

# THE ERP INTEGRATION HANDBOOK

Key integration considerations for wholesale distributors looking to connect their ERP systems with third party software solutions.



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# INTRODUCTION: SUPPLEMENTING ERP SYSTEMS WITH BEST-OF-BREED SOLUTIONS

Ten years ago, if any wholesale distributor were asked, “What technology are you running your business on?” they would almost certainly have given the name of their Enterprise Resource Planning (ERP) system, and the conversation would have ended there. But while ERP systems have long been touted as “all in one” solutions, companies are

increasingly beginning to think about how new classes of software can impact their operations—and profits.

Indeed, with the incredibly wide range of both cloud and on-premise software solutions available to companies today, the enterprise technology landscape is not as clear-cut as it was years ago. Wholesale distributors are learning how they can supplement existing legacy systems with third party best-of-breed Software-as-a-Service (SaaS) solutions like B2B eCommerce platforms, mobile sales order management software, inventory management software, and more. These purpose-built solutions are allowing countless businesses to reduce costs and take advantage of shorter implementation cycles and quicker returns on investment.

Now the challenge lies in integrating best-of-breed solutions with ERP systems to maximize ROI across all platforms. While ERP software ecosystems can be extremely complex, gaining an understanding of the options and approaches available for integration is the first step towards a solid integration strategy.

The aim of this white paper is to serve as a springboard to begin the integration process, covering top ERP vendors like SAP, Oracle, Microsoft Dynamics, Sage, and NetSuite, as well as a few insights for smaller businesses using accounting software like QuickBooks and Xero. Whatever third party solutions are chosen to supplement your ERP, a tight integration across all systems will have a huge impact on improving current business processes and meeting future challenges.

**INTEGRATING WITH**



## SUMMARY:

- Most older versions of SAP are based on SAP's proprietary ABAP (Advanced Business Application Programming) language; newer versions have moved away from that standard.
- Companies with the requisite expertise can write their own custom interfaces using ABAP, the most direct option to integrate older versions of SAP. The disadvantage is that SAP no longer supports these interfaces, presenting problems at upgrade time.
- An important component of SAP's strategy is the deployment of the HANA Cloud Platform, which will provide an SAP-supported hosting platform for SAP-certified third party applications. Over time, SAP will support only the interfaces that reside on this platform.

## BACKGROUND:

SAP offers a huge number of applications to meet the needs of almost any business, including MySAP, SAP All-in-One, SAP BusinessOne, the R/ series or SAP ECC, or any of SAP's more specialized applications. At the time of this writing, most companies are likely to be running licensed, on-premise applications. Most older versions of SAP are based on SAP's proprietary ABAP language, while newer versions have moved away from that standard.

The SAP landscape, however, is changing. Over the last few years, SAP has begun moving toward a Software as a Service (SaaS) business model. BusinessOne, a popular option with SAP's small and medium business (SMB) customers resides in the cloud.

In 2015, SAP released SAP S/4 HANA, the latest version of its business applications. S/4 HANA is offered in on-premise, cloud and hybrid versions. An important component of SAP's strategy with S/4 HANA is the deployment of the HANA Cloud Platform, which will provide an SAP-supported hosting platform for SAP-certified third party applications. Over time, SAP will support only those interfaces that reside on the HANA Cloud Platform. Any of these factors can impact your integration plans.

# INTEGRATING WITH SAP:

Because SAP has changed the way it builds software over the years, your integration path depends to a great extent on which version of SAP your organization is running. The most common integration tools used with SAP include:

- **IDOC (Intermediate Documents):** IDOC sends messages between systems, querying for information. There are over 600 IDOCs, and they are generally well supported across versions.
- **ABAP Interfaces:** Companies with the requisite expertise can write their own custom interfaces using ABAP. This is the most direct option to integrate older versions of SAP, but the disadvantage is that SAP no longer supports these interfaces, presenting problems at upgrade time.
- **RFC (Remote Function Calls):** These are programming hooks within ABAP that allow calls to external applications. These are typically not documented, and are not supported by SAP.
- **BAPIs (Business Application Programming Interfaces):** These are essentially APIs written and supported by SAP to enable integration between SAP modules and between SAP and third-party applications.
- **SAP NetWeaver:** For companies using SAP ECC, NetWeaver is the preferred tool for moving data and triggering actions between SAP modules and third party software.
- **Third Party APIs:** These are Application Programming Interfaces (APIs) offered by many software vendors to connect SAP with their applications.



