



# E-Business Software

---

A Buyer's Guide

---

# Table of Contents

Table of Contents .....	i
Introduction .....	1
What is an E-Business?.....	1
Expanding the Reach of Business Software .....	2
Users and Visitors .....	2
Revenue, Cost and Profitability .....	3
E-business "Cube" .....	3
<i>E-Commerce</i> .....	3
<i>E-Management</i> .....	3
<i>Application Delivery</i> .....	3
What is E-Business Software? .....	4
Making Your-Business an E-Business .....	4
Business Divisions.....	5
E-Business Constituencies .....	5
Application Delivery .....	7
<i>Application Hosting</i> .....	7
<i>Application Availability</i> .....	7
Choosing an E-Business System .....	8
Mapping an E-Business.....	8
Example E-Business Map .....	10
Trading Price for Function .....	11
Application Delivery Issues .....	11
Which E-Business Product? .....	12
Conclusion .....	12

---

# E-Business Software

## A Buyer's Guide

### INTRODUCTION

The Sage Group provides business management solutions to more than 2 million small and medium-sized organizations worldwide. Generating more than \$600 million of annual revenues, Sage is the market leader in the US, UK, France and Germany. Sage's U.S. brands—Peachtree, MAS 90, BusinessWorks, DacEasy and Enterprise Suite (formerly Acuity)—are among the best known in the accounting software industry, and Sage is at the forefront of helping businesses become Internet-enabled.

Our customers and prospects frequently ask Sage where their businesses fit into the Internet revolution and how they can participate. This white paper is intended to show how any company can become an e-business and reap the benefits from this revolution.

If you're reading this paper, you already realize that your business needs to address the Internet, and, most likely, you understand that your business can become more productive, profitable and competitive by becoming an e-business. This paper will help you move up the learning curve and begin to create the kind of e-business you want to operate.

#### What is an E-Business?

An e-business, in its simplest terms, is a business that is conducted over the Internet, a dramatically new interactive channel for connecting buyers and sellers. Sage puts it another way:

*An e-business is a business that has maximized its business efficiency by leveraging Internet-based applications and technology.*

Many traditional businesses are familiar with the concept of leveraging technology to improve efficiency. Sage is already a leader in packaging sophisticated and complex technology in such a way that it is affordable and can be easily adopted by small and medium sized businesses seeking greater efficiency. Sage is maintaining this leadership by helping traditional businesses leverage the new Internet technology.

Key questions for businesses are:

- How does the Internet change the playing field?
- How can businesses enhance efficiency through the latest technology?
- How does this help increase revenue for a business?

## Expanding the Reach of Business Software

Software for traditional businesses focuses on the productivity of full-time users, who, once they invest time and effort to learn the package, can then be highly productive. The Sage Enterprise Suite General Ledger module, for example, is intended to allow a company's accountant or bookkeeper to set up and maintain the company accounts. The product is flexible, fast and powerful, but requires training to use all the features successfully. This is the type of application that company accountants need (and will always need) to manage a business.

Historically, companies primarily purchased business management software for individuals that would use the package full time. Installing software for occasional use (e.g. to access a monthly report) was usually expensive, inconvenient and difficult to justify the return on investment. Imagine having to install software from your bank, brokerage, bookstore and newspaper on your home PC. In order to buy CDs for the first time, you'd have to install software just to browse the catalogue!

The Internet changes this. It is now inexpensive and straightforward for people to use software occasionally—via a browser. This technology innovation has vastly increased the demand for “occasional use” software. Providing software applications to customers, vendors, partners and remote employees is now technologically feasible.

## Users and Visitors

The Internet has changed the rules. People can use software without the installation and maintenance headache. By using a browser, occasional or even anonymous use of software can be provided in a technically feasible manner. This has dramatically expanded the reach of business software. All employees will now want to access business systems (at least occasionally) and external individuals will want to access information via the Web.

Throughout the rest of this guide, **employees** of your business are referred to as “**users**.” They are subdivided into “full-time users” and “occasional users”—each having somewhat different characteristics.

