Facing the ongoing question of building vs. buying

Medical technology organizations spend years—sometimes decades—building life-saving and life-enhancing technology, with the specific goal of helping patients. But with new rules and regulations in place surrounding electronic health records (EHR), and a shift in focus from volume- to value-based reimbursement, your organization also needs to consider how to link data from your device to the patient’s EHR.

Many organizations struggle with the question of whether to create a point-to-point integration solution from scratch or purchase existing resources from outside. It can turn into a perennial dilemma.

But deciding whether to build or buy technology can have strategic implications, as well. Simply choosing “make” when the capacity exists, or “buy” to avoid investment when your organization has adequate capital, might work some of the time. But a wrong decision can have dramatic, enduring consequences, according to a report by A.T. Kearney.¹

For medical technology companies in the post-Affordable Care Act world, the build versus buy question now holds special relevance. Medical technology companies must change core aspects of their business to align with the value-based agendas of their health system customers, a Deloitte report notes.²

At the same time, companies need to move more rapidly and take different approaches than they used to in order to maintain their innovative edge, a KPMG survey reveals.³ To compete aggressively, they must collaborate with more partners and pursue greater integration with suppliers and providers.
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Guidelines for building or buying

Following are some considerations to help your company navigate the build versus buy decision when it comes to creating an integration platform.

**Know your business strategy**—Can you make a strong business case for building in house? Assuming you have the internal HIT Java, .Net, and coder expertise required, as well as the capital to invest, fundamentally, a strong business case can be made if the solution in question is something that heavily influences or builds your core competitive advantage.

**Define your competitive advantage**—In defining your core competitive advantage, the question is fairly straightforward: Why do your customers come to you? As a medical technology organization, the answer most likely relates more to the quality, safety, reliability, and innovativeness of your solution(s), such as niche software, medical devices, or tele health, than to your ability to deliver connectivity with physician, hospital, and health system EMRs. And that connectivity is crucial to interoperability. You need to consider whether it’s a differentiator that only you can offer, or something available from an established vendor as a core offering.

**Explore what already exists**—Put another way, if respected connectivity solutions with long track records of success are already available to do the job for you, why reinvent the wheel? The need for interoperability looms so large in healthcare now that it has spawned an industry of its own.

Consider this: High quality portable operating systems have already been developed to spare you from having to develop an operating system for your device. You can purchase or download one of these systems and then build your solution on top of it.

The same holds true for an integration platform. You don’t need to build your own network infrastructure. You can access an effective third-party solution that has already been successfully implemented in hundreds of hospitals and healthcare facilities around the world.

Also, determine if building the technology yourself adds to your intellectual property to make your organization more successful or profitable. If you can answer yes, then score another point in favor of custom development rather than buying from outside. But if the solution in question is not closely tied to your competitive edge, and if it is not something that defines who you are and distinguishes you in the market, then it might not be worth investing the requisite resources. As the late business consultant Peter Drucker so aptly said, “Do what you do best and outsource the rest.”

**Develop a custom solution**—Some healthcare providers, such as Montefiore Health System, are partnering with startups like Menon Group in various ways to build their own custom applications.

The approach has advantages, including functionality that can be incorporated from the outset and tailored closely to the organization’s unique needs. However, custom-built applications also open IT developers and the company to risks and extensive losses of financial, technological, and other resources, if the technology does not work and the application ultimately fails.
Cost considerations of building versus buying integration technology

A custom solution gives you the opportunity to design an application to your specific needs and fine-tune it as needed. That flexibility remains one advantage of the in-house, do-it-yourself approach; however, it's going to cost you a premium.

On the other hand, many external solutions come ready built with capabilities that meet and exceed the needs of the market majority, so that you just need to configure them, rather than customize. In addition, an outside solution can help you:

**Offload must-have functionality**—When a function becomes a must-have while no longer differentiating the product, offloading that functionality onto a specialized third-party can be a cost-saving, low-risk strategy to keep pace with market changes. You may believe that there are no costs associated with building and maintaining your own integration platform, but when you scratch beneath the surface, you might find the opposite to be true.

**Free up resources for innovation**—You might be able to custom-build an integration platform and make it work, but considering the competitiveness and unpredictability of the current environment, ask yourself whether you really want to allocate resources to an IT development and maintenance load this large when your IT dollars could be more prudently spent on product innovation that will strengthen your core offerings.

"More than other manufacturing sectors, medical devices have a special stake in innovation," says Chris Stirling of KPMG. "The nature of the business requires companies to elevate their performance to offer better life-enhancing and life-saving technologies." The same holds true of other organizations as well.

