

SOLVE FOR X.

Addressing Omni-Channel Through Intelligent Material Handling

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Discussion Topics

1. Omni-channel definition
2. Omni-channel considerations for the distribution center
3. Practical suggestions, with examples, for managing day to day omni-channel operations.

DEFINING OMNI-CHANNEL



“When I use a word,..., it means just what I choose it to mean — neither more nor less.’

‘The question is,’ said Alice, ‘whether you can make words mean so many different things.’

‘The question is,’ said Humpty Dumpty, ‘which is to be master — that’s all.’

— Lewis Carroll, Through the Looking Glass

Omni-channel: A comparative look

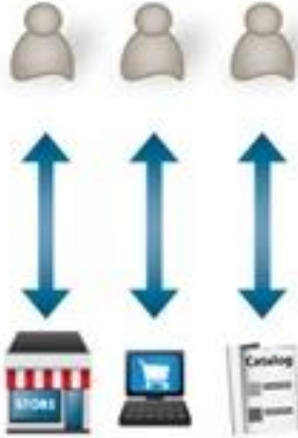
Single Channel



- Customers experience a single type of touch-point
- Retailers have a single type of touch point

The Legacy

Multi-Channel



- Customer sees multiple touch-points acting independently
- Retailers' channel knowledge and operations exist in technical & functional silos

The Reality for Many

Cross-Channel



- Customer sees multiple touch-points as part of the same brand
- Retailers have a single view of the customer but operate in functional silos

The Reality for Some

Omni-Channel

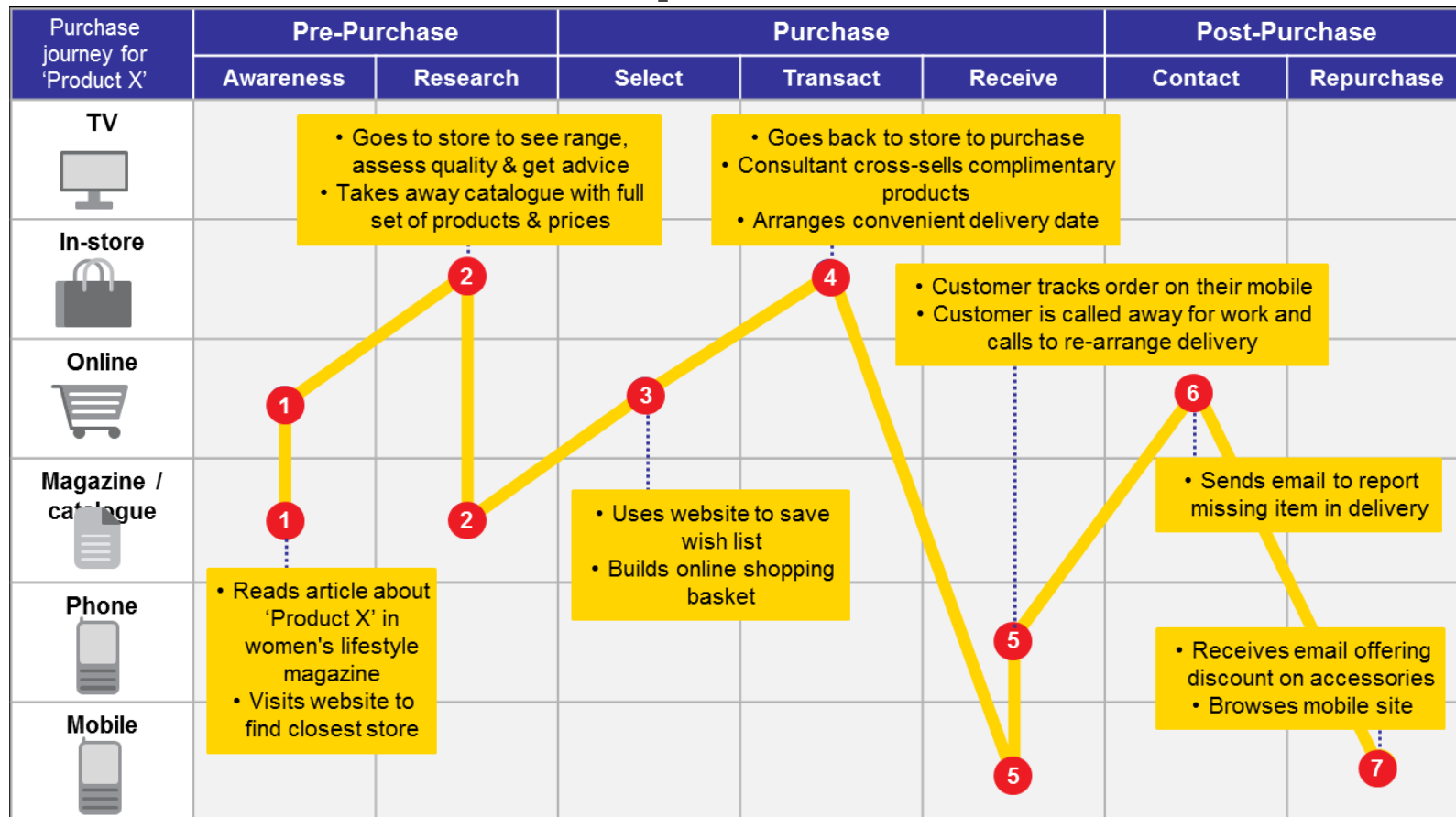


- Customers experience a brand, not a channel within a brand
- Retailers leverage their 'single view of the customer' in coordinated and strategic ways

