

A Comparison of

**Distribution Management Capabilities
Sage MAS 90 ERP and
QuickBooks Enterprise Solutions**

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What's Right for Your Distribution Firm—Sage MAS 90 ERP or QuickBooks Enterprise Solutions?

Executive Summary

If you want to pick one of the most competitive industries in which any firm can operate, the distribution industry would be at or near the top of any list. How do you generate profits in an industry marked by virtually indistinguishable products and resulting razor-thin margins? While superior service might have a positive effect on customer loyalty and therefore generate much sought-after repeat business, price still drives most customers' decision to order from you rather than your competition. Given this significant constraint over which you have little control, long-term profitability is dependent on tight control of your inventory as well as all related business processes. We have examined QuickBooks Enterprise Solutions (QuickBooks ES) and Sage MAS 90 ERP (Sage MAS 90), with respect to their ability to provide distributors with the functionality required to compete successfully, and have come to the following conclusions:

Accounting vs. Business Management

QuickBooks ES is an excellent accounting system. It supports inventory tracking, customer and supplier maintenance, purchase orders, and sales orders. However, these capabilities are accounting related and exist to some extent as individual functions rather than integrated into a cohesive business management system. Sage MAS 90 provides the same level of accounting functionality, but it also assists people within an organization to do their jobs more efficiently and effectively by integrating these individual functions into a well-managed business process.

Document Management

QuickBooks ES does not support any form of native document management application, relying instead on a third party application. Sage MAS 90 allows users to attach key documents (purchase contracts, sales contracts, etc.) to vendor, customer, and item records. Sage MAS 90 also supports a Paperless Office application whereby users have the ability to print accounting-related documents (purchase and sales orders, purchase and sales invoices, journals, statements, etc.) to file for storage and subsequent retrieval, thus eliminating inefficient and costly manual filing systems.

Supplier Relationships and Purchasing

Effective inventory control is not dependent solely upon managing the quantities on hand within a warehouse. It must start with an effective purchasing system that integrates all such activities into one cohesive business process. QuickBooks ES supports both supplier master file maintenance as well as purchase orders, but the depth of the functionality is limited unless a user purchases a third party application. Sage MAS 90 supports all aspects of the purchasing cycle including supplier relationship management, document management, collaboration between the two parties, automatic generation of suggested purchase orders, volume pricing, and other factors that contribute to a fully integrated "system" rather than isolated functions.

Customer Relationships

Although one would think that an effective distribution system should concentrate on item maintenance and order processing, customers and their needs must be taken into consideration as a necessary first step. QuickBooks ES integrates with several third party contact management applications while Sage MAS 90 fully integrates customers into the order management process. These supported processes include customer file maintenance, in depth customer relationship and contact management, complete integration between the relationship management system and sales order entry, customer contract management, document management, and collaboration between customers and their suppliers (in this case the seller organization).

Item Management

One of the two primary keys to success in the distribution industry is item management. QuickBooks ES supports basic item tracking and costing, while depending on third party applications for more comprehensive item management. Sage MAS 90 expands these controls to include multiple costing methods, multiple units of measure, serial, lot and bin tracking, landed cost tracking, multiple item price matrixes, warehouse level costing, and other functions that increase the flexibility and accuracy by which items are tracked, costed, and priced.

Warehouse Management

The heart of any distribution systems lies in the warehouse and the methods by which items are received, stored, tracked and replenished. QuickBooks ES natively supports a single warehouse with no storage system within this single warehouse. If more comprehensive capabilities are required, a third party application must be purchased. Sage MAS 90 supports multiple warehouses and bar code tracking to scan

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item IDs rather than utilizing manual data input. Sage MAS 90 also supports specific receiving functions, multiple stocking locations, work orders for light assembly, a comprehensive returns management (RMA) system, and comprehensive pick/pack/ship functions.

