# Examining the pros and cons of modifying your ERP solution

# Should you choose functionality or flexibility? Yes.

Modification is a controversial word for many professionals in aerospace and defense (A&D)'s IT industry. The term "off the shelf" also has mixed connotations, as it's often associated with old generic business solutions that offered rudimentary functionality under the guise of "plug and play" simplicity.

As the needs of A&D manufacturers and suppliers have changed over the years, the available software has evolved as well, leading to a lot of discussion lately around the age-old question of "to modify or not to modify." While the issue remains complex, the pendulum seems to be swinging away from heavily customized systems and toward those that can provide the majority of the functionality required, without significant modifications. A number of factors are driving this trend—antiquated systems that don't meet the needs of today's commercial business practices, the risk of "breaking" customized systems every time you upgrade, and being locked into outdated systems because upgrades are too difficult. However, the growing availability of cloud-based solutions designed to meet specific industry and/or business area needs seems to be the leading driver. Companies no longer have to sacrifice functionality for simplicity and low total cost of ownership.



The need for agility and responsiveness has led highly customized ERP implementations to an impasse, creating a subset of legacy ERP installations that must be dealt with constructively."

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In a **Gartner** press release, Andy Kyte, vice president and Gartner fellow, noted "Businesses looking to improve administration today can take advantage of lower costs, better functional fit and process flexibility offered by blending cloud applications with on-premises applications in what we now refer to as 'post-modern ERP'"<sup>2</sup>

However, the mental switch away from customization is far from easy to flip. Many A&D organizations will no doubt continue to wrestle with questions about which approach is best, and the decisions made today will have a significant impact on the long-term health of the business.

# The following are some things to take into account as executives from all areas of the company wade into the debate.

#### **Point**

We need modifications so we can make the new ERP system match current work processes.

Operational teams often ask for modifications, especially ones that are entrenched in existing processes. They want the new system to be tailored to the way they're attacking business issues now. Certainly, this makes adoption easier for reluctant-to-change Baby Boomers and any front-line users who dread the thought of making time to learn new systems.

The cost of modification is justified because it will give us the exact system we need.

Executives who have been burned in the past by generic enterprise software solutions that didn't deliver understandably doubt that any system can meet the unique needs of their business without customization. There is a perception that the investment is justified because it will make the business stronger overall.

Our industry is so specialized that "off the shelf" business solutions couldn't possibly fit our needs.

A&D manufacturing operations have distinct needs, far different than those in healthcare or hospitality, for example. There are terms, unique processes, certifications, industry standards, and regulations that may require special forms or audit trails.

Off the shelf ERP solutions have a reputation for

not being specialized enough to run complex A&D-specific manufacturing processes and

## Counterpoint

Adapting processes to your ERP system where necessary provides greater benefits over the long term.

Reevaluating business processes can be an uncomfortable process. However, by insisting that new technology support business as usual, companies lose out on best-practices and capabilities that often have been proven effective through decades of practical application. In the end, it's typically more cost effective for your team to adjust its operating procedures to match the new ERP system. Doing so also yields greater improvements in productivity.

Modifications are expensive and unsustainable.

Not only do you have the initial investment, but every time you want to upgrade, those modification have to be revisited and updated too. According to **Gartner**: "It is not uncommon to find businesses that have spent 10 times more on customizations of their ERP compared to what they initially spent on licenses. The net result of 15 years of continuous customization is that these ERP implementations are now extremely "arthritic," incredibly slow and expensive to change... They are also frequently error-prone due to the

Industry-tailored ERP solutions and point solutions offer industryspecific functionality.

Solution providers have come a long way from the days of trying to create one-size-fits-all ERP systems. The monolithic solutions of the 80s and 90s are now far behind the times. Today, loosely coupled, federated systems give A&D organizations more flexibility, allowing them to easily integrate specific apps, modules, point solutions, and even legacy "home grown" solutions to the ERP system. In addition, purpose-built ERP solutions offer the manufacturing expertise needed to run operations, whether they use MTO, ETO, or complex mixed modes processes.

At this stage, ERP implementations with no customization are still a rare breed. In fact, a study by **Panorama**Consulting showed that 90% of

ERP systems have at least minor customizations, while 36% have customizations that involve modifying over 50% of the code. Only 2% are completely customized or home-grown.

However, the landscape is clearly changing at an accelerated pace.

The good news for technology buyers is that there is now more choice and flexibility on the ERP front than ever before. Once thought to be risky, cloud-based deployments have become known for offering a greater level of security and uptime than most organizations can provide on their own, and they have the added benefits of delivering a lower TCO and being far easier to upgrade and maintain. And as both industry-driven and point solutions that can be deployed in the cloud, on-premise, or a combination of both become increasingly available and sophisticated, it seems that highly customized ERP systems may well be on their way to becoming a relic of times gone by.







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Within five years, most organizations will shift from the current monolithic approach to a hybrid ERP environment, in which many components of functionality will be delivered as cloud services, whereas others will be maintained on-premises. Typically, 'core' ERP functions like financials and manufacturing will remain on-premises and be augmented by a range of cloud services."

Gartner

### Actionable advice

- Document any existing industry practices you simply cannot give up or change. Make sure the vendors who are providing proposals know what these are and have the opportunity to explain how their solution would address each requirement.
- When reviewing investment required for new systems, consider the long term costs over the life of the solution, not just the initial investment.
- Plan for the unexpected. Above all else, know that you may not be able to foresee a new technology, market change, or customer expectation that may lie ahead. Choose a solution that is flexible enough to adapt to the "what if..." world in which businesses today must operate.



The concept of a single ERP suite that meets all of an enterprise's needs is nonexistent, and is being replaced by the emergence of cloud point solutions that deliver functionality business users want and that the IT-controlled and centrally-mandated ERP megasuite previously struggled to deliver."1

Gartner

<sup>&</sup>lt;sup>3</sup> Panorama Consulting; The Long-Term Effects of Heavy ERP System Customization; June 5, 2013; Kimberling, Eric.











<sup>1</sup> Gartner Predicts 2014: The Rise of the Postmodern ERP and Enterprise Applications World, Denise Ganly, Andy Kyte, Nigel Rayner, and Carol Hardcastle,

<sup>&</sup>lt;sup>2</sup> Gartner; Gartner Press Release; "Gartner Says By 2016, the Impact of Cloud and Emergence of Postmodern ERP Will Relegate Highly Customized ERP Systems to "Legacy" Status"; January 29, 2014.