The Reality for Few

The Goal

An Omni-channel experience



The Future is now: "Buy everywhere, fulfill everywhere, return everywhere"

Omni-channel Retailing Summary

- From Wikipedia:
 - “**Omnichannel retailing** uses a variety of channels in a customer's shopping experience including research before a purchase. Such channels include [retail stores](#), [online stores](#), [mobile stores](#), [mobile app stores](#), [telephone sales](#) and [any other method of transacting with a customer](#). Transacting includes [browsing](#), [buying](#), [returning](#) as well as [pre-sale](#) and [after-sale service](#). Extending across channels and devices, shoppers can visit stores how and when they want.”
- The consumer expects a seamlessly connected shopping and consistent brand experience.
- Traditional stores become **showrooms** where consumers get product advice & information about stock availability.
- Omni-channel connotes more than just a multi-channel distribution center
- **In summary: Buy everywhere, fulfill from everywhere, and return to everywhere**

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OMNI-CHANNEL CONSIDERATIONS FOR THE DC

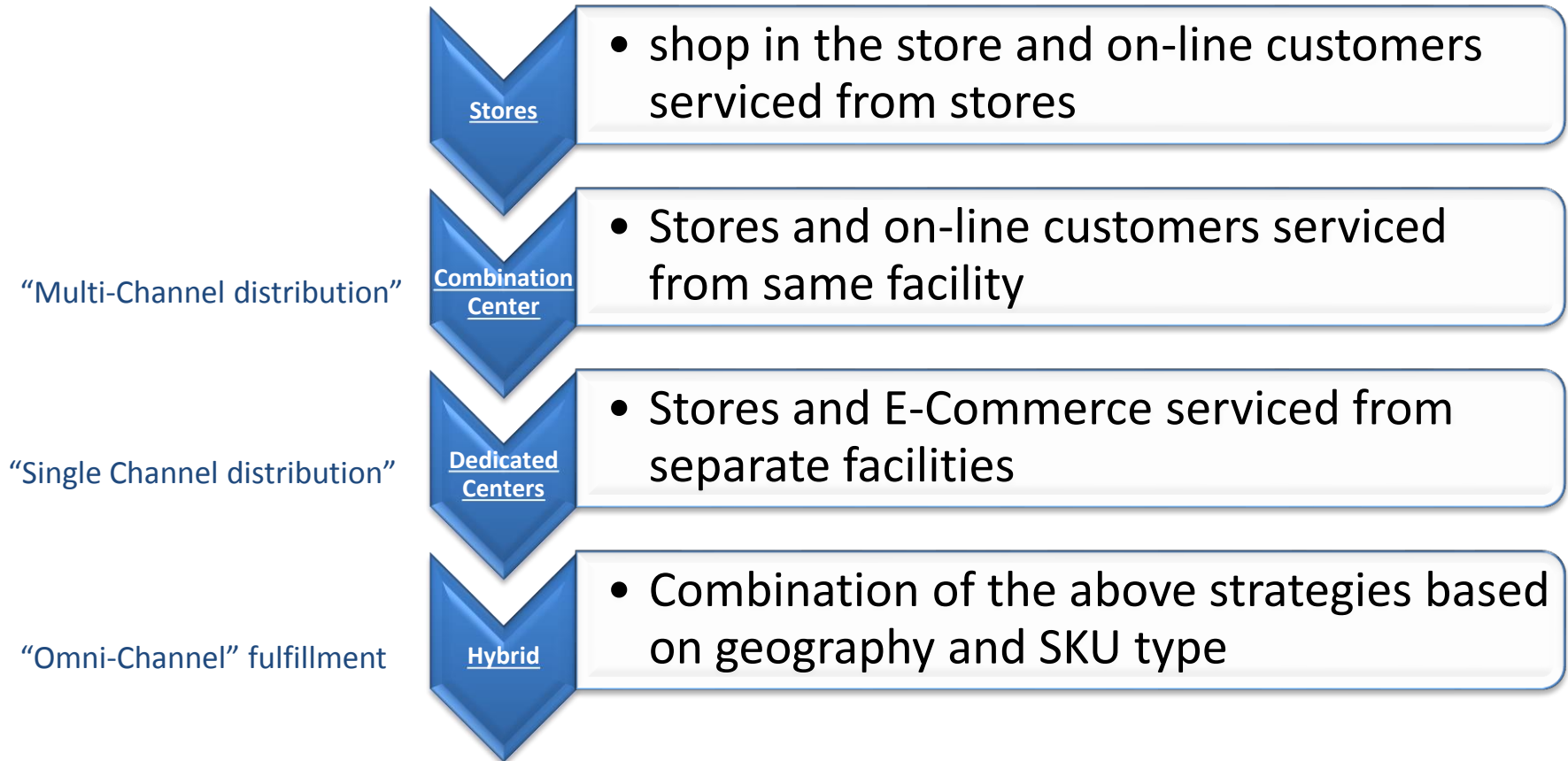


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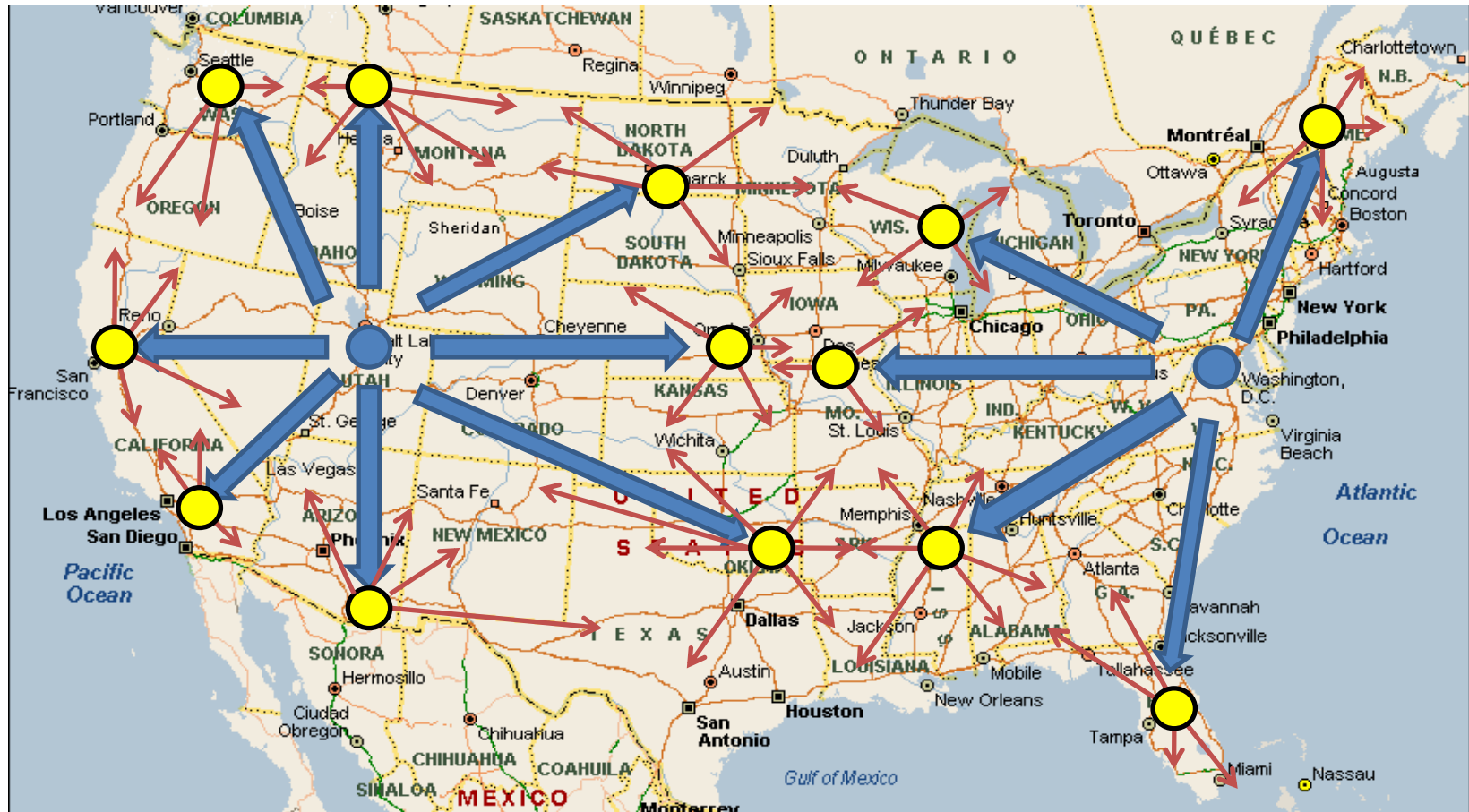
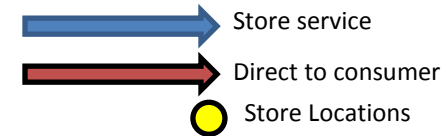
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Building Considerations: Getting products to customers



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Building Considerations: Store Distributed

