

Picking the Right Enterprise Software

As software technology for enterprises continues to evolve at a speedy pace, so has the process of evaluating and buying it. The enterprise software market is vast, complex, and often fragmented, with overlapping offerings from many different vendors. A wide variety of pricing models makes apples-to-apples comparisons difficult and can cast doubt on the initial business case driving the effort. Even buyers with years of experience making enterprise software purchases can find the process daunting.

As a software firm, we see buyers struggling with the complexity of performing a fair evaluation. And as buyers of software ourselves, we feel that pain firsthand. In this whitepaper, we discuss what we've learned to maximize the probability of choosing the right enterprise software, with less struggle.

What Matters Most Is Changing

Over nearly two decades of selling enterprise software to organizations in the government, engineering and construction, biotechnology, energy, and manufacturing sectors worldwide, we've discovered emerging trends in how organizations evaluate their current systems and select new ones that better meet their needs.

DevonWay's customers are high-reliability and complex organizations like Government Agencies and National Labs; global Engineering & Construction firms; large Energy and Oil & Gas companies; and Biotechnology pioneers. Selling to them is consultative and takes many months, so by the end of a sales cycle, win or lose, we learn about the sales process from their perspective.

Our goal is not only to sell software but also to help these organizations to identify benefits they can achieve with new technology and to understand how those benefits can advance their business goals.

The "big four" success criteria we used to use

Just a few years ago, most prospects we worked with were looking for business software that, first and foremost, offered:

1. An intuitive user experience that meets business requirements
2. Clear efficiencies for streamlining and automating tasks and workflows
3. Strong reporting to measure performance with visibility into operations
4. Excellent vendor support

There are always other considerations, but we found these to be the "big four."

Increasingly, we now find that every year customer expectations rise, vendor capabilities improve, and, in many cases, the systems that customers are replacing already meet most of the big four criteria above.

These criteria are not sufficient: program owners today are stuck with systems that can't achieve program goals because those goals span departments and require a multi-department, integrated approach.

New Challenges for Program Owners

Program owners seeking to implement new software solutions that will enable them to meet their business goals are in a tough spot. They must communicate benefits for which it's challenging, if not impossible, to validate with hard evidence. And, in many cases, it's extremely difficult to achieve organizational alignment needed to secure funding. All of which leads to drawn-out evaluations with unpredictable outcomes.

Careful evaluation and due diligence are critical for any major software purchase, but what we're seeing is that the process itself can be detrimental. Longer evaluations don't lead to better results. Rather, as months and years go by, with different stakeholders weighing in at different times, it's nearly impossible to come to agreement and start working toward those business goals. The longer the evaluation goes on, the greater the chance that requirements change and people change roles, potentially causing the process to start again from the beginning – leading to a lot of wasted time.

The solution, therefore, isn't more time spent evaluating, but choosing a vendor and solutions that are going to meet the needs of your evolving organization.

New Success Criteria

In our experience, the most successful enterprise software deployments must deliver:

- Extraordinary performance across the core “big four” success criteria PLUS
- Implementation of best practices that improve the business
- Ability to make changes quickly, without customization and without compromise
- A pathway to operational excellence
- A comprehensive set of features enabling digital transformation

These new traits not only achieve the benefits that justify the expensive and disruptive process of replacing enterprise software, but they also help avoid expensive and ineffective software evaluations.

Extraordinary Performance Across the Core “Big Four” Success Criteria

The key traits that for many years have served as the gold standard for software deployments are just as relevant today as they were 10 years ago. The big difference today is that many companies are underperforming against their peers, even though their enterprise software tools technically meet these criteria.

To ensure organizational alignment with the goal of replacing business applications, new systems must deliver *extraordinary* improvements in the big four.

Vendors should be able to effectively demonstrate and communicate what makes them extraordinary in each area. Below are specific examples of improvements that go far beyond the minimum expected experience.

Mobile apps that fully support organizational workflows and requirements

A strong, complementary mobile user experience introduces many opportunities to improve performance. A mobile app that works offline, runs on all major mobile platforms, and allows users to review records and complete tasks across multiple workflows is the difference between good and exceptional. Further, the program owners should be able to author their own well-organized, high-performing forms for mobile entry. And the mobile solution can't be an island – it needs to enable reporting and trending to provide visibility and insight into what's happening in the field.