Customer Order Processing

While effective item ordering and maintenance functions ensure that material is on hand when required (but not overstocked), that just takes care of the cost side of the business. True success in the distribution industry is driven by superior customer service that brings customers back to order again in the future, not necessarily solely because the price they paid was acceptable, but because their order was handled efficiently and they received their merchandise on time. QuickBooks ES supports sales order functions as well as some limited shipping functions, again relying on third party applications to provide more robust order-processing capabilities. Sage MAS 90 provides a complete and fully integrated range of order processing and shipping functions. Sage MAS 90 starts with customer credit management and then moves into a step-by-step order-processing function, including duplication of past orders, handling special customer requirements, multiple delivery dates, and special sales to mention just a few highlights.

Business Intelligence

While one of the most important success factors in the distribution industry is comprehensive inventory control, truly successful firms spend a significant amount of time analyzing their performance as well as the performance of their suppliers in order to create a constantly evolving foundation for success. QuickBooks ES does provide a number of performance reports while Sage MAS 90 has created a whole array of business analysis reports including out-of-the-box reports, a powerful report writer, and two analytical tools: the Business Insights Dashboard and the Business Insights Explorer.

Exception Management

Sage MAS 90 supports user-defined alerts that track key inventory control-related data values, including calculated values. If a value falls outside the defined acceptable range, the system will automatically notify a user. This enables users to collaborate with Sage MAS 90 to constantly monitor critical business conditions without having to actually update and review reports relating to those critical conditions. QuickBooks ES does not support exception management except perhaps via Excel reports which can be difficult to create. In addition, these reports are not updated automatically.

Introduction

The distribution industry is one of the most competitive industries in which any firm can compete. We will address the needs of firms that might be growing beyond their ability to control their operations using fairly simplistic and primarily manual procedures. Some very small distributors with a limited number of items probably need nothing more than a product such as QuickBooks ES to handle inventory control, purchase orders, and customer orders. What happens though as a company grows in terms of products or product lines, number of orders handled per day, or any other measure of volume or complexity? In very general terms a company will over time outgrow its ability to control critical operations. While there is no specific time that can be identified as the change point, there are indicators that serve as reminders that change is warranted.

Simple vs. Flexible

As we discuss the factors that have an effect on a distributor's ability to control its operations, the key differentiator in most instances is the concept of flexibility. Small distributors may not require sophisticated or deeply integrated functions. The operations of larger distributors tend to be more complex and it is this complexity that drives the need to migrate to a more flexible business management system that supplements (not replaces) the knowledge and skills of the people within the organization. In general it can be said that tightly integrated business management systems can bring order to what might have been increasingly more chaotic manual business processes.

Cost of Doing Business

Ultimately a distributor's bottom line profitability is dependent on its ability to minimize its cost of doing business while maximizing its revenue, particularly from existing customers. While the same can be said for any business, distributors operate in a highly competitive industry with extremely thin gross margins. The purchase and storage costs of items can become quite significant as can write offs from obsolete inventory. Successful distributors need business management systems that help them minimize the per item cost of purchasing, determine what should be stocked and in what quantities, minimize the cost of handling customer sales orders (while giving customers superior and expected service that leads to repeat business), and finally pick, pack, and ship each order when required and at an acceptable per unit cost. Ultimately it's all about optimizing (not too much and certainly not too little) the quantity on hand for each item sold and minimizing the per unit business cost for each item

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sold. In this case the business cost can be defined as any cost associated with the following functions: purchasing, receiving and storage, customer order processing, and shipping. Pricing and gross margin are certainly key success factors as well, however in many cases gross margin is dependent on the decisions made by the sales department and are not related directly to the business management system (other than being able to store and retrieve customer pricing tables).

Multiple Warehouses

Expansion into multiple warehouses is perhaps one of the strongest indicators that a firm has reached a critical point in its growth. If the warehouses are close together geographically, it might be possible to track inventory for both locations as if they are a single geographic point. If the warehouses are not close, each has to be treated as a completely separate business unit with, in some cases, different order patterns and even different item costing.

Number of Items Stocked

While it is possible to effectively manage a rather limited number of items using essentially manual (what you see) procedures, as the number of items stocked increases, it becomes physically impossible to control what's on hand and how much needs to be ordered and stocked. In addition, as the number of items stocked increases, it becomes increasingly more difficult to know where everything is stored or should be stored within the warehouse.