**Non-employees** are referred to as “**visitors**.” Visitors therefore include customers, vendors, prospects and anyone else who might want to interact with your company. Visitors are subdivided into “first-time visitors” or “regular visitors”—again, each type having different characteristics.

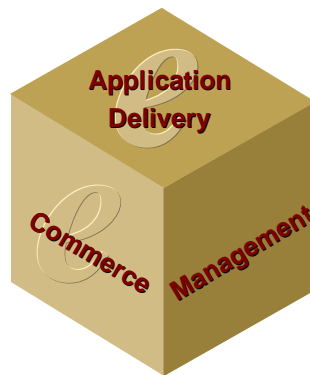
## Revenue, Cost and Profitability

Many people ask how e-business solutions can impact the bottom line. The answer depends greatly on the type of business and the areas tackled. Some changes will decrease costs, for example, by reducing customer calls and thereby reducing the need for telephone operators.

Other changes will help increase revenues, for example by allowing you to provide better customer service than your competitors. Some changes can even facilitate entry into new markets, for example by providing an ability to provide specialized support remotely.

## E-Business “Cube”

A simple way to pull together the different aspects of an e-business is by combining three factors:



### **E-Commerce**

This aspect of e-business includes the interaction between a company and its partners. Commonly, this means a Web site for customers, but increasingly, it includes electronic interaction with vendors and customers—an electronic supply chain. An e-business uses the Internet to serve its partners better.

### **E-Management**

E-management is the area of an e-business that uses the Internet to manage the business operations better. This includes using software that leverages the Internet (providing credit reporting to accounting, for example), to using Internet technology to enhance the productivity of occasional users (allowing employees to access their human resources [HR] information online).

### **Application Delivery**

Finally, application delivery encompasses all aspects of the software implementation and management. An e-business uses the Internet to lower the cost of ownership of the application software. In some cases, using “hosted” software provides a lower cost of ownership<sup>1</sup>.

---

<sup>1</sup> A hosted application is one where the computer system is maintained offsite by an Application Service Provider or ASP, and user access is gained through an internet connection to the ASP.

## What is E-Business Software?

So what is e-business software? At a high level, e-business software is software that enhances the business efficiency of an organization by providing tools both to employees and visitors, and provides those tools in a cost-effective way. E-business software will provide solutions for e-commerce, e-management and application delivery.

The rest of this paper analyses this position in more detail, and explains how Sage products already do some of this today. Clearly the Internet revolution is in its infancy, but Sage already is the leading provider of e-business solutions to small and medium businesses—and will continue to be in the future.

## MAKING YOUR BUSINESS AN E-BUSINESS

The structuring of an e-business is highly specific to a company's business and operating model. This is probably the single most important point to bear in mind. Looking around, particularly at the pioneers of e-business (Dell and Cisco, for example), we can compile a list of the advantages of the Internet that drive e-business productivity:

- Online ordering for customers
- Online account inquiry
- Online auctions of product or byproduct
- Online bidding by vendors
- Company and product information
- Automatic business transaction exchange
- Up-to-the-minute information (news, stock prices, etc.)
- Employee benefit self-maintenance
- Online meetings and document sharing
- Employee time and expense gathering
- Conference calls with customers, investors, vendors and partners
- Shipment and order tracking
- Time management tools, including calendars, contact books, etc.

Obviously this list is nowhere near exhaustive, but the point is clear—some of these issues are vital for a particular business; other issues are incidental or not applicable.

## Business Divisions

The above list can be grouped into the different divisions of a typical business—divisions that are as applicable to traditional business software as to e-business software of the future. However, in order to purchase e-business software effectively, it is useful to establish the areas of focus for your current situation.