**Reduce risk**—Even if you consider an integration platform to be a core strength for your company, building one will probably cost more than buying a solution from an outside source. There is no need to gamble on a custom strategy when a solution has already been developed by a vendor whose sole focus is supporting the solution and keeping on top of standards.

When it comes to connectivity in the current environment, the goalpost is always moving. You can build your own cloud solution, for example, but you will still have to contend with the development of interfaces for a host of disparate systems.

**Cut maintenance and staff costs**—There are many cost-associated reasons why choosing an outside source is a good idea, starting with the savings associated with maintaining applications on your own.
An external solution partner will also bear the burden of:

- Maintaining and managing applications
- Replacing and training IT staff
- Assuming responsibility for system and data center capacity
- Adding new customers and maintaining those customers over three to five years
- Staying competitive with external solutions that provide niche offerings to customers, such as connecting to disease registries or pulling data from wearables and placing it back into patients’ electronic health records

Can you keep up with the pace of change?

Think about the rapid evolution in standards for interoperability in HIT, most recently with the development and implementation of Fast Healthcare Interoperability Resources (FHIR), spearheaded by Health Level Seven International (HL7) and the industry-sponsored Argonaut Project.6

The resources and expertise needed to stay on top of industry developments like these are daunting. In an environment as rapidly changing as the current one, partnering with a vendor that specializes in keeping abreast of interoperability standards offers a smarter alternative. Working with an external partner frees you to funnel resources toward innovations that increase your ability to remain competitive.

Polaris Health Directions improves efficiency, patient outcomes and revenue streams with Infor Cloverleaf

Polaris Health Directions analyzes and delivers actionable behavioral health analytics addressing the emotional aspects of illnesses, such as cancer, by giving health systems better insight into expected treatment responses. Using Infor Cloverleaf®, Polaris has expanded its already-innovative technology by helping its clients achieve faster, more streamlined EHR integration, improve patient outcomes, and create new revenue streams.

By using Infor Cloverleaf, Polaris Health Directions can more easily monitor behaviors throughout the term of care. This is especially important for complex and chronic diseases, when behaviors change throughout the course of treatment. For those being treated for breast cancer, for example, Polaris provides a very important innovation—Apple® watches that gather telemetry information throughout the day. That information is integrated with the EHR, so even when a patient is not in front of the provider, she is still being monitored. The result is a happier, more engaged patient, and better outcomes.

Even if you consider an integration solution to be core IT for your company, it will probably cost more than buying a solution from an outside source.
Consider the time and talent required

You’ve heard the phrase “not invented here.” It reflects a way of thinking among many IT professionals that an application not developed internally is likely to be inferior. It’s understandable why many IT specialists assume that the internal team, which already knows the company’s products intimately, should also build custom applications for them. This notion actually might have elements of truth to it in some cases, such as when using application program interfaces (APIs).

But it doesn’t make sense for in-house staff to devote time to building something that is already available. The time spent developing a custom integration platform could distract from a focus on your core competencies.

Even if your IT specialists believe they are up to the task, keeping current with interoperability standards and federal regulations regarding HIPAA and Meaningful Use might not be the best uses of their time. For example, FHIR is an emerging standard that many believe will rapidly advance interoperability. How will your organization adapt to handle both FHIR and HL7 integrations and the subsequent revisions?

The effort and expertise required to remain up-to-date with these standards and regulations could quickly overwhelm your people and slow you down in areas that focus on the core offering in your organization.

According to a report by Forrester Research, Inc., “While the cost of acquiring a third-party integration solution adds capital expense, making packaged integration capability available to the development staff can lead to significant improvements in developer productivity, lower maintenance costs of new integration functionality, and provide faster response time to the business.”

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Choose a partner with deep industry insight

Developing an integration platform requires a dedicated team of developers, while partnering with an external solution would provide the resources needed to:

- Stay abreast of constantly changing regulations and standards through support from a large developer community with industry-recognized skill sets.
- Maintain the system.
- Perform ongoing enhancements and upgrades.
- Test the application with multiple configurations, including the more than 200 standard EMRs.
- Deploy trained support staff to troubleshoot with customers.
- Meet aggressive project targets

As articulated by CIO magazine, “If an organization has an in-house development team, there is always the push to build because they can supposedly satisfy all needs. However, from my experience and observation, it is usually far cheaper and faster to buy than to build. After all, if a problem has been adequately solved in a commercial product, why solve it again? Why not focus on a new and more interesting problem?”

It does not make sense for in-house staff to devote time to building something that is already available.
Make a smart decision

In an era of exceptionally high expectations for medical technology organizations to consistently deliver in the areas of innovation and quality, purchasing a tried and tested interoperability platform from an outside vendor offers important advantages in terms of cost and overall competitiveness over the custom-built, do-it-yourself approach.

About Infor

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