

Disciplined Software Selection

When selected with care, enterprise software can be a strategic differentiator that drives efficiency and cost savings throughout your organization. Furthermore, as the great crew change occurs in any industry, the younger generation has certain implicit expectations about how you will leverage that technology, from automation for repetitive processes to the usability of application interfaces, to remote access anywhere on the devices of their preference. If your organization finds itself labeled a technology dinosaur, then you will neither attract nor retain the best young talent in a competitive employment landscape.

Beyond the human resources aspect, the bar that defines baseline efficiency levels in the business is on an upward move. If your organization fails to leverage technology effectively, then your business will ultimately suffer and fall behind as your competition leap frogs ahead. If you accumulate enough technical debt in your IT organization then you will find it difficult to catch-up to the competition.

Selecting the right software product can be a complicated and daunting process, especially when the costs to purchase, implement, and maintain the product can be in the hundreds of thousands to millions of dollars.

Improper selection of a software product results in a direct impact to information management and business processes for the purchasing company.

Because implementation has a true business impact in the form of training costs and initial loss of productivity, there really are no second chances with this decision. Improper software selection frequently results in a range of problems, such as:

- 1. Loss of sunk software investment
- 2. Unhappy users
- 3. Loss of job

Additionally, choosing a tool that only works for the present can result in unforeseen business process bottlenecks and inhibit growth in the future.

The rapid progress of technology such as big data and analytics, sensors, and control systems offers oil and gas companies the chance to automate high-cost, dangerous, or error-prone tasks.

Stefano Martinotti, McKinsey & Company

Entrance tracks software marketplace of more than 375 commercial-off-the shelf applications available today. For every one of those 375 products, there is new start-up company trying to break into the marketplace with a newer, better product. The thought market matured greatly over the last decade, not every new vendor lives up to its own marketing hype.

ENTRANCE'S 5-STEP SOFTWARE SELECTION PROCESS

Software connects people with information and it is critical that we treat it like any other investment. Though nobody understands your business better than you and your team, without technical knowledge it can become difficult to sift through the myriad of options available for the best solution to integrate with your current software systems and business process.

We want to share with you our best practices for a successful software selection process. Our approach is repeatable and proven. We have applied the methodology successfully with leading companies in many industries. The general steps tend to be the same for any scenario and performing the due diligence will help guarantee that you are satisfied with the final investment.

Complicated or highly specialized business processes generally require more complicated solutions, so the amount of time spent on each step will be dictated by the complexity. Typically, the process takes at least one or two months to complete, but could take longer for more complex scenarios with enterprise-wide reach. Our standard process of five essential steps can navigate you through a software selection process.



STEP 1: ASSEMBLE EVALUATION TEAM

First, you must compose a comprehensive team of stakeholders to represent the various parts of your organization that will be impacted by the new software system. This will involve first mapping out the business processes that touch the software.

With the business processes documented, you can identify the departments and individual stakeholders that need to be involved. The evaluation team is responsible for identifying quantitative business goals for the evaluation and for the software.

STEP 2: IDENTIFY SOFTWARE SELECTION CRITERIA

Second, you must establish selection criteria, which will comprise a wide variety of considerations Selection criteria includes strategic business goals, budget, functional business requirements, nonfunctional information technology (IT) requirements, vendor requirements, and business process documentation. Furthermore, all criteria must be prioritized for proper consideration.

STEP 3: PERFORM INITIAL INVESTIGATION

Third, generate a list of vendors and solutions to share with the evaluation team. Based on the original selection criteria, you will evaluate numerous sources of information, starting with marketing materials.

Marketing materials are frequently misleading or overstated, so having a seasoned technology partner alongside will help guide you through this process by sifting through the fluff to find the important features. Next, schedule preliminary demos with gualified vendors.

STEP 4: CREATE SHORT LIST

After you complete the initial investigation, narrow the list down to two to four viable options that require more in-depth research. It's easy to feel overwhelmed by demos and just choose a solution that feels right. Your advisor's role is to prepare your team to look for and confirm that the features they say are present actually work. Then, your team performs an objective evaluation beyond how the software meets requirements to determine that the software meets your requirements. You will want to schedule detailed, customized demos with each short list vendor.

Using the information captured in the investigation phases, we can calculate which software is the better option by evaluating the priority of a given requirement with a score representing the software's ability to meet the requirement. As with any decision-making process, there will be no shortage of trade-offs to evaluate. Ultimately, Total Cost of Ownership (TCO) must balance with functionality, maintainability, scalability, ROI, and all of the other considerations we outlined.



STEP 5: MAKE DECISION

Based on the above analysis, it is then up to your company to decide whether or not to move forward. The key to software selection is to let the facts guide the decision making process and not just a sales pitch, glossy brochure, or gut feeling. You are making a significant investment in the future of your business so making the best decision is crucial to the success of your software project.

LEARN MORE

"Find a partner that specializes in your industry," says Jim Shepherd, chief strategy officer at Plex, a manufacturing ERP provider. "Better yet, find one that is dedicated to your industry."

Navigating the world of software selection can be a daunting task for any business, large or small. From establishing requirements and the business case to evaluating software packages and making a final decision, be sure to work with a trusted software advisor to help you navigate the software selection process and ensure a successful implementation.



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Eric has over 12 years of professional experience in software development, data management, and project management. His energy industry experience spans all segments including upstream, midstream, downstream, and services. Eric manages a multi-million dollar project portfolio annually across many clients in the energy and energy-related services industries.