Sales	The sales aspects of any business are critical. Depending on the exact nature of the business, software for this segment covers order management, customer management, invoicing and similar business functions.
Purchasing	The purchasing activity of a business is focused on cost. Software provides functions that cover vendor management, payables, receipt-of-goods, and more. For many companies forecasting and replenishment are becoming important.
Finance	Financial operations range from a simple general ledger package, to cash management and treasury operations. Credit checking, payroll and credit card processing are also valuable functions.
Employees	Employees are vital to a company's competitive advantage. HR packages are increasingly important for achieving employee satisfaction, and include benefits management and other employee tools.
Line-of-Business	This segment of a business is usually very industry-specific. A distributor, for example, must view inventory and warehouse management as critical operational requirements, whereas a professional services firm must focus on project management as its most important operational issue.

Clearly the boundaries are blurred in some cases (e.g., credit card verification is relevant to sales as well as finance). However, dividing your company this way is useful in analyzing the needs of your business.

## E-Business Constituencies

As mentioned earlier, the Internet revolution is allowing many people to access information that was previously denied to them—enabling software is only now cost effective on their PCs. These additional people can be referred to as new “constituencies”—groups of people in a similar situation who now can be supplied with software cheaply and easily via an Internet browser.

Examining constituencies helps you focus on which areas of your business are most important and which are less so, from the perspective of enabling e-business. In turn, this helps reduce the variables in a search for the right e-business software.

Sage sees five distinct constituencies that interact with an e-business:

Constituency	Software Type	Description
First-Time Visitors	Internet	These individuals are unknown to the company, and therefore have no account information or other historical data.  The software needs to support Internet access.
Regular Visitors	Internet	These non-employees are known to the system (a log-in is usually required) and therefore have accounts, credit information, interaction histories, etc.  The software needs to support Internet access.
Occasional Users	Self-Service	Employees that wish to access the system occasionally fall into this category. They are not full-time users of the system, but do have a need to access data, etc.  The software needs to accommodate self-service access by employees.
Full-time Users	Operational	These employees are the users traditionally served by business software vendors. These users are almost always employees.  The software needs to be designed to allow very flexible use by power operators.
Automatic Transaction Exchange	Programmable Interface	This constituency refers to business software that interacts with other computers. Traditional Electronic Data Interchange (EDI) falls into this area, as does newer platforms for electronic transaction handling.  The software needs to be easily integrated to other applications and systems, through a programmable interface.

Constituencies are important because the software required for one constituency is usually completely inappropriate for another. For example, a sales order entry package designed for full-time users (an operation-oriented sales order system) allows price overrides, commission-plan adjustments and so on. These features would be inappropriate for a sales order package targeted at first-time visitors! A sales order package targeted at occasional users (perhaps field-based sales reps) would need a feature set positioned between the two.

In other words, a traditional application built for operational use cannot simply be delivered in a browser and given to customers. Another application is required—Internet-based sales order targeted at first-time users.

In summary, a fundamental power gained from the Internet is the ability to extend software (through a browser) to constituencies that previously could not use it. Before the advent of the Internet, the providing of software to virtual visitors was too costly and inconvenient; they had to use a telephone or visit physically instead. Now, visitors can be given the use of software (through their browser) and interact directly with your business. However, software must be designed explicitly for the constituency in question.

## Application Delivery

The preceding discussion focuses on the functional requirements of the e-business (i.e. e-commerce and e-management requirements). However, application delivery issues should also be considered.

### **Application Hosting**

First, is it a problem for the data to be off site? Many companies are reluctant to store critical accounting data on a machine that is located at another company. On the other hand, that company's e-mail functions can be hosted elsewhere quite happily. In other words, the choice is yours.

This is a critical issue, because many companies are providing application hosting services. In some cases, these services can reduce ownership costs, by allowing economies of scale in the hosting operation. Against this, the data is stored offsite and may be unavailable in the event of connection or server failure.

The most important thing to remember is that it is possible to use hosting for any type of application. However, it may be preferred to keep some applications in-house. For example, a Web-based system for customer self-maintenance is usually best hosted, whereas many companies choose to keep the general ledger in-house for security purposes.

