



PROMAT

2015

McCormick Place South | Chicago
March 23-26, 2015
promatshow.com

***Optimizing your
warehouse for the
Future – Making
complexity simple***

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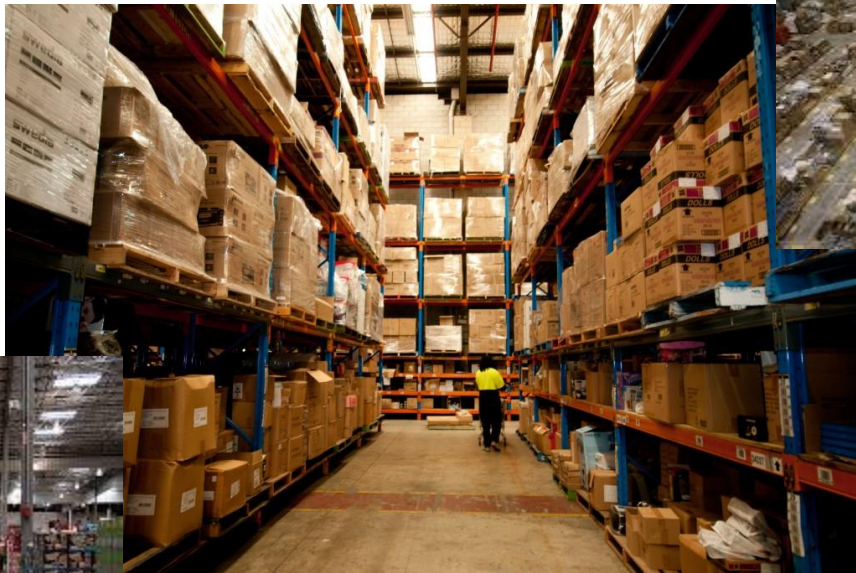
FIND WHAT'S NEXT.



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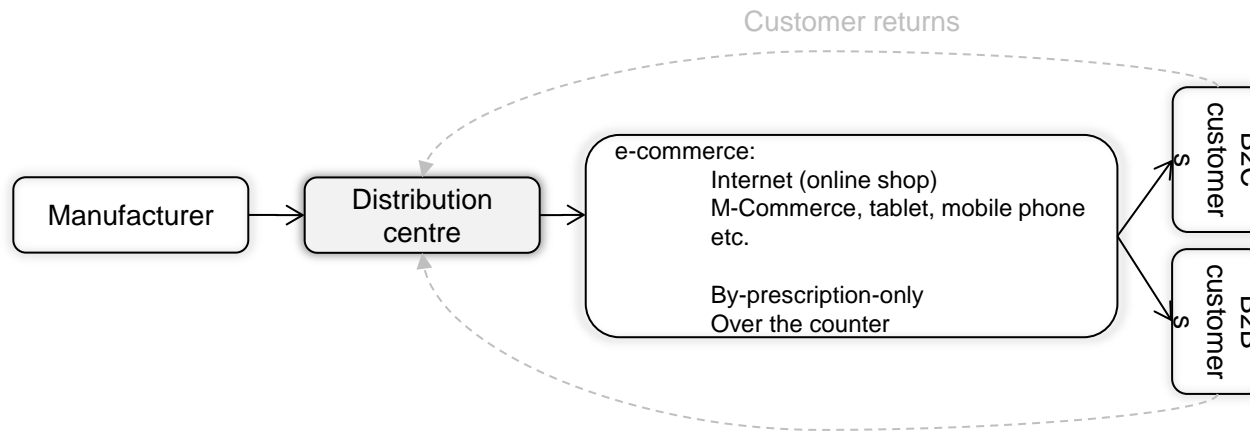


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Business scenarios B2C supply



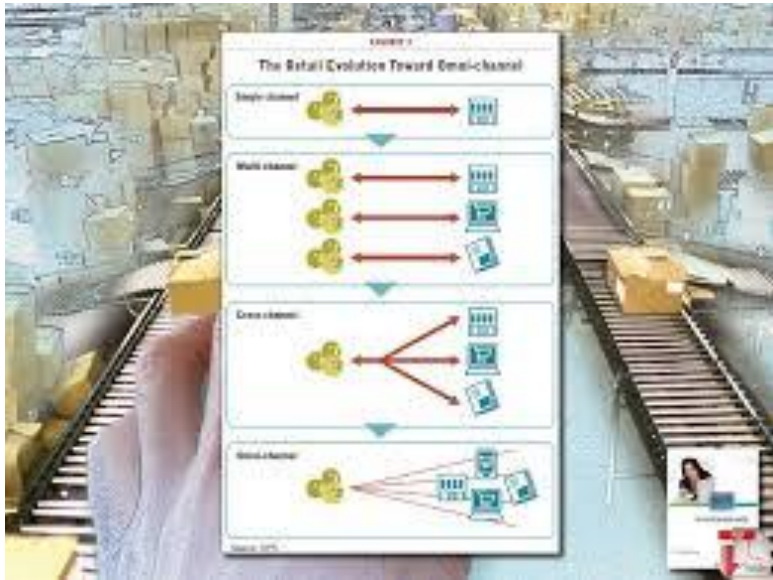
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Omnichannel?

