Wiley BEST PRACTICES

INVENTORY Best Practices

SECOND EDITION

Steven M. Bragg

Contents

Inventory Best Practices

Second Edition

Steven M. Bragg

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Preface

This book contains more than 200 best practices related to every phase of a company's activities involving inventory—its purchase, receipt, storage, picking, and shipment—and includes 29 new best practices that are unique to this second edition.

Special functions related to inventory contain so many best practices that they deserve their own chapters—production, transaction processing, planning, warehouse layout, cost accounting, and even bills of material. Further, you need to measure a company's progress in achieving best practices, so a comprehensive list of inventory-related measurements has been added to a separate chapter (including new metrics in this second edition). Also, a number of the inventory chapters refer to specific inventory procedures, which are helpfully detailed in yet another chapter. Further, an entirely new chapter describes the impact of constraint management systems on how you should deal with inventory. Given the large number of best practices presented, the Appendix summarizes them for you. If there are any concerns about the meaning of any inventory-specific terms, the glossary contains an inventory dictionary. In short, this book is the go-to source for inventory improvements.

Inventory Best Practices is designed for people in many parts of a company. The controller can use the cost accounting, inventory transactions, inventory measurements, and policies and procedures chapters to increase the efficiency of inventory accounting. The CFO can use virtually all the chapters to determine what options are available for reducing a company's investment in inventory, while the purchasing manager can use the purchasing chapter as well as the planning and management chapter to increase that department's

effectiveness in procuring inventory. The warehouse manager is a particular beneficiary, with the inventory receiving and shipping, storage, picking, transactions, and warehouse layout chapters devoted to that area of expertise. The engineering manager can also benefit from the inventory planning and management and bill of materials chapters. Finally, the CEO can use the entire book to gain a sweeping view of the scope of inventory best practices on all aspects of a company.

This book is intended to be a buffet table of ideas from which one can sample. There is no clear set of inventory best practices recommended for all companies, all the time. Instead, given the wide array of industry- specific issues and inventory flow concepts in use, you should skim through the book and select only those best practices resulting in the most obvious improvements. The Appendix, which summarizes all the best practices, is a good place to conduct this review. However, a company's business plan will likely change over time, so it is worthwhile to refer back to the book from time to time to see what other best practices may have become applicable as a result of those changes.

Finally, you do not install a best practice merely by ordering that it be done. The “Make it so!” approach of Captain Picard of the *Enterprise* does not always work. Instead, read Chapter 1, “Success or Failure with Best Practices,” to learn what factors will impact a best practices implementation and how you can increase your odds of success.

In short, use *Inventory Best Practices* to improve all aspects of your company's business that relate to inventory. This can result in far less time spent recording inventory transactions, reducing the company investment in inventory, shrinking its scrap and obsolete inventory

expense, improving the efficiency of the warehouse, and shortening order cycle time. Enjoy!

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Centennial, Colorado
March 2011

Chapter 1

Success or Failure with Best Practices

This chapter is about implementing best practices. It begins by describing the various kinds of best practices and goes on to cover those situations where best practices are most likely to be installed successfully. The key components of a successful best practice installation are also noted, as well as how to duplicate best practices throughout an organization. When planning to add a best practice, it is also useful to know the ways in which the implementation can fail, so there is a lengthy list of reasons for failure. The chapter also addresses a number of planning issues related to the implementation of inventory best practices. Only by carefully considering all of these issues in advance can one hope to achieve a successful best practice implementation that will result in increased levels of efficiency.

Types of Best Practices

This section describes the two main types of best practices, each one requiring considerably different implementation approaches.

The first type of best practice is an incremental one. This usually involves either a small modification to an existing procedure or a replacement of a procedure that is so minor in effect that it has only a minimal impact on the organization, or indeed, on the person who performs

the procedure. The increased level of efficiency contributed by a single best practice of this type is modest at best, but this type is also the easiest to install, since there is little resistance from the organization. Only when this type of best practice is used in large numbers is there a significant improvement in the handling of inventory and the investment in inventory.

The second type of best practice involves a considerable degree of reengineering. This requires the complete reorganization or replacement of an existing function. The level of change is massive, resulting in employees either being laid off or receiving vastly different job descriptions. The level of improvement in the handling or investment in inventory can be several times greater than the old methods being replaced. However, the level of risk matches the reward, for this type of best practice meets with enormous resistance and consequently is at great risk of failure. A single best practice implementation of this sort can reap major improvements.

