VANDERLANDE

Productizing Material Handling Solutions

Flexibility from a System Integrator perspective

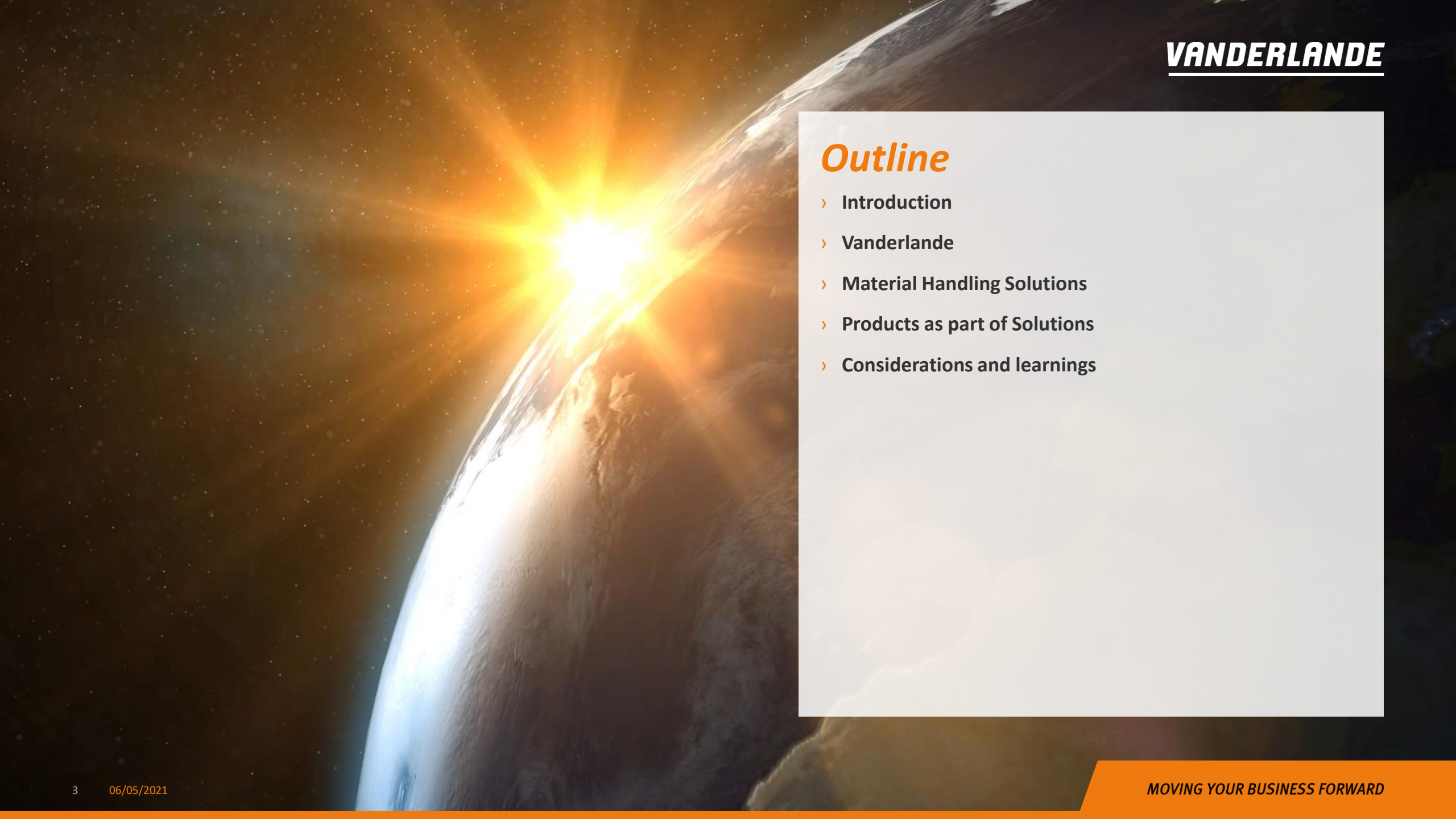
06/05/2021
Remko van der Zee
Director Systems Integrat
Vanderlande

Introduction

- Remko van der Zee
- Vanderlande since Nov 2004
- Director Systems Integration (since 2018)

Responsible for corporate strategy on systems integration.

