



Dwars denken loont

ADAPTO for e-commerce

24-04-2014 Material Handling Forum



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Agenda

- <http://www.vanderlande.nl>
- Market trends
- Introduction ADAPTO
- ADAPTO customer benefits
- ADAPTO for e-commerce

> Market Trends

Market Trends

- Increased Supply Chain agility
- Reduced order size (e-commerce)
- Reduced order leadtime (e-commerce)

Impact on DC design and deployment

- Fast system deployment required
- Design based on growth forecast?
- Duration of beneficial use?
- How to safeguard investment against uncertainty?



Start now, adapt later!



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> **ADAPTO introduction**





Scalability



Availability



Cost-efficiency



Maintainability



Sustainability

> ADAPTO customer benefits



Scalability

- **Storage capacity**

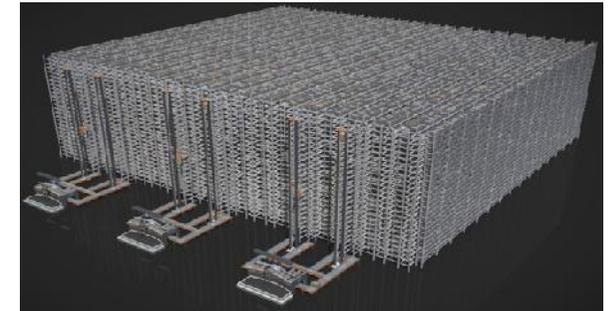
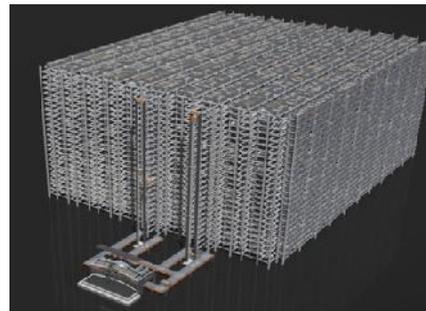
- Extend racking as and when required

- **Throughput**

- Workstations
- Shuttles
- Lifts

- **Layout flexibility**

- Modular components fit in any building shape



Availability

- **System availability**
 - Every product accessible by every shuttle
 - Multiple routes leading to each product
- **Product availability**
 - Product availability always ensured
 - Products are within manual reach
- **Fast troubleshooting**
 - Service zones and maintenance platforms





Cost-efficiency

• Investment

- Fast deployment
- Designed for changing business drivers
- Start now, adapt later!