Seamless shopping experience across channels and touch points

Anytime, any place, anywhere

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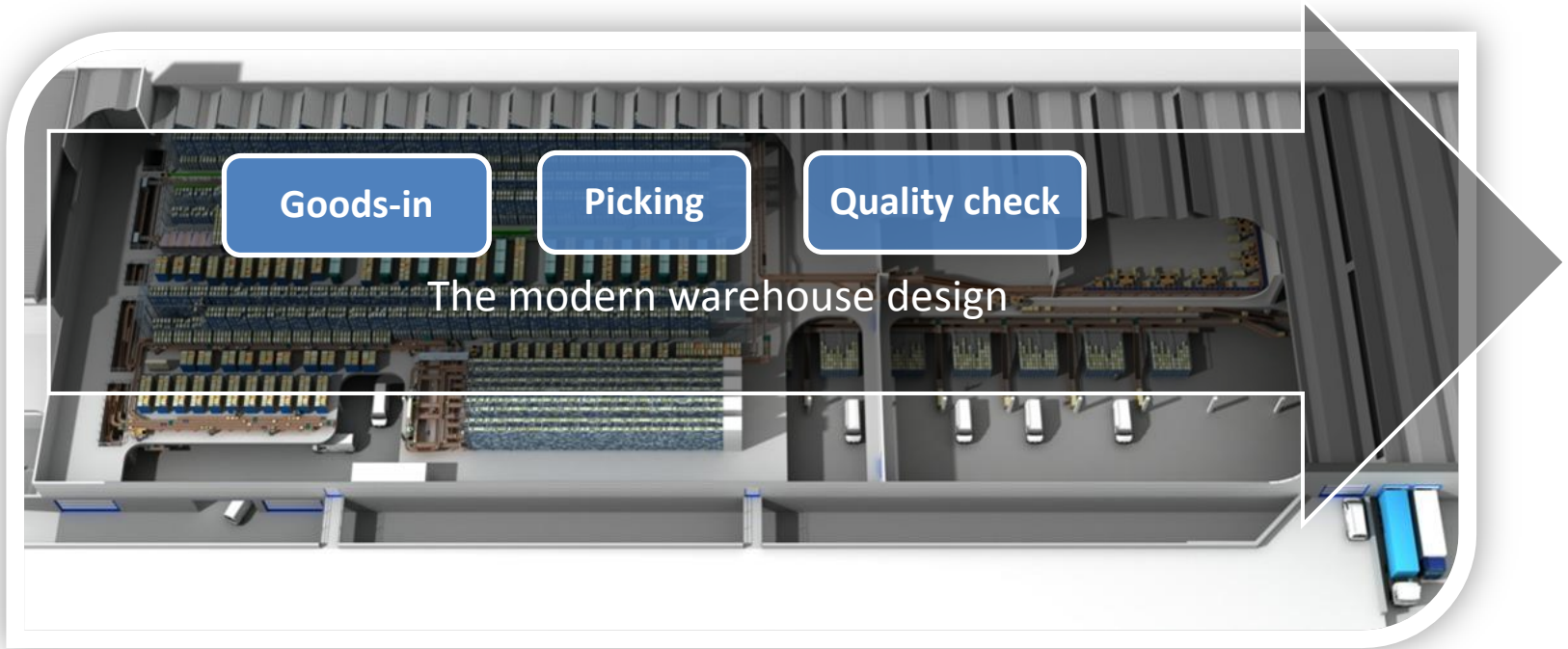


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The modern warehouse design



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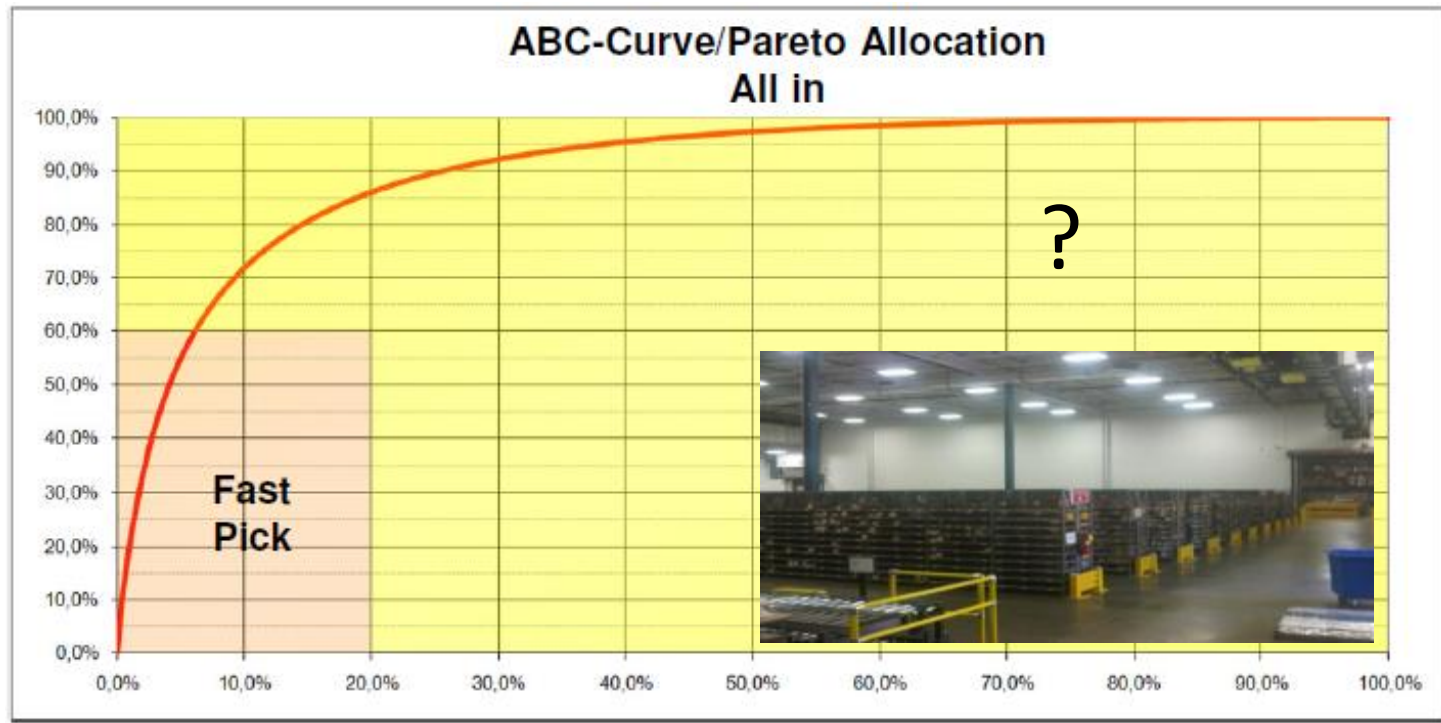
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Distribution