System Integration in Vanderlande covers the design and delivery of customer solutions by executing projects in the Warehousing and Airports domain.



VANDERLANDE

Outline

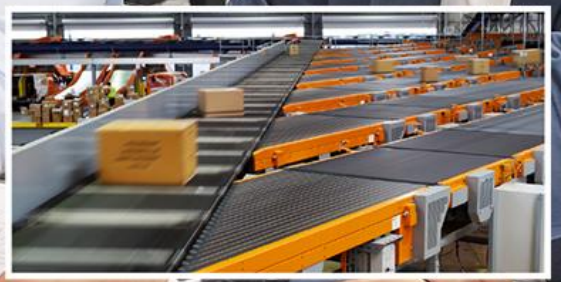
- Introduction
- Vanderlande
- Material Handling Solutions
- Products as part of Solutions
- Considerations and learnings

VANDERLANDE

Reliable partner for future-proof logistic process automation

Airports

Warehousing



Parcel

MOVING YOUR BUSINESS FORWARD

About Vanderlande: ***Company profile***

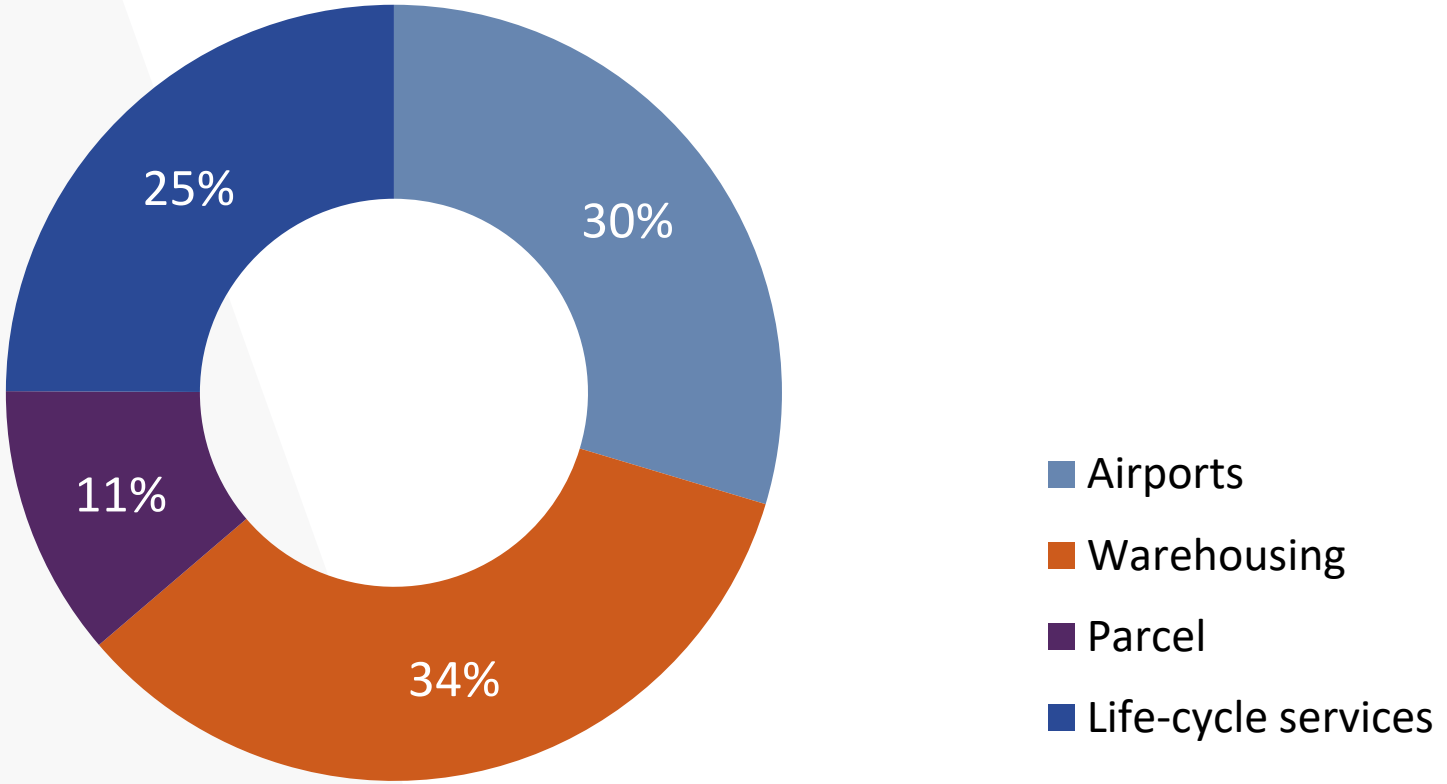
About Vanderlande: Roots in Veghel, The Netherlands

