



## What is your Innovation Systems tools strategy?

And how do you successfully transition innovations into sustainable competitive advantages?

by

**Yovel Badash**  
Managing Director

**Magnus Håkansson**  
Vice President of Business Development

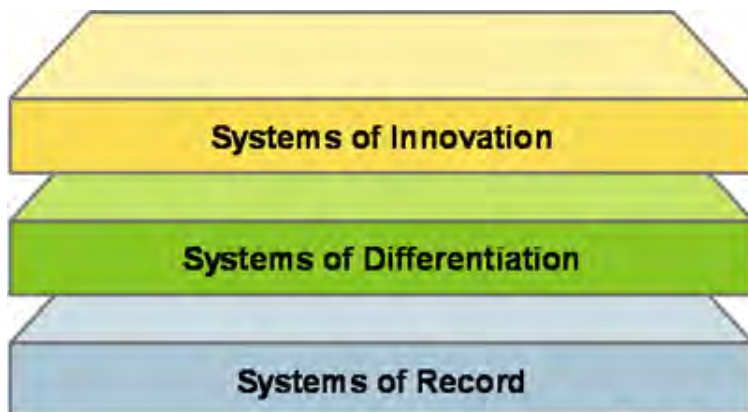
## Leveraging technology to drive innovation

In today's fast moving business environment, how can your company best leverage technology to drive innovative practices? Do your business and IT leaders agree on a cohesive strategy? Or does your company – like many others – have a growing rift over application deployment decisions between the IT organization and business line managers?

Smart IT managers pursue prudent strategies designed to consolidate and standardize underlying technologies in an effort to achieve productivity gains and lower costs. Many IT departments have gone through so many rounds of cost cutting that they barely have the resources and personnel needed to “keep the lights on” maintaining and streamlining their existing systems. They excel at steady, stable system management and implementations. The company relies on them to deliver strong secure, scalable, stable systems with excellent performance and appropriate controls.

Line of business managers constantly clamor for new systems to support or automate a range of business processes to gain or sustain competitiveness in various areas of their operation. In essence, they require easy to use solutions that can be developed and launched in pace with the change of the market dynamics.

These differences in focus and requirements create tension between the IT operation and business sides of a business. Both approaches are necessary for building a successful business, but until now it has been difficult for companies to reconcile the two within a unified application management strategy.



Source: Gartner

## The emergence of the pace layers strategy

Gartner recently introduced a three tiered “pace layers” methodology for the flexible classification and management of a company's applications. This new concept is borrowed from the practice in architecture of treating separate systems within a building differently. Just as building's structure, utility systems and furnishings all have different useful lifespans, different applications within a business have different lifecycles and must be managed differently.<sup>1</sup> The Gartner team identified three distinct types of applications:

**Systems of Record** These are the core packaged applications that keep the business running: enterprise resource planning (ERP), supply chain management, customer resource management (CRM) These applications are partly driven by regulatory industry requirements, tend to be quite similar across companies, and relatively static over time.

**Systems of Differentiation** These are the applications that support the aspects of a business that are unique – industry-specific processes and well-defined proprietary business practices. They power the company's secret sauce and drive its competitive advantage. These applications often need regular reconfiguration and have useful lifespans up to a few years.

**Systems of Innovation** These are the early leading edge, experimental bespoke applications that are called for to address a situation here and now. They must be created quickly and evolve smoothly as they conform to changing business needs.

Over the course of a year or less and subject to success, these applications either mature into more complete systems of differentiation or they are simply turned off when lacking the edge to become a differentiator for the business.

According to Gartner, the key to application management success is agreement between business and IT managers on different management processes for each tier and successful identification of which applications should be managed according to which policies. Systems of record benefit from IT's traditional tight change control and cost containment strategy. However, a company's long-term differentiation strategy and competitive advantage require much more flexible management at the innovation and differentiation levels.