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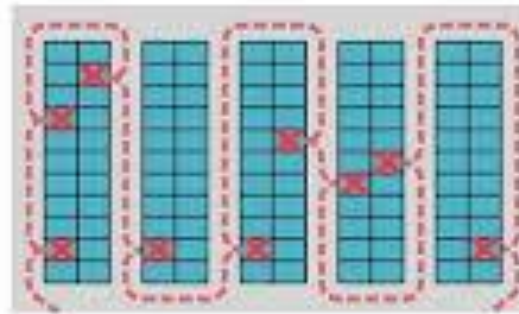
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Travel Distance



Remember: Traveling is
60%-70% of labor costs

$$P(n^{Picks}, n^{orders}) = \frac{n^{picks}}{t^{pick}(n^{picks}) + t^{basis}(n^{orders}) + t^{way}(n^{picks}, n^{orders})}$$

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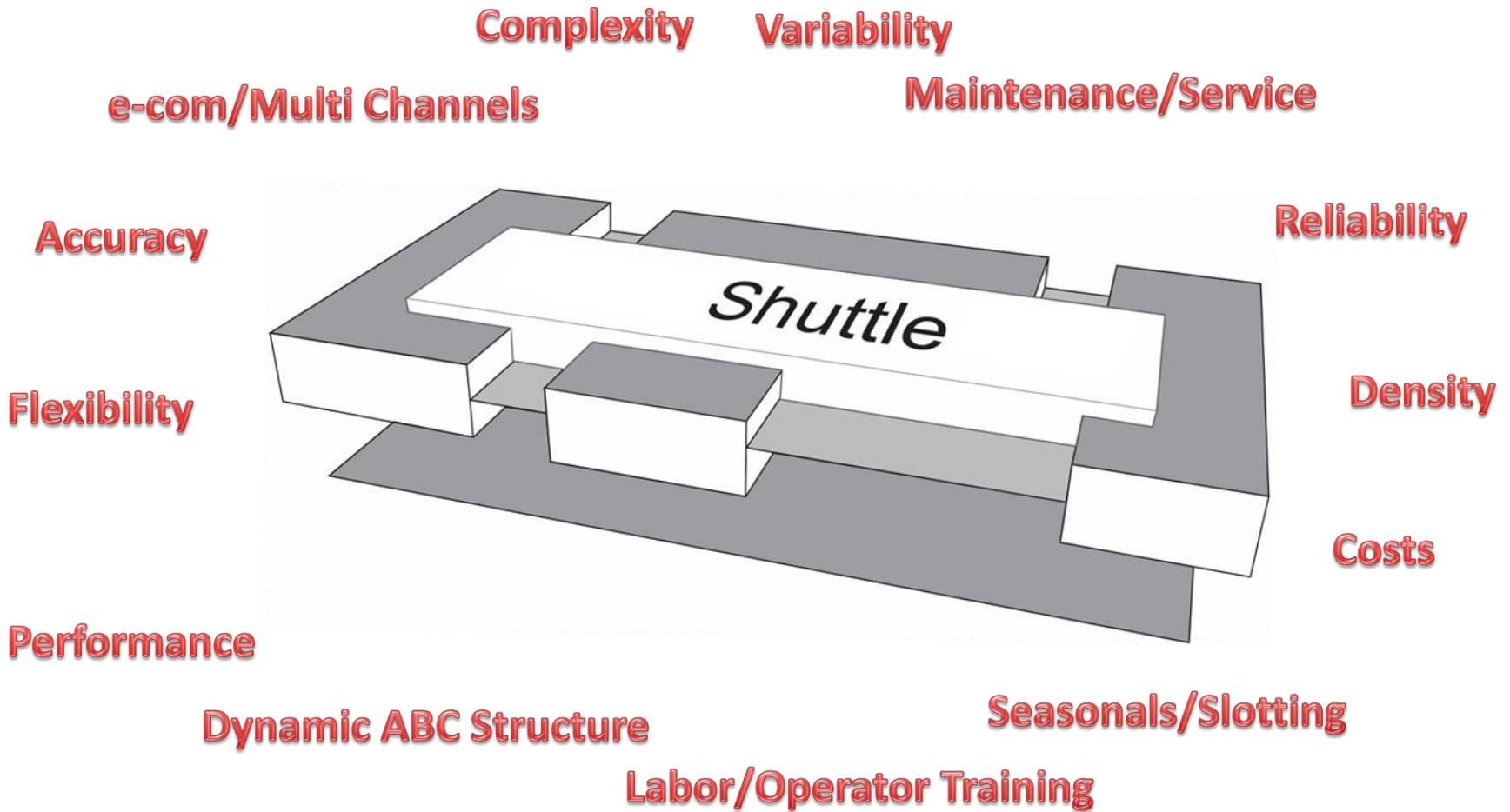


