Operational Keys for a Successful WMS Go-Live

An outline of the traditional operational activities you need to anticipate and plan for early on when implementing a WMS project

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"Expect the best, plan for the worst, and prepare to be surprised." Suffice it to say, Denis Waitley, the author, must have been involved in a Warehouse Management System (WMS) implementation a time or two. Whether it’s a WMS project with SAP EWM, Oracle, JDA, Manhattan Associates, HighJump Software, Infor, or some other vendor, technical and operational plans must be developed and properly executed in order to overcome challenges, manage the unexpected project twists and turns, and ensure success.

It is important to understand that WMS software providers focus their efforts almost entirely on the technical aspects of the implementation such as design, development, configuration, integration and installation. They leave the operational planning and execution to you, the customer, while offering only limited support. Planning, staffing, managing and executing the operational work associated with a WMS implementation are key to keeping the business running and continuing to satisfy customer commitments during the transition from old to new.

We are not trying to minimize the importance of the technical work that WMS software vendors perform. We realize that technical-related issues with design, development, configuration, integration and unit testing can result in delays and cost overruns. Certainly not desirable, but definitely not as “bone-jarring” as a failed operational cutover or poorly executed go-live, which can negatively impact supplier and customer relationships, cause financial hardship for the entire organization, and put your company in a hole that takes months to overcome.

Our goal in this whitepaper is to outline and describe the traditional operational activities you need to anticipate and plan for early on, rather than as an afterthought. So, whether you’re considering a WMS or actively involved in the deployment of one, this whitepaper is for you.

**WHAT ARE THE MAJOR OPERATIONAL ACTIVITIES THAT ARE NECESSARY FOR A SUCCESSFUL WMS IMPLEMENTATION?**

The major operational activities that you, the customer, need to plan, staff and execute to support a WMS project can be classified into five (5) major areas:

1. Change Management
2. Testing
3. Training
4. Cutover
5. Hyper Care / Go-Live Support
**Change Management**

Change management is a structured approach for handling change. Effective change management requires control, communication and adoption of change so that risks are minimized and goals are met.

Many WMS project charters fail to recognize the need for change management until late in the project, or simply believe that change can be managed through training alone.

WMS impacts not only the distribution center (DC), but other departments in the company, as well as customers, carriers, and / or suppliers. Additionally, most organizations must meet inbound, outbound, labor and other key performance indicators (KPIs) during the transition, or shortly thereafter.

Equally important, WMS implementations frequently impact staffing levels, roles, responsibilities and sometimes pay scales. Failure to deal with human resources-related changes may impact user adoption.

So how do you successfully manage change? Assign a dedicated Change Management Lead to understand, manage, control and communicate change internally and externally. This resource needs to be actively involved in the project from the start. The Change Management Lead must work with the Project Manager and key decision makers from functional areas such as Customer Service, Distribution, Manufacturing, HR, Finance, and IT in the development and communication of a “Smart Plan” that minimizes risks to the organization, its key trading partners and customers. This resource must truly understand how the organization functions, possess strong communication skills, and have the ability to make major decisions for the company during the WMS project.

Change management, while time-consuming, is an essential element of any successful WMS implementation and should not be overlooked.

**Testing**

Every company plans some level of testing. What’s often missed or not fully considered during the development of the implementation testing plans are:

- The testing the organization is required to perform
- The effort it takes to prepare granular test scripts and / or testing mechanisms (e.g., configuring a tool such as LoadRunner® for load testing, or developing a simulation to test WMS and WCS integration)
- The level of documentation required
- The resources and man-hours required to perform each level of testing

Testing and validation requirements are generally driven by:

- The testing policies and procedures that your management expects to be satisfied
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- The extent of modifications that need to be made to the ERP system and other applications (e.g., WCS) to support the WMS
- The industry your company operates within
- The type of organization (e.g., private vs. publicly-traded company)

Typical types of testing that are required to be led and executed by you, the customer include:

- Functional Testing
- Pre-Formal Testing (testing of the test scripts and mechanisms prior to Integration Testing)
- Load / Volume and Response Time Testing
- End-to-End Integration Testing
- Dry-Run Testing
- User Acceptance Testing (UAT)
- FDA Certification
- Bioterrorism Act Validation
- Sarbanes-Oxley (SOXs) Compliance

In order to successfully navigate and ensure all testing requirements are satisfied, a Test Lead should be assigned and dedicated to the project. The Test Lead should be involved in the development of the implementation plan so that all testing activities and resource requirements are properly planned.

