WMS IMPLEMENTATION
5 STEPS TO SUCCESS

Five steps to follow on your path to a successful WMS implementation

GUIDE HIGHLIGHTS

- Migrating your warehouse and inventory data
- Training your warehouse staff to use the new system
- Deciding whether to hire a WMS consultant
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Written by experienced WMS project managers, this guide outlines the five steps you should take when implementing WMS.

1. Create a change management strategy

2. Decide whether you should hire a WMS consultant

3. Train your workforce to use the new system

4. Migrate warehouse data to the new system

5. Launch your WMS and go live
1. CREATE A CHANGE MANAGEMENT STRATEGY

When it comes to impending enterprise-scale change management evolutions, hosts of cultural challenges emerge almost immediately. These concerns are exacerbated when implementing complex software like WMS.

It is largely accepted that people tend to resist change due to a number of psychological issues including:

- Misunderstanding the rationale for a change
- The universal fear of the unknown
- General fear regarding the potential of learning new operational competencies
- Low trust in management decision-making
- Irritation caused by a workforce ‘failure to consult’
- Poor management communication
- Disruption of routine
- Workforce exhaustion

While this pick list of sensitivities appears to be fairly straightforward, note that these issues also imply the ‘management of many people’ rather than dealing with comparatively simple technological revisions.

Therefore, in order to implement your WMS successfully, action must be driven from the outset by a well-planned strategy that engages a warehouse workforce from bottom to top.

Here’s how individual change management elements can help create a consolidated change management plan in association with a WMS project:

“In order to implement your WMS successfully, action must be driven from the outset by a well-planned strategy that engages a workforce from bottom to top”
BY PROVIDING A STRATEGIC ACTION FRAMEWORK

One can't finish unless one starts. In our change management scenario, this means that enterprise leadership must first develop an overall workforce action plan. Elements associated with this research effort include:

- Current organizational charts
- Targeting and onboarding of necessary stakeholders (warehouse managers and staff, CTO, IT department head etc)
- Identification and onboarding of necessary project committee managers
- Establishment of necessary guidance, constraints, and/or caveats
- Establishment of necessary enterprise operational scope(s)
- Projected identification and definition of workforce and systems actions
- Detailed definitions relating to project roles and responsibilities
- Definition and development of an end-to-end change management process
- Convene and launch project committee activities

The sub-goal here is to clearly establish what, who, and how the enterprise will engage its workforce in order to support the final project goal of implementing a new WMS.

BY GALVANIZING YOUR SENIOR MANAGEMENT

While the change management process begins, affected senior and middle-management participants must begin engaging with the workforce rank and file.

This collaborative effort can be initiated in a number of ways:

- Formal all-hands meetings
- Divisional, department, and section meetings
- Informal “meet-and-greets” with workforce representatives
- Peer-to-peer canvassing
- In this case, senior and middle-management representatives should serve in as role models.
BY CREATING A CONCRETE WORKFORCE TRAINING TIMETABLE

Once supervisory managers are at work, project committee members and operational participants should begin the development of a WMS training plan for the workforce. In this case, the goal is to ensure that everyone ‘gets the memo’ when it comes to the training program, while also ensuring that any likely human resources weaknesses can be bubbled up.

BY PROVIDING THE FRAMEWORK FOR A ‘SOFT LAUNCH’

When considering WMS implementation it should be expected that a parallel enterprise effort is in-work on the systems integration side of the overall WMS project. Consequently, assuming that the training and technological efforts are in place, a ‘soft’ or ‘training’ launch should be initiated. The goal, in this case, is to test and validate both the WMS training project and its supporting WMS platform in parallel with current warehouse, inventory and supply chain processes and systems.

Once the soft launch is complete, all relevant operational participants, i.e. logistics managers, inventory analysts, administrators etc., should conduct a lessons-learned round. The goal in this event is to identify and resolve any weaknesses that may cause a failure prior to a hard launch, or cut-over to next-step operations.

BY PREPARING THE GROUND FOR THE GO-LIVE

Assuming that the gap analysis and any remedial actions are successful, the workforce should embody necessary project and practical confidence, while warehouse managers up the organization’s chain should be equally clear on what will happen once a final implementation is initiated.