About Vanderlande: Local and global presence

- Customer centres and offices
- Software houses
- Manufacturing sites

> Delivered in more than 100 countries
> Located in 28 countries

About Vanderlande: ***Revenue FY2020***



About Vanderlande: ***Core business***

Industry segments	**Focus areas**
➔ Airports (global market leader)	Baggage, Passenger
➔ Warehousing (leading supplier)	Food, General Merchandise, Fashion
➔ Parcel (global market leader)	

Logistic process automation

➔ Innovative systems ➔ Intelligent software ➔ Life-cycle services

Innovative systems

- ➔ System and process scope
- ➔ Entire material handling systems
- ➔ Process inside and outside material handling system

Intelligent software

- ➔ Complete and modular
- ➔ Low-level and high-level controls
- ➔ Self-developed

Life-cycle services

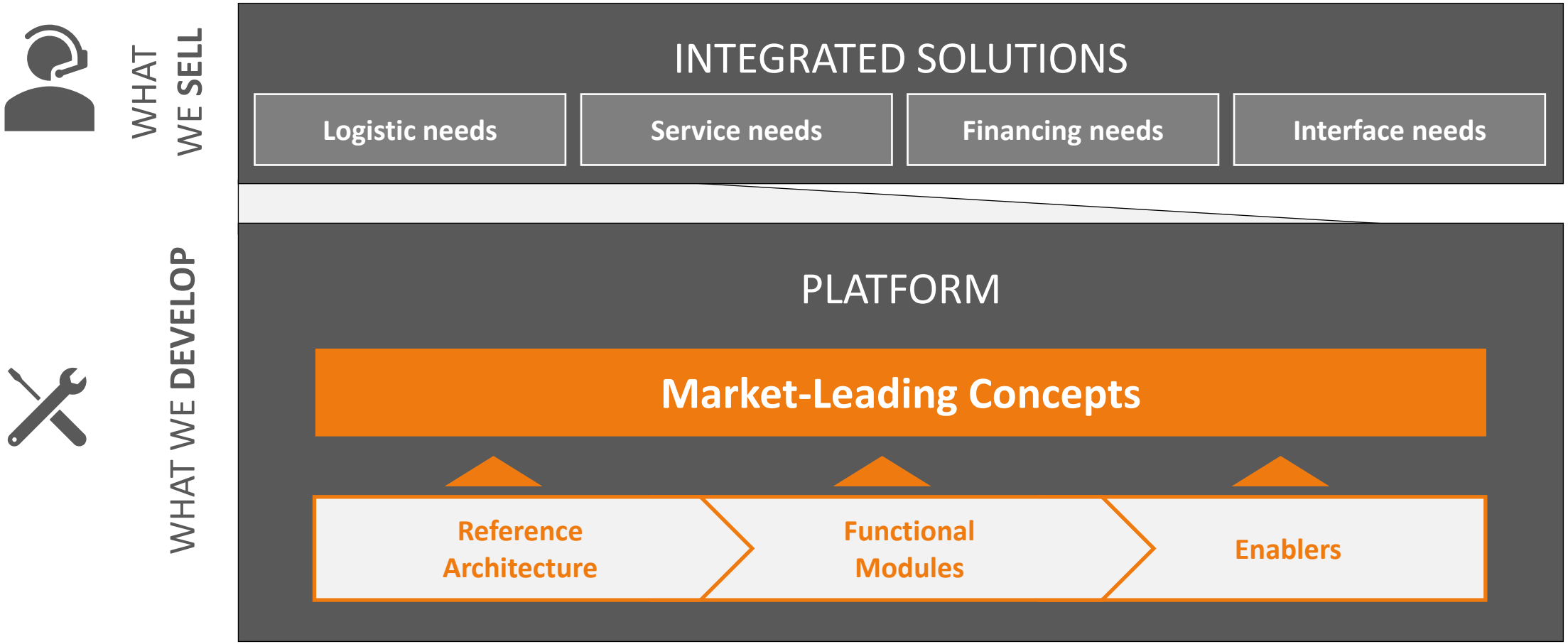
- ➔ Asset services
- ➔ Logistic services
- ➔ Business services