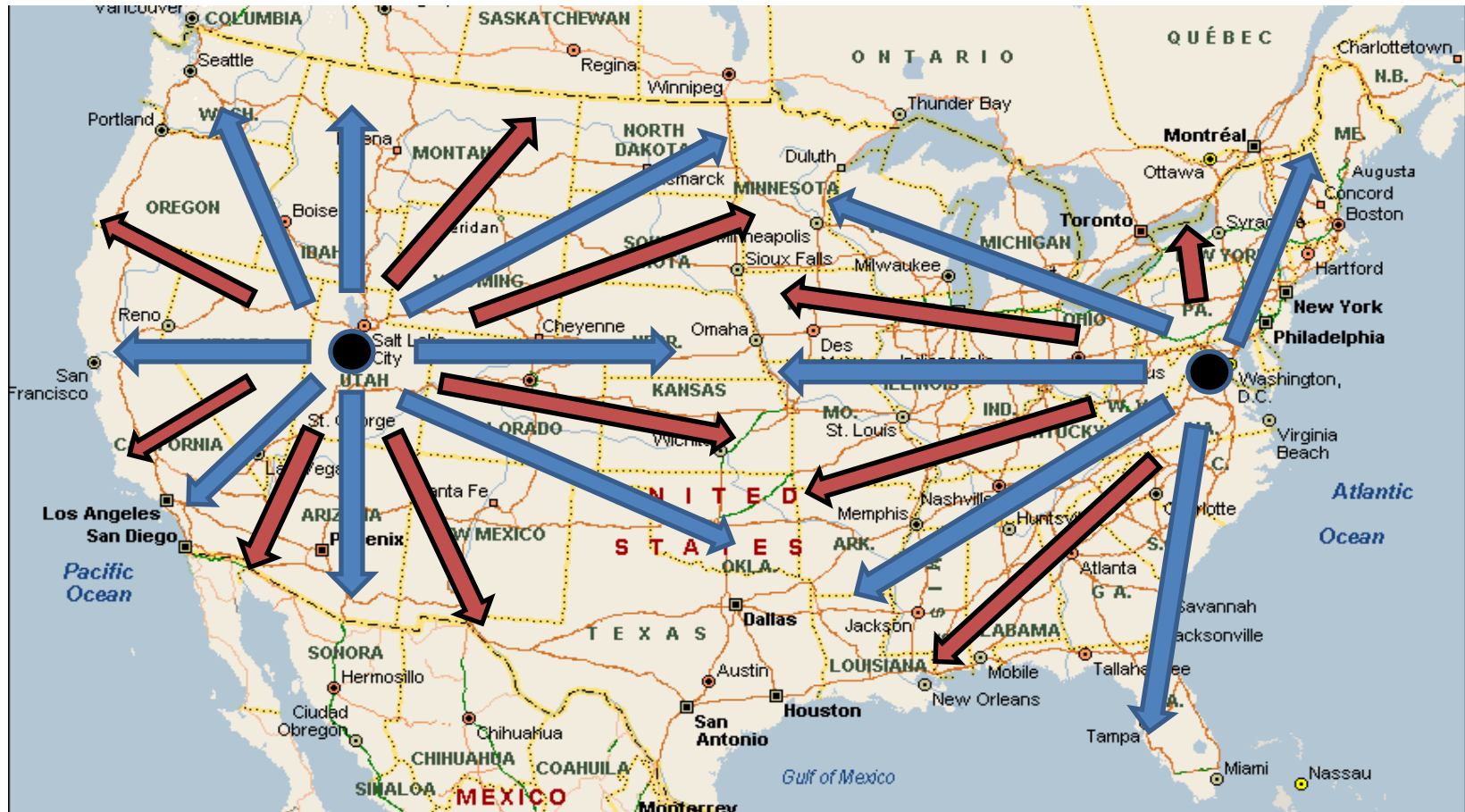


Store Fulfillment: Processing Limitations



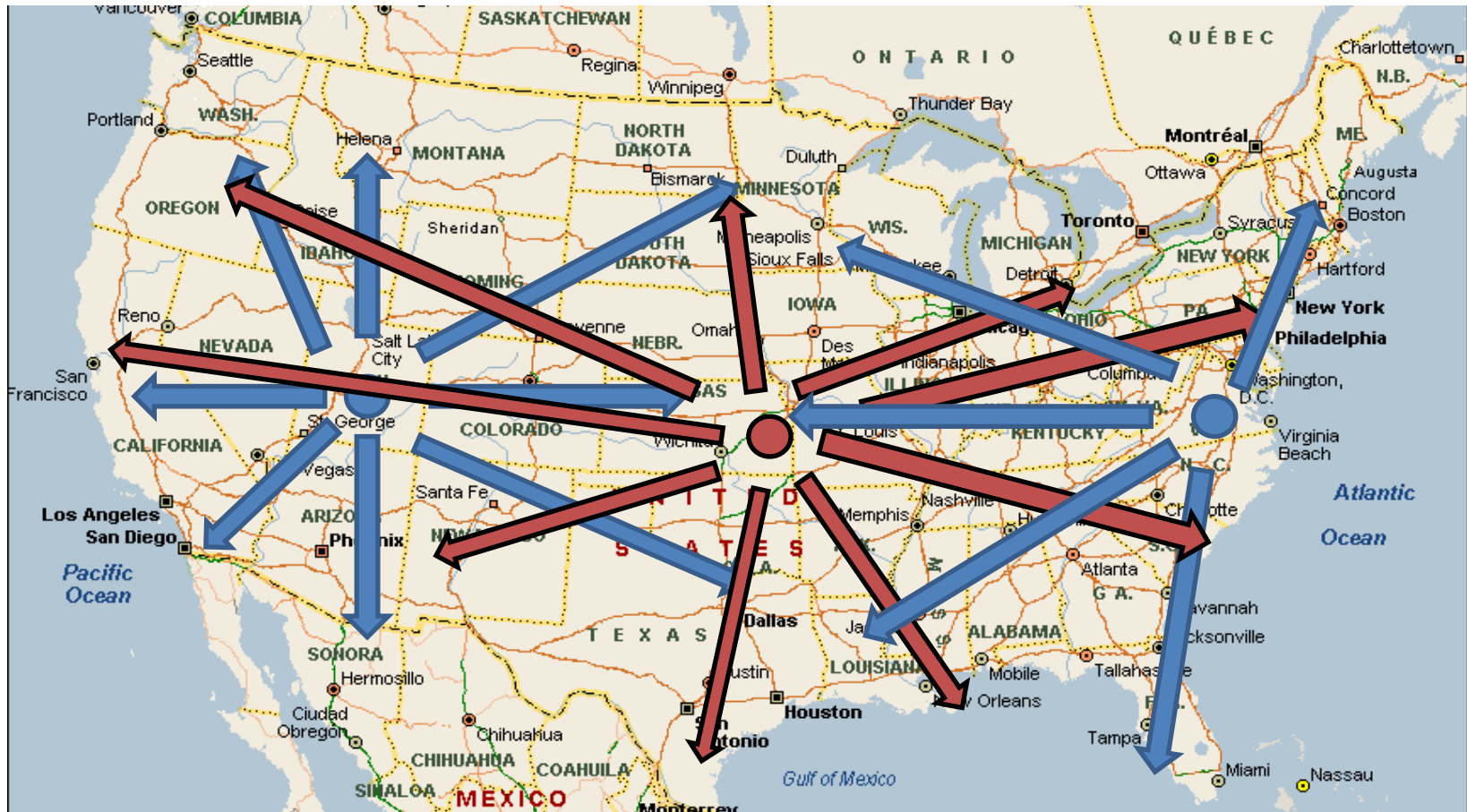
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Building Considerations: Multi-Channel Center(s)