Thus, given the considerable number and size of the differences between the incremental and reengineering best practices, it is necessary to first determine which category a best practice falls into before designing a plan for implementing it. Given the difficulty of implementation for a reengineering project, it may even be necessary to delay implementation or intersperse a series of such projects with easier incremental projects in order to allow employees to recover from the reengineering projects.

Most Fertile Ground for Best Practices

Before installing any best practice, it is useful to review the existing environment to see if there is a reasonable chance for the implementation to succeed. The following points note the best environments in which best practices not only can be installed but also have a fair chance of continuing to succeed:

- *If benchmarking shows a problem.* Some organizations regularly compare their performance levels against those of other companies, especially those with a reputation for having extremely high levels of performance. If there is a significant difference in the performance levels of these other organizations and the company doing the benchmarking, this can serve as a reminder that continuous change is necessary in order to survive. If management sees and heeds this warning, the environment in which best practices will be accepted is greatly improved.
- *If management has a change orientation.* Some managers have a seemingly genetic disposition toward change. If a department has such a person in charge, there will certainly be a drive toward many changes. If anything, this type of person can go too far, implementing too many projects with not enough preparation, resulting in a confused operations group whose newly revised systems may take a considerable amount of time to untangle. The presence of a detail-oriented second-in-command is very helpful for preserving order and channeling the energies of such a manager into the most productive directions.
- *If the company is experiencing poor financial results.* If there is a significant loss, or a trend in that direction, this serves as a wake-up call to

management, which, in turn, results in the creation of a multitude of best practices projects. In this case, the situation may even go too far, with so many improvement projects going on at once that there are not enough resources to go around, resulting in the ultimate completion of few, if any, of the best practices.

- *If there is new management.* Most people who are newly installed as managers want to make changes in order to leave their marks on the organization. Though this can involve less-effective best practice items such as organizational changes or a new strategic direction, it is possible that there will be a renewed focus on efficiency that will result in the implementation of new best practices.

In short, as long as there is willingness by management to change and a good reason for doing so, then there is fertile ground for the implementation of a multitude of best practices.

Planning for Best Practices

A critical issue for the success of any best practices implementation project is an adequate degree of advance planning. The following list describes the key components of a typical best practices implementation plan.

- *Capacity requirements.* Any project plan must account for the amount of capacity needed to ensure success. Capacity can include the number of people, computers, or floor space that is needed. For example, if the project team requires 20 people, then there must be a planning item to find and equip a sufficient amount of space for this group. Also, a project that requires a

considerable amount of programming time should reserve that time in advance with the programming staff to ensure that the programming is completed on time. Further, the management team must have a sufficient amount of time available to properly oversee the project team's activities. If any of these issues are not addressed in advance, there can be a major impact on the success of the implementation.

- *Common change calendar.* If there are many best practices being implemented at the same time, there is a high risk that resources scheduled for one project will not be available for other projects. To avoid this, use a single-change calendar, so that planned changes can be seen in the context of other changes being planned. You should examine the calendar for conflicts every time you make a change to it. Also, make it available for general review by all of the project teams.
- *Contingencies.* Murphy's Law always applies, so build contingencies into the project plan to cover any issues where you think there is a reasonable chance of failure.
- *Dependencies.* Properly sequence the steps required to complete a project, so that any bottleneck steps are clearly defined and have sufficient resources allocated to them to ensure that they are completed on time.
- *Funding requirements.* Any project requires some funding, such as the purchase of equipment for the project team or software licenses or employee training. Consequently, include in the project plan the dates on which funding is expected, so that dependent tasks involving the expenditure of those funds can be properly positioned.

- *Review points.* For all but the smallest projects, there must be control points at which the project manager has a formal review meeting with those people who are responsible for certain deliverables. You should build these review points into the plan, along with a sufficient amount of time for follow-up meetings to resolve any issues that may arise during the initial review meetings.
- *Risk levels.* Some best practices, especially those involving a large proportion of reengineering activities, run a considerable risk of failure. In these cases, it is necessary to conduct a careful review of what will happen if the project fails. For example, can the existing system be reinstituted if the new system does not work? What if funding runs out? What if management support for the project falters? The answers to these questions may result in additional project steps to safeguard the project, or to at least back it up with a contingency plan in case the project cannot reach a successful conclusion.
- *Total time required.* All of the previous planning steps are influenced by one of the most important considerations of all—how much time is allocated to the project. Though there may be some play in the final project due date, it is always unacceptable to let a project run too long, since it ties up the time of project team members and will probably accumulate extra costs until it is completed. Consequently, you should continually revise the existing project plan to account for new contingencies and problems as they arise, given the overriding restriction of the amount of time available.