About Vanderlande: ***Mission***

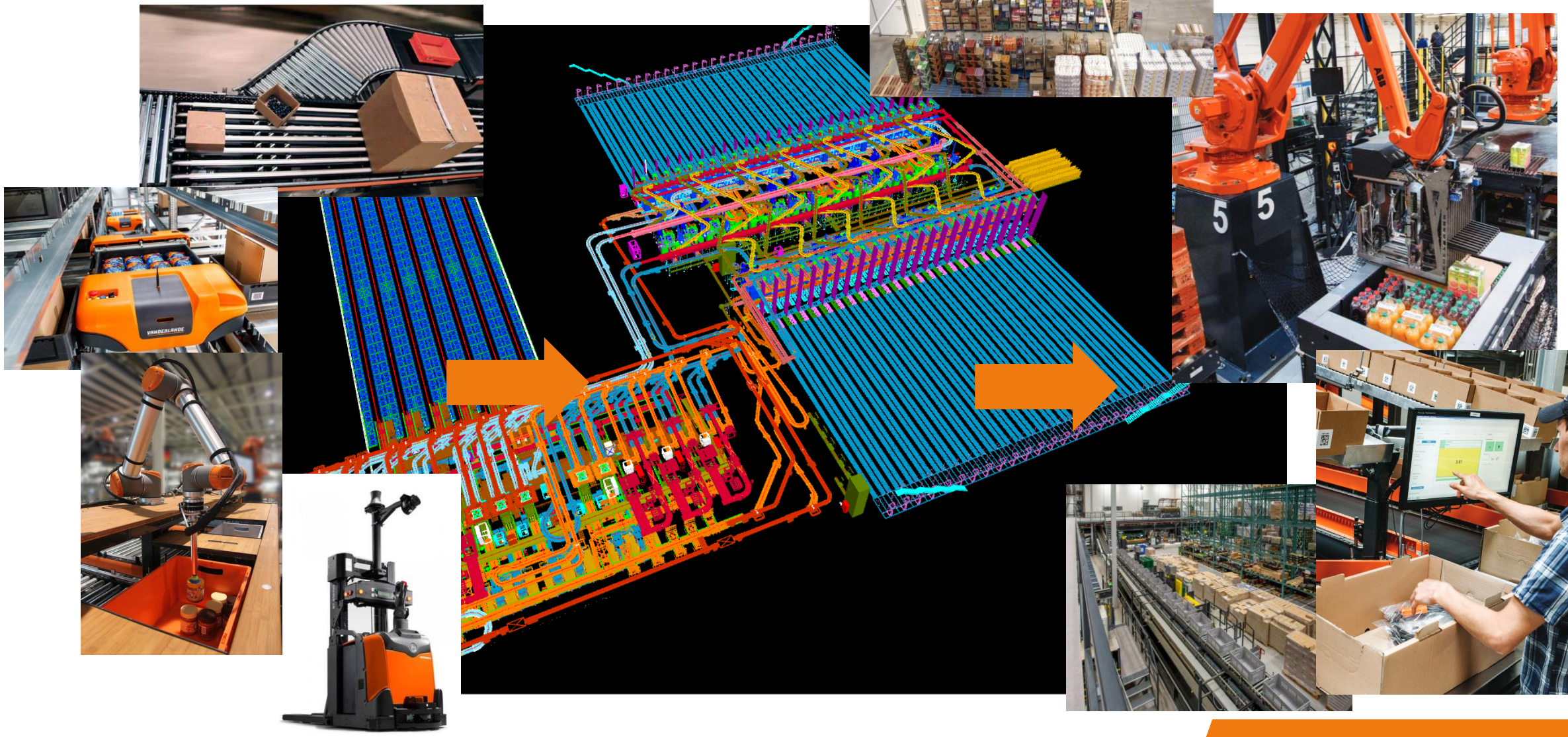
“We improve the competitiveness of our customers through future-proof logistic process automation”