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Building Considerations: Dedicated Center(s)



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3PL Considerations:

Is there a role for a 3PL in your network?

Entrance into E-commerce

Manage Labor Costs

Enter New Sales Region

Returns Handling

Channel Split Considerations

Typical multi-channel DC example

- Retail store replenishment
- E-commerce

Can automation be shared?

- Peak demand overlap

Inventory considerations

- Shared or separate
- Packaging
 - Store pre-packs vs. bagged and labeled for Ecom

Growth

- When will one of the channels outstrip the shared capacity

Equipment Considerations

- Shared equipment considerations
 - Facilities where a multi-channel solution makes sense
 - Smaller footprint stores who receive a significant amount of split case shipments.
- Retailers whose order profiles to stores are not close to Ecommerce profiles would have different solutions for each channel.

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Equipment Considerations: Product to Picker

- Primary goal is to save pick labor by reducing travel.



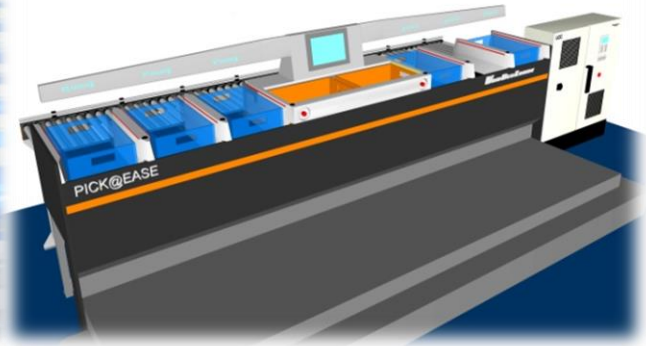
Carousel



Vertical Lift
Module



Shuttle
System



Equipment Considerations: Zone Divert Pick & Pass Modules



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Equipment Considerations: Picker to Product

- Primary goal is again to save pick labor by reducing travel.



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**Equipment
Considerations:
Unit Sort
Order Consolidation**

Cross belt



Bombay



Tilt tray



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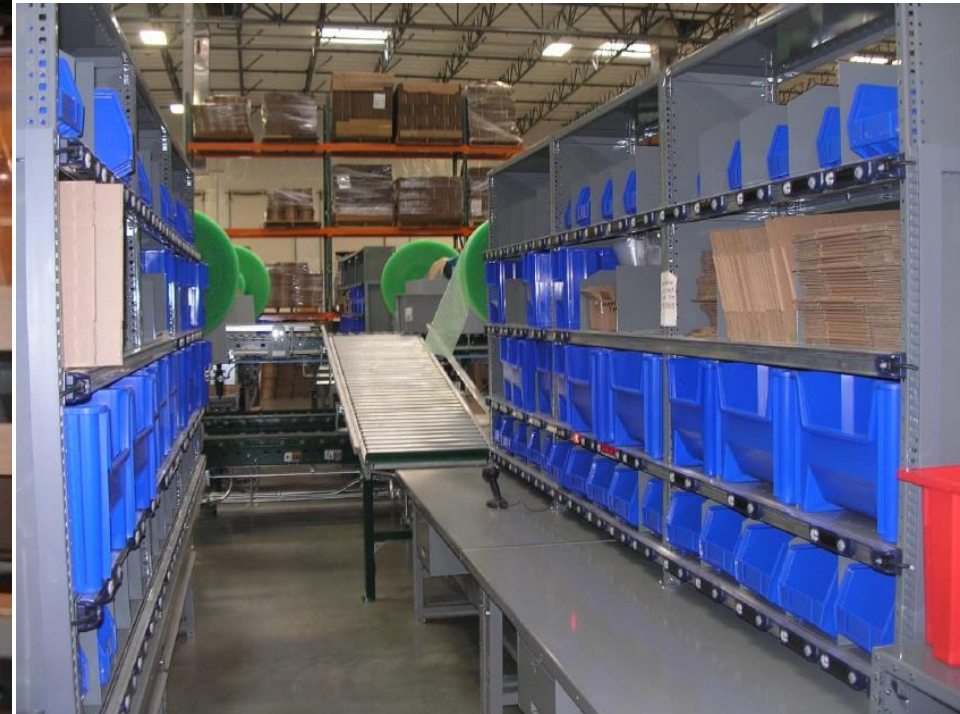
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Equipment Considerations: Sort to Order

