

What Is A Tailored Software Approach?

Is your manufacturing firm differentiated by its financial accounting procedures? Of course not! Your manufacturing processes that allow you to produce products faster, of higher quality, or mass customized to customer needs differentiates your firm. A primary task for any manufacturing firm is to retain and enhance their competitive advantage.

Enterprises that change all of their processes to reflect "best practices" will **lose their competitive advantage**. Making a careful evaluation to identify the unique processes that support that advantage preserves competitive advantage. In order to support these unique processes firms have the following options:

- 1. Write and maintain custom software applications supporting your competitive advantages.*
- 2. Purchase a Commercial Off The Shelf (COTS) package and add customization to support your competitive advantages.*
- 3. Purchase a COTS package and change your processes to conform to the package requirements.*

The difficulties with each approach are explained below.

1. To write and maintain custom software requires a **substantial investment** in people and equipment. There are no economies of scale when the software is written and maintained for a single location or enterprise.
2. Large COTS software packages (e.g. ERP) are **notoriously difficult to customize** and the changes often need to be reapplied after each new version of the COTS package. The level of effort required to maintain these changes can approach or surpass that of a custom application.
3. Changing your processes to conform to your COTS package will either **loose your competitive advantage** or force your people into using manual methods to collect the information needed. The real-time processes that exist on the factory floor are significantly different from the planning and financial processes of the rest of the enterprise.

Factory Insite, Inc.'s approach takes the best of all these and adds the personal touch. We start with proven commercial software, use our **tailoring approach to add customer specific processes**, and offer our continuous process improvement support to keep our customers up to date.

This approach allows us to deliver software that is **supported as a commercial package** with regular additions of new features. Yet, this software appears to our customers as a **custom version** that fully supports your uniqueness and maintains your competitive advantage.

The following table summarizes the strengths and weaknesses of each approach.



Tailored Solutions for the Manufacturing Environment

▽ identify ▽simplify ▽automate

<i>Items to consider</i>	Packaged Software Approach	Custom Software Approach	Tailored <i>factoryInsite</i>[®] Approach
Business Process Change Required Because of Software	To avoid customization you must modify business processes to use the software. This is maybe acceptable for areas not giving your business a competitive advantage.	Solution is completely designed to fit all of your business processes.	<i>factoryInsite</i> [®] is built using small modules that can be replaced to support business processes that give a competitive advantage.
Handling Business Growth	New functionality may be already available from the same vendor. Adding this functionality can be a cost effective option, but it will not differentiate your enterprise.	New software may need to be developed to accommodate growth.	New modules can be added. Existing functionality can evolve to incorporate changes.
Maintaining a Competitive Advantage Due to a Unique Process	COTS package gives you no strategic advantage since your competition will be using the same processes. Customizing a package costs a lot initially and again with every upgrade.	Great advantage to automate areas that give a competitive advantage.	Software elements can be added into the <i>factoryInsite</i> [®] architecture to provide custom functions. Also entry processes and reporting are tailorable.
Support	Less internal staff required. Base functionality will be fully supported, but the functionality is not an exact fit for all enterprises.	Need to provide your own support staff. Costly software maintenance because you are paying 100% of costs.	Any tailoring is supported as a standard piece of the product.
Scope of Implementation	Development cost is spread over all customer installations.	Major commitment of time for in-house developers or contract firm. You can easily spend more to build a large application than to buy.	Standard pieces of <i>factoryInsite</i> [®] are already developed. Tailored changes take advantage of architecture and processes.
Quality of Application	COTS products are usually tested to the highest levels.	If your staff or an outside contractor does not manage risks adequately you will have major problems.	Tailored changes are tested to the same high quality used for our standard product.
Budgetary Planning	Hefty initial investment and large continuing maintenance cost.	Internal staff development can spread cost over time. If an outside firm is used, a larger initial investment is required.	Initial investment is lower because of progressive entry approach. Software rental approach can further cut initial costs. Low monthly continuous improvement payments.
Reliance on Software Developer	As long as the software vendor remains viable you can rely on their ability to support the software.	Temptation of in-house or contract staff is to cut corners on formal documentation. This makes the system vulnerable to the loss of key personnel.	Software is commercial quality and well documented. Source code is available to customers.