

ASRS Revolution - Six (6) steps to selecting the right ASRS for your business

Sponsored by:

ASRS
Automated Storage / Retrieval Systems

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Swisslog

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Six (6) steps to selecting the right ASRS for your business

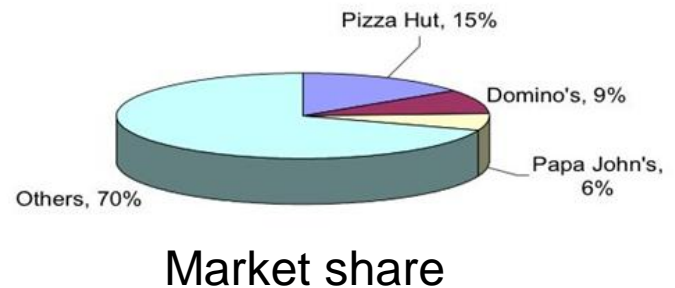
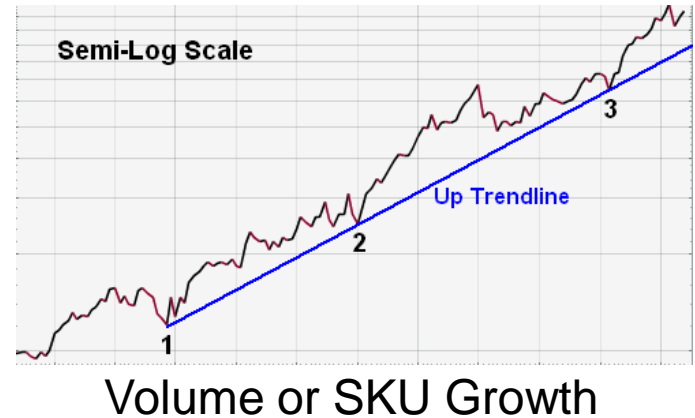
- **Step 1: Know Your Company Vision**
 - » Know where you want to be in 5+ years
 - **Step 2: Define Your Customer Expectations**
 - » What do your customers expect, service level
 - **Step 3: Determine the Range of Flexibility (Crystal Ball)**
 - » How will your business change in the lifetime of the facility
-
- **Step 4: Outline Your required Processes for Success**
 - » What processes are needed for your business to support your customer service level defined previously
 - **Step 5: Match ASRS Solutions to Your Processes**
 - » Do any of your processes involve order fulfillment, sequencing, staging, and holding
 - **Step 6: Create an Appetite for Automation and Change**
 - » Does your company have an appetite for automation, change, and willing to invest for the long-term ROI?

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Step 1: Know Your Company Vision

- Status Quo
- Volume Growth
- Assortment (skus)
- Cost Leader
- Lead Times
- Quality
- Service
- Market Share

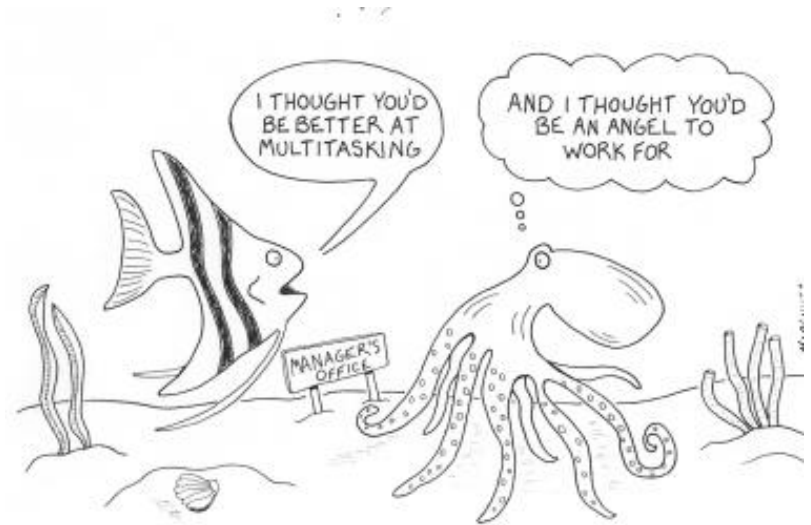


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Step 2: Define Your Customer Expectations

- Lead Times
- Quality
- Assortment
- On Time (JIT)
- Price
(competitiveness)
- Flexibility
- Availability