• Building cost

- Upto 20% smaller footprint
- Optimised storage density

• Operational cost

- 50% lower maintenance cost
- Lowest energy cost per double cycle

Maintainability

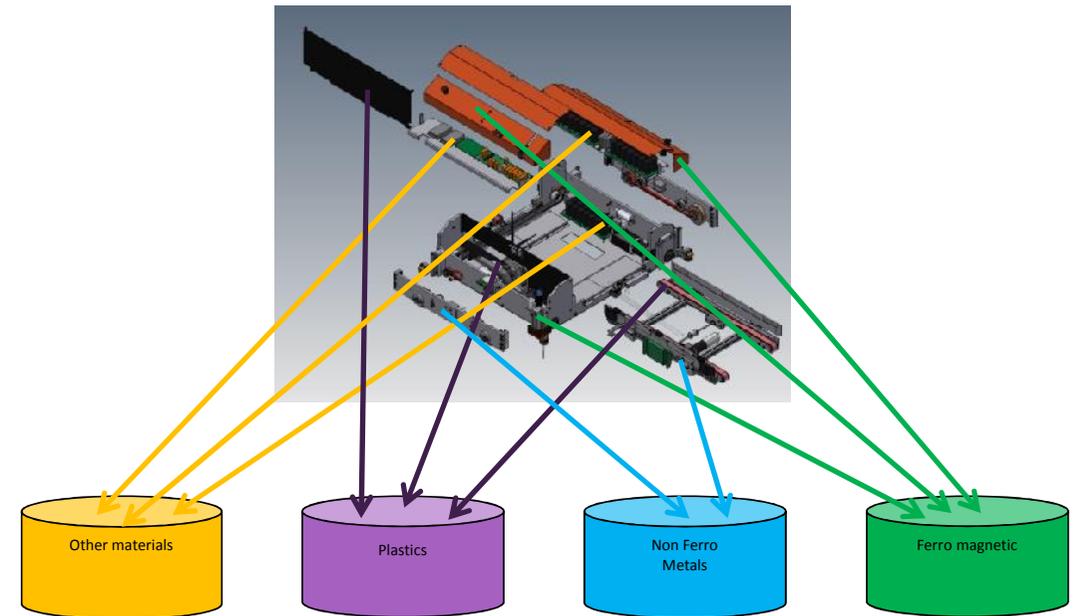
- **Off-line maintenance**

- Ergonomic maintenance workstation
- Repair and planned maintenance without disturbing operations
- Adding /removing shuttles to/from running system



Sustainability

- **Minimal energy consumption**
 - Low moving mass
- **Material recycling**
 - Designed for sustainability
 - High level of reuse/recycling
- **Shuttle refurbishment**
 - Extend shuttle lifetime
 - Deploy shuttles across multiple systems