## KEY QUESTIONS:

Now that you understand the factors impacting your SAP integration, you can lay out a plan for your particular situation. It's simply a matter of asking the right questions. To do this, you need to identify:

- What should the integration allow you to do? In other words, what are your key business needs?
- Which SAP version and applications do you have? Are they ABAP-based?
- Which type of interface is compatible with your current SAP system?
- Does your software vendor offer an API?
- Do you need the interface to be supported by SAP?
- Do you have the IT expertise to support your own interface, if needed?
- How will existing customizations impact your integration path?
- What are your future upgrade plans?

## KEY RECOMMENDATIONS:

In many cases, the best option for integration is to use SAP-supported interface types, i.e. BAPIs or NetWeaver. Another good option is to use the interfaces supported by the third party vendor. Only when these options are not available should custom interface development be considered.

A network diagram consisting of numerous nodes (circles) of varying sizes connected by thin lines, set against a solid orange background. The nodes are scattered across the page, with a higher density in the lower right quadrant.

INTEGRATING WITH

ORACLE®

## SUMMARY:

- Oracle has “productized” integrations using their Application Integration Architecture (AIA) and the Oracle Fusion Middleware integration layer.
- Oracle Fusion Middleware works with E-Business Suite and Oracle Fusion applications. It includes numerous tools, like Oracle WebLogic Server for building Java-based tools or Oracle SOA Suite for building composite applications to enable specific business processes.
- Oracle EBS Adapters can also be used by Oracle partners to integrate third party applications with the E-Business Suite using SOA to ensure integrations meet business needs without excessive customization.

## BACKGROUND:

As of 2012, Oracle held about 13% of total ERP market share, second only to SAP. Like many enterprise software vendors, Oracle has morphed over time, acquiring former competitors like PeopleSoft and JDEdwards and expanding its application offerings. Today, more than 420,000 companies around the world use Oracle in various forms.

Oracle started out in the late 1970s as a database company, and today it sells numerous functional modules and application suites that use Oracle RDBMS as a back-end. Over time, Oracle’s ERP application suite expanded to include Financials, Human Resources, Manufacturing, Supply Chain Management, Projects, CRM, Procurement and more.

Oracle’s offerings are highly complex and have historically been considered the best fit for enterprise-level customers. More recently however, the company has begun transitioning to cloud offerings such as DaaS, SaaS, IaaS and PaaS. These, along with the Oracle Accelerate partner solutions for medium businesses, have helped make Oracle a somewhat viable option for mid-sized businesses.

As a result of its acquisition strategy as well as organic development and growth within the company, there are more than 40 application suites and product lines that fall under the Oracle umbrella, including Oracle Fusion, Oracle E-Business Suite, PeopleSoft Enterprise, Siebel, JD Edwards EnterpriseOne and World, and many others. Each of these has multiple releases or versions that may be in use, and each may have differing integration paths and considerations.

# INTEGRATING WITH ORACLE:

For the purposes of this white paper, the focus will remain on Oracle Fusion and E-Business Suite integrations, as these comprise the majority of Oracle customers. Oracle has taken a somewhat different approach to integration than many others in the ERP industry. Over time, the company has recognized that integration with third party applications adds a lot of expense to ERP projects, both at the time of initial development, as well as future upgrades.

Because of this, Oracle has “productized” integration with many third party applications using Oracle Application Integration Architecture (AIA) along with their Oracle Fusion Middleware integration layer. Built and supported by Oracle, these are the preferred methods of integrating Oracle with third party applications. When this isn’t an option, however, custom integration is possible.

