



SIX REASONS WHY IT'S TIME FOR **App Stores** for Supply Chain Management Software

Your industry and your customers—and let's not forget the government—have unending lists of new requirements and regulations. Why does it seem like you're never able to adjust your business as fast as the requirements roll in? And why do those little "code adjustments" your software vendor makes to your system always come with a headache-inducing invoice?

There are millions of apps to help us manage our work and personal lives on our smart phones, but what about apps for your supply chain management software? Wouldn't it be great if you could browse and add functionality to your warehouse management system (WMS) similar to how you add new apps to your smart phone?

The next generation in software adaptability is here. Read on to see six reasons why it's time for an app store for your supply chain management software.

1. Traditional WMS software is bloated with features you'll probably never even use...and you're maintaining all of it.

Traditional enterprise software delivery models add new features into ever-growing "master" applications. Most systems have been developed over at least 10 years and nearly every customer-requested feature has been added to the product and is enabled by sets of interdependent switches. This causes the code base to grow increasingly bloated and adds risk and additional complexity to software maintenance—like upgrades—and makes it difficult to make even small adjustments to the software to fit your business. An app store model allows you to select and add only the new functionality your business needs, which reduces complexity and risk and streamlines system support.

“The bigger the code base, the more monolithic the solution becomes, the longer implementations take, the more difficult testing becomes (flipping a switch to enable one piece of functionality could break a different piece), and the more difficult the upgrade process becomes.”

“App Stores Come to the Supply Chain Execution (SCE) Market”
Steve Banker, Logistics Viewpoints

2. It's risky and time-consuming to mess around with custom code when you need to make a change.

Ever feel like you're playing with a house of cards when you need to make changes to your system? Or maybe it's more like finding the right wire to cut to disable a bomb?

When modifying traditional monolithic WMS software you're always taking the risk you may affect another part of your application. Ideally your WMS should have a more modular, adaptable approach and architecture that supports your business' need for continuous evolution and empowers you to personalize your system on your own when changes are needed. The app store delivery model further minimizes risk by delivering new functionality via on-demand, modular applications. Having modular business processes segregates the process you need to modify from other business processes. This means quicker adoption of new technology and less risk of breaking something inadvertently.

3. Your customers and suppliers can't wait around for your next major WMS upgrade—neither should your functionality.

You know that sick feeling you get when you read about a new government or market regulation coming down the pipe and you wonder how long it will be before your software vendor will make the compliance workflow available in the next upgrade? Oh, wait—that means you have to figure out how to get a major upgrade completed first. Well, the government can wait...right?

With an app store your WMS vendor can package new functionality in a way that's fast and easy for you to access and deploy. This provides customers with instant access to the latest supply chain technology innovations through a centralized location. And there's no need to wait for the next major upgrade in order to get your hands on the functionality you need.

“[App stores for the supply chain] is a very provocative concept, and one that might have quite an **impact on how software functionality is delivered** and even the traditional versus on-demand software debate.”

“Supply Chain Software App Stores?”
Dan Gilmore, *Supply Chain Digest*, Oct 2010

4. Nobody wants to have to pay—or wait for—their WMS software vendor to make system changes.

It's unreasonable—and ridiculous—for a WMS vendor to claim their system includes all features and workflows your business will ever need. The reality is that your customer and industry requirements will change. Your operation

The App Evolution

Ever since the beginning of time (or perhaps it just feels that way), enterprise software has been delivered in one giant chunk of monolithic code. Little by little, software vendors began moving to modular application delivery, with different modules turned “on” or “off” with switches. The most advanced stage of the evolution has come with the arrival of “micro apps”, which further reduce software complexity, speed implementations and upgrades, provide customer and industry-specific functionality, and get new innovations in the hands of customers faster⁽¹⁾.

MONOLITHIC CODE BASES

Switches control entire applications

MODULAR ARCHITECTURES

Switches control module
Modules statically integrated

MICRO APP ARCHITECTURES

Solutions delivered as small apps that run on platform
Switches configure app logic

may grow, or completely evolve to provide new services for your customers. A conventional WMS necessitates an engagement with your software vendor (perhaps the whole source code modification team!) to perform these changes for you through costly and disruptive source code modifications. You may get treated to a nice lunch when your WMS vendor is in town, but do you really want to see them—and pay them—whenever you need to make a simple change?

A WMS with flexible, adaptable architecture allows you to easily make changes to your system on your own, without disrupting the rest of your business and without complicated source code modifications. Add an app store delivery model to the mix and you're off and running, quickly and inexpensively applying any needed changes and new technology—whenever you need it. And without the eye-popping vendor invoice.

⁽¹⁾“App Stores Come to the Supply Chain Execution (SCE) Market”, Steve Banker, Logistics Viewpoints

5. WMS upgrades needn't be prohibitively expensive. Or scary.

Ever hear of the WMS million-dollar club? Don't worry, it's not one you'd want to be a member of. Did you know there are a large number of business out there that have had to cough up a million dollars just to *upgrade* their WMS? Many conventional WMS contain a shortcoming in their design in that most changes can only be accomplished through the addition of inflexible custom coding—coding which doesn't carry forward with an upgrade. In some situations, this reaches an extreme where so many changes have been made that even minor modifications become a major undertaking. Ouch.

An app store delivery model for supply chain management software helps keep scheduled upgrades lean and simple. Through an app store delivery model the software vendor is able to add new functionality not widely-required by customers to the app store instead of to the base product. Remember the “code bloat” problem we mentioned earlier? Customers that want the new workflow can easily browse for and snap in the new app. The rest of the customers are not affected, meaning software code is kept to only the processes that are required for their business—and upgrades are dramatically simplified.

“[App stores] may be the perfect way of delivering many/most pieces of functionality specific to companies in different vertical industries or with different supply chain process models.”

“Supply Chain Software App Stores?”
Dan Gilmore, *Supply Chain Digest*, Oct 2010

6. The traditional supply chain software delivery model doesn't exactly promote rapid innovation...for you or your software vendor.

Apple's App Store, launched in July 2008, recently crossed the 10-billion app downloads mark—a milestone that took the iTunes music store about seven years to attain. How's that for a testament to the power of the app distribution model? Although there are obvious differences between creating and deploying apps for your smart phone and apps for a complex distribution operation, the inherent appeal is the same: app stores free up you and the technology provider to innovate faster.

Lengthy delivery timeframes and protracted upgrades aren't the richest soil in which to grow supply chain innovation. You've read how applying an app store model to your WMS simplifies and speeds maintenance, system changes and scheduled upgrades. But one of the most significant benefits of the app store model is the increased rate at which your vendor can package and deploy—and you can install and begin using—new supply chain innovations. It's this innovation that will give you an edge over your competition by allowing you to incorporate the needs of customers quickly, integrate new industry requirements and simplify training so that your business won't skip a beat.

Related Resources You May Find Interesting:

Video: [What's the HighJump App Station?](#)

Video Blog: [How WMS Upgrades are Like the Monopoly Board Game](#)

Special Report: [WMS In the Cloud: Real-World Option, or Just Fluff?](#)