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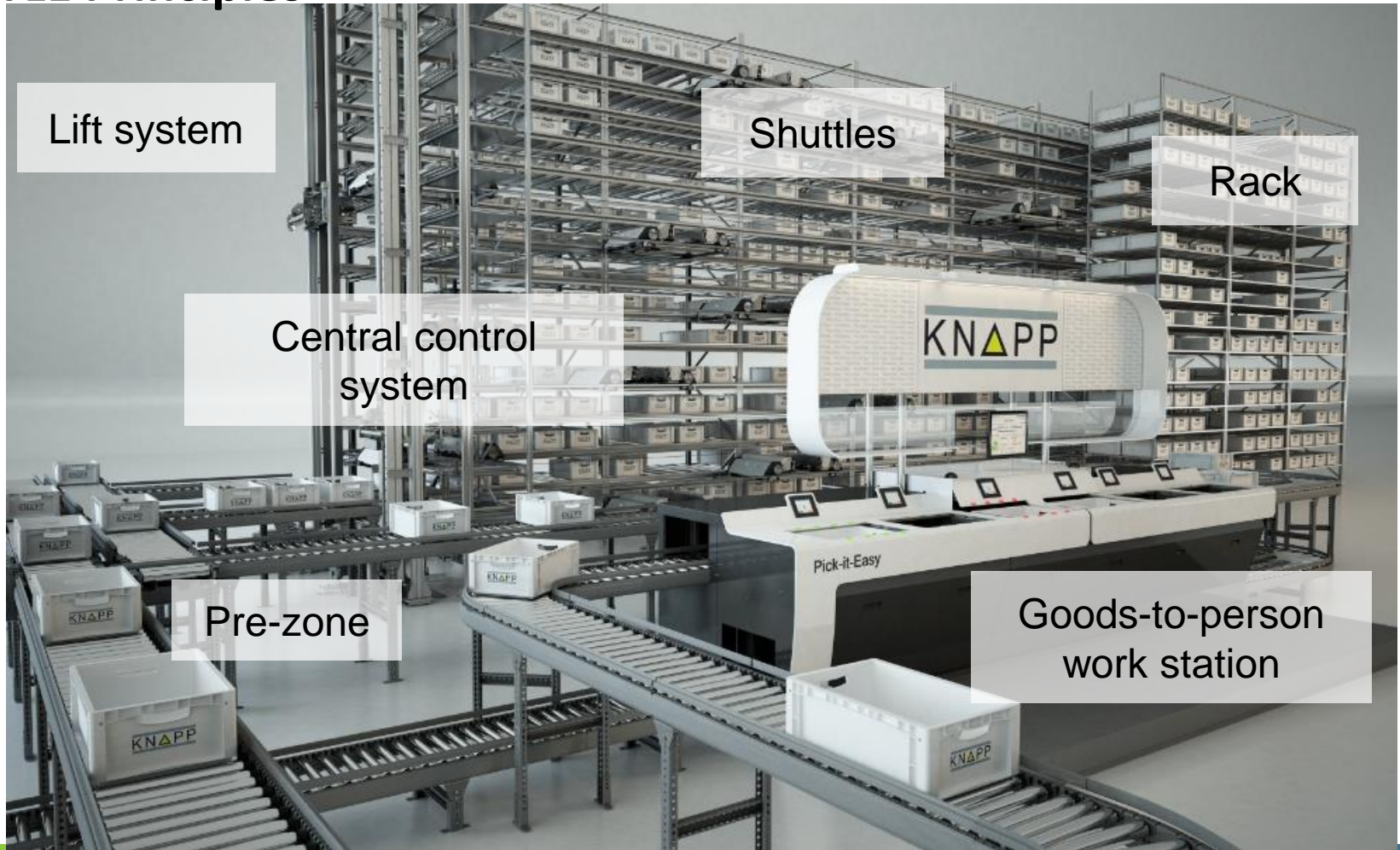
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Warehouse challenges