- **Oracle E-Business Suite** (EBS) handles integrations a number of ways. Overall, Oracle uses Service Oriented Architecture (SOA) to integrate business functions and applications to provide support for specific business processes. Integrations between third party applications and Oracle EBS can either be pre-built application interfaces or integration accelerators residing in the Oracle Interface Repository or Fusion Middleware layer. Modifications to the applications themselves (an option Oracle discourages in favor of using its pre-built tools) or custom-built interfaces can also be built using protocols appropriate for each environment or task, such as PL/SQL, XML, EDI, Java, and others.
- **Oracle Fusion Middleware** works with E-Business Suite and Oracle Fusion applications as an integration layer, allowing integration between Oracle applications and third party applications, as well as the development of new composite applications. It includes numerous components, like Oracle Identity Management (providing services and interfaces that facilitate third-party enterprise application development), Oracle WebLogic Server for building Java-based tools, Oracle SOA Suite for building composite applications to enable specific business processes, Oracle WebCenter for building web interfaces and applications, and many others.
- **Oracle EBS Adapters** can also be used by Oracle partners to integrate third party applications with E-Business Suite using SOA to ensure integrations meet business needs without excessive customization. EBS Adapters are a component of Fusion Middleware. Oracle Adapters support all modules of Oracle Applications for versions 11.x.



## KEY QUESTIONS:

Now that you understand some of the general considerations that can impact your integration of Oracle with third party applications, you can create an integration plan for your particular situation. To do this, you must identify:

- **Your business needs: what should the integration allow you to do?**
- **Which version of Oracle (or subsidiary products like PeopleSoft or JD Edwards) and specific applications are you running?**
- **Does Oracle provide a supported integration tool, or is an interface offered by the third party vendor?**
- **If no integration tools are available, does your organization have the IT expertise to develop and support your own interface?**
- **Has your current system been modified or customized? Could this impact your integration plans?**
- **Do you have future upgrade plans?**

## KEY RECOMMENDATIONS:

Custom Oracle integrations are subject to the same challenges associated with any ERP integration, including differing information architecture, conversion of data between systems, challenges at upgrade time, and maintenance costs. Because of these challenges and the complexity of its own application landscape, Oracle has made it clear that the preferred method of integration is using its own integration tools through the Oracle Fusion Middleware layer and AIA tools.

Generally speaking, the best option with the least long-term issues is to use Oracle's supported integration tools rather than writing a custom interface. If this isn't an option, the interfaces supported by the third party vendor would be the next best choice. Only when these options are not available--or when they do not meet your business needs--should custom interface development be considered.

**INTEGRATING WITH**



**Microsoft  
Dynamics™**

## SUMMARY:

- Microsoft Dynamics products are based on different coding languages, many of which are proprietary and may have different protocols for integration. For the purposes of this white paper, we will focus on Microsoft Dynamics NAV integrations.
- Microsoft relies heavily on its extensive partner network to assist customers with customization and integration projects.
- There are two primary methods of integrating NAV with third party applications. The first is via APIs that allow two-way communication between Microsoft NAV and third party software. The second is building a custom interface using Dynamics' XMLport objects.

**BACKGROUND:** Like its larger competitors Oracle and SAP, Microsoft has several product lines based on acquisitions over the years. The instances or versions a given company could be running include:

- **Microsoft Dynamics NAV:** Formerly Navision, NAV is currently on release NAV 2016, and is the most popular of the Dynamics product lines.
- **Microsoft Dynamics GP:** Formerly Great Plains, Microsoft Dynamics GP is on version GP 2013 R2 and is oriented towards rapidly growing small and mid-market businesses.
- **Microsoft Dynamics AX:** Formerly Axapta, AX is currently on version AX 2012 R3 and is oriented towards large, global enterprises.

Currently, Microsoft Dynamics encompasses about 5% percent of global ERP market share, behind SAP, Oracle, Sage, and Infor. Dynamics AX makes up the majority of global implementations, while NAV has greater market saturation within the United States.

Each of the Microsoft Dynamics products is based on different coding languages--many of which are proprietary--and may have different protocols for integration with other applications. For the purposes of this white paper, we'll focus mainly on NAV integrations.

Microsoft Dynamics NAV is based primarily on .NET architecture running atop a SQL database and only works with the Explorer browser. It is available either as an on-premise installation, or in the cloud through Microsoft's network of business partners. On-premise installations generally have more customization options than cloud versions.