Integrated Purchasing

Reviewing a report to determine what needs to be purchased in standard order quantities might work just fine for distributors with a limited number of items for sale, but the time and therefore the cost of placing purchase orders can become significant. As the number of items stocked increases, so do the number of suppliers; and as the number of suppliers increase, so does the complexity of managing each of these relationships. This is especially true if you are going to maintain relationships with multiple suppliers for the same items, each with different order requirements and item price points. In short, the complexity of the purchasing cycle can increase beyond any person's ability to effectively manage it.

Integrated Customer Relationships

The same factors that influence the complexity of the buying side of a distributor's operations have an effect on the selling side of the business. As the number of customers increase, their individual purchase preferences, patterns, and characteristics will increase. Multiple ship-to locations, special pricing, special order handling, and other customer-specific requirements, which could have been managed in the

past, now exceed the ability of the sales side of your business to effectively compete—without utilizing some form of fairly robust and flexible software support.

Distribution Intelligence: Key Elements

As we have previously discussed, two of the most important keys to a distributor's success is managing customer relationships and managing per unit operating costs. Customer relationship management includes holding onto existing customers, generating relatively more profitable repeat business, and adding new customers. Unit operating costs include the acquisition cost of each item as well as costs associated with purchasing, storage, and shipping while avoiding excess inventory levels that increase the investment of scarce funds as well as increased write offs. We will now compare Sage MAS 90 ERP (Sage MAS 90) against QuickBooks Enterprise Solutions (QuickBooks ES) using the success factors we have previously identified.

Accounting vs. Business Management

QuickBooks ES is an excellent small business accounting system that allows users to set up customers, suppliers and items, create purchase orders, track inventory on hand, and record and ship each customer order. However, these functions are isolated from each other. As an example, the system tracks inventory levels and can create a report that identifies which items need to be purchased, but the user then has to manually create a purchase order and enter it into the system. Sage MAS 90 automatically creates a suggested purchase order which the user can then review, possibly modify, aggregate with other suggested purchase orders for the same supplier, and generate a single purchase order to a supplier. Sage MAS 90 integrates all of the key functions into one system making it a complete business management system. QuickBooks ES is an accounting system with individual functions that are not in many instances truly integrated with other functions in the system. If QuickBooks ES users require more sophisticated distribution management capabilities, they must purchase a third party application that integrates with QuickBooks ES.

Document Management

As a business grows, the number of documents associated with various business processes grows as well. While it is possible to store these documents in file drawers, over time the sheer number of documents will tend to increase the complexity of each business process driven by a source document. In this case, we would be talking specifically about customer and vendor contracts as well as documents related

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to specific items, such as technical specifications and schematic diagrams. In addition, we need to consider the outputs of the entire accounting and business management system: journals, invoices, purchase orders, etc.

QuickBooks ES does not yet support any form of a native document management system. It does support third party document management applications that can be purchased separately. Sage MAS 90 allows users to attach to any number of documents to each customer and supplier file. In addition, Sage MAS 90 allows users to attach to each item record multiple documents such as technical specifications, schematic diagrams, and even hazmat information.

In addition to supporting standard document management functions, the Sage MAS 90 Paperless Office application enables firms to print many documents to file rather than having to print and file various accounting records. The system currently handles journals and registers, period-end documents, direct deposit stubs, accounts payable checks, statements, sales orders and sales order invoices, accounts receivable invoices, and purchase orders.

Documents stored electronically have superior handling functionality over hardcopy files. The Paperless Office application can extend the accessibility of these documents to multiple people in separate locations, where they can be accessed quickly, securely, and even simultaneously. In addition, the powerful electronic forms delivery function allows Sage MAS 90 users to e-mail or fax documents on a timely basis to vendors and customers, which ultimately improves business-to-business communications

Supplier Relationships and Purchasing

QuickBooks ES supports supplier files, purchase order creation, and the processing and payment of supplier invoices. Although purchase orders can be connected to supplier invoices, that's about the extent of the native integration. If users require additional functions, they must purchase a third party application.