WE IMPROVE	COMPETITIVENESS OF OUR CUSTOMERS	FUTURE-PROOF	LOGISTIC PROCESS AUTOMATION
Continuously improve together Build long-term partnerships	Deliver best end-user experience and satisfaction Ensure reliable and efficient logistic solutions	Offer flexibility and scalability Excel in sustainable innovation for dynamic markets	Provide end-to-end integrated solutions Support the whole life cycle

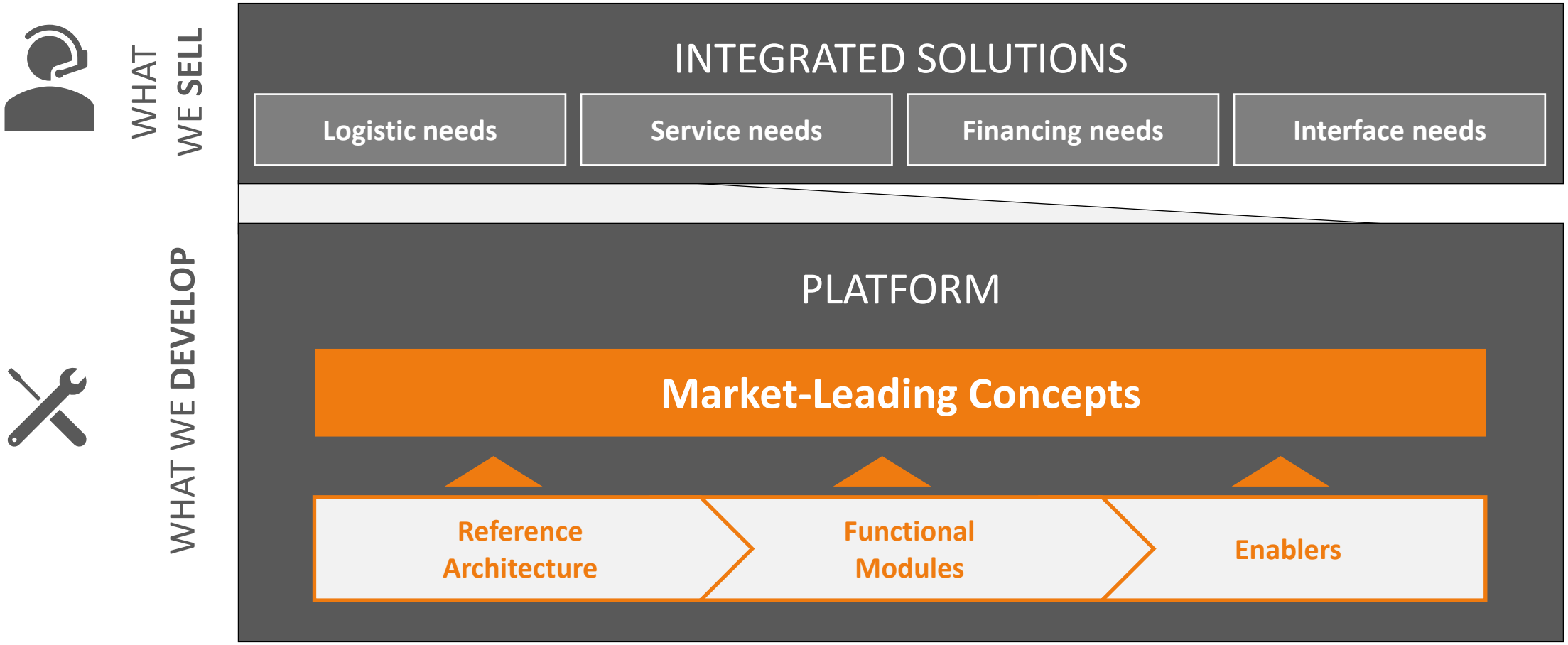
Provider of integrated solutions



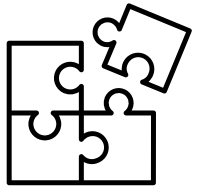
System Integrator



Provider of integrated solutions



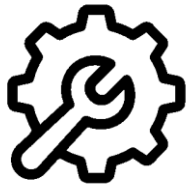
Considerations on third party products



Domain fit

Is the product fit for use in logistics?

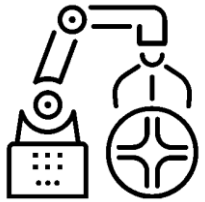
- 24/7 operation
- High volume, low footprint



Customization

To what extend is customization possible?

- Configurable behavior
- Add-on without core product change
- Programmable interface



Technology

Can technology be similar?

- Uniformity over total solution
- Serviceability
- Spare parts
- Volume of supply

Global

Ready for international use?

- Regional EM regulations (Power, EMC)
- Compliance to local safety rules
- Installation and maintenance
- Language support

Considering options:

✓ Select the best product	Does it exist? What do we need? Today and tomorrow?
✓ Design the context for the product	Adapt to fit? Impact on effectiveness?
✓ Product supply	Volume of supply. Shipping.