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SHUTTLE Principles



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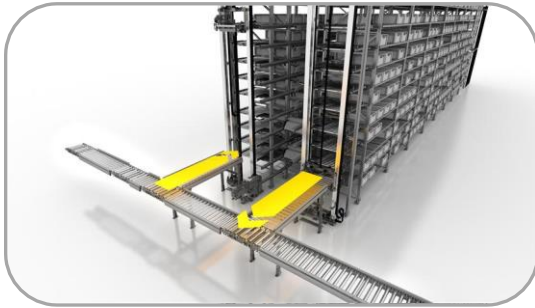
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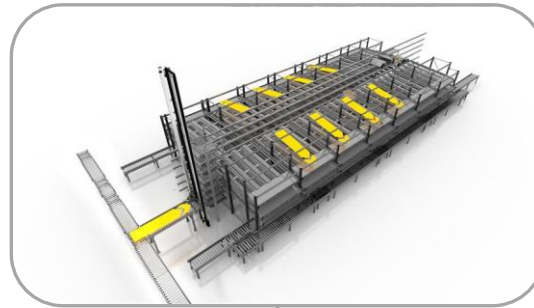
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Applications

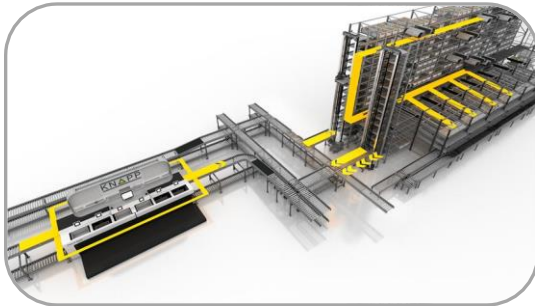
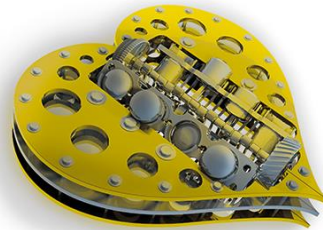
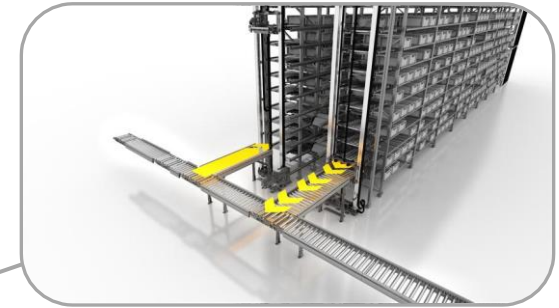
Storage



