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McCormick Place South | Chicago  
March 23-26, 2015  
[promatshow.com](http://promatshow.com)

***Warehouse  
Execution  
Software:  
Creating Operational  
Agility in an Omni-  
Channel Environment***

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## What You'll Learn



- What **Warehouse Execution Software (WES)** can provide for your DC.
- How **WES** augments and aligns with your **existing software** and **MHE infrastructure**.
- How **WES** can provide your DC with the necessary **operational agility** it needs to be successful in an omni-channel environment now and in the future.

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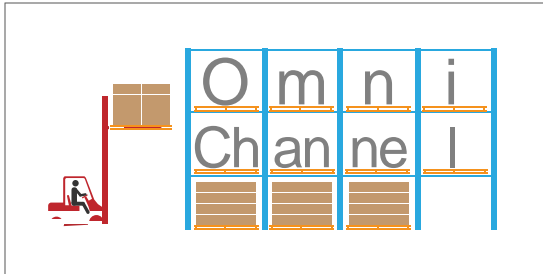


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# Are you tired of talking about Omni-Channel?



Unfortunately it's here, and it affects everything within your supply chain.

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## At least it should....

Retailers are investing heavily in their front-end operations to provide their customers with an omni-channel experience.

But the back-end of distribution is falling short in meeting those demands.

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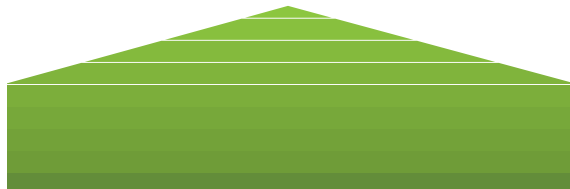
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Warehouses are being left in stale states, incapable of meeting the distribution demands being promised to customers.



We are failing to execute on the **omni-channel experience.**

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If you want to **remain competitive**, closing the gap between customer engagement and your distribution channels should be a top priority.

Unfortunately, the problem isn't solving omni-channel, it's keeping up with the constant changes being brought on by these new consumer demands.



## Omni-channel isn't one thing....

- It's multiple channels
- Changing and varied order profiles
- Ship-to deadlines
- & much, much more

Omni-channel is really a catchall term to mean engaging customers in any way they like...



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So how do you solve an omni-channel distribution problem today that **may change tomorrow?**

How can you implement solutions today that may negatively impacts how you **adapt to new challenges** down the road?



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## We need to rethink what an omni-channel optimized supply chain looks like

...It's more than adding an  
eCommerce arm to your  
fulfillment system.



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You need a solution that promotes **holistic health** across your facility.

You need a solution that provides **operational agility**, so your warehouse can combat whatever new challenges come your way.

You don't need your distribution centers to be the **weak link** in your company's overall strategy.

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**So what can you do?**

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## Invest in costly MHE?

MHE vendors continue to innovate around their own offerings instead of finding ways to use their own technology to create holistic health inside their customers' DCs.

The result has led to many mistakenly plugging in costly, new MHE into their systems only to fail at gaining the return they want.



## What about Software?

WMS are great at Inventory LMS, Inbound, inventory

WCS is great at the physics – moving conveyors, picking, machinery, robots, etc.

But there's a gap, forcing you to throw orders over a technological fence inside your own warehouse

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What if you could use software to leverage your **existing infrastructure and legacy systems**: systems that were not originally designed to deal with the flux of omni-channel?

What if this software could create **agility and alignment** inside the four walls of an existing facility to allow for the constant changes of omni-channel without the costly capital expenses and uncertain ROI of new MHE?

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## Enter WES

### What is it?

Warehouse Execution Software (**WES**) is a modular platform that rests atop the entire order fulfillment process, aligning the multiple discrete processes operating inside the four walls of the warehouse.