Planning and executing testing activities is a major effort that requires involvement from the entire project team, and needs to be considered prior to project kick-off.

Training

WMS software vendors provide standard training courses such as system orientation, and some will offer, as an option, end-user training. While that’s all fine and dandy, training is a process, and final end-user training and the education of the supervisory leads should be developed and conducted by company resources. Training can also be provided by an integration firm that has extensive experience creating and conducting training programs with the WMS software.

If you elect to use an integration firm for training, the assigned resources should have strong distribution domain expertise, and incorporate your standard operating procedures (SOPs) into the training material and classes. However, using outside resources to lead training should not excuse operations project members from assisting in the training. Rather, in order to help facilitate company-wide acceptance of the new system, the operations team needs to play an active role.

Two questions we are often asked about training are:

- Why do you consider training a process?
- Why not contract with the software vendor for end-user training?
So, why is training a process? Because training starts at the beginning of the project and continues throughout – from initial vendor software orientation and setup / configuration training, to design discussions, conference room pilots, configuration of the software by operational project team members, development of standard operating procedures, training program development, supervisory and end-user training, testing and startup support. Knowledge transfer on how to configure and use the software does not happen quickly. WMS solutions are complex and gaining the requisite knowledge takes time and requires hands-on involvement in the software implementation process.

Why not contract with the WMS vendor for end-user training? Frankly, most software organizations are not readily equipped to conduct comprehensive, extended end-user training. Also, because roles and jobs are not static in organizations, education programs need to be in place to support changes in personnel long after the software vendor has completed their work. Finally, companies need to be self-sufficient in order to deal with the constant change that takes place in distribution and logistics. This requires you to have a good understanding of most aspects of the software so that you can adapt quickly to new industry, facility and customer requirements.

Will you know everything there is to know about the solution? Probably not. Will you have enough experience to handle most day-to-day requirements that come about, including questions or issues that arise during go-live? Most likely, yes.

**Cutover**

Cutover planning should begin early in the project. The major areas of cutover that need to be planned and the questions that need to be considered are:

- **Data Migration and Validation**
  - Will all inbound and outbound orders be complete and associated transactions posted prior to cutover?
  - What data does the WMS need?
  - Is the data from the existing system sufficient and accurate?
  - Can data be migrated from the current legacy system to the new WMS?
  - Do tools or scripts already exist that can be used to migrate the data or do we need to develop scripts?
  - If data is being migrated, how long will it take to run the scripts and validate the data?
  - If data cannot be migrated, how will inventory be loaded into the WMS? How many resources are needed to load initial inventory manually? Does that mean we will need to do a physical inventory? What are the processes for validating data?

- **Mock Cutover**
  - What day of the week should be planned for a mock cutover?
  - How much time needs to be allocated for cutover – from IT and from operations?
  - How do we staff for the mock cutover?
  - How many mock cutovers need to be performed?
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- What metrics will be used to identify when the cutover plan and processes are acceptable for go-live?

- Go-Live Plan
  - Who should assume responsibility for preparing the micro go-live plan?
  - Is there a micro plan that can be used as a starting point? If not, does the software vendor have one that we can follow?
  - What level of detail is required for the Readiness Assessment?
  - What factors will drive a ‘go’ or ‘no go’ decision?
  - What resources are available to support the go-live effort?

Cutover planning and activities are not to be taken lightly. Poor planning and decisions in this area can have major operational impacts.

Hyper Care / Go-Live Support

Most of Hyper Care / Go-Live Support planning typically occurs during the deployment phase of a WMS implementation. Hyper Care planning should be led by the Operations Lead with support from the overall Program Manager, IT Lead, Change Management Lead and the Software Vendor Project Manager. In most cases, it’s “all hands on deck.”

Hyper Care planning should encompass each of the following elements:

- Key Performance Indicators (KPIs) or Metrics to measure progress
- Central Help Desk Plan for logging and resolving issues
- Escalation Plan so that major issues that hinder operations are prioritized and resolved in a timely manner
- On-Site Support Plan including staffing schedule, defined roles and responsibilities
- Communications Plan for reporting progress, issues and other important items to senior management, the project team and material handling personnel

In Summary

In any large WMS Go-Live, the key to operational success is having multiple layers of planning in place and effective tools and support teams to identify and resolve issues as they occur. It should be noted there will always be bumps in the road, but the important thing is to have plans in place to anticipate and minimize them as much as possible, or react and resolve them, if need be. Proper Change Management, Testing, Training, Cutover and Hyper Care planning and execution are the difference between operational success and failure in a large scale WMS Go-Live.
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