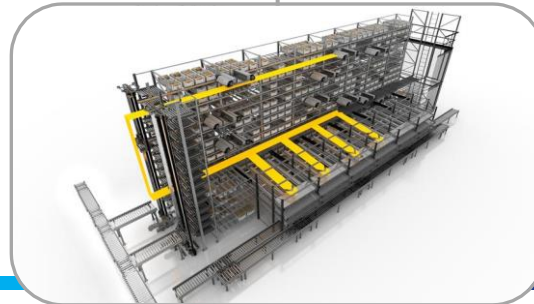
Sorting



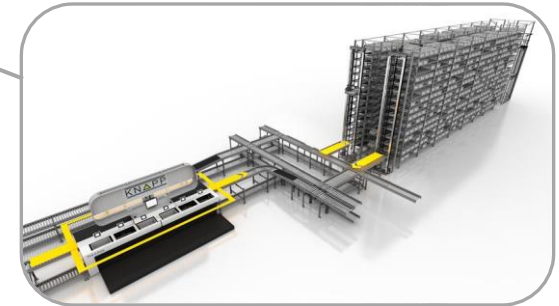
Sequencing



All-in-Shuttle



Overstock/replenishment

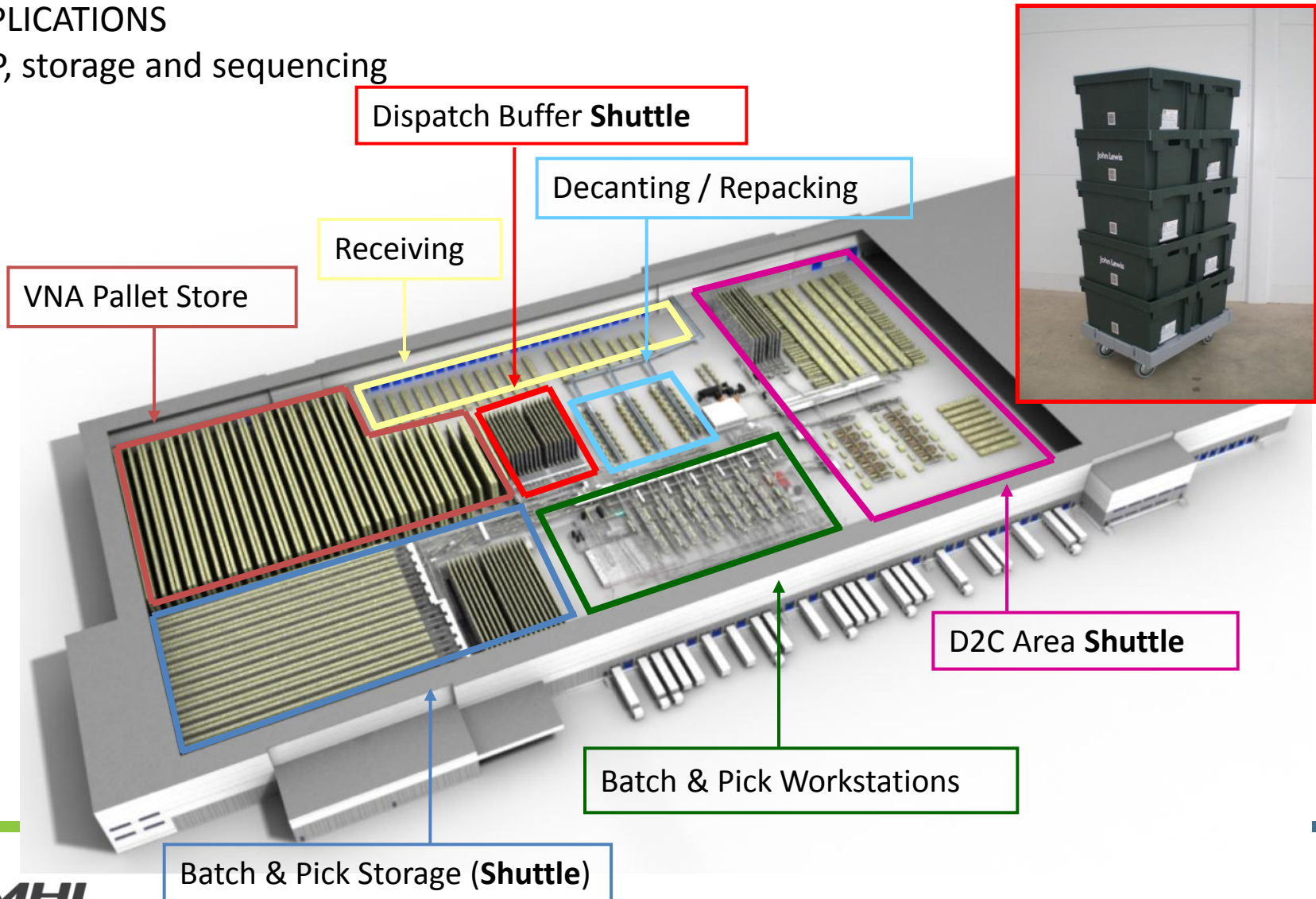


Goods-to-Person picking

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APPLICATIONS

G2P, storage and sequencing





APPLICATIONS Ominchannel

EXHIBIT 1

WHY DO RETAILERS ENGAGE IN OMNICHANNEL COMMERCE?

Reasons for practicing omnichannel	Percentage
Increase sales	78%
Increase market share	73%
Improve customer loyalty	70%
Increase margins	38%
Decrease markdowns	32%
Preserve market share	32%
Improve ability to rebalance inventory	30%
Learn more about our customers	25%
Decrease capital expenditures in building new e-fulfillment warehouses	20%

Note: Participants were allowed to select multiple responses.

EXHIBIT 2

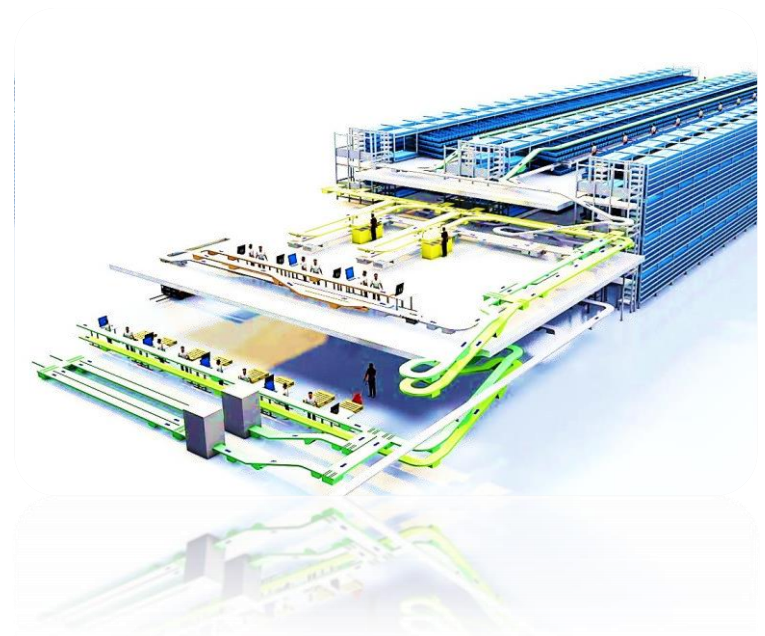
WHAT OMNICHANNEL CAPABILITIES DO RESPONDENTS SUPPORT?

Omnichannel capabilities currently supported	Percentage
Return to store, even when goods are ordered online	73%
Order at store, fulfill from warehouse	69%
Order online and pick up in stores	53%
Pick orders at store for home delivery	43%
Order at store, fulfill from another store	36%
Parcel return, even when goods were bought in a store	36%
Order online and pick up at a location other than your stores	14%