# INTEGRATING WITH MICROSOFT DYNAMICS:

Microsoft relies heavily on its extensive partner

network to assist its customers with customization and integration projects. This is due in part to the fact that Microsoft uses proprietary rather than open source programming. In addition, some of the Microsoft Dynamics products are more complex than others; AX is generally much more complex than NAV, as are the organizations that use it, so implementations, integrations, and upgrades typically require a lot more support.

Although assistance from a partner is usually needed to customize, initial setup is fairly simple using the NAV wizard. This allows NAV to be set up and managed “out of the box” with minimal project management and specialized resources. However, as businesses grow, some degree of customization may be required, which is where Microsoft’s network of NAV partners is available to assist.

There are two primary methods of integrating Microsoft Dynamics NAV with third party applications. The first is via application programming interfaces (APIs) that allow two-way communication between Microsoft NAV and third party software. These APIs are typically developed and maintained by the third-party software vendor.

The second is building a custom interface using Dynamics’ XMLport objects. This involves a system administrator putting NAV data into an XML format for exchange or integration purposes. Generally speaking, the API is by far the simpler of the two options.

Integrating Microsoft Dynamics using custom code is not a small undertaking. Like most Microsoft products, NAV is based on proprietary code made available to developers for purchase, severely limiting what those who do not specialize in Microsoft development are able to do with the software. In addition, custom code is difficult to manage long-term, which is why Microsoft prefers that these sorts of projects be handled by its network of trusted partners.



## KEY QUESTIONS:

Now that you understand some of the general considerations that can impact your integration of Microsoft Dynamics with third party applications, you can create an integration plan for your particular situation. To do this, you need to identify:

- What are your business needs, and what should the integration allow you to do?
- Which version of Microsoft Dynamics are you running?
- Is there a Microsoft partner that offers a supported integration tool, or is an interface offered by the third party software vendor?
- If no integration tools are available, does your organization have the experience with Microsoft proprietary code to develop and support your own interface? If not, you will need to identify a partner organization to assist.
- Has your current system been modified or customized? How could these impact your integration plans?
- What are your future upgrade plans?

## KEY RECOMMENDATIONS:

Generally speaking, the least costly option for integrating Microsoft Dynamics with third party applications--with the least possibility for long-term issues--is to use an API provided by the third party application vendor.

If an API is not available, a Microsoft partner may offer a “plug and play” integration tool that can be used. Only when these options are not available, or when they do not meet your business needs, should custom interface development--with or without a partner--be considered.

A network diagram consisting of numerous nodes (circles) of varying sizes and colors (white, light orange, dark orange) connected by thin white lines, set against a solid orange background. The nodes are scattered across the page, with a higher density in the lower right quadrant.

INTEGRATING WITH

sage

## SUMMARY:

- Sage is based on proprietary rather than open-source code.
- Most Sage integration development is done by Sage's partner developers or by third party application vendors themselves.
- Integration options include APIs, Sage Data Objects, Web Services, and SData.

## BACKGROUND:

Sage Systems was founded in the UK in 1981 and today is the third largest ERP application provider behind SAP and Oracle. Unlike SAP and Oracle, Sage is focused primarily on providing solutions for small and medium businesses and the smaller end of the enterprise space. Sage Systems has more than 6 million customers--more users than its larger competitors--but in terms of revenue, the company is smaller due to the lower price tag of its offerings.

Sage's ERP and financial accounting products include:

- **Sage X3:** Financials applications for midsized to large manufacturers or distributors with the option to add operations, multi-site, multi-company, and multi-language utilities.
- **Sage 300:** Sage's ERP financial accounting solution for small to midsized companies. Sage 300 includes project costing, multiple currencies, languages and more.
- **Sage 300 Online:** Sage's cloud-based ERP solution for small to midsized companies that are outgrowing basic financial accounting systems and looking for a more robust solution that includes inventory, projects, payroll and more.
- **Sage 500 ERP:** ERP applications for midsized to large companies with a focus on manufacturing or distribution.