### **Application Availability**

Additionally, given the increased reliance an e-business places on the software applications, it is important to ensure a robust and reliable platform. A significant software failure could have a serious impact on the revenue

stream of an e-business. Software reliability is therefore paramount as a company transitions to being an e-business.

Again, the requirements will vary somewhat between different functional areas of the system. E-mail failure is annoying but not disastrous, whereas failure of a shipping system impacts the fundamental business operation. Examining each functional area for “business criticality” would be a useful exercise.

Caution needs to be used, however, because it is possible that the interaction between all aspects of the system make apparently non-critical areas critical; for example, if the shipping system uses e-mail to route shipments for approval, e-mail failure will indeed cause failure of the shipping system. This kind of interaction needs to be taken into account.

## CHOOSING AN E-BUSINESS SYSTEM

Choosing the right e-business software solution is clearly more complex than choosing an accounting package, as the discussion above indicates. In addition to more business variables to consider, there are more vendors suggesting that they can help. However, choosing a proper e-business system requires a careful tailoring of the software to the business needs of the company, including its size, strategy, and opportunities for competitive advantage.

### Mapping an E-Business

Sage recommends selecting e-business software by means of an e-business map. An e-business map combines the two previous concepts (business divisions and user constituencies) into a grid format. The purpose of the map is to illustrate the requirements of your particular situation in a helpful framework. Given the long list of software and function possibilities, this provides useful focus on the most critical parts of a company’s overall requirement. Since no vendor yet provides a complete solution that covers all constituencies and all business divisions, attempting to implement an all-encompassing solution in one step might prove to be overly ambitious, risky and costly.

To produce an e-business map for your business, first examine your own company’s requirements in terms of the relative importance of each of the constituencies outlined above. For example, are first-time visitors to your Web site more or less important than providing tools to occasional users, such as field sales people or engineers? This will dictate which type of software is required.

Second, establish the priority of each business division. For example, is sales the key area, or is there a line-of-business need that is more important?

Finally, the important constituencies can then be combined with the key business divisions to establish a map of the e-business you are hoping to build.

Note that before the Internet arrived, the “map” usually contained only the left-most column, the full-time users. This was because the cost of providing software to the other constituencies (i.e. self-service and Internet software) was prohibitive. The Internet has expanded the map into the second dimension.

Below is an e-business map that suggests common requirements. Note the section marked “not applicable.” It is rare that a business will want to invite non-employees into financial and operational parts of the business. This is not an absolute rule—some kinds of manufacturers, for examples, might offer access to in-process operations—but it is a reasonable assumption for most companies.

Constituency	Employees		Non-Employees		Automatic Transactions
	Full-Time User	Occasional User	Regular Visitor	First-Time Visitor	
<b>Sales</b>	Sales Order Accounts Receivable	Customer Inquiry Salesperson ordering Salesperson quotes	Customer self service Customer order entry Customer order tracking Product detail and availability	Open account Order by credit card	Advanced Ship Notifications/EDI
<b>Purchasing</b>	Purchase Order Accounts Payable	PO Requisition	Open requisitions	Open requisitions	EDI
<b>Finance</b>	General Ledger Cash Management Budget Management	Access to reports Budget Review/Update Executive dashboard	Not Applicable		Bank Reconciliation Bill payment
<b>Employees</b>	Human Resource Management	Employee self service			Payroll deposits Expense reimbursement
<b>Line-of-Business</b>	Multi-warehouse inventory Forecasting and Replenishment Project management Line-of-Business System	Stock status Time-and-expense collection			Various

## Example E-Business Map

For example, imagine a \$175 million distributor of electrical parts and supplies. The company has two locations, primarily selling to businesses in the local area. Revenues are almost exclusively derived from existing customers, who need immediate availability, technical assistance when necessary and special-order services.

Critical issues over the year are to:

- Expand customer service, especially through the Internet
- Improve inventory management
- Reduce out-of-stock while also reducing inventory carrying costs
- Improve the availability and value of management information
- Enhance employee management through employee self-service.

