Workshop: Accelerating Innovation by Adopting a Pace-Layered Application Strategy

George Ambler
@cioleader
Why Is a New Application Strategy Needed?

The Conversation Between Business and IT Leaders Is Not Working!

“I don’t know exactly what I want. I need to experiment”

“I know what I want, but it needs to be different from my competitors”

“I know what I want and it doesn’t have to be unique”

Better Ideas

Common Ideas

New Ideas

One Size Fits All

Business Leader

Apps/IT Leader
How Do Other "Systems" in Industries Deal With Varying Rates of Change? Pace Layering?

Structure: 30 to 300 Years
Skin: 20 Years
Space Plan: 3 to 30 Years
Services: 7 to 15 Years
Stuff: 1 Day to 1 Month
Site: Eternal

Note: For more on pace layers and shearing layers in building architecture, see "How Buildings Learn" (1994) by Stewart Brand
A Pace-Layered View of Applications

- Systems of Record
  - Greater Efficiency
- Systems of Differentiation
  - Better Ideas
  - Unique Processes
  - Common Ideas
- Systems of Innovation
  - New Ideas
  - Competitive Threats
What Are Your Systems of Record?

- Employee
- Customer (Constituent)
- Product (Offering)
- Financial
- Order
- Asset
- Others
  - Core Banking
  - Policies (Insurance)
  - Etc.
- Supplier
What Are Your Differentiating Capabilities?

- **Offering**
  - R&D
  - Source/Make
  - End of Life

- **Service**
  - Customer (Constituent)
  - Deliver

- **Deliver**
  - Review
  - Promote

- **R&D**
  - Version
  - Develop

- **Source/Make**
  - Offer
  - MRO
  - Buy/Build/Lease

- **End of Life**
  - Upgrade

- **Finance**
  - (Evolves to PM)

- **Contract**
  - Manage
  - Procure

- **Employee**
  - Recruit/Hire
  - Review

- **Supplier**
  - Manage
  - Procure

- **Asset**
  - End of Life

- **MRO**
  - End of Life

- **Upgrade**
  - End of Life
How Should New Ideas Be Supported?

- Customer (Constituent)
- Service
- Market
- Recruit/Hire
- Employee
- R&D
- Offering
- Open Innovation
- Facebook
- LinkedIn
- Gartner
Example: Externally Driven Innovation and Differentiation Meet "Layers"

Facebook, Twitter, YouTube, Communities, Portal, etc.

- Sentiment Analysis Service
- Open Innovation Submission Box
- iPhone App
- Product Review Service
- Droid App
- Recommendations Engine
- Facebook Presence

Systems of Innovation

Customer Service Processes & Systems
R&D & Product Development Systems & Processes
Configurator

Systems of Differentiation

Customer
Product
Supplier
Order

Systems of Record
It's All About the Governance - Differences Between the Layers

**System of Record**
- Process Change: Strict Change Control
- Architecture: Traditional
- Funding: Capital Process
- Development Practices: Waterfall
- Business Engagement: Formal Process
- Planning Horizon: 7+ years

**System of Differentiation**
- Process Change: Experimentation
- Architecture: Alternate Platforms
- Funding: Departmental
- Development Practices: Incremental and Iterative
- Business Engagement: Part of the team
- Planning Horizon: 1-2 years

**System of Innovation**
- Process Change: Experimentation
- Architecture: Alternate Platforms
- Funding: Investment Pool
- Development Practices: Agile Practices
- Business Engagement: Doing the Work
- Planning Horizon: 2-3 months
Bimodal IT Offers a Way to Get Unstuck

"The reality is that you do have to operate at two speeds, and some of that you do by creating dedicated teams for each. Focusing on the big systems, making them run smooth, while at the same time having disrupters to innovate, together with marketing and the customer, exploiting digital."
— Willem Eelman, global CIO, Unilever

When speed or innovation is needed, or there is a high degree of uncertainty

Stuck in the middle "Fit for no one"

Traditional Mode

Waterfall development
Known vendors
Strong governance
Minimized risk
Technology teams

Nonlinear Mode

Agile dev.
Small/innovative partners
Lightweight
"Just good enough" governance
Managed risk
Multidisciplinary teams
Workshop Discussion
Hybrid ERP is Becoming the Norm

- Most organizations have a heterogeneous portfolio of business applications.
- The applications range from mainframe to iPad, data center to cloud, and critical to casual.
- The business processes they support may change every few years or every few days.
- No single strategy or governance model can be appropriate for all applications.
- The problem will get worse as Cloud and SaaS options continue to gain popularity
Group Discussion

In your groups appoint a spokesperson for your group to report on the discussion around the following two questions:

1. What do you see as the **key benefits** gained from implementing a place layered application strategy?

2. What are the **challenges** you can see in implementing a pace layered application strategy?
Common Challenges When Implementing Pace Layers

- Defining the Appropriate Scope for the Effort
  - All applications, even the Departmental ones?
  - Whole Organization or by BU or Functional domain
- Getting to the right level of Granularity for defining Application
  - ERP is too broad, but how much to we break it down
  - Is a web service to granular?
- Lack of business Involvement
- Focus too much on eliminating spend on Systems of Record
- Look at it as a one and done exercise
  - Don’t establish distinct governance for each layer
  - Don’t tie pace Layers to their APM/investment management process
Common Benefits cited by clients

- Communication Vehicle for improving business and IT partnership
  - By far the most common positive feedback
- Simple model that everyone understands
- Provides clarity on where investment priorities should be
  - Shift funding towards differentiation/innovation
- Creates more manageable segments for portfolio management
- Can help convince business to implement SoR with little or no customization
- Shifting more resources to differentiating/innovative work since it needs to change more frequently
Feedback from Clients on how Pace Layers Can Enable Differentiation

- Provides a process to consider individual business activities rather than application categories.
- Creates a framework to support the coexistence of integrated suites and best-of-breed apps.
- Establishes a governance process that allows departments to specify, justify and even purchase their own applications.
- Improves the dialogue between business and IT leaders about which activities are (or should be) truly differentiating.
Feedback from Clients on How They are using Pace Layers to Encourage Innovation

- Creating an “Innovation Center” with a budget and governance process to identify and nurture new ideas
- Establish a development environment with tools and resources to make innovative apps faster and easier to develop. Many looking to cloud
- Identifying consolidation and rationalization opportunities and shifting investment towards innovation
- Reinforcing that failure isn’t a bad thing, as long as you fail fast.
Recent Trends on How people are using Pace Layers

- Identifying what applications can/should move to cloud
- Support planning for ERP Upgrade or Consolidation projects
- Using Pace Layers as a way to incorporate “Rogue IT”
- Incorporating Pace Layer concepts into RFP’s for application outsourcing deals
- Pace Layered Budgeting
  - SOR – long term capital planning
  - SOD – classic annual budgeting process
  - SOI – Innovation Fund, VC model (Many re-thinking how to do this)
Accelerating Innovation by Adopting a Pace-Layered Application Strategy

George Ambler
Executive Partner
Gartner Africa

george.ambler@gartner.co.za
www.twitter.com/cioleader