Sage also offers a free online version for startups and sole proprietorships called Sage One, as well as Sage 50 (formerly Peachtree), a combined online/desktop accounting system for small businesses, and Sage 100 (formerly AccPac).

# INTEGRATING WITH SAGE:

Generally speaking, Sage's customers do not have the technical expertise to do their own coding and application development in-house. Therefore, Sage is in no hurry to open their proprietary code to anyone other than their network of partner application developers.

What this means is that there isn't a great deal of information available about how to integrate Sage with third party applications for do-it-yourself application development. Most of this type of development is done by Sage's partner developers or by third party application vendors themselves. In general, the integration options include:

- **Application Programming Interfaces:** APIs are the primary means of integrating Sage products with other cloud-hosted solutions. These are usually developed and maintained by the third party application vendor using Sage's Software Development Kit (SDK). Some very popular applications have their APIs built into Sage and can be activated as needed.
- **Sage Data Objects:** Sage Data Objects are developed by Sage and its partners to integrate with the on-premise versions of Sage. Sage Data Objects are typically installed with Sage on-premise applications, but have to be activated using a serial number from the Sage developer that created it, and an activation key from Sage. You'll typically need a working knowledge of C# to be able to develop an integration using Sage Data Objects.
- **Web Services:** Web Services is a means of integrating Sage applications with external applications like eCommerce portals, data feeds, etc. Web services enable Sage ERP to operate with third-party applications by making data available over the Internet and/or integrating data from external web services into Sage ERP processes.
- **SData:** Sdata is a subcategory of Web Services that is specific to Sage. It is a web toolkit, promoting the development of REST (or as it is often called, "RESTful") web services. REST stands for Representational State Transfer, and typically uses HTTP to build web services that are lightweight, maintainable, and scalable. SData consists of a small, standards-based core (HTTP, ATOM, JSON) and a set of optional mechanisms solving common implementation challenges in a consistent manner.



## KEY QUESTIONS:

Now that you understand some of the general considerations that can impact your integration of Sage with third party applications, you can create an integration plan for your particular situation. To do this, you need to identify:

- What are your business needs? What should the integration allow you to do?
- Which version of Sage and what specific applications are you running?
- Is there a Sage partner that offers a supported integration tool, or is an interface offered by the third party vendor?
- If no integration tools are available, does your organization have the experience with Sage proprietary code to develop and support your own interface? If not, you will likely need to identify a partner organization to assist.
- Has your current system been modified or customized? How could these impact your integration plans?
- What are your future upgrade plans?

## KEY RECOMMENDATIONS:

As we've shown, there are several ways to integrate Sage with third party applications, but there are some challenges as well. For most of the small and medium businesses that make up Sage's customer base, having the skills on staff to accomplish these integrations on their own is probably the biggest hurdle.

Fortunately, tools such as APIs do exist to make the process of integrating with Sage easier. When an API or other pre-existing tool does not exist, it's possible to get in contact with a Sage partner, who will likely be able to provide any needed assistance.

INTEGRATING WITH



## SUMMARY:

- With NetSuite, modifications or enhancements can be done by creating a web-based script between the core application services provided by NetSuite and the browser-based user interface.
- Since most of these scripts are done using Java, it's not difficult for companies that have the technical ability to do modifications in-house, or at least to have modifications done for them.
- Like its enterprise-grade competitor Oracle, NetSuite has also “productized” its approach to application integration and extensions, offering SuiteFlex, a technology platform that provides the tools to allow customers, partners and developers to customize NetSuite to meet specific business needs.

**BACKGROUND:** NetSuite bills itself as the world's number one cloud ERP vendor, used by more than 24,000 organizations worldwide. Historically, its products have been adopted primarily by SMBs. However, as its products have grown in functionality and larger companies have grown more comfortable in a cloud-based environment, it has also gained a following with larger enterprise-scale businesses looking to lower costs and minimize the IT footprint required to maintain their ERP applications.

NetSuite's offerings include the NetSuite ERP, which is the world's most deployed cloud Enterprise Resource Planning solution, and NetSuite OneWorld--an integrated, cloud-based ERP application suite that supports multiple currencies, taxation rules and reporting requirements, enabling real-time insight and financial consolidation for global businesses.

