Whitepaper

5 Best Practices When Planning an eCommerce - ERP Integration

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ERP Integration
Made Easy
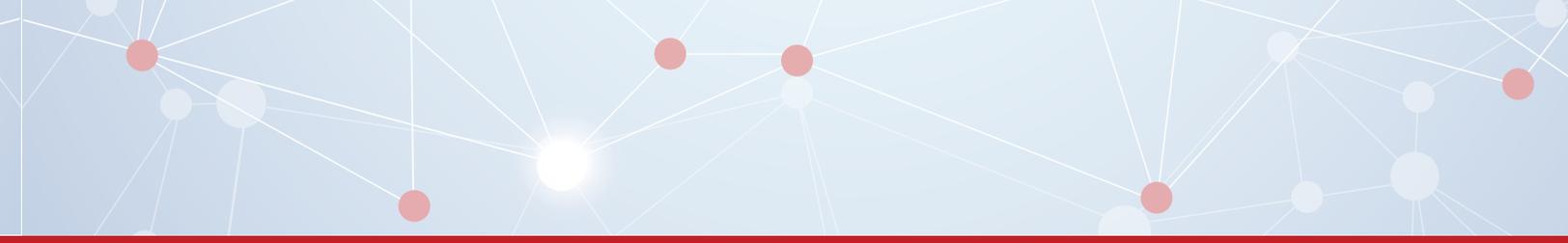
Most growing eCommerce businesses eventually reach a point where the time they're spending on manually re-keying data into and out of their ERP becomes unsustainable. Hiring additional resources is too costly, and customers are demanding access to accurate and timely product and order information. Fortunately, there are ERP integration solutions that can solve this particular problem and enable merchants to streamline operations and scale their business.

Often lost in the process of building an eCommerce website is how it will connect and communicate with an organization's back office systems. Unfortunately, most eCommerce platforms and ERP systems are designed in isolation and often use dissimilar data formats that don't speak to each other effectively. Because of this, systems integration becomes complex and requires careful planning and the proper technology to be implemented successfully.

When planning for an eCommerce – ERP integration there are a number of best practices that, if followed, can greatly increase the effectiveness of an integration project. In this whitepaper we identify 5 of these best practices and explain how they can help an eCommerce business avoid common integration issues and costly mistakes.

1. Set Realistic Project Goals

The first step in any integration project is for the business to identify the challenges that need to be solved. Once they are clearly defined it becomes much easier to set the overall project goals and expectations. Problem definition and goal setting should be approached from a company-wide level, including executive buy-in and involving key stakeholders from each impacted department.

When setting integration project goals it is critical that they are realistic. Many businesses fail to understand the complexity associated with integration, and therefore, often underestimate what it takes to complete a project. To avoid this from happening it is important to be very specific when setting goals and to ensure that they are achievable within a pre-defined set of constraints. Integration project goals should be defined within these 4 constraints:

- Scope – what is going to be delivered including limitations
- Timing – when milestones need to be reached, including an ideal 'Go Live' date
- Quality – how the end solution will perform
- Budget – how much the business is willing to pay

Clear communication of these constraints within the integration team will go a long way towards the project staying on course. It's also important to identify and outline potential risks or complications, and to plan for how they will be handled to minimize disruption to the project.

2. Build an Engaged Integration Team

Systems integration projects are usually successful when everyone involved is on the same page from beginning to end. A shared understanding of the project goals and action plan will help to ensure that there is no scope-creep, delays or cost overruns.

Building an active integration team begins by having all of key stakeholders participate in defining the scope of the project and their role in it. Internal stakeholders should include representatives from the company executive and from each of the impacted departments. 3rd party stakeholders could potentially include an ERP consultant, eCommerce developer, and integration solution provider. 3rd party stakeholders should be expected to provide their expert advice during the planning phase, identifying the intricacies of systems integration that the internal stakeholders are probably not aware of.

Setting a communication schedule and protocol will also help to move an integration project along and keep team members in the know. With an open line of communication between team members project risk will be minimized, complications will be handled more effectively, and expectations will be kept in check.

