Accelerating the Innovation Process

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Flextronics – Breadth and Depth


$30 Billion Revenue
250,000 employees
130 Locations
30 Countries
27 million manufacturing square feet
Why Innovation is More Important Now than Ever

1. Social – Facebook, Jive, Linked-in...
2. Mobile – tablets, iPhone, Android, pda’s…
3. Cloud – SAAS, PAAS, IAAS, private, public…
4. Consumerization – workforce drivers…
5. Big Data – predictive analytics, sensors…

…massively disruptive technology is driving innovation
Growth in Mobile Devices is Unprecedented

Cumulative First 3 Quarters Unit Shipments, iPod vs. iPhone vs. iPad

Source: Apple.
iTunes Changed the Media Industry…App Store Growth Leaves it in the Dust

Cumulative Number of Downloads, iTunes Music / Video / Movie vs. Apps, First 10 Quarters

Source: Apple.

REGIONAL FORUMS for SENIOR IT LEADERS
Smartphone + Tablet > PC Shipments Since CQ4:10

CQ4:10: Inflection Point
Smartphones + Tablets > Total PCs

Note: Notebook PCs include Netbooks. Source: Katy Huberty, Ehud Gelblum, Morgan Stanley Research. Data and Estimates as of 2/11
Virtualization & Cloud = Top Priorities for CIOs

<table>
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<tr>
<th>CIO Technology</th>
<th>2010 Priority</th>
<th>2009 Priority</th>
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<td>Virtualization</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Cloud Computing</td>
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Source: Gartner CIO study, Q4 2009
The Innovation Conundrum

- **Too much** standardization can **stifle innovation**
- **Too little** of it could **cripple efficiency**, drive your enterprise users nuts and cost up
- Optimize with balance and flexibility
“…constraints shape and focus problems, and provide clear challenges to overcome as well as inspiration. **Creativity, in fact, thrives best when constrained.**

“…Disregarding the bounds of what we know or what we accept gives rise to ideas that are non-obvious, unconventional, or simply unexplored…

Marissa Ann Mayer, Vice President, Google
Bloomberg BusinessWeek
February 1, 2006
Innovation Must Have Clear Business Drivers

- Don’t innovate for the sake of innovation
- Understand and align with the organizational mission & goals
- Strategic innovation is focused on customer demands, business requirements,.. Problems to be solved, how can it be done better, faster, cheaper
- Should be ROI based
How do you create a culture for innovation?

**Encourage small experiments**… nurture curiosity, make it ok to fail, kill the bad ones and move on, hold up the good ones and encourage/reward adoption.

**Partner with innovators**… build off their energy, creativity, network, desire to be disruptive… not everything costs $$… Spend money with startups.

**It’s all about speed**… fail faster… better to go with an 80% solution in a month, then optimize, than to spend six months trying to get the 99% solution designed.

**Walk the front lines and trenches**… At Flex innovation occurs on the shopfloor where product is made… What are the customers asking for? What are the problems with getting it to them?
Build an IT Architecture that Enables Innovation

**CORE FOUNDATION**
Stable, reliable, low-cost…

- mrp
- financials
- b2b
- materials
- engineering
- hr
- fin analysis

→ fewer outages, greater availability, scalable, repeatable

**PERIPHERY**
Fast, agile, innovative…

- shopfloor
- warehouse
- repair/retail
- pipeline

→ speed and flexibility in dealing with specific cust requirements
→ combining capability for new offerings.

**GLOBALLY OPTIMIZED ORGANIZATION**

- program management excellence
- strong business alignment
- standard tools & processes
- culture of innovation/experimentation
Innovation Accelerators are Everywhere …

- Experimentation
- Solving problems with constraints
- Under pressure
- The perimeter of the org
- Within the org… between departments
- Rule breakers
- Passion/motivation
- Driven by customers
- Enabled by partners & vendors
- Best practice sharing with peers & others
- Failing faster
Innovation from the Top

The problem: HR was moving to a centralized model, needed a global system to enable the new model.

Conventional wisdom pointed to established package software.

However, a SAAS offering appeared more usable, simpler, cheaper, faster… a differentiator

Assessing and recommending required innovative thinking. Partnering with the vendor delivered innovation in both organizations.

Saved Flextronics more than $15 million…

…set an example, lead from the top
…be willing to evaluate exceptions to standards
Innovation from the Perimeter

The problem: How to leverage social networking model in the enterprise to speed up global collaboration internally.

Social is new, evolving rapidly, there are many existing and new solutions on the market.

A Flex Ukranian software team experimented by developing an internal “Facebook”… Whisper Enterprise Collaboration.

Instead of killing the project we are piloting and expanding…create an environment where risks/mistakes are ok…identify best practices and standardize.
Innovation From the Trenches

The problem: How to implement system monitoring without $$.

Network team began experimenting with opensource tools.

Created a standard package of tools now rolled out globally providing monitoring as a service for all critical apps and devices.

Saved Flex millions of dollars in license fees

…it is amazing what you can do for little or no money
Technology Driven Innovation

The problem: Create an internal “Youtube” for video sharing.

Collaboration team began evaluating options with hw & sw.

Looked beyond hardware based solutions costing hundreds of thousands of dollars to find an inexpensive cloud solution.

Delivered speed, security, flexibility for low cost

…push to reach for the unlikely even impossible
Failing Fast with Blackberry Development

Approvals were taking too long…
  capital
capital
  travel
  credit
  procurement
  procurement

Top 2,000 execs have RIM devices

No experience, multiple development options

Partnered with RIM for an eight week sprint

...partner with vendors
...encourage experimentation
Accelerating Innovation

Take advantage of technology disruptions
Create constructive constraints
Optimize your architecture
Be clear on mission, strategy, & goals
Create an environment that nurtures innovation