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or
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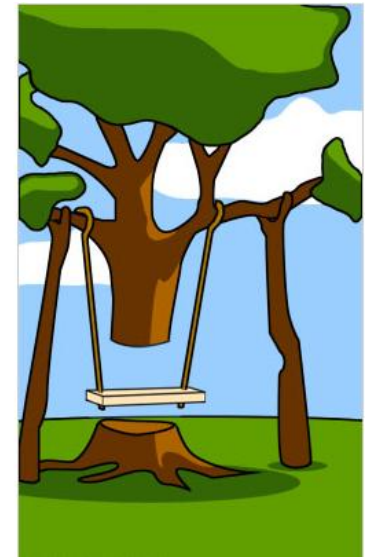


Step 2: Define Your Customer Expectations (Clearly)



What does your customer expect !!!

If you don't know what they expect, you'll never satisfy their needs !!



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Step 3: Determine the Range of Flexibility (Crystal Ball)

- Product Assortment
- Volumes
- Pallet, Case, Each
- Constant or Peaks
- Delivery Methods
- Seasonal Business
- Internet Business
 - 300+% peaks
- Life-Time Changes



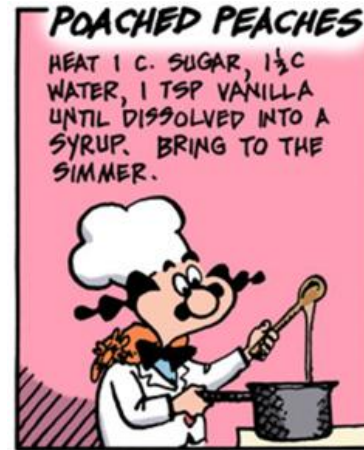
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Step 4: Outline Your required Processes for Success

- Recipe for Business
- Operations Schedule
- Staffing Availability
- Materials Receipt
- Throughput Capacity
 - Buffers
- Inventory Requirements
 - Raw, WIP, Finished
- Delivery Schedules

