

Unconscious Incompetence and Organizational Change in the Application Organization

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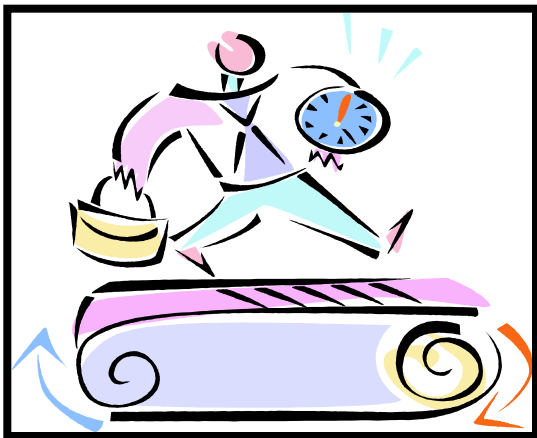
(based on Matt Hotle, Gartner Research VP)



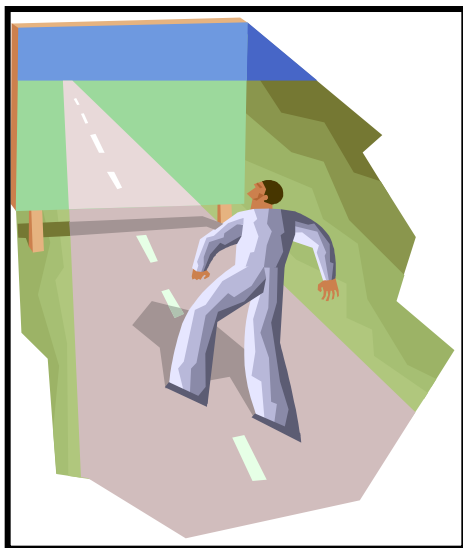
Voorjaarsconferentie, 15 april 2009



Reality: Continuing to Get What You've Been Getting



- "This is the way we've always done it."
- "We tried that and it didn't work."
- "That's not the way things are done around here."



- Change (run, grow or transform) requires a *vision*.
- Change requires a *reward* and *measures*.
- Change is *uncomfortable*.
- Change is *personal*.

Key Issues

1. Is there a problem?
2. How do application organizations currently manage change and why doesn't it work?
3. What are key success and failure factors to consider when becoming competent at application organizational change?