The business map might look as follows:

Constituency	Employees		Non-Employees		Automatic Transactions
	Full Time User	Occasional User	Regular Visitor	First Time Visitor	
<b>Sales</b>	Sales Order Accounts Receivable		Customer order entry and tracking Product detail and availability Product finder utility Special-order request Pricing information	Open account Corporate Information Product Information	Advanced Ship Notifications/EDI
<b>Purchasing</b>	Purchase Order Accounts Payable				
<b>Finance</b>	General Ledger Cash Management	Access to reports	Not Applicable		
<b>Employees</b>	Human Resource Management	Employee self service			
<b>Operations</b>	Multi-warehouse inventory Forecasting and Replenishment				

This map helps you to focus on the issues that are important to your business, without losing sight of the big picture. Vendors' products can be mapped as well, and compared to your requirements. However, one final consideration is important when selecting products.

### Trading Price for Function

Everyone is familiar with the price/function trade off. A Toyota Tercel is less expensive, but less luxurious than a Rolls Royce. Which is better? If you're wealthy and desire a luxurious ride (the chauffeur is driving), the Rolls Royce is the only serious option. If your purpose, however is to obtain personal transportation on the tightest possible budget, a Toyota Tercel is a much better choice. Similarly, there are many other choices along the price/function spectrum.

This price-for-function trade-off applies equally in the new world of e-business. For example, Dell has spent many millions of dollars to build its Web site and e-business infrastructure. No software vendor can provide Dell's level of functionality to small and medium companies at a shrink-wrap price. However, Sage does provide its customers with many of the key functions that leverage Internet technology so that they can operate successful and highly effective e-businesses. Furthermore, Sage provides it at a price that is compatible with the resources of a small or medium sized business.

### Application Delivery Issues

As discussed above, each functional area should be reviewed against two factors:

- Importance of on-site location
- Business impact of failure

The first rating will help identify the applications that could be hosted rather than implemented in-house. A phased approach can be used to "test the water," by hosting non-critical parts of the system first and moving additional elements as and when appropriate.

The second rating will help identify the applications that need careful selection. Given the difficulty in measuring reliability objectively, references are probably the most practical way to establish reliability of software. However, irrespective of the actual software performance, understanding which parts of the system are critical can help improve the internal processes. For example, critical areas can be assigned (expensive) 24x7 support (to ensure application availability), but not to non-critical areas of the system.

## WHICH E-BUSINESS PRODUCT?

Choosing an e-business product can be broken into three steps:

1. Map your desired e-business
2. Determine your preferred trade-off between price and function
3. Compare proposed solutions to the e-business map
4. Rate each functional area on the application delivery requirements

The first step should be straightforward, given the previous discussion. This step will allow priorities to be set for the solution, and focus the search on those areas of key importance.

The second step is important, because products that are designed for “out-of-the-box” use are not always suited to customization and integration. When the situation requires integration and customization, look for products that support appropriate changes.

Third, mapping your e-business requirements and your e-business solution allows you to identify your options and make the best choices. Clearly, a solution needs to be found for each key part of your e-business.

Finally, ensuring that application delivery options are available for a particular product allows maximum flexibility for reducing cost of ownership.

## CONCLUSION

The Internet has expanded the range and complexity of software that your business needs to stay competitive. When selecting software, many issues need to be considered. First, use an e-business map to help focus on the areas of your business that are most important. This will ensure that your investment produces returns more quickly.

Second, deciding your preferred trade-off between price and value is important. In some cases, a shrink-wrap product will be sufficient for the business requirement. However, in many cases, the requirement is critical enough to justify an investment in customized applications. In these situations, operational software that can be extended to the Internet is important.

Third, comparing your requirements to the available product solutions can be facilitated by an e-business map. This will allow a more detailed comparison of the products against your requirements, and thereby ensure that your investment is productive and successful.

Finally, ensuring that application delivery issues are reviewed allows costs to be minimized across the e-business without exposing the organization to undue risk of critical system failure.