Self-service streamlining and automation of tasks and workflows

Task automation should extend beyond automating small parts of a process. For example, generating a chart in the system without requiring Excel for data analysis is nice. Far better is full automation, where the program owner can independently create that chart as part of a report, set up the distribution group and distribution schedule, and define a performance measure to trigger report distribution to take themselves and their team out of that process altogether.

Strong reporting environment to easily measure performance with visibility into operations

Helping people track and prioritize work assigned to their team is just a baseline of operational visibility. When managers and employees can view upcoming work and click through work tasks by process, team, and status, they can save substantial time and improve outcomes. Being able to gain insight from operational data through built-in business intelligence – such as trending and the ability to create ad hoc reports without IT – is exceptional.

Excellent vendor support

High-touch, highly responsive support is a requirement for any successful deployment, and many vendors offer it during implementation. But many vendors cannot sustain that level of support, especially if customers have customized their software.

Exceptional support by today's standards is proactive instead of reactive. For example, with DevonWay, customers get one configuration change a month at no charge, which helps ensure the enterprise software reflects the inevitable changes brought about by dynamic business conditions. Quarterly account meetings include a review of new features that customers can turn on at no cost to introduce new innovations to their implementation, and every user can submit new ideas, feedback, and complaints that go to our Customer Success experts for follow-up.

Improve the Business with Best Practices

Implementing best practices that improve the business, in parallel with rolling out a better technology to manage the business, is how customers transform a traditional customer/vendor relationship into a partnership.

The right software partner shows up with an experienced team and full list of program management considerations to assess, with the ability to easily incorporate different types of behaviors into their

system without customization or configuration changes. For example, for Issues Management/CAPA customers, DevonWay reviews a list of items such as:

- Preferred cause analysis process
- Archiving preferences
- Extent of condition review
- Integrated change control process
- Lessons learned model

As the project team reviews these and many more items with the customer, they provide examples of implementation best practices that best meet the organization's needs.

The result is an accelerated evaluation of process improvement ideas, with real-time feedback from an experienced vendor, to quickly achieve the desired future state – without requiring high-priced consulting teams. Vendors that review best practice examples up front quickly establish themselves as a change agent to help achieve operational success criteria, which becomes an important element in the business case.

Best practices also include extending business programs to incorporate concepts that might not otherwise be considered because the business owners have not been exposed to these concepts. For example, a vendor who is a true partner might suggest incorporating a built-in trending layer into the operating model to better support decision making, even if that wasn't part of the original vision for the deployment.

Making Changes Without Customization and Without Compromise

Too many business sponsors have been badly burned by customizations required for major software implementations. These sponsors have all felt helpless dealing with the same unfortunate circumstances:

- Every change, no matter how seemingly minor, is expensive and takes weeks or months to implement
- Upgrading becomes increasingly difficult until the company decides to stop taking product upgrades altogether
- When they do take patches or upgrades, they endure excessive bugs, performance issues, and unpredictable behavior
- Eventually, there's a significant negative impact on culture and morale, as the vendor and customer look to pass the blame until the customer eventually goes in a different direction and swears to never customize again

Customers have come to equate customized software with a product that will inevitably die a slow and painful death, dragging the business down in the process and forcing business users to depend on Access databases and Excel spreadsheets as the business evolves but the software remains static. But these days, no-code and low-code platforms have emerged as the logical and appropriate response to move customizations to a configuration layer decoupled from the underlying codebase. This provides customers with the ability to meet unique requirements without traditional customization.

When considering all the costs to customize and maintain custom software, the business case becomes extremely compelling to start evaluating replacement options before the current environment becomes too antiquated and disconnected for effective use.

On the other hand, customers that choose out-of-the-box software, usually to save money in the short term, must engineer their business around the software and to force their users to deal with irrelevant software elements. They may never get things to work the way they need them to work. In fact, we've often found that when we first talk to a prospect, they say they're fine with the basics, but then later we learn of the many ways that the basics just don't fit.

Customers building a business case to replace aging business applications need the ability to make changes without customization – without compromise.

Pathway to Operational Excellence

The term *operational excellence* means different things to different people, but we define it as unifying (not just integrating) business applications across multiple functional areas within a single platform that incorporates all traits of software excellence.