Sage MAS 90 starts with a foundation of supplier maintenance files, including support for multiple order-from and ship-from contacts, as well as payment to a third party. Sage MAS 90 enables some degree of collaboration with suppliers by giving them a portal through which they can access certain records (item sales histories, production forecasts, and open sales orders). Sage MAS 90 also integrates suppliers into a full relationship management application just as one would find on the customer side of the business. In addition, Sage MAS 90 tracks supplier

performance so that users can track how well each supplier is serving them.

One of the most important differences between Sage MAS 90 and QuickBooks ES (and the difference between an accounting system and a business management system) is the fact that Sage MAS 90 automatically generates suggested purchase orders, rather than just a suggested purchase order report. The simple task of creating suggested purchase orders saves users a significant amount of re-keying time. If users of QuickBooks ES require this level of functionality, they must purchase a third party application.

Creating a suggested purchase order is only the beginning of the business process. Sage MAS 90 allows users to view detailed item status information, as well as detailed supplier information, as each suggested purchase order is being reviewed. QuickBooks ES also exposes some item and supplier information, but not nearly to the depth supported by Sage MAS 90.

One of the other significant differences between the two products is the fact that Sage MAS 90 supports volume pricing on the purchase side as one would find on the sales side. In addition, users can view not just one suggested purchase order for a supplier, but all suggested orders for that supplier, so that one purchase order rather than many can be created.

Sage MAS 90 supports landed cost tracking while QuickBooks ES does not. For firms that import merchandise, this is a crucial difference as the additional costs associated with buying from an overseas supplier can be significant. If distributors import merchandise, they must have a very clear picture of all acquisition costs, not just the base unit cost. This is the only way a complete and accurate picture of item gross margins can be created. If the true acquisition cost of each item you sell is unknown, there is no way prices can be set correctly.

Customer Relationships

Sage MAS 90 and QuickBooks ES are somewhat closer in terms of customer information, but several significant differences do exist. Sage MAS 90 supports a full document management system whereby any document can be associated with a customer, particularly contracts. Both products support a customer relationship management system, but it is a third party application for QuickBooks ES while Sage MAS 90 offers both a native contact management application and a full customer relationship management (CRM) system.

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Item Management

Item management and warehouse management are the two key applications in which a distributor would be most interested. Sage MAS 90 supports item substitutions (whereby users can specify whether their customer would accept substitutions) as well as superseded items. While users can define new items that supersede discontinued items in QuickBooks ES, Sage MAS 90 tracks the sales history of both items, giving users a total picture rather than a partial history.

Two additional significant differences between the two products is the fact that Sage MAS 90 supports serial, lot, and bin tracking while QuickBooks ES supports only serial number tracking. In addition, Sage MAS 90 supports multiple costing methods (LIFO, FIFO, standard, and average) while QuickBooks ES supports only average costing unless the user purchases a third party application.

Both products support multiple standard pricing methodologies, but Sage MAS 90 supports a greater array including percentage of cost and blanket discounts. Both products support the creation of multiple customer price matrixes, but Sage MAS 90 supports more options than QuickBooks ES.

Sage MAS 90 also allows users to record customer part numbers and print these numbers on shipping documents and invoices to further enhance customer service.

Warehouse Management

One of the most significant distribution-related differences between Sage MAS 90 and QuickBooks ES lies in the warehouse. QuickBooks ES essentially creates a single "building" in which material is stored with no designation with respect to where in the warehouse the material is located. All warehouse management operations are therefore essentially manual. While this might work very well for a small building with a limited number of items, this system probably would not work as well for a larger building with a greater number of items. As more items are added, it becomes increasingly more difficult to "remember" where everything is stored. If QuickBooks ES users require this greater level of control, they would have to purchase a third party application.

Sage MAS 90 supports multiple warehouses with multiple stocking locations in each warehouse. When material is received, it is placed into a specific (identified) location which is automatically displayed when a shipping order is ready to be picked. The activity in each warehouse then drives replenishment activities or the activity in

the warehouse can be consolidated with other warehouses for replenishment purposes.