1 sort vs. 2-pass sort

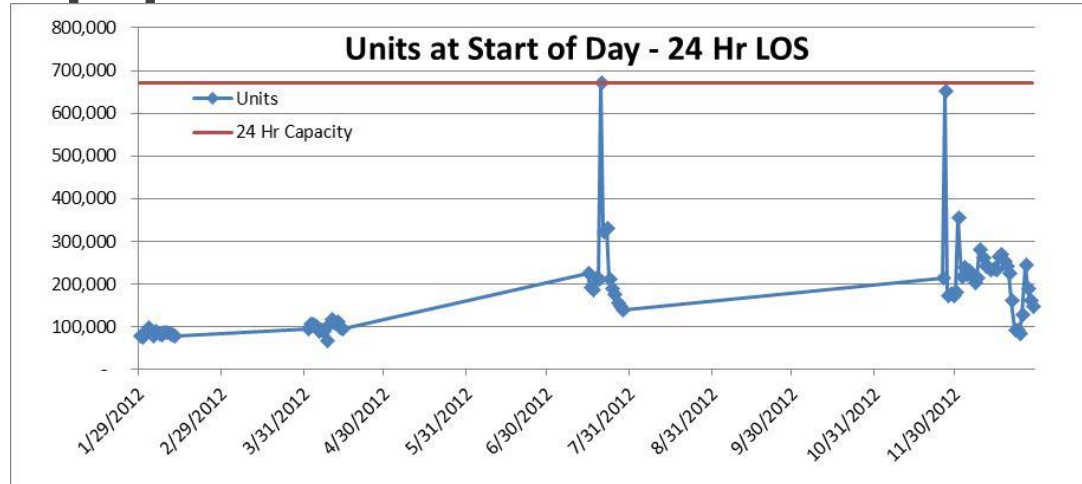


automated / semi-automated



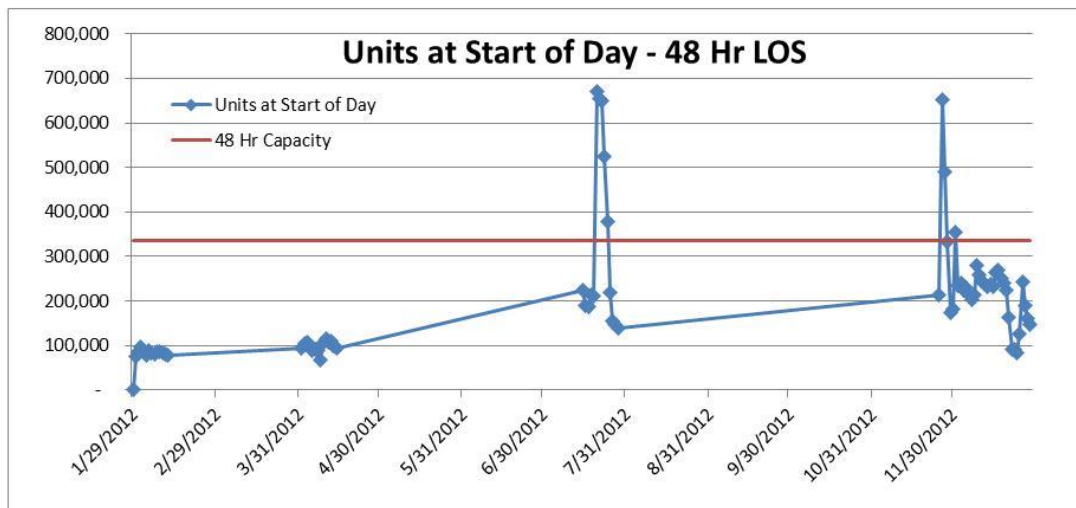
manual

Equipment Utilization and LOS considerations



How much is enough?

- 48 hour LOS achieved with 50% reduction in total facility throughput capacity
- 72 hour LOS achieved with 60.6% reduction in facility throughput capacity (graph not depicted)



Returns Considerations

Returns center location(s) considerations

- Will stores and E-comm returns be processed at the same location?
- How many distribution centers are in the current network?
- How many stores are in the current network?

Single E-Commerce returns center

- E-Commerce returns best processed at the FC
 - Most efficient labor
 - Stock availability



Multiple E-Commerce fulfillment centers in supply chain network

- Directing customer returns locations can:
 - Decrease return freight
 - Help manage inventory imbalances

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Returns Considerations

Who will pay for returns freight?

- Customers' experience is viewed as more favorable when retailer pays for return freight, but this will drive toward a strategy to reduce return freight costs.
- If the customer pays the freight then a single returns location would make more sense. Affect on sales should be closely monitored.
- Remember that not all customer bases are the same. Not everyone cares about the same things.

Can E-com purchases be returned to a store?

- This increases the customer experience by providing more options
- The potential downside is selling the product at the store level without proper refurbishment.
- The upside is achieving the common retail goal to drive the customer into the store

E-Com returns shipping materials

- Best in class: provide shipping label on-line as part of returns authorization process
 - This can be a prepaid label or an address label only (customer paid freight)
- Exceptional: provide return label with the invoice as part of a multi-part form. Package soft goods in shipping bags that are reversible or reusable for returns packaging

Operating Complexity Considerations

- Skill and experience level of DC leadership
 - General Manager
 - Operations Manager
 - Supervisors
- Tools available
 - Systems
 - Reports



- What does it mean to manage the day to day operations of a facility that support the customer's omni-channel experience?...