Granted this is a fairly simple plan structure, and depending on the scale of a particular enterprise more or fewer elements can be applied as a practical matter. Nevertheless, it should give one an ability to gain a general understanding of what will be required.
2. DECIDE WHETHER YOU SHOULD HIRE A WMS CONSULTANT

When implementing a WMS, any decision to engage third-party consultants tends to harbor both up and downsides. As a general rule, most warehouse managers don’t typically appreciate business investigators rooting around under the covers. Often they identify likely weaknesses that managers would rather let slide than beginning a change management process that might lead to extended internal workforce upset.

That said, from a more finite process, systems or support perspective, WMS consultants can be quite useful - just as long as you’ve engaged the right ones of course. Here are three situations in which third-party consultants can help if the enterprise bus finds itself in a ditch.

WHERE COMPANY TUNNEL VISION IS AN ISSUE

Regardless of the application, there are three critical interest drivers when it comes to enterprise systems management:

• measuring the past
• managing the current
• leaning toward the future

“From a more finite process, systems or support perspective, WMS consultants can be quite useful - just as long as you’ve engaged the right ones of course”

While most warehouse managers would like to believe that their resource levels are always up to par, limitations often force past and future concerns to go by the wayside, in favor of having to respond to the present.

The problems caused by this usually manifest themselves downstream in the form of technical tunnel vision. This leads to narrow, entrenched views of what happened to the enterprise in the past, and why things need to be different in the future (which aren't necessarily well-considered).

This is where a WMS consultant can be helpful, since the goal of any legitimate consultancy is to help provide the enterprise with ‘fresh eyes’, whilst offering more efficient ways for a company to go further and faster, at a lower cost.
WHERE DIFFICULT DECISIONS NEED TO BE MADE

This relates to the ‘narrowed view’ perspective mentioned above, however, in this case, limited internal capabilities represent an entirely finite business constraint.

For example: when considering the removal and/or replacement of a legacy WMS, how many direct FTEs are currently involved with the standing system?

One might suggest that such a direct question should require a direct answer. Yet this is not so, since anytime an enterprise considers a significant systems change, workforce folks are probably going to be impacted, whether directly or indirectly. You might need less warehouse staff, or require them to work fewer hours due to your new software’s automation capabilities, for example.

The next thing you know, a workforce culture problem emerges that will have to be dealt with crisply. At the end of the day, if the potential of the newly defined system requires that you make some of your warehouse staff, this can create even more disturbance going forward.

Internal management must always tread lightly in these cases, otherwise a commercial house of cards can tumble down in a flash. On the other hand, WMS consultants can not only help define any change impacts clearly and efficiently while minimizing workforce strife, but can also define ways to hold on to a core workforce cadre that is part of the management goal.

Either way, the consultant takes the heat rather than management, which is probably worth several thousands of dollars in lost process efficiencies.

WHERE KEY DECISION MAKERS HAVE LIMITED MARKET KNOWLEDGE

This business intelligence element also applies to the culture of tunnel vision; and the wages of management decision-making in general, when considering a WMS.

As a rule, successful enterprise managers typically expect that their decisions are a cut above other peers, but over time, repeated success also tends to breed arrogance. Just because the CIO has an MBA from Wharton and the Director of IT holds a BS in Computer Science from MIT, it doesn’t necessarily mean that those executives are entirely up-to-date with modern logistics solutions, or any more knowledgeable about the nitty gritty of WMS functionality.

An external consultant can help keep this in check and bring specialized market knowledge to the table. Your CIO might not know the ins and outs of integrating a new warehouse solution with your existing ERP, but an experienced consultant will have seen it all before, and be able to suggest the best way to move forward.
3. TRAIN YOUR WORKFORCE TO USE THE NEW SYSTEM

Although many folks assume that WMS is fairly straightforward, the more complexity associated with a system, the more training will be required by all involved. This is particularly true when the effort is being driven by a new, rather than an updated, warehouse management system.

Therefore, here are a number of elements to remember when you're preparing for both an overall training program, along with setting up to train based on individual module breakout sessions.

TIME IS OF THE ESSENCE, BUT STEADY AHEAD IS BETTER

For some reason enterprises tend to try and cut their own throats when WMS user training is involved.

Perhaps this has to do with the practical realities of implementing new software whilst dealing with a company's workforce, or maybe it has more to do with pure cost factors. Either way, many senior management cadres either try to speed through complex training regimes or shortcut their way to completion.