As indicated earlier, Sage MAS 90 supports the use of bar code labels to record inventory movement (receiving, shipping, and movement from one location to another). While it is certainly possible to manually note item movement, the use of RF devices significantly increases accuracy.

Sage MAS 90 supports work orders for light assembly. While most items are shipped as they are, some distributors assemble components into a finished product (computers as an example). Sage MAS 90 supports bills of material for such assembly operations and the required work to complete the assembly is noted on each work order. Sage MAS 90 also supports comprehensive RMA (Return Material Authorization) functions to handle returns or exchanges for customers as well as suppliers. In order to support the RMA function, Sage MAS 90 also provides users with a warranty handling system which grants users access to information regarding both seller and manufacturer warranty information. QuickBooks ES does not support any of these functions.

A somewhat similar difference exists on the receiving side of the business. QuickBooks ES receives material into a warehouse, but has no way to set aside material that might require inspection or might be damaged. The same items can be received by Sage MAS 90 into a warehouse location reserved for that purpose and this location can be set up so that the material in it is not available for sale. Once the material has been inspected and accepted, it can be moved to a stocking warehouse location and thus made available for sale.

On the shipping side, QuickBooks ES supports the creation and printing of shipping documents, particularly pick lists. Basically, these pick lists are just another form of the sales order itself. On the other hand, Sage MAS 90 consolidates pick lists by item as well as bin location (thus improving the efficiency of the picking operation). Sage MAS 90 can also consolidate items into boxes or crates to reflect the actual nature of the shipment.

Customer Order Processing

Assuming that item cost control has been established, distributors must "sell" their merchandise in the most efficient and effective manner possible. Efficiency implies that orders are handled as quickly as possible while effectiveness implies that customer service is optimized (not necessarily maximized since superior customer service may actually cost more than a distributor is willing to pay).

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Although the objective of any order system is securing a customer's order, a necessary first step is checking the customer's credit. Sage MAS 90 displays an overdue account flag to alert users and can hold an order until the customer's credit is acceptable. QuickBooks ES does not support this level of credit management.

Both products provide an effective order entry screen by which a customer's order can be created. Sage MAS 90 provides access to other supportive functions such as customer pricing tables, customer special instructions, an aging analysis if required, item availability queries if an item is not currently in stock, and access to purchase order creation to handle customer drop shipments. Sage MAS 90, also through a third party product, provides users with a product configurator by which assemblies such as computers can be created instantly. Sage MAS 90, through its document management functions, also provides users with access to technical specifications and schematic diagrams so that they can discuss an item in detail with a customer.

QuickBooks ES captures a customer's order and will process it for shipment, but there are no supportive functions that users might require in order to handle complex customer orders. Sage MAS 90 goes beyond simple order entry and gives users the ability to customize many variables. One example of this flexibility is specifying multiple delivery dates on the same sales order. QuickBooks ES requires separate sales orders for each delivery date. Sage MAS 90 also gives users access to open purchase orders to view expected arrival dates for back ordered items and can give users access to alternate items, upgrade items, and material that might be in another warehouse.

On the item pricing side, QuickBooks ES displays either the list price or customer price unless the user purchases a third party product. Sage MAS 90 supports special, time-based sales, displays quantity price break tables, and even displays the best price if the customer price is higher than another price point, such as a special sale being promoted. In addition, Sage MAS 90 also displays the gross margin for any item so that users can negotiate prices with customers if required.

Sage MAS 90, through a tightly integrated shipment management application, helps users control most shipping functions including calculation of freight rates using an optional integrated scale, rate shopping between freight carriers, integration with a third party parcel insurance firm, and even the printing of carrier-approved, bar-coded shipping labels and COD tags.

Once an order has been recorded or shipped, Sage MAS 90 can use its EDI function to send order acknowledgements and advance ship notices to customers, a very important attribute if you are going to sell to large retailers. Sage MAS 90 also supports internal order tracking reports and gives customers and employees the ability to track shipments via an internet portal.