<sup>1</sup> Dennis Gaughan, “Is It Time to Rethink Your Enterprise Application Portfolio Strategy?”, [blogs.gartner.com](https://blogs.gartner.com), June 29, 2010

$$\text{Competitive advantage} = \frac{\text{Innovation}}{\text{Time}^2}$$

A flexible application management process and cooperative relationship between line of business managers and IT leadership is crucial for developing and supporting innovation within the context of the company's IT governance requirements. Gartner notes, "For each layer of the portfolio to be managed effectively, a strong governance structure must unite all stakeholders." The team adds, "A number of governance considerations must be taken into account when developing a strategy for each layer and the dynamics among layers. Recognize that the approach may differ dramatically from one layer to the other, but that the organization must develop guidelines for each layer across these dimensions."<sup>2</sup>

Historically, IT departments have developed very successful application management programs to maintain the Systems of Record and the Systems of Differentiation once the requirements clearly are in place or have unfolded. Creating Systems of Innovation as well as effective transitions to Systems of Differentiation requires a significantly different skill set and culture however. To successfully and systematically create innovative applications and manage the transition for the successful ones to applications of differentiation, the company must in many ways behave like a startup. The larger and more complex the company's information technology requirements are, the more difficult this is for traditional IT departments to achieve. It is difficult to be agile and fast when dozens of policies and procedures are in place to prevent unwanted or unforeseen changes to the infrastructure.

*Gartner predicts that by 2014 as many as 25% of new business applications will be built by "citizen developers" – users outside the IT department who create new applications or combine existing services.*

## The importance of Innovative Systems

In a rapidly changing world, businesses cannot afford to stand still. Technology evolves – and businesses that don't evolve with it get left behind. Because information technology is such a fundamental component of business, companies that fail to innovate consistently cannot continue to create a competitive advantage in the marketplace. The speed of innovation is also critical. The magnitude of a company's competitive advantage is a function of both the quality and quantity of their innovations as well as the speed with which they are developed and actually "hit the street" and become productive (compared to their competitors).

Successful enterprises outperform their competition by excelling at business processes that are more effective at meeting market demands and customer needs. Today's pace of change means that these companies must maximize their use of automation. They must be ready to remold their processes and add new capabilities at any time. But how can managers transform their application development and development processes to meet the speed and flexibility of a fast-moving market? New software development frameworks and methodologies such as agile development are making it faster and easier than ever to craft web-based applications. Internal and external development teams can respond to changing market needs in ways that were not broadly available just five to ten years ago.

But increasing the capacity and speed of traditional development teams is not enough to maximize innovation. A new class of innovation leaders is emerging. Gartner predicts that by 2014 as many as 25% of new business applications will be built by "citizen developers" – users outside the IT department who create new applications or combine existing services. New application development platforms such as IS Tools are making it possible for business users, analysts and others to apply technology to areas of the business that IT seldom has time to address.

Putting easy to use development tools directly in the hands of the business users allows for the rapid creation of point solutions to solve specific business process issues on the fly. Teams can streamline the creation process by eliminating the time required for documenting lengthy requirements, development programming, testing, processing change requests, and additional rounds of programming. When provided with appropriate tools and a safe development platform, business users can quickly create, test and adapt their own solutions in all parts of an enterprise.

<sup>2</sup>Jim Shepherd, Dennis Gaughan, Yvonne Genovese, and Valentin Scribar, *How to Use Pace Layering to Develop a Modern Application Strategy*, Gartner, December 8, 2010.

This opening up of the creative process greatly expands a company's innovation opportunities. Not all of these efforts will be successful but the losers can be created, tested and discarded much faster than applications from traditional development processes. Similarly, when an innovative application succeeds, it can be quickly enhanced and expanded.

Gartner encourages companies to, "Create a system of innovation sandbox that encourages end users to try new ideas in a slightly more structured environment, where concepts can be shared and technology investment can be leveraged."

The IS Tools platform provides just such an environment. Business managers like the point-and-click framework that makes it simple enough for any business user to create specialized applications on the fly without programming. Technology managers trust it to deliver the scalability and security they need to confidently meet service levels and effectively manage data policies across the enterprise.

### From Innovation to Differentiation

The ability to rapidly try new approaches to business problems dramatically increases the probability that a company will create successful innovations. But cool new experiments are not enough. Sustainable competitive advantage is built when new innovations become part of the company's DNA. It is the companies that can repeatedly turn innovative applications into systems of differentiation that become most successful.