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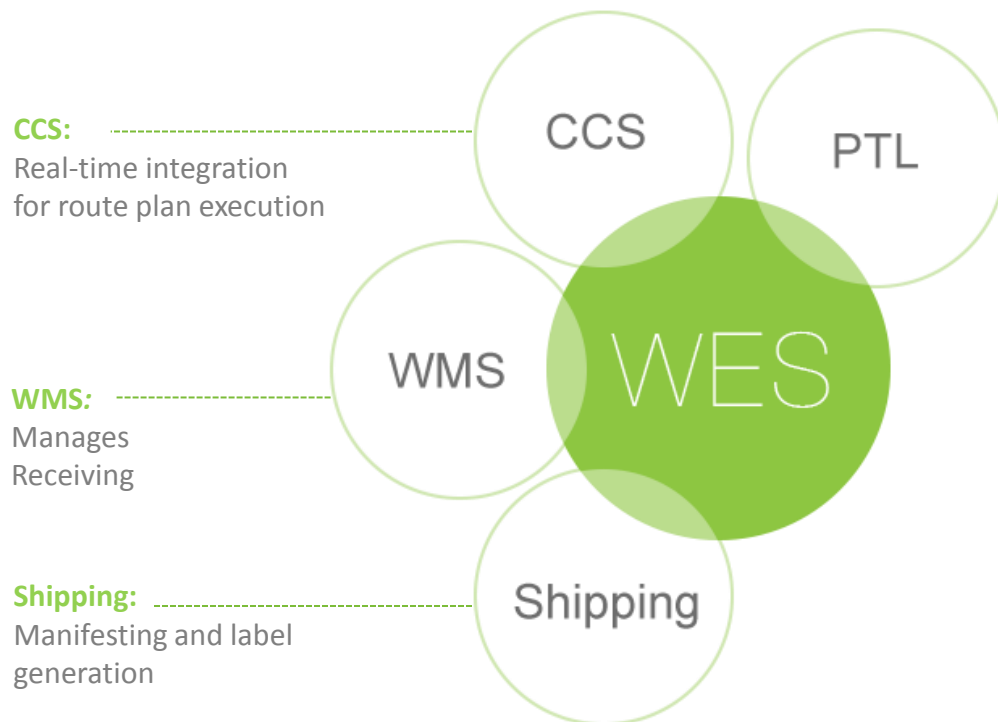
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**How Can WES work in your warehouse?**