# INTEGRATING WITH NETSUITE:

Unlike proprietary software developers like Microsoft and Sage, NetSuite takes more of an “open source” approach to the customization and modification of its software. As a cloud-based platform, however, NetSuite owns the core code—not the client organization. With NetSuite, modifications or enhancements can be done by creating a web-based script between the core application services provided by NetSuite and the browser-based user interface. These interfaces are largely done using “RESTful” Web Services, enabled by Java.

There are actually several different types of scripts, depending on the type of action that is desired, including client scripts, user events, scheduled scripts and Suitelets. Client scripts run on the client side and enable actions to be taken based on inputs to a form. User scripts run on the server side, and are triggered by actions being taken with a record (such as saving a file). Scheduled scripts allow scripts to be run on a scheduled basis, and Suitelets are server-side scripts that behave like Web apps.

Since most of these scripts are done using Java, it’s not difficult for companies that have the technical ability to do modifications in-house, or at least to have modifications done for them. As is usually the case, these custom modifications may need some updates in order to continue working properly at upgrade time.

Like its enterprise-grade competitor Oracle, NetSuite has also “productized” its approach to application integration and extensions. NetSuite offers SuiteFlex, a technology platform that provides the tools to allow customers, partners and developers to customize NetSuite to meet specific business needs.

SuiteFlex tools include:

- **SuiteScript:** SuiteScript is basically JavaScript, which allows new functions, processes, and entire applications to be built and hosted in NetSuite.
- **SuiteTalk:** SuiteTalk is a Web Services integration tool that allows NetSuite to be integrated with legacy systems and third-party applications. SuiteTalk allows developers to use any programming language or platform that supports the SOAP standard in order to generate NetSuite business objects in that language, such as Java or Microsoft .NET. Within SuiteTalk, NetSuite offers a library of Application Programming Interfaces (APIs) for certain third party applications, which are supported and maintained by NetSuite to facilitate client upgrade processes.

The upshot is that if your organization doesn’t have a good understanding of what you’re trying to accomplish, significant experience in business process improvement, as well as a good understanding of the ins and outs of SaaS and Java development, you could find yourself in hot water. To avoid issues, businesses that don’t have significant experience in these areas should use a supported API or work with a development partner.



## KEY QUESTIONS:

With this understanding of NetSuite's approach to application integration and modifications, it's time to create an integration plan for your particular situation. To do this, you need to ask the following questions:

- What are your business needs, and what should the integration allow you to do?
- Which NetSuite applications are you running?
- Is there a NetSuite-supported API within SuiteTalk for the application you would like to integrate?
- Is there a NetSuite developer partner that offers a supported integration tool, or is an interface offered by the third party vendor?
- If no integration tools are available, do you have SaaS integration and Java development expertise in house?
- Has your organization modified or customized NetSuite in a way that could impact your integration plans?

## KEY RECOMMENDATIONS:

As we've shown, application integration is well-supported by NetSuite. It can be done by either a client organization, a development partner or application vendor, or in many cases, with tools supported by NetSuite.

However, most small businesses that lack experience with software integration and Java development might be better served by outsourcing more complex integration development.

# A NOTE ON INTEGRATIONS FOR





For SMBs running their businesses on accounting software like QuickBooks or Xero, integration with compatible software solutions is still crucial to keeping business processes running efficiently. While manual data imports and exports are certainly possible, integration is a simpler, more secure solution.

Sales, customer, and other financial data can be shared between these applications and compatible software solutions, providing maximum visibility into all of your business processes, reducing data entry tasks and increasing overall data accuracy, allowing businesses to focus on growth rather than cumbersome administrative tasks.

The good news is, QuickBooks Online and Xero both have hundreds of existing compatible “add-on” applications across many software categories, including sales order management, inventory management, payroll management, and eCommerce. Indeed, accounting software vendors have generally made it easier for developers to create add-on products and extend the functionality of their software to meet more complex business needs.