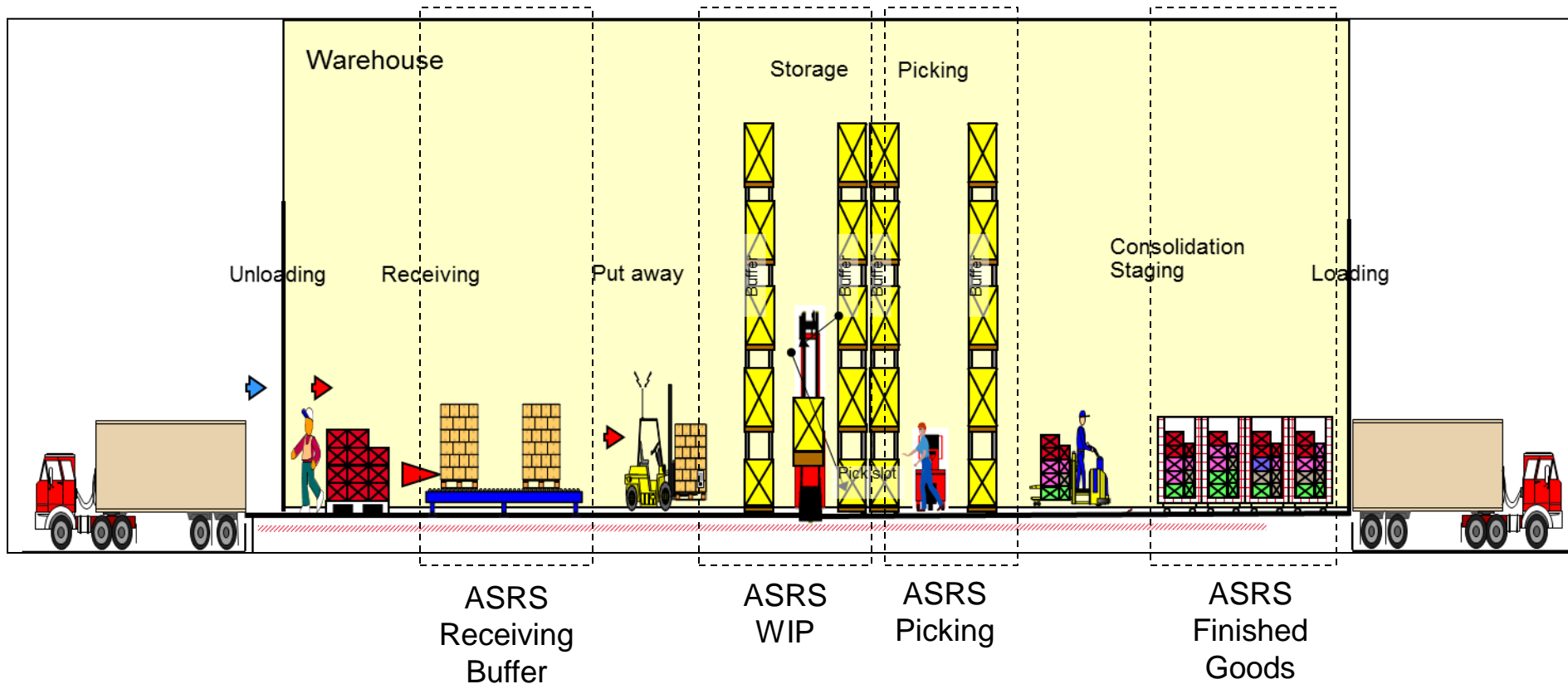


REMOVE FROM HEAT; COOL 20-30 MIN. REMOVE PEACHES; STRAIN SYRUP. YOU MAY NOW POUR PEACHES + SYRUP OVER ICE CREAM; OR ROLL PEACHES INTO CRÊPES + TOP W/ SYRUP + WHIPPED CREAM- ETC??



Step 4: Outline Your Required Processes for Success

- Process Flow



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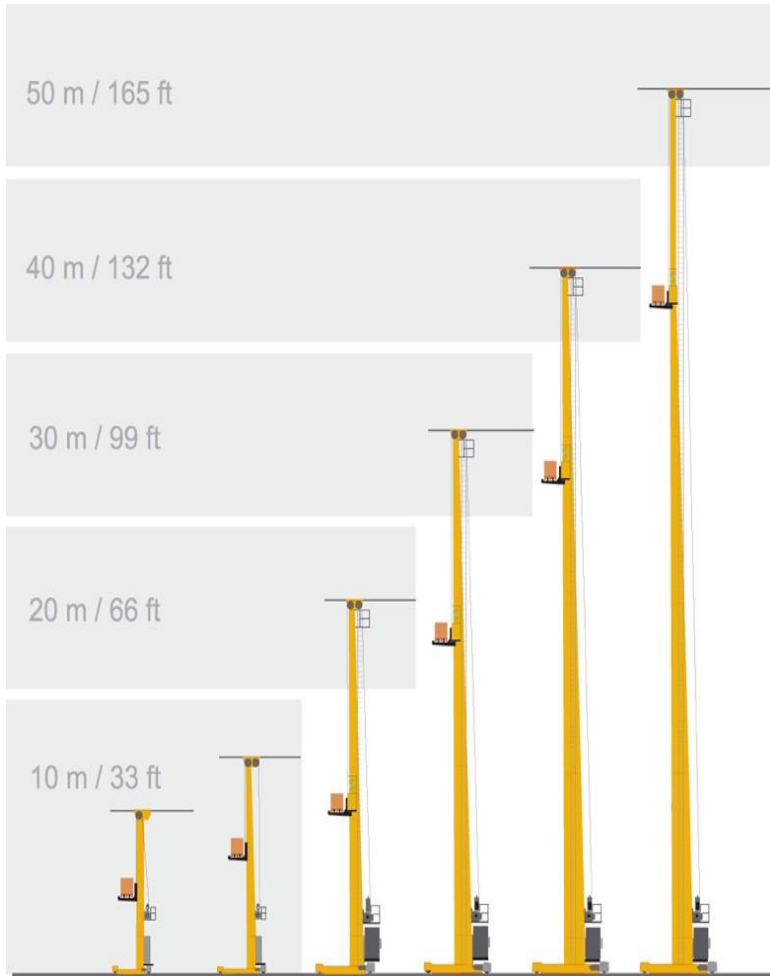
Step 5: Match ASRS Solutions to Your Processes

- Pallet, Case or Tote
- Automatic or Semi
- Facility Limits
- Inventory
- Throughput
- Peaks
- Operation Hours

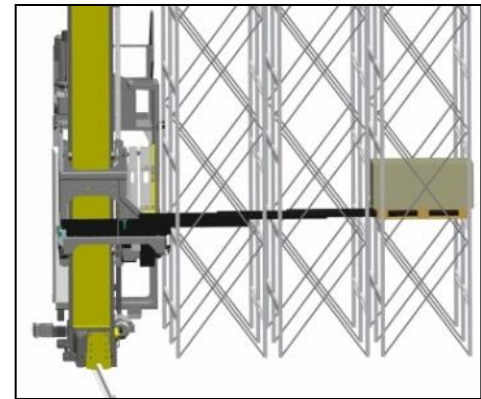


One technology does not fit all !!