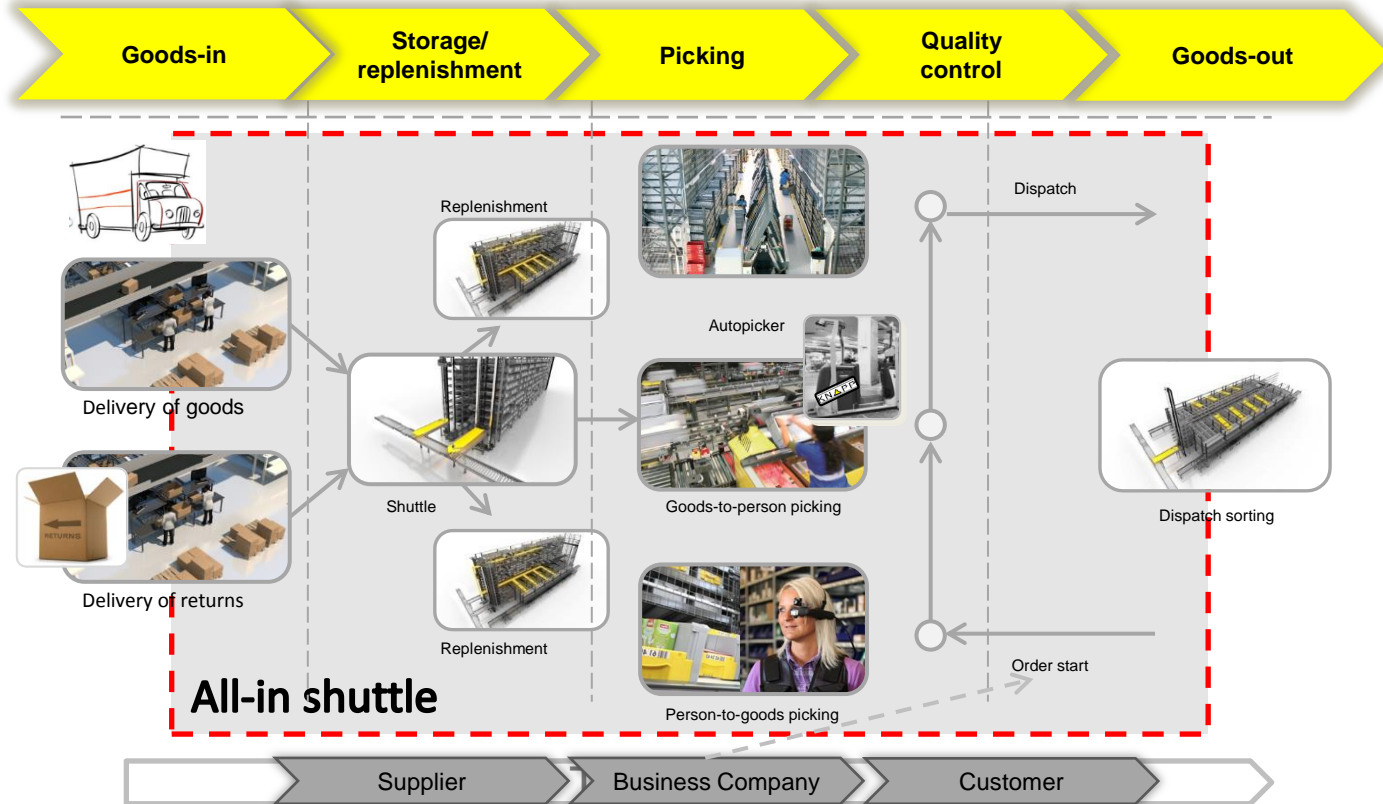
All-in shuttle A storage system for all areas

- One system for different core processes in the warehouse:
 - Goods-in, storage, picking
 - Storage
 - Picking
 - Goods-out
- Optimization of warehouse areas by reducing number of methods/technologies used in the warehouse
- By using the Shuttle as an all-in-one solution, separate warehouse areas are seamlessly connected, operation is made easier and material flow is optimized



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All-in shuttle [2]