## Adaptable Implementation: E-commerce

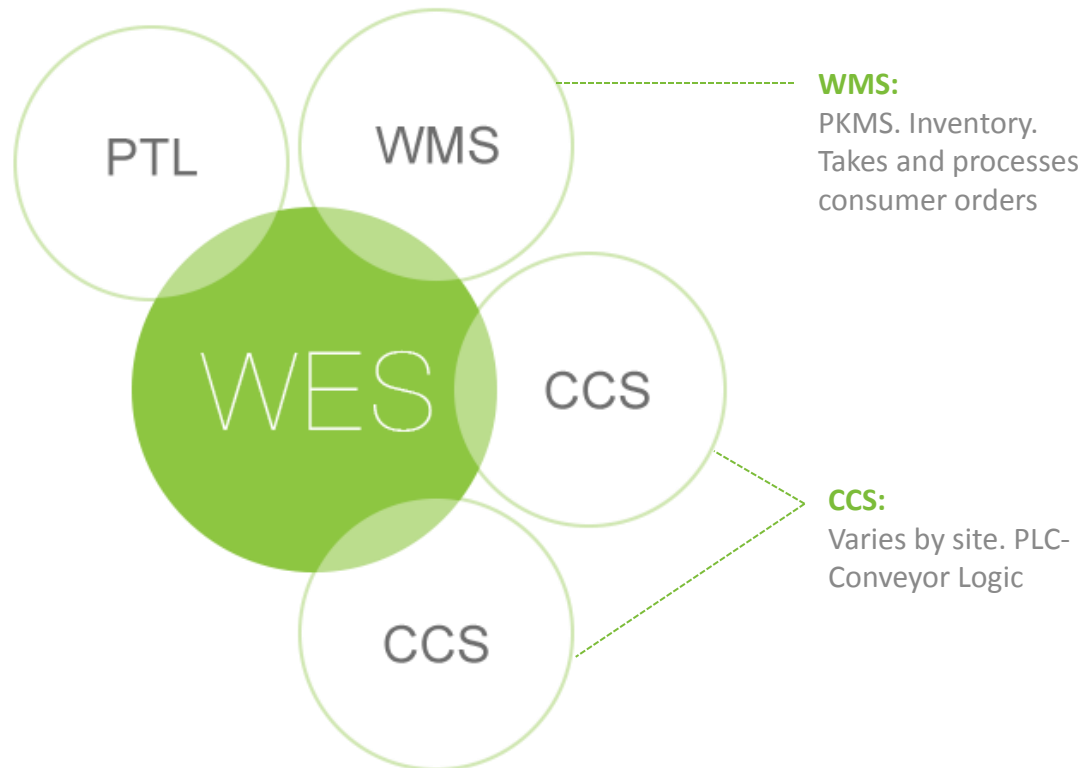


- Manage Putaway → Shipping
- SLSU, MLMU & SLMU using Waveless & System Directed work engines
- Highest priority orders assigned at Packout
- MLMU's range from 15% of business at non-peak to 83% at peak
- Batching done using a pull method based on resource availability
- Protocols: FTP, Socket, 3<sup>rd</sup> Party Middleware



## Adaptable Implementation: E-commerce

- Manage Picking → Packing
- Promotional items fulfilled at Quick Pick stations
- Personalization = 49% of total lines processed daily
- During batching, process 5,000 orders in 1.3 min
- Hybrid order processing system made up of SLSU, SLMU and MLMU, both personalized and non-personalized
- Protocols: FTP, Socket





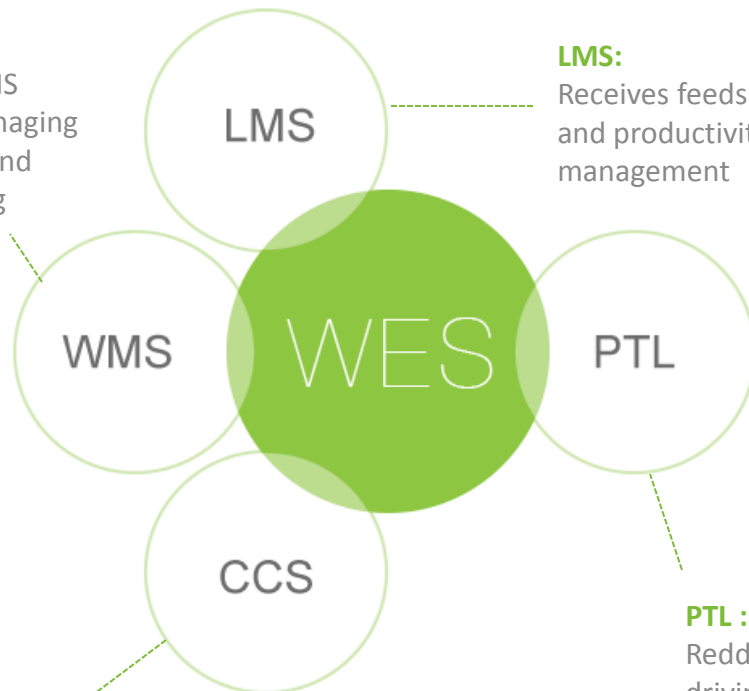
## Adaptable Implementation: Grocery

### WMS:

Legacy WMS system managing inventory and manifesting

### LMS:

Receives feeds on rates and productivity for labor management



### CCS:

PC-based controller executes what Reddwerks plans

### PTL :

Reddwerks driving both our devices and IPTI

- Use all major WMS / WCS / CCS applications
- Processing orders for 35,000 convenience stores & major big-box retailers
- 73,500 Reddwerks PTL devices in 8 sites + more than 50,000 IPTI lights in other sites
- Replaced PC-based controllers (Dematic) in several sites with PLC-based controller
- CCS controlling conveyor by Intelligrated, Dematic, Hytrol, FKI, etc.
- Protocols: FTE, FTP, MQ, socket



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# Q & A



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## **For More Information:**

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**Or visit ProMat 2015 Booth 4181**