In either event, each of these decision tracks can lead to lost efficiency, money - and ultimately lost enterprise performance that can end up being the beginning of a business death spiral starting from the warehouse up.

The truth here is taking the right amount of time to ensure that everyone is comfortable before you spin a system up pays enormous dividends down the road. So do what is necessary the first time, and simply avoid the challenges associated with having to do it over.

SMALL CLASSES OR ONE LARGE LECTURE: ALL THAT COUNTS IS GETTING IT RIGHT

This decision will always accrue to the subjective nature of each enterprise. To a large degree, the structure and size of each training program can be largely defined by the overall scale and of the enterprise, the size of its WMS workforce, and how complex the particular system will be.

In the latter case, necessary functionality will apply as a critical element throughout, and the more functions the company desires, the longer and more granular the training program should be. At the end of the day, if the target enterprise is a small operation harboring minimal WMS functionality, a single 'large venue' program will apply nicely.
However, if the particular system is to be housed in a large-scale enterprise, with many moving parts to manage then it’s likely that a single large cadre orientation, followed by a series subordinate breakout sessions, will be preferable. Again, the goal is to get it right the first time, so consider your own scale and systems complexity challenges before you establish your training regime.

If your warehouse staff work on shift rotations, you’ll need to factor this into your training plan. Hoping you’ll get your entire staff into one training session is probably unrealistic, and ideally, you want to minimize the time that they spend off the warehouse floor.

Each company has an approach to this issue that works best for them. Here are a couple of starting points you can adapt to your workforce.

- **Feature-specific training**: run feature-specific training sessions, with employees only attending the sessions relevant to them. Pickers don’t need extensive knowledge of the software’s analytics capabilities, so there’s no point sitting through extensive training sessions on it.

- **Training in short bursts**: instead of pulling employees out of work for one afternoon, train them in shorter bursts.

- **Incentivized training**: training employees during work hours takes up valuable time, but no-one really wants to stay behind an hour or so after work for a mandatory training session. If you go down this route be prepared for a fair amount of resistance. Offering rewards - like overtime pay, free food or time-in-lieu - can be a good way of sweetening the deal for those whose shift pattern necessitates sacrificing free time for work-related activities.

> "The goal is to get it right the first time, so consider your own scale and systems complexity challenges before you establish your training regime”

**VIRTUAL VERSUS FACE-TO-FACE TRAINING: THE DECISION DEPENDS ON SCALE**

Today’s global economy poses a number of challenges to WMS training cadres, and it largely accrues to enterprise scale. Many larger companies operate offshore, and WMS software integrates either as localized standalone modules that transact business and deliver necessary ERP records via periodic batch processing or operate on the basis of peer-based communications in real-time.

In the former case, WMS training can be propagated from a headquarters, by either having remote WMS operators attend headquarters class sessions or have the parent company send trainers to the local site. The ‘attend in person’ option offers a number of advantages, including an ability to allow remote folks an opportunity to ‘see and be seen’ by various bosses.
However, in particularly large companies, virtual education tends to be today's trend for a host of reasons, but most importantly cost - since trying to execute one or more WMS training rounds, associated with workforce cadres in 20 countries can create both logistical and cost problems to the parent company. Again, it all depends on how you scale your effort and how complex your WMS requirements are.

You'll also need to consider access to hardware for non-office staff training. It sounds obvious, but if training requires that all participants have individual access to a computer, then make sure you can accommodate this. There is no point pulling staff off the warehouse floor to give them substandard, poorly-resourced training that they won't remember. You'll lose productivity, you won't see the benefits you want from your new software and you'll have to redo it at some point. This is inefficient and expensive.
4. MIGRATE WAREHOUSE DATA TO THE NEW SYSTEM

As one might expect, any large warehouse data migration involves a number of necessary steps. However, of all of the most critical elements involved, testing the final stability and accuracy of a consequent WMS update is perhaps the most important to most enterprise operators.

This is because once an enterprise has migrated all its data, the next questions usually become:

- Are the resultant records delivering information accurately, and as advertised
- When can the business begin to leverage its next-steps value?

Here are a number of ways to define and execute a WMS data migration, without having to deal with too much muss and fuss.

TIME-TO-COMPLETE PLANNING

Before you can get started on validating the efficiency of your information and migrating your warehouse data, it is best to establish expectations about the time necessary to complete the effort.