✓ Partner with product supplier. Provide requirements and test facilities.	Is it still ‘standard’? Cost of development?

Considerations on development processes

Knowledge management

Product expertise versus Material Handling

- Speak the language
- Requirements versus technology choices
- End user involvement

Engineering processes

How to coordinate development

- Agile software: (Scaled) Scrum, XP, Kanban, Crystal
- Lean manufacturing
- MBSE, Code generation, test automation, simulation

Quality control

Processes and tools to monitor progress

- Requirements management
- Releasing and Change management
- Test management

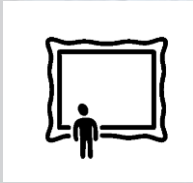
› Note: Vanderlande will have to cope with diverse processes applied by its product suppliers.

› Adopting industry standard, best in class, latest technology tooling	Broad toolset, maintenance, training impact
› Process supporting workpackage management (interface with local process)	Support local processes -> train Vanderlande IM/SA
› Supply System models, software libraries, emulation environments, code generators	Support and training of suppliers

Summary

Drivers: Increasingly advanced systems. Rapid changes in technology. Need for innovation. Speed of delivery.

Main challenge: Knowledge sharing. The ability to fit the product in the domain.



Main capability required: See the bigger picture, while being an expert on a focused area.

Secondary challenge: Alignment of development processes and tools

VANDERLANDE

MOVING YOUR BUSINESS FORWARD