> ADAPTO for e-commerce

- Reduced order size
- Reduced order leadtime
- Fast system deployment



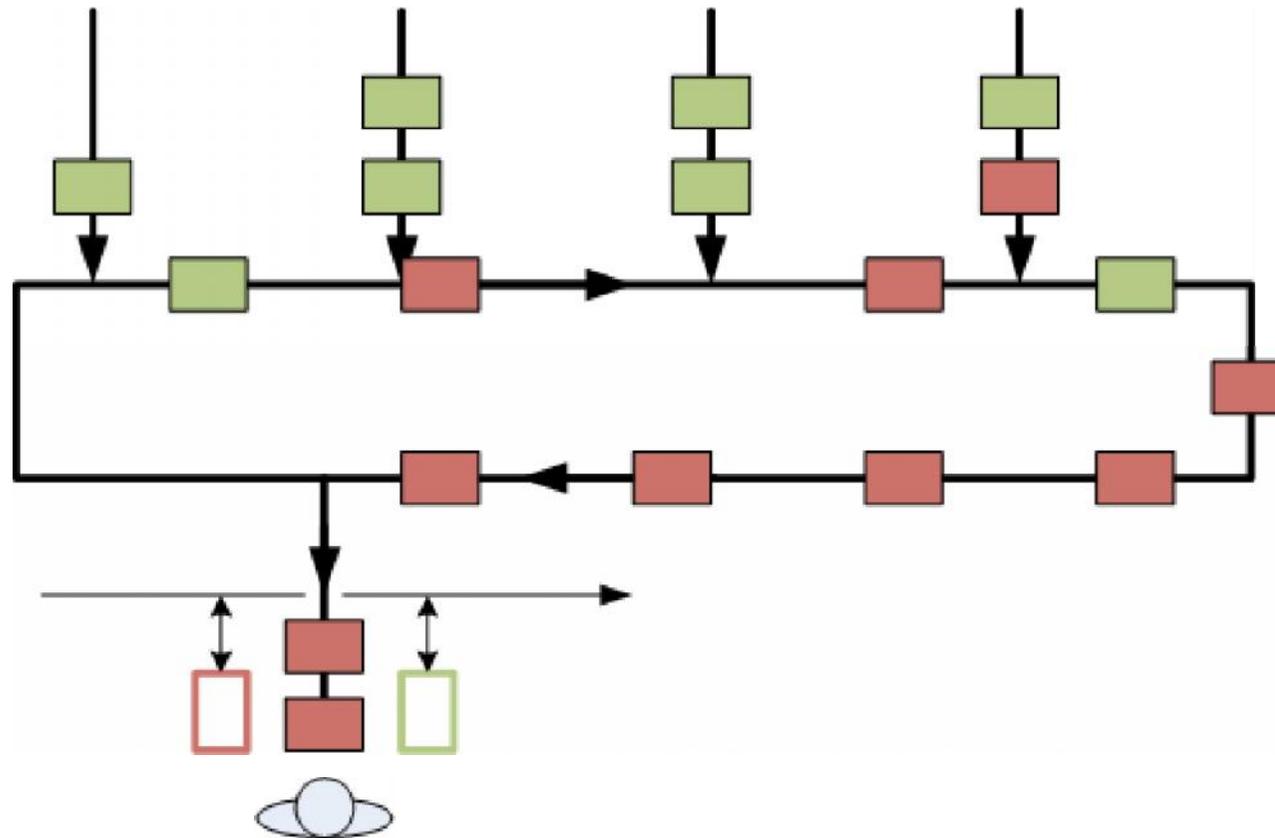


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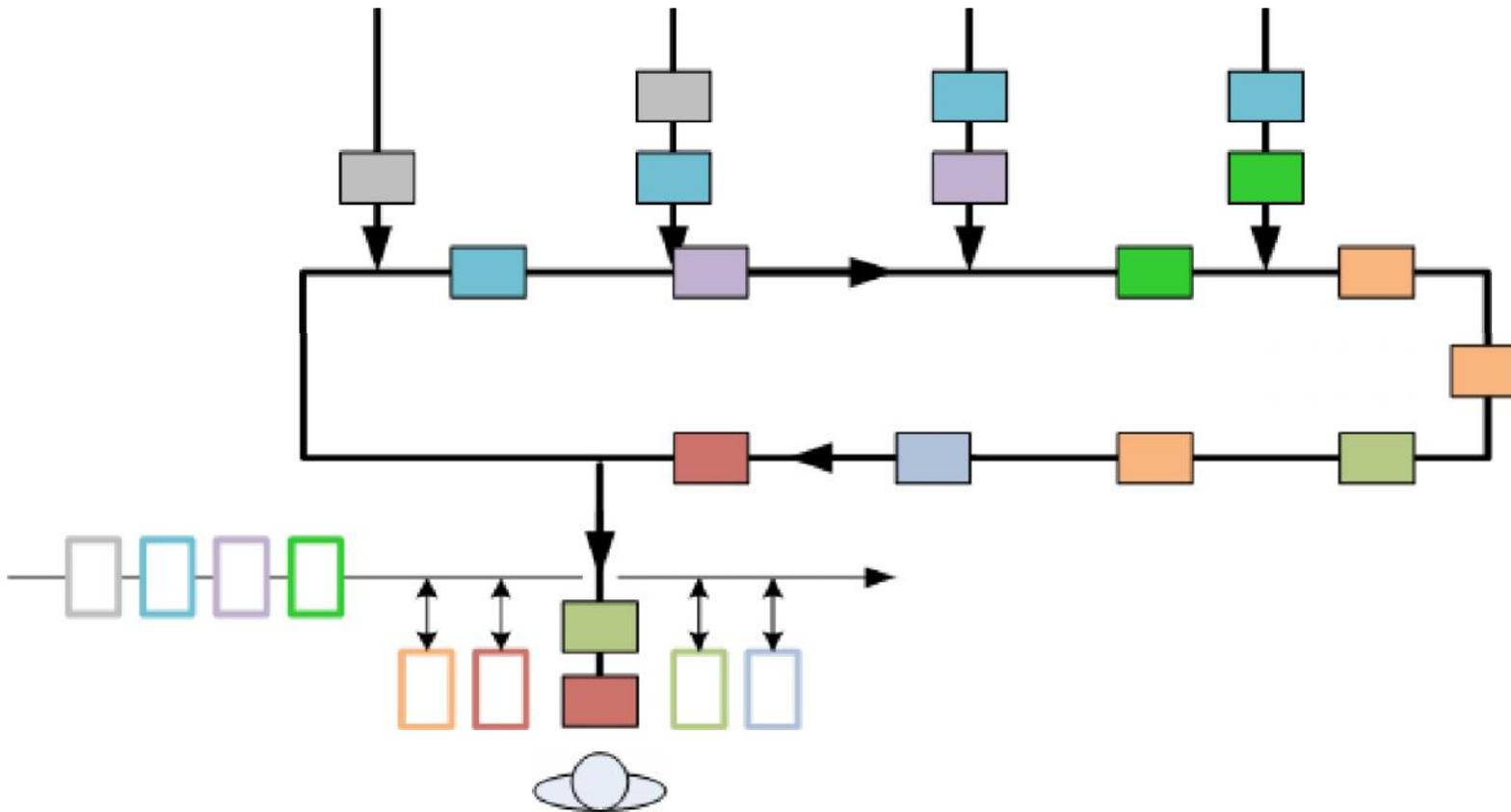
> **Reduced order size/leadtime**