For example, what will you want from the overall test process - are you looking for accuracy first, or is enhanced speed going to be the preeminent factor? Believe it or not, these elements are important since 'how the user feels' from the outset will ultimately guide most validation rounds. So, figure out what you're going to want from the system first from a time to complete perspective; then prepare to do the empirical investigations.

WMS DATA QUALITY

This is really where the rubber usually hits the road. In this step it's best to ensure that your documentation is up to snuff, including 'before and after' WMS data maps, security concerns, availability of policy and business rules, and every other bit of administrivia necessary to prepare to review and measure the new data store.
If you don't spend the proper time to execute this process properly, you'll be working in the dark; and everyone knows that very bad things happen at night. Before you migrate, ensure that stock levels, inventory location and any accounting information stored on your legacy WMS are up-to-date. There's no point migrating old data - it'll only confuse things in the long run.

"If you don't spend the proper time to execute this process properly, you'll be working in the dark"

THE WMS DATA MIGRATION PROCESS

WMS data migrations these days often involve movement from premise-based systems to the cloud. While this decision triggers its own set of challenges, there's a clear upside in the offing, particularly if you are moving your data to one of the more reputable public networks such as Amazon Web Services (AWS). In this case, the environment helps the tester, since AWS harbors a number of highly-useful automated systems that allow the user to establish and run test regimes in an unattended mode.

This means that all you'll have to do is manage the results of your effort by comparing what you think will happen against what actually happens, including the announcement of one or more failures. In the latter case, then, the automated system can help with any remedial actions, then run the routine again after the fix has been completed.

More than anything, test processes are supposed to be simple enough to 'see' problems; then fix them before the user begins to spin the entire system up to reach active operational status. However, automation or not, the more detail you and your IT cadre apply during the test's setup, the better results you will achieve during your WMS data migration.
5. LAUNCH YOUR WMS AND GO LIVE

Regardless of how much preparatory work you do, there's always a bit of stress associated with the cut-over and launch of a new WMS. Part of this has to do with the general fear of the unknown, and some of it has to do with more commercial concerns such as whether a new system will do what it's supposed to do for your business.

Either way, tension and discomfort will always accompany a new software implementation. That said, there are some steps you can take to make your WMS go-live more manageable for all concerned:

PREPARE A DETAILED LAUNCH PLAN

As mentioned above, fear of the unknown is an intrinsic part of any go live evolution. Consequently, rather than operating on the basis of conjecture and assumption, it's better to work from a finite and measurable plan that everyone can poke holes in prior to going live. Once this process is complete, and everyone has signed-on appropriately, things usually work much better and your WMS go-live will go much more smoothly.

Here are some of the elements that should be included in a useful plan:

- Review and act on all previous test results
- Network: validate devices, connectivity, and applied security systems
- Hardware: ensure that computers, monitors, navigational devices cables, printers, scanners and servers are software-ready
- Interfaces: validate module hooks, handles, datastores, datacenter connectivity
- Software: test each unit, ensuring that all system modules are complete for screens, templates, reports and other requirements
- Issue formal staff certificates for training compliance
- Validate signoffs for each workflow and process map
- Review systems policies with key stakeholders and reaffirm systems sign-on.
- Ensure that partner, operational, and support resources are available
This might be an obvious plan task, but you’d be amazed by how many enterprise folks forget resourcing when it is time to turn the lights on. Don’t be conservative with resource planning and allocation, since in the case of a new WMS everyone is going to be impacted one way or the other. So, be ready and resource up accordingly.

EXECUTE A FORMAL LAUNCH MEETING

This is a useful bit of tasking oriented to ensuring that everyone who is directly involved in the launch is on the same page, at the same time, using the right tools.

GET A FORMAL SIGN-OFF ON THE GO LIVE

“A rather than operating on the basis of conjecture and assumption, it’s better to work from a finite and measurable plan that everyone can poke holes in prior to going live”

EXECUTE THE GO-LIVE

You’ll find this checklist useful during the chaotic initial stages of your go-live. It’s not a perfect fit for everybody but will serve as a useful template from which to construct your own plan for the day.

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This guide was written by Rick Carlton, Explore WMS Columnist, with contributions from Kathryn Beeson, Explore WMS Editor

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