Integrating applications implies custom interfaces to develop and maintain, which is expensive, can introduce security issues, and impedes change.

Unifying systems helps companies invest in innovation and continuous improvement and distributes the benefits of software excellence across the enterprise. Unifying business applications is a common goal, but one rarely achieved outside of large-scale ERP deployments.

A unified approach should:

- Include reporting, administration, workflows, task management, and mobility
- Simplify change management and training
- Empower the user community through ease of use and access
- Accelerate rollout and adoption of new modules and features
- Enable insights because all relevant information is connected

Providing a pathway to operational excellence is the basis of the broad product library that DevonWay offers clients across four major product suites: Quality Management, Environmental Health & Safety, Enterprise Asset Management (EAM), and Workforce Solutions.

Customers typically start in one area, but the ability to extend across functional areas should be a must-have requirement for any software evaluation scorecard.

Operational Excellence “Day in the Life” Scenario with DevonWay Software

Here’s a real-world example of a work order from inception through work execution, where quality and safety are just as critical to the work management process as scheduling.

A work task is automatically generated in DevonWay based on the preventive maintenance schedule. The recurring task includes standard information such as parts, qualifications, and tools required to perform the work. The task is routed for scheduling and assignment and includes all procedures and forms that workers must access.

The task is assigned to a field worker, who reviews the work task on an iPad, at which time the system validates she is using the most current version of the procedures and that her training and qualifications are current and in compliance with standards. Prior to starting the work, all permit, job brief, and job hazard information is available for review within the mobile app. (If the supervisor performs the job brief, workers can sign off that they received their briefing on their tablets.)

Each step of a work procedure includes specific hazards and controls that the safety coordinator has pre-defined, so workers view that information in real time as they complete their work to ensure controls are in place.

In this scenario, the procedure writer authored a “digital procedure” in DevonWay, allowing the worker to input values directly into the app for subsequent reporting and trending, for example to track equipment reliability data over time.

While performing the work, a worker finds an unrelated part that appears compromised, which is not addressed in the work order. She decides to file a Condition Report directly from the same app. The condition report is automatically routed to the supervisor for screening and investigation.

After work is complete, the worker documents all work performed, submits her timecard, and checks in the work task for supervisor completion review. Once the supervisor’s review is completed, the work task documents are automatically archived for records retention. The supervisor assigns the condition report to the maintenance manager, who assigns a corrective action to the procedure owner to revise the procedure to inspect the part and replace it, if necessary.

That entire work management, safety, training, timekeeping, corrective action, and procedure revision control process is handled within one unified system. Unified systems like this elevate performance, quality, and safety in ways that are impossible with disparate systems. This is the definition of operational excellence.

Enabling Digital Transformation

In the context of business applications, digital transformation should encompass not only a fully paperless environment, but also one that transforms how the business is run by leveraging technology to achieve operational excellence.

Large, complex businesses have thousands of forms and documents that are constantly being produced, filled out, reviewed, approved, updated, and revised, on an endless cycle to keep things running. Achieving complete (or nearly complete) digital transformation requires several things:

- An easy-to-use authoring environment for business owners to author and maintain documents and forms, with data fields, for mobile use
- A mobile app to access and fill out documents and forms from a tablet or phone
- A simple PDF annotation layer for workers to fill out existing PDF documents and forms on their tablet with a stylus that's just as familiar and easy to use as pen and paper

Digital transformation requires a mobile-centric outlook that goes beyond the mobile capabilities of a traditional enterprise system. A form authoring environment and PDF annotation tool, for example, are pre-requisites to doing away with paper, but never make it onto the requirements checklist for a new EH&S, QMS, or EAM system, which at many companies are the functional areas most responsible for paper printing and scanning.

Digital transformation and operational excellence are rarely included in customers' list of requirements because 95% of business application evaluations are managed at the departmental level: Digital transformation and operational excellence initiatives are enterprise driven.

The key to long-term success is for the enterprise is to ensure a pathway to operational excellence by investing in technology that enables digital transformation – even if a full commitment to those goals is still several years out.

Digital transformation and operational excellence won't happen in one giant step. Choosing a vendor-partner who can take small steps at your pace will get you there.