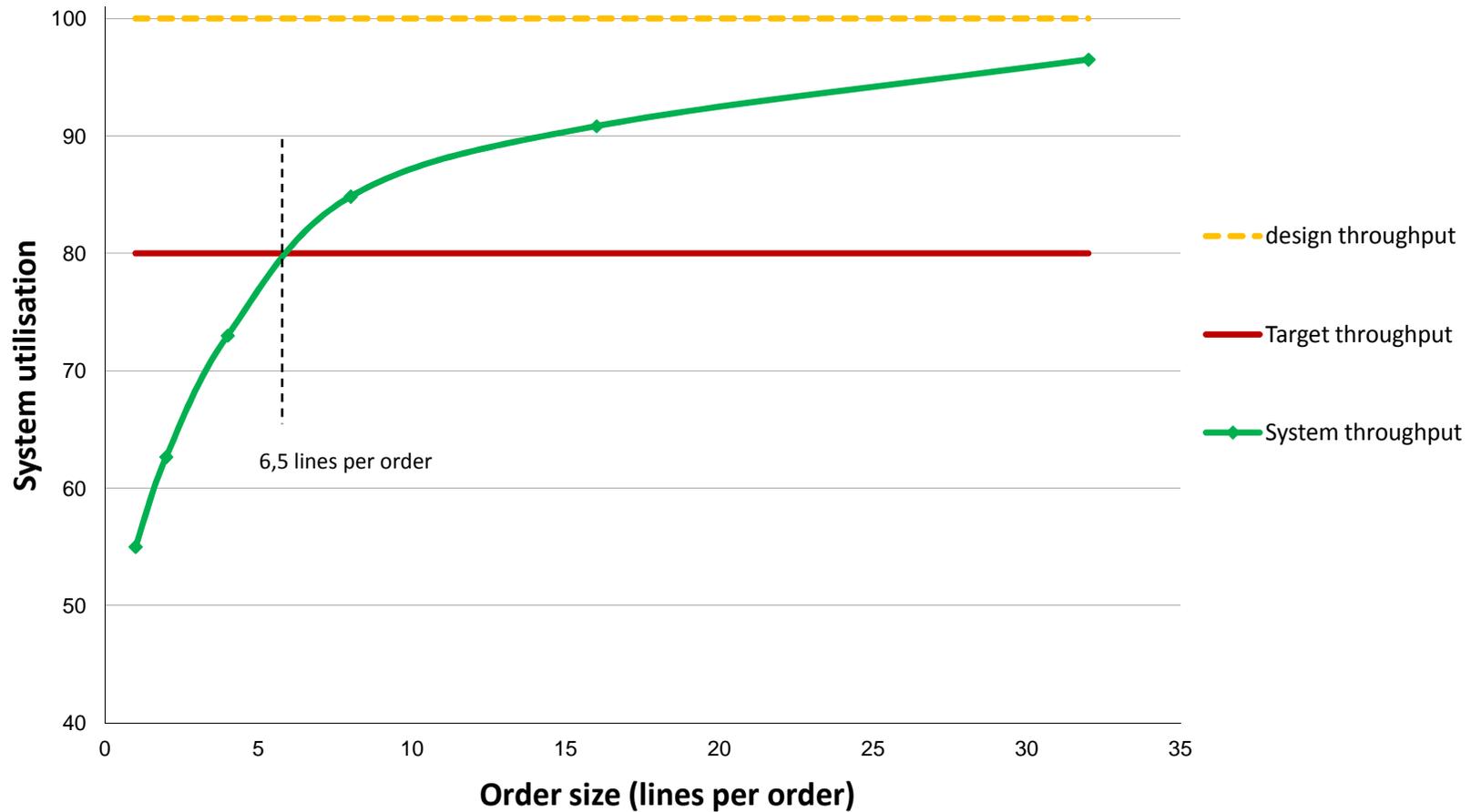
Goods-to-man, large orders