3. Define Requirements... In Detail

An eCommerce business should have a pretty good idea of what type of integration is going to help them solve their challenges. While that's a great starting point, going into a much greater level of detail is necessary when defining the final business requirements for the project.
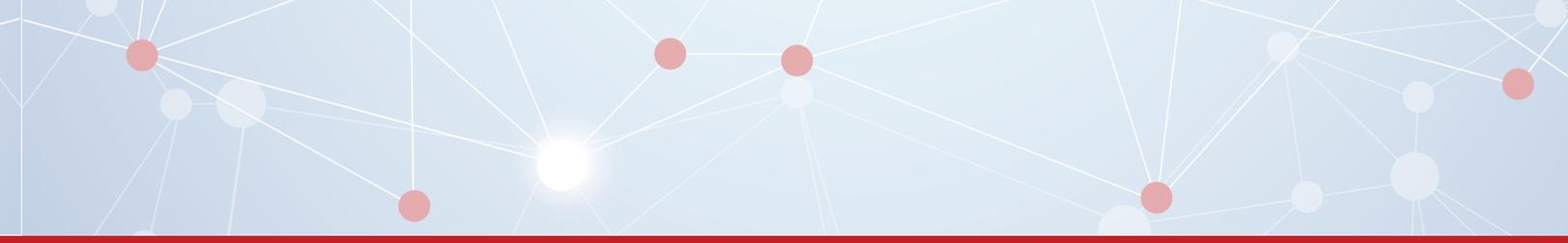
The first step is to have the internal stakeholders map out and document each of the core business processes (data flows) that are being considered for integration. When documenting these processes, the following questions should be answered:

- What information is included in each business process (eg. orders)? Are there any key fields that must be brought into one system from the other?
- In which system does data originate (where does it come from) and where does it get moved to or replicated?
- How does data move from one system to another? Who is involved? How often and how long does it take?
- Which ERP/accounting software package and version is the business running? Have any customizations been made to the software? Is the software hosted on premise or in the cloud?
- Which eCommerce platform and version is the business running?
- Are there any 3PL warehouses, inventory or product information management systems also in play?
- Are there any business processes that may need to be integrated in the future?

Once these questions are answered the internal stakeholder team should be able to determine where there are existing inefficiencies and provide a detailed list of business requirements to any 3rd parties contacted to deliver or assist with the integration solution.

4. Select the Integration Solution that Fits Best

There are many different integration solutions available today for an eCommerce business to choose from. These solutions come in all shapes and sizes – some are geared to the SMB market while others are enterprise-level. Some fall somewhere in between. They can be selected based on price, time to deliver, connectivity, etc. While each of these considerations is a factor, the integration solution that is chosen by an eCommerce business should be the one that best meets the defined business requirements of the project.
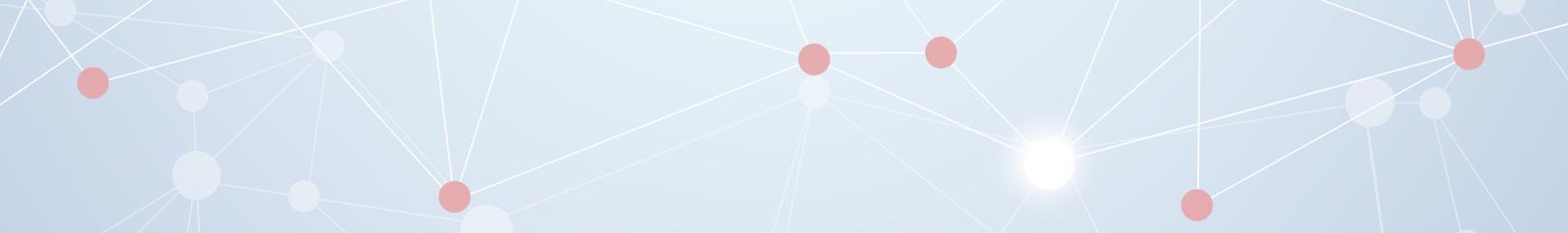
The following features/capabilities should be considered when determining which integration solution is the best fit:

- Provider Expertise:
    - Businesses should look for an integration solution provider that has strong expertise integration with either the ERP or eCommerce systems or both. Furthermore, selecting an integration provider that is a certified partner of the ERP or eCommerce vendor ensures that their solution has been developed and tested using the official development tools such as an SDK or API. For proof of expertise, it is best practice to ask for a reference call with an existing customer or to see a relevant case study.