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MANAGING DAY TO DAY OMNI-CHANNEL OPERATIONS



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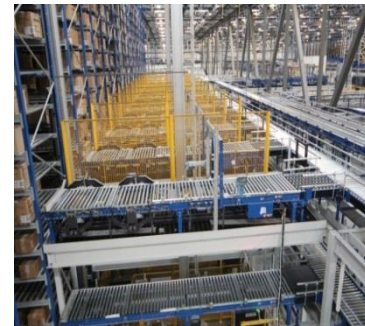
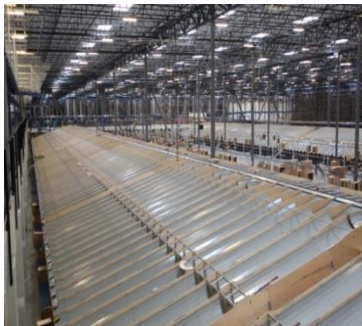
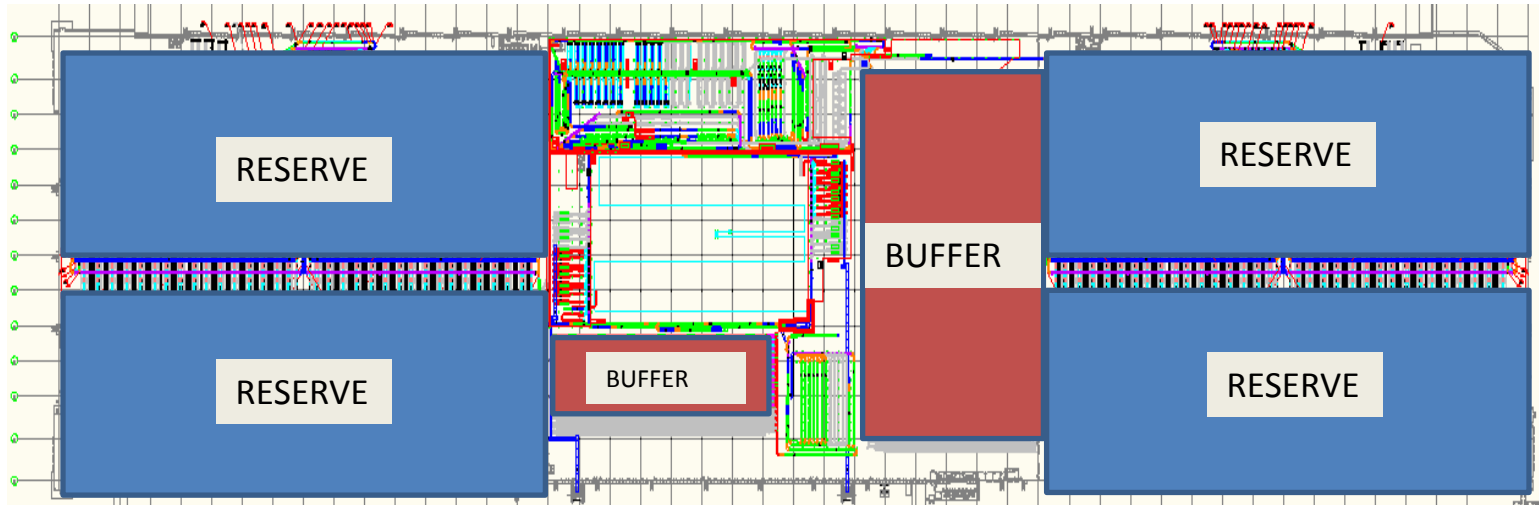
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The Challenge of the New World of the customer

- Seamless
- Customers do not care how their orders are fulfilled
- Orders will be placed from any platform
- Service level expectations do not move
- How do we serve these demand?