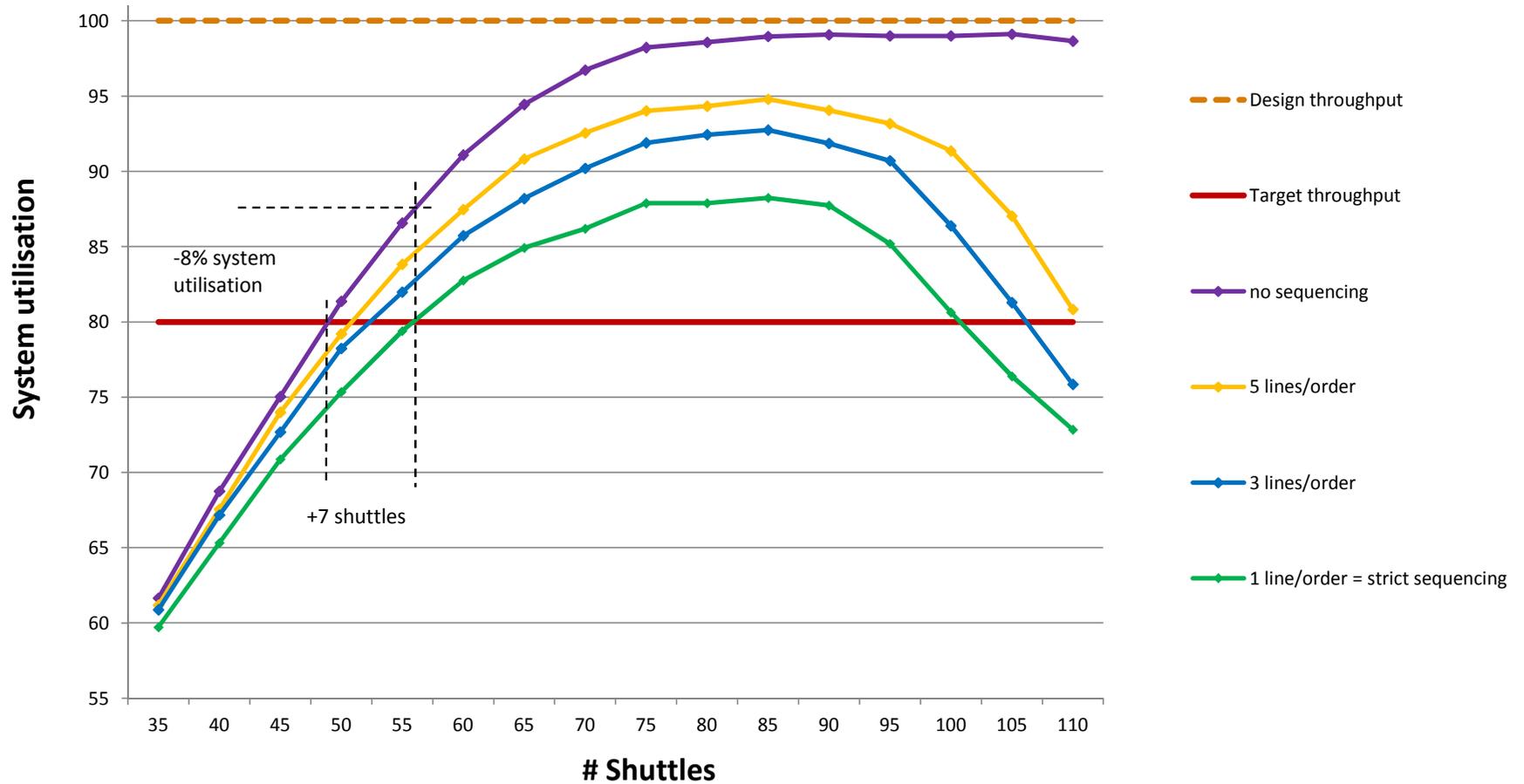
Goods-to-man, small orders (e-commerce)