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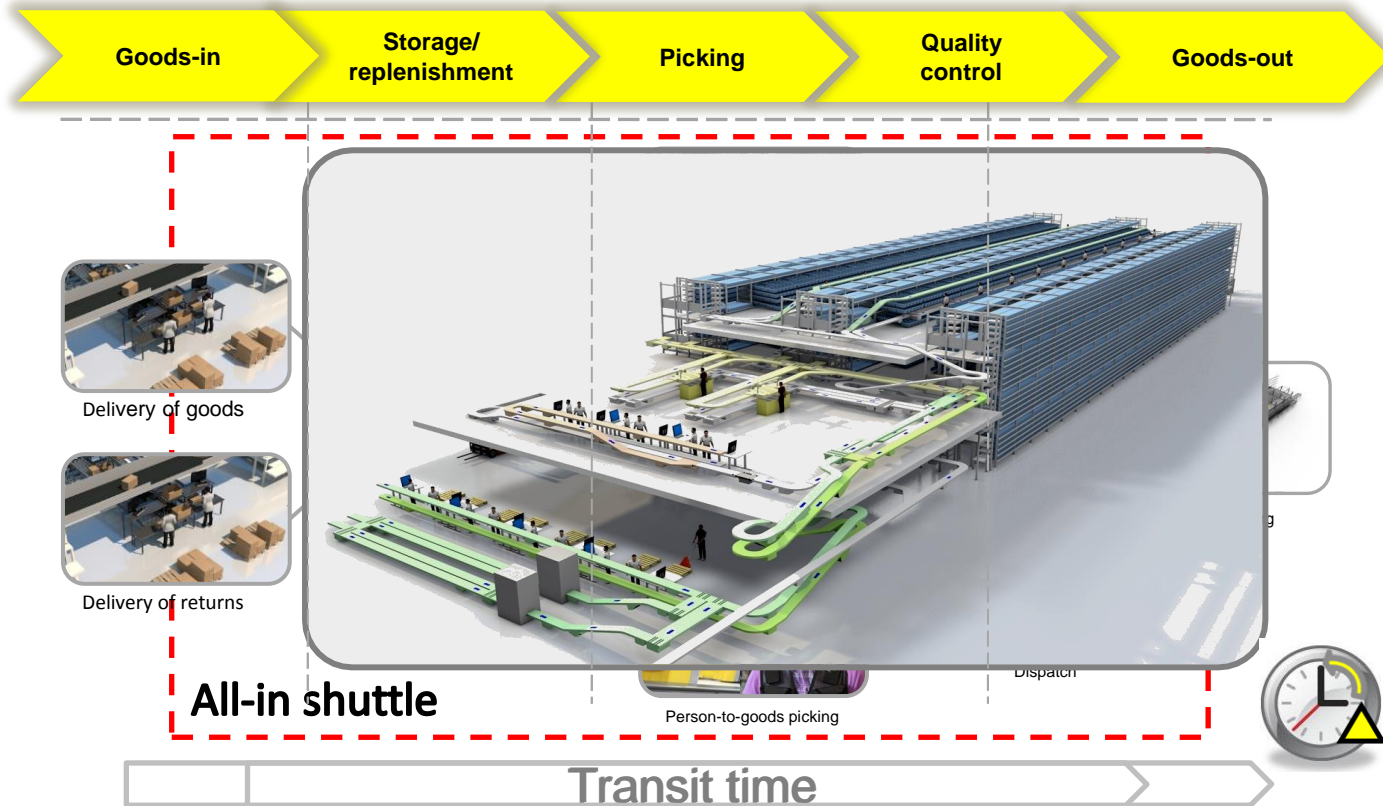
All-in shuttle [3]



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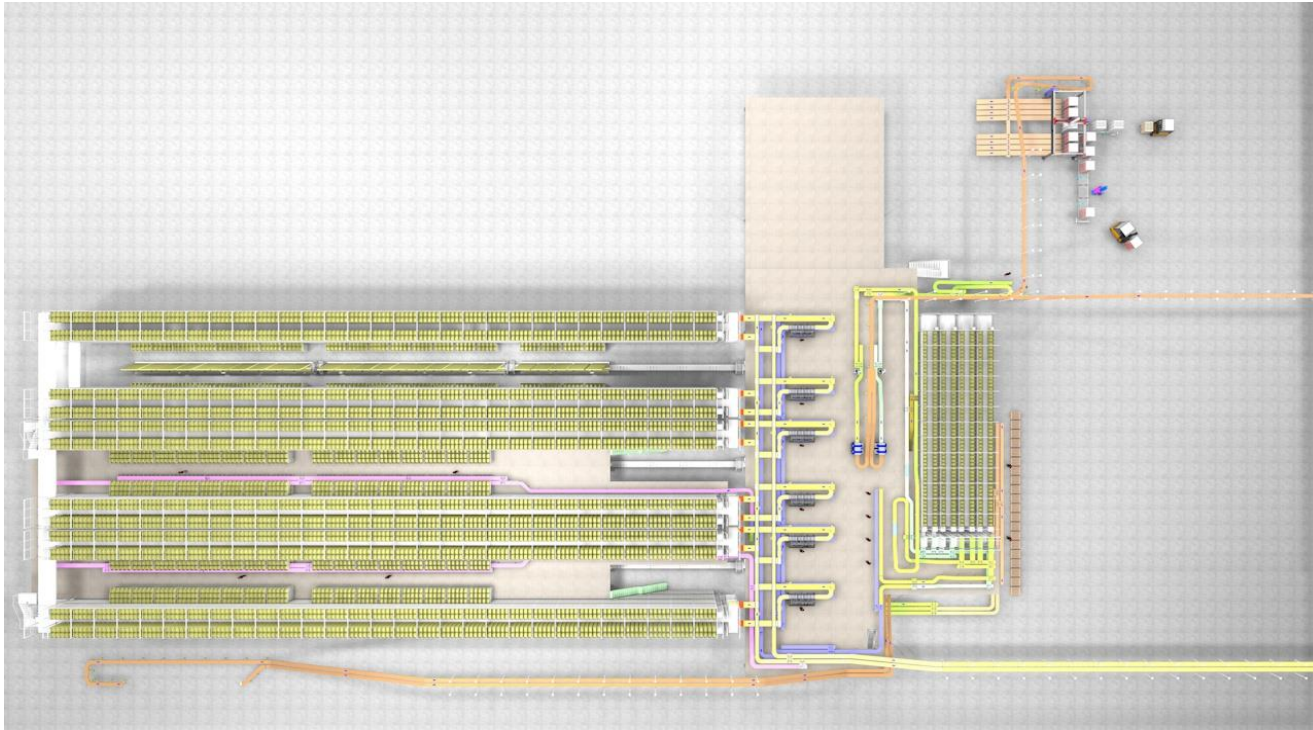
All-in shuttle [4]



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Thank You!

Questions?

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website: www.knapp.com/us

Or visit ProMat 2015 Booth 3203