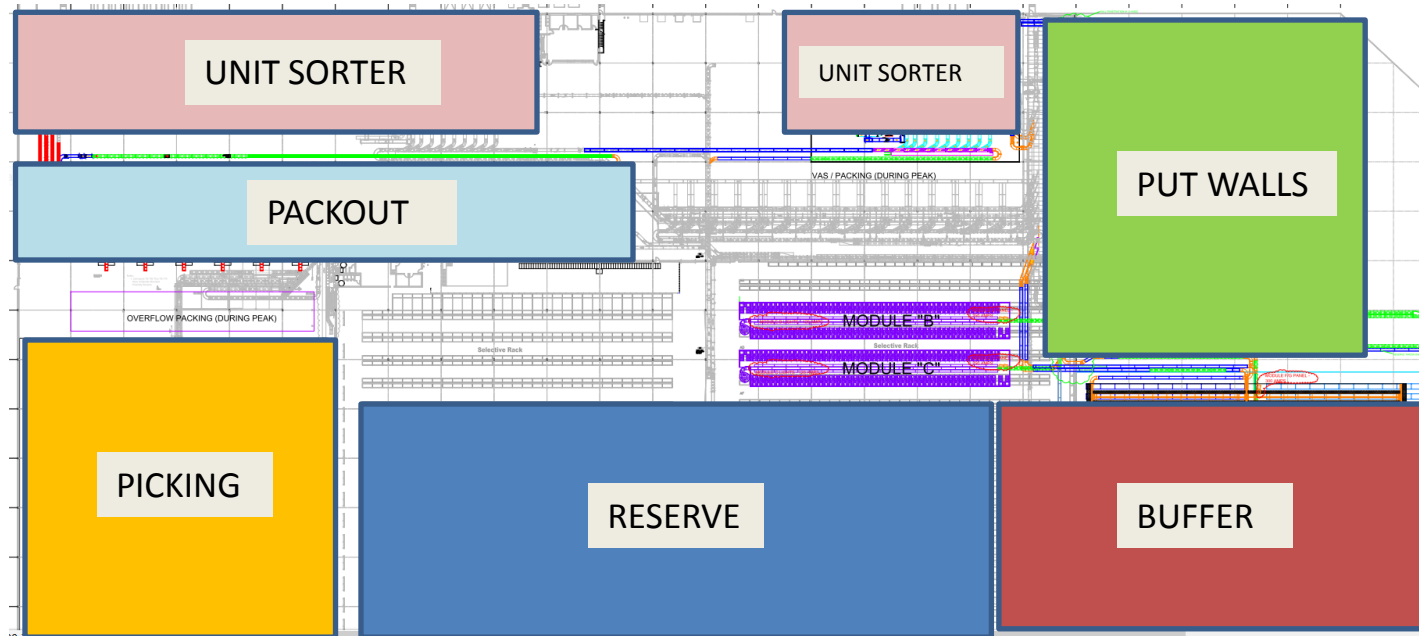
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Omni-Channel phased approach



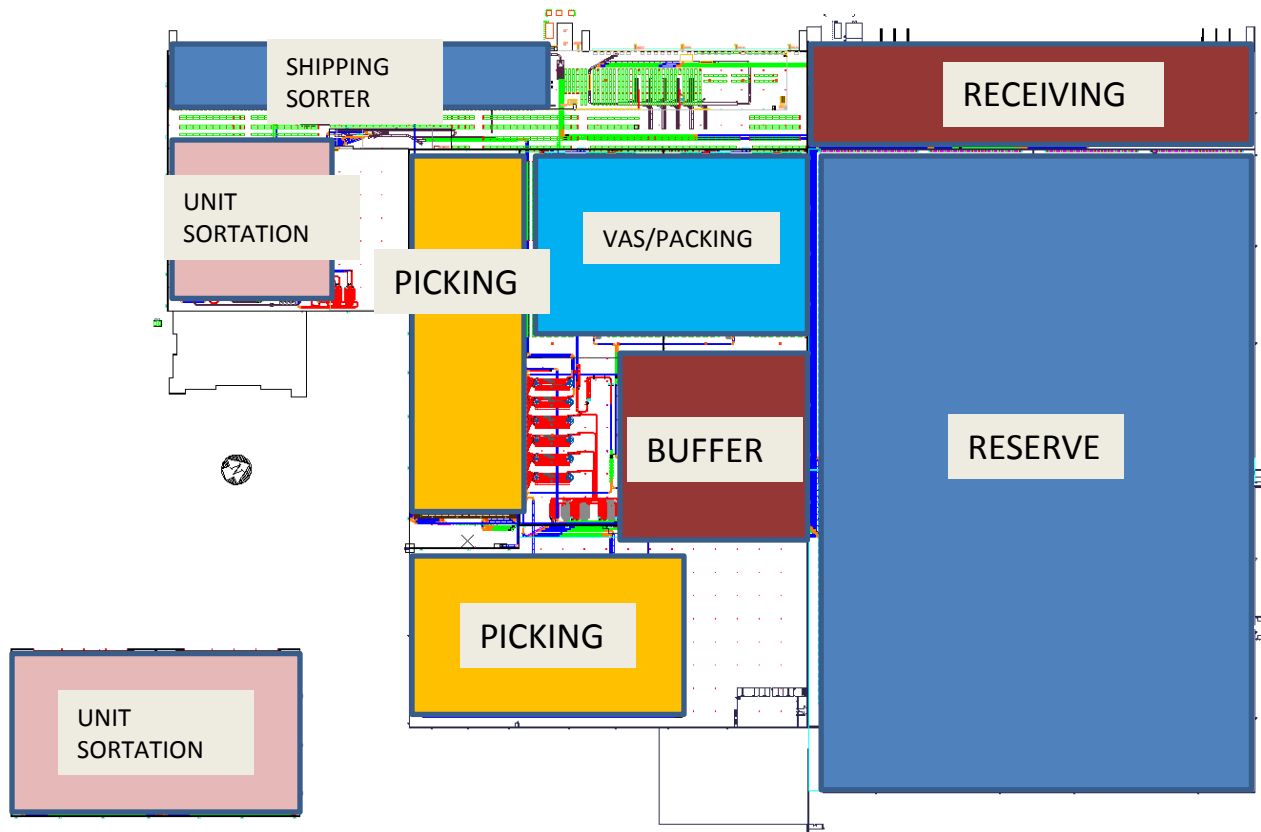
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Conventional to Omni- Channel



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Conventional to Omni- Channel



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Future Landscape

- Retail stores at FC
- Brick and Mortar for eTailers
- FC at Brick and Mortar retailer

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Keys to Winning

- Visibility (real time)
- Actionable information
- Flexible Operation

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