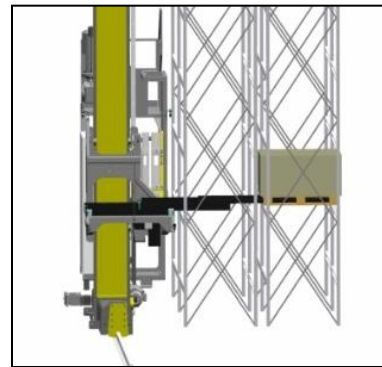
Step 5: Match ASRS Solutions to Your Pallet Processes



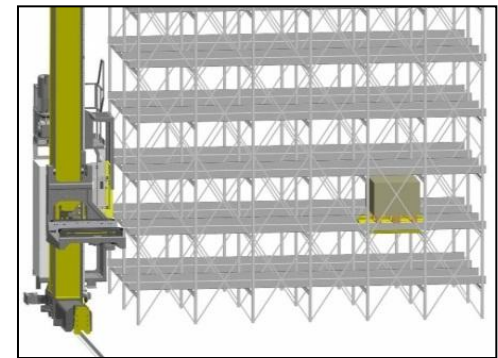
Single



Triple

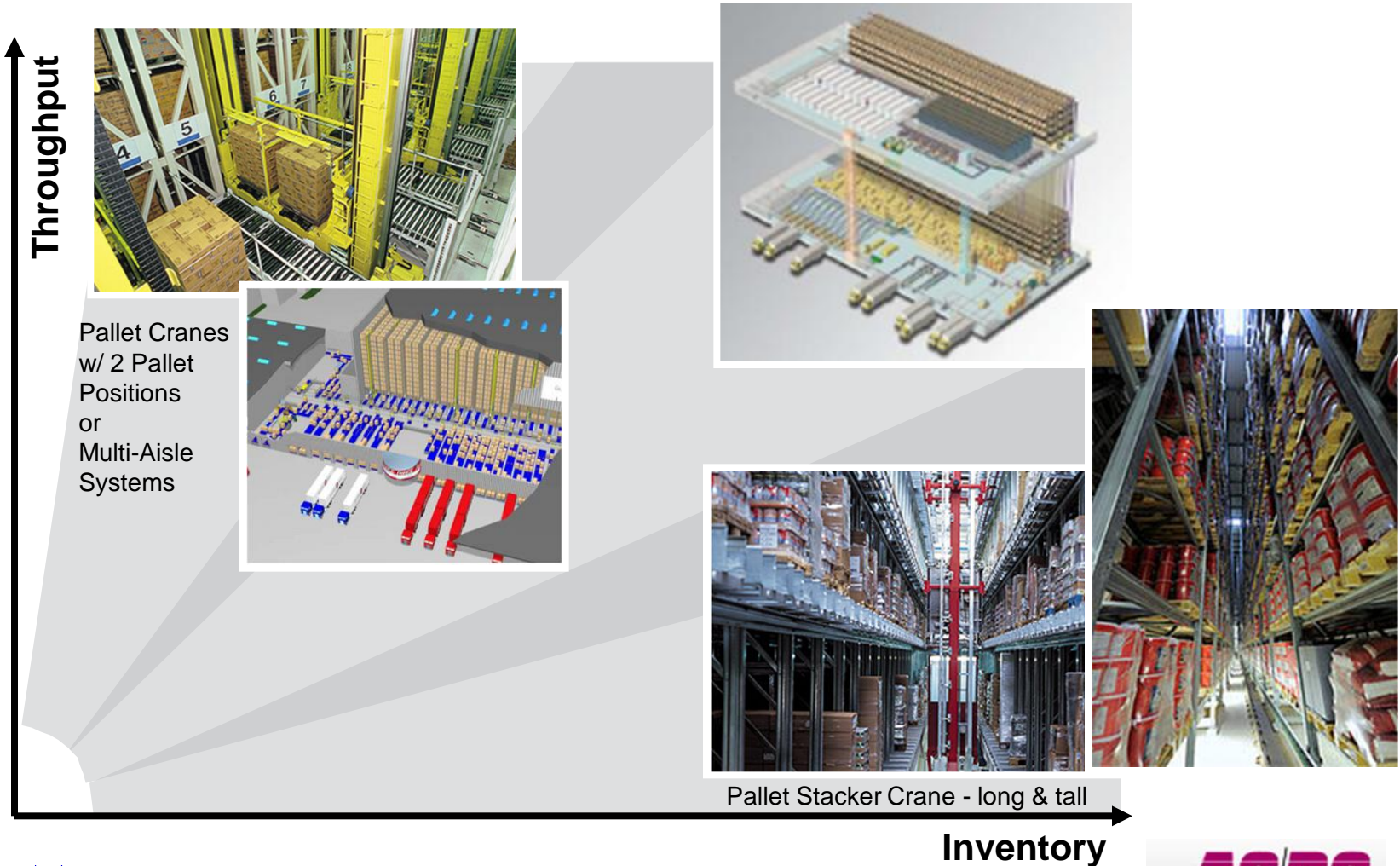


Double

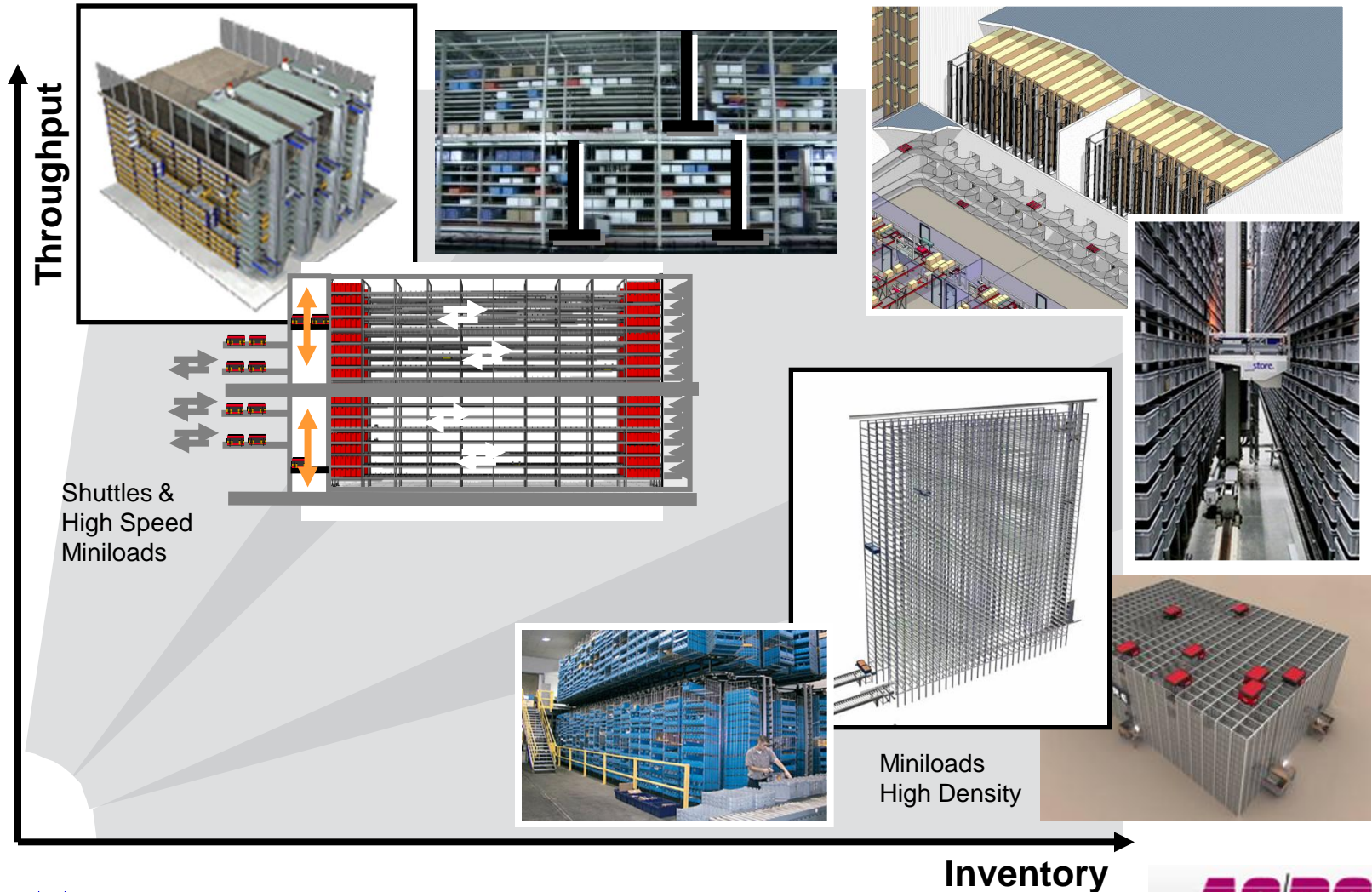


Multi-deep

Step 5: Match ASRS Solutions to Your Pallet Processes



Step 5: Match ASRS Solutions to Your Case or Tote Processes