For some QuickBooks users, however, it is important to note that as of March 1, 2016, Intuit will be discontinuing service of the QuickBooks Desktop REST API and Sync Manager Service. If you have existing applications relying on the sync manager, you will have to contact your third party application vendor to find out what new integration options are available.

While both QuickBooks Online and Xero have marketplaces featuring certain applications that have been deemed compatible with their software, many more third party software vendors have available integration solutions that require little technical knowledge to implement. When vetting third party software vendors, it is critical to gain a clear understanding of how their integration process works. Be sure to ask about successful integrations they have done for other customers.

# CONCLUSION: INTEGRATION KEY TO BUSINESS AGILITY

As businesses realize the limitations of their existing ERP and Accounting solutions and seek third party best-of-breed applications to supplement them, integration is becoming a key priority. These integrations with third-party SaaS solutions help companies avoid the risks inherent with running multiple

systems, i.e. higher overall IT costs and the loss of important business opportunities when systems cannot “talk” to each other.

This is a challenging new time for an industry used to simply picking an accounting system or ERP, but these best-of-breed tools can play a huge part in optimizing the customer experience, improving sales productivity, and increasing overall efficiency. While the integration process can be complex, it’s also an exciting time for wholesale distributors taking a new look at existing processes and ways to become more agile in an increasingly competitive market.



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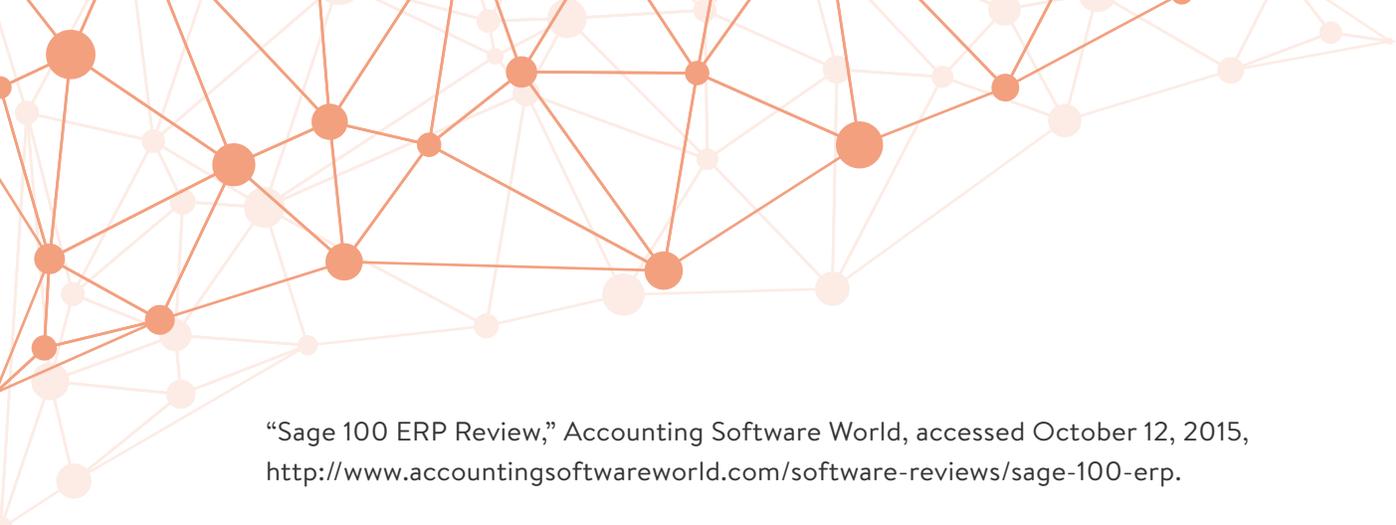
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# ABOUT HANDSHAKE

Handshake provides the B2B Commerce platform for manufacturers and distributors that powers standout ordering experiences both in-person and online. Companies using Handshake transform their sales effectiveness and drive operational efficiency, delighting customers and growing lasting relationships.

The Handshake mobile app allows sales reps to write orders faster, and gives them the product and customer information they need to have more strategic customer conversations.

Handshake Direct is a custom B2B eCommerce website that complements field sales reps by providing customers the convenience of 24x7 ordering and product education.

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