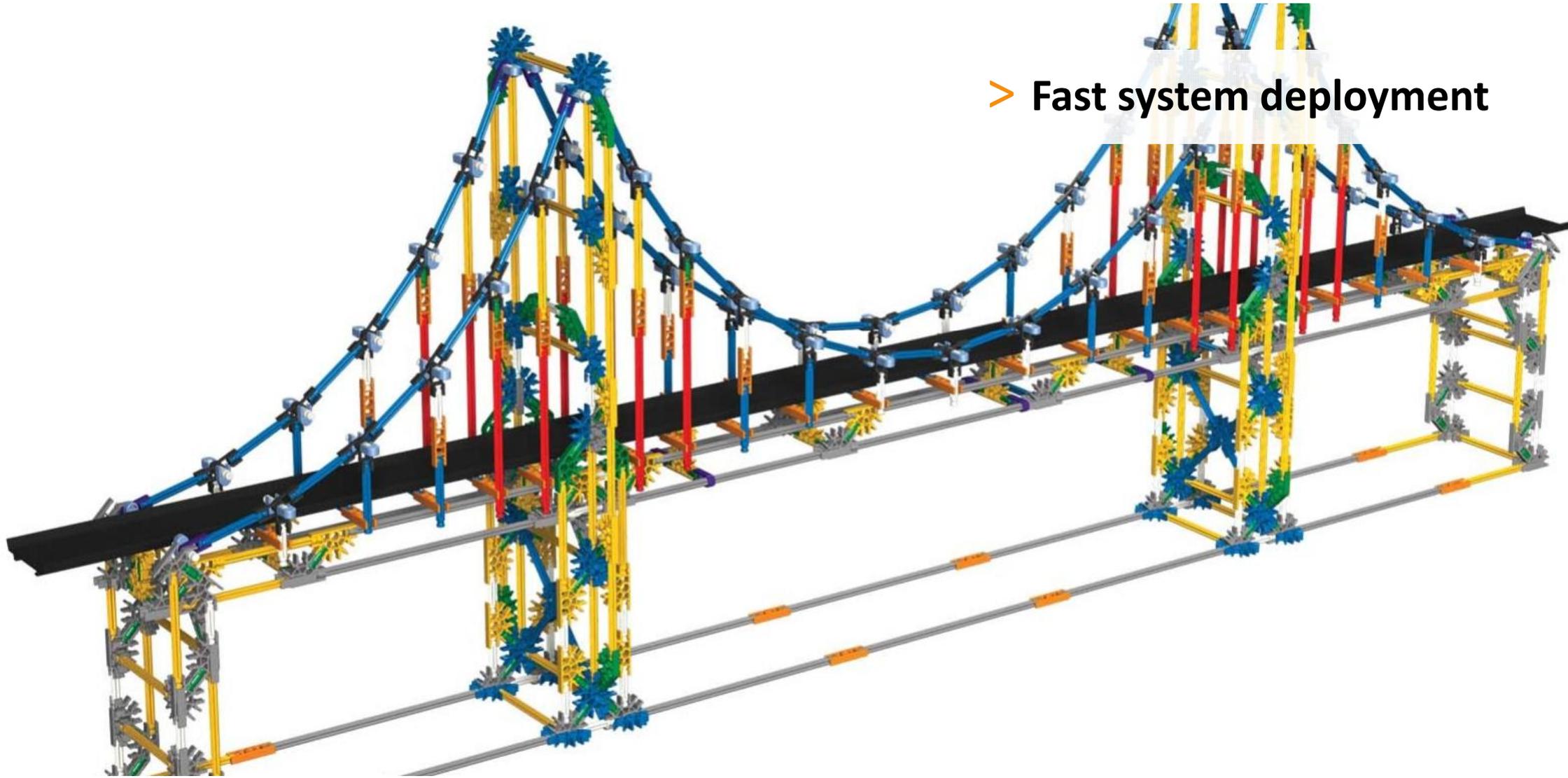
Aisle bound systems, sequencing



Adapto Sequencing



> Fast system deployment



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