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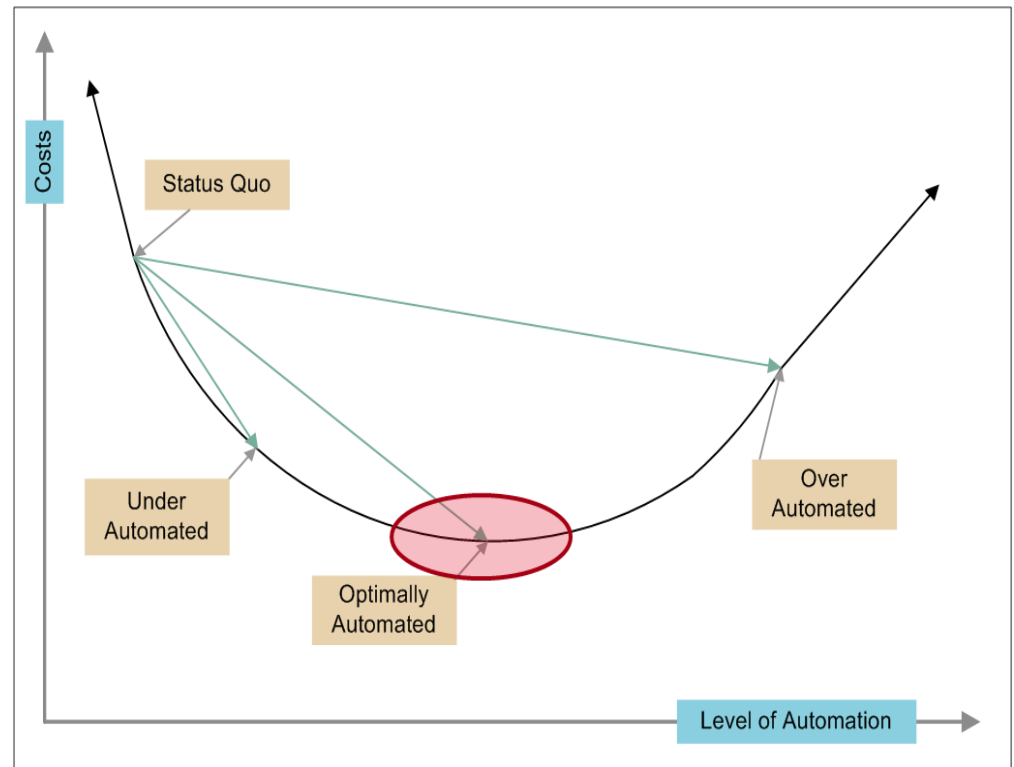
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Step 6: Create and Appetite for Automation and Change

- Islands of Automation
- Fully Integrated Solutions
- Small Success Leads to Larger Opportunities

- Larger success leads to sustained growth



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Daifuku America Corp.

Dematic Corp.

Hanel Storage Systems

KardexRemstar, LLC

Knapp Logistics Automation

Lenze Americas

MIAS Inc.

MURATEC

Retrotech

Sapient Automation

SICK, Inc.

Swisslog Logistics, Inc.

System Logistics Corp.

TGW Systems

viastore systems, inc.

Westfalia Technologies, In

For More Information:

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www.MHI.org/ASRS