- Solution Type: Off the Shelf or Custom
    - A custom coded solution may be cheaper to implement, but will require trained development resources to build, support and maintain the code. Off the Shelf integration software is much easier to implement, offers more flexibility and scalability, and usually can support ERP and eCommerce system upgrades quickly and cost-effectively.

- Connectivity:
    - An ideal solution will include pre-built connectors to the systems in play. Pre-built connectors are easier and faster to implement and have usually been tested by other businesses beforehand. ERP connectors can be cloud-based or on premise, and it's important to know which type is needed for the business and which solution providers can offer that type of connector. Lastly, it should be known if the solution provider supports each of the required business processes for integration. If one or more of the business processes is not supported, it's probably time to look elsewhere.
    - A second connectivity consideration should be the number of connections required. If the business has multiple eCommerce stores, or additional connections such as marketplaces (Amazon, eBay), EDI trading partners, or CRM applications (Salesforce, Dynamics CRM) they would be best serviced by a solution provider that can support integration with each connection. Unless there is only one connection to be made, it is best practice to select a solution provider that powers a multi-channel integration platform.

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- Scalability:
    - Quality integration solutions are able to exchange large volumes of data and allow for business growth without any limitations. It should be determined if the solution will be able to support an even greater volume of data exchange with the addition of a 2nd store or marketplace.

- Frequency:
    - There are multiple options for the frequency of integration – real time, interval, batch, and on demand. Some integration providers are only able to provide one of these options (eg. batch) while other providers offer more flexibility.

- Redundancy:
    - In cases when a business process fails, the integration solution should make an attempt to retransmit the data and continue to do so until the data is received in the destination system. Some solutions will also provide alerts to business contacts if and when there is a failed posting of data.

- Testing:
    - Testing is often seen as overhead, however, proper testing ensures that an integration solution meets all of the business requirements and is the final quality check. It can reveal any gaps in an integration solution that can be costly. It is good practice to determine what testing is included with each solution being evaluated.

- Support:
    - eCommerce is a 24/7 sales channel, thus an integration solution needs to keep business processes moving at all times. That being said, it's important that the technical support for an integration solution is readily available and can resolve issues promptly.

5. Know Your Data and Have It Ready for Integration

Data preparation can be an effective means to decrease the complexity of an integration project, and in turn, save time and reduce costs. This planning component can include a number of different exercises, including the following;

- Documenting the data types (eg. text, integer, decimal, date, etc.) and field sizes of the fields in both systems
- Cleaning source data – purging duplicates, correcting incomplete, inconsistent and inaccurate records, updating data fields into a readable format, etc.
- Formatting data when capturing it in the source system to match it later on with the destination system
- Add an accounting SKU in an extra field for each product in the eCommerce store so it can be used for matching during integration
- Match selling units of measure with stock-keeping units of measure, whenever possible

Taking the time to properly understand and prepare data will help to eliminate complications during the implementation phase and will result in an integration that produces more value to the business.

Conclusion

ERP integration is a complex, but essential element in any growing eCommerce business. Planning effectively for an integration project will reduce this complexity and increase the probability of it being delivered on time and on budget.

About eBridge Connections

eBridge Connections delivers powerful, cloud-based and on premise ERP integration solutions that automate vital business processes and eliminate the need for manual data entry. Our universal integration platform supports over 20 accounting and ERP systems including products from Microsoft, Sage, SAP, NetSuite, and Epicor. With connections to the most popular eCommerce carts and marketplaces, hundreds of EDI trading partners and the leading CRM applications, eBridge Connections has become the integration platform of choice for businesses worldwide.

To request a demo or quote, please contact us at info@ebridgeconnections.com or 1-800-755-6921.