How does a company move from innovation to differentiation? Putting implementation into the hands of the business is a great start. Provide users with tools that are easy enough to allow any citizen developer in the company to become an innovator. At the same time, make sure they have effective ways to comply with the IT department's requirements for data, security, backup, service level agreements, provisioning management, and access controls. A flexible, customizable arrangement that meets the appropriate governance requirements allows business and IT leaders to agree and allow business users to experiment broadly without exposing the corporate technology infrastructure and data to undue risks.

Winners in the race for competitive advantage are likely to be organizations that, apart from fostering a corporate culture for innovation, have the technical capabilities ready and at hand in combination with a defined process for turning clever innovations to mature systems of differentiation.

Having a good idea and being able to quickly transform it into a workable prototype application is not enough to sustain defensible competitive advantage for a large multinational organization.

The easy to use creation tool must be supported by an enterprise grade platform that can deliver the full complement of security, scalability, interoperability, etc. that major organizations require.

The IS Tools platform provides these unique end-to-end technical capabilities to move from the cool new application innovation phase to the system of differentiation phase with fully scaled, deployed and supported applications for mature global use. Further, IS Tools has the extensive experience in helping customers create and transform several hundred applications of innovation to differentiated systems. This is an unparalleled and unique track record of supporting the development of innovative applications and their maturation into systems of differentiation. IS Tools proven platform and methodology are delivering sustainable competitive advantages on a global scale for our leading global clients.

### IS TOOLS IN ACTION

One of the world's leading telecommunication vendors used the IS Tools platform to manage a massive network upgrade project in the South Pacific. Their innovative custom project management application helped the company coordinate activities for the internal teams and a substantial number of subcontractors during the deployment of more than 5000 3G sites and, in parallel, upgrade the existing 2G networks to 3G at 2000 sites, within six months. The company now uses the application to manage deployments all over the world.

The company also used IS Tools to develop and deploy a custom application for an end-to-end and "best in class" quality assurance (QA) program. It was used to manage all aspects of an internal and third-party quality control program from development, system design and manufacturing to field deployment and launch of services. The resulting increase in quality and decrease in costs increased their competitive differentiation in the market.

When a Fortune Global 500 company needed an efficient, way to manage contracts for complex managed services, they created a custom application on the IS Tools platform to align their day-to-day managed services with their detailed contract obligations. The application not only helped efficiently manage their contracts, but also became a vehicle for globally sharing experiences, continuously enhancing 'best practice' methodologies, and identifying add-on sales opportunities.

The IS Tools platform provides the best way for companies to support the rapid development of innovative new applications to support specific business needs while maintaining the full capabilities of enterprise grade governance and scalability needed to evolve those fledgling applications into full Systems of Differentiation capable of sustaining substantial competitive advantage in the global market.

## So where do I go from here?

Here are five steps to help your organization successfully manage systems of innovation and their transition to systems of differentiation.

- 1) Assess your existing applications, IT systems and roadmap of needs within the context of a pace layering strategy. Determine which should be assigned to each level.
- 2) Get buy-in from senior executives, IT and business operations stakeholders for implementation of an application management process in accordance with the above.
- 3) Find a tangible starting point. Select a few promising innovations in need of application support to begin.
- 4) Select a platform/product/vendor that will embrace and support the full scope of an end-to-end solution. It should provide support from your initial iteration of the innovative application to its maturation as a full-fledged differentiation application that delivers a competitive edge for your business.
- 5) Empower your IT and line of business personnel to take ownership for developing the first iteration of innovative new applications. Make sure they have the tools and authority to create these new solutions.

As you get started in the funneling process of moving application of innovations towards applications of differentiation, be sure to run the evaluation processes - proactively select the applications of innovations that seems likely to be carried through and become a differentiator and later eventually underpin your competitive advantage and shelve the ones that don't. This is a dynamic, iterative process – expect and plan for changes along the way.

### Getting started is easy!

Take the IS Tools Innovation Challenge and you'll have something to show within a week

[www.istools.com](http://www.istools.com)