Business Intelligence

Although optimizing inventory levels (balancing demand vs. quantities on hand) while minimizing item handling costs and item write offs is critical to firms in the distribution industry, success in these areas cannot be achieved without current and accurate information. QuickBooks ES and Sage MAS 90 provide users with good reporting systems but the types of reports available show us the difference between an accounting system (QuickBooks ES) and a business management system (Sage MAS 90). QuickBooks ES provides reports that can assist firms in the distribution business, but this information is not really distribution specific.

Sage MAS 90 provides in-depth reporting (the number of reports available) as well as targeted analysis, either through out-of-the-box reports or powerful report writers and Excel links, particularly when combined with the ability to add table-driven, user-defined fields.

To further expand data analysis, Sage MAS 90 supports the Business Insights Reporter, a wizard-driven report designer that is very easy to use. If users want to slice into current information without having to create a specific report, they can use the Business Insights Explorer, a powerful tool to analyze structured data within the business management system. One of the most important points that should be made concerning a reporting tool built within an accounting system is that the data is by default current. No updates or exports are required. When you open a window in the Business insights Explorer, you are looking at the most recent data. If you want to export data, you can simply create the view you want and then export that data in multiple formats.

While the Business Insights Explorer is a powerful reporting and ad-hoc query tool set, in some cases it can become the primary access point into Sage MAS 90. The menu that accompanies the Business Insights Explorer also lists tasks, which open an explorer-type menu structure where users can list all of the most commonly accessed functions within Sage MAS 90.

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Exception Management

The underlying objectives of any business intelligence activity are the identification of opportunities for growth or the identification of opportunities for improvement. Rather than waiting for financial reports at the end of any given financial period, users should be monitoring business information virtually as it happens. This proactive approach to business management allows users to take action more swiftly to maximize profits or minimize the effects of less than acceptable performance. Since time is any organization's most precious asset, managers and executives cannot spend the whole day analyzing operational reports. Actually, they should not be spending much time looking at reports anyway.

Managers need to monitor the underlying conditions that affect performance. That's why a graphical presentation of data is so important. Responsible employees can see very quickly in a graphical presentation of information whether the conditions being analyzed are falling within acceptable guidelines (assuming, of course, they are looking at the most important pieces of data). Even a graphical presentation takes time if you have to look at 20 different graphs.

One of the most effective ways to monitor performance conditions is utilizing the system itself. In this case, we are talking about an alert system whereby users define the conditions they wish to monitor and have the system itself play the role of watchdog. If the actual value of the condition falls outside the performance parameters specified by the user, the system will alert the user either via an internal e-mail or some form of exception management application that lists the exceptions. As an example, the system could monitor inventory turns or customer balances or anything that can be measured (including calculated values). This approach allows users to spend more time working on improvements and less time analyzing reports.

Sage MAS 90 supports an e-mail Business Alerts application while QuickBooks ES supports only a few such alerts through Excel-driven reports.

Summary

QuickBooks ES is a very good accounting system that can serve the needs of small distributors quite well. It is however an accounting system, not a true business management system that presents, through functions found in the system, a type of workflow that integrates various business activities into a single cohesive whole. As a distributor grows in size or complexity of operations, or wants to expand into more than one location, QuickBooks ES begins to show its limitations. As a distributor grows, what were manual processes may begin to become burdensome whereas they might not have been in the past. There is no precisely defined point where a switch needs to be made, but growth will slowly tend to place strains on a pure accounting system like QuickBooks ES.

Sage MAS 90 is an excellent business management system that can provide growing distributors the functional integration they need to operate more efficiently in a highly competitive market. Greater efficiency can lead to reduced inventory levels while maintaining or possibly even increasing customer service.

Sage MAS 90 helps users concentrate on increasing productivity and customer service by integrating supplier and customer relationship functions with inventory and warehouse management functions. Rather than spending more and more time creating purchase orders, and walking through a warehouse to determine what needs to be ordered or where material should be stored, users can let the system itself support their day-to-day business activities and therefore spend more time proactively managing and improving their business.