2010 CIO strategies indicate the need for greater productivity and continued cost-efficiencies

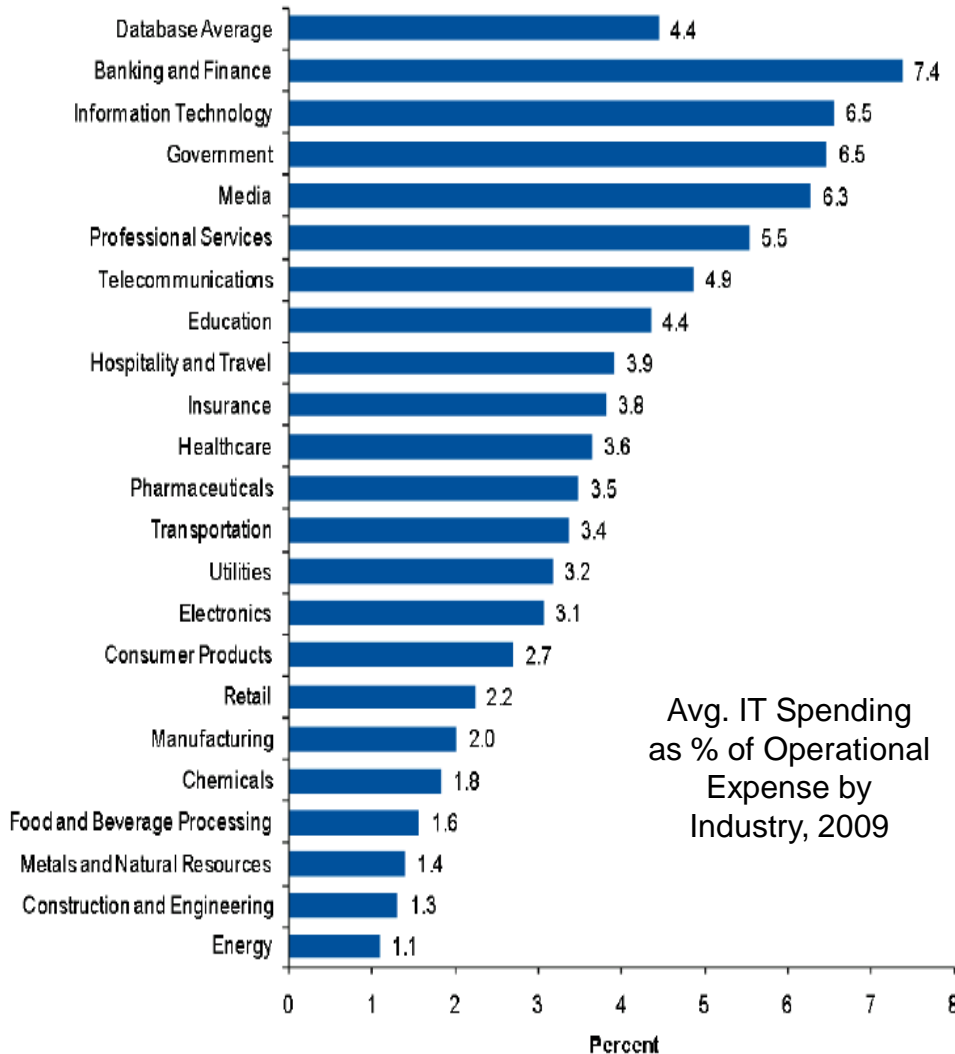
Business expectations	Ranking of business priorities CIOs selected as one of their top 5 priorities in 2010, and projected for 2013					
Ranking	2010		2009	2008	2007	2013
Improving business processes	1	↔	1	1	1	2
Reducing enterprise costs	2	↔	2	5	2	8
Increasing the use of information/analytics	3	↑	5	8	7	5
Improving enterprise workforce effectiveness	4	↓	3	6	4	7
Attracting and retaining new customers	5	↓	4	2	3	3
Creating new products or services (innovation)	6	↔	6	3	10	1
Managing change initiatives	7	↑	8	12	*	12
Expanding current customer relationships	8	↑	9	7	*	9
Consolidating business operations	9	↑	11	13	*	16
Targeting customers and markets more effectively	10	↓	7	9	*	10
Supporting regulation, reporting and compliance	11	↑	12	14	13	15
Creating new sources of competitive advantage	12	↑	13	11	8	4
Expanding into new markets and geographies	13	↓	10	4	*	6

* New question for that year

Source: Gartner's CIO Agenda 2010

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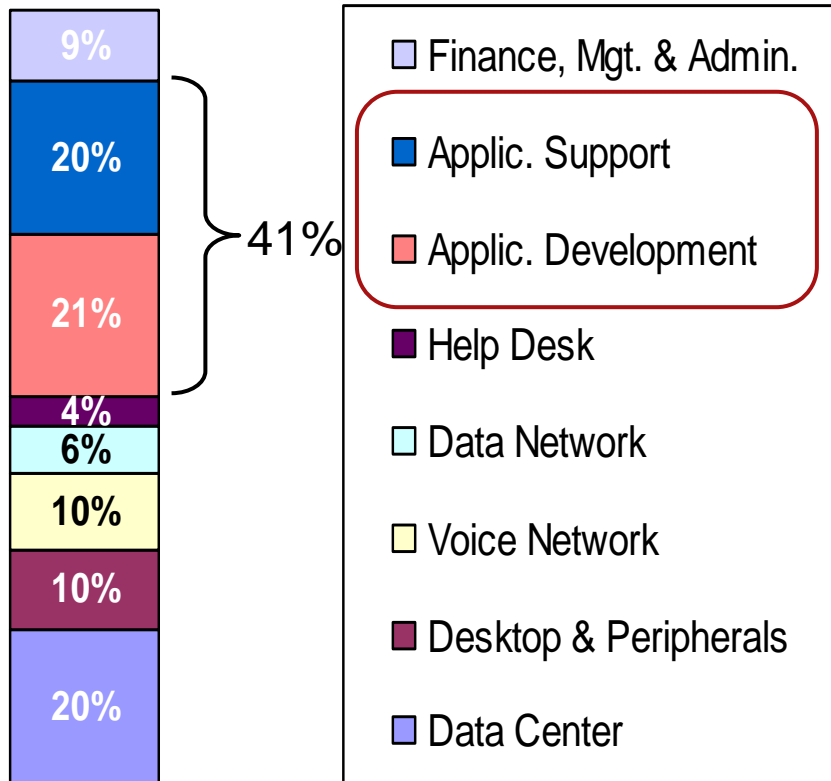
The economic climate is putting pressure on IT to increase efficiency and effectiveness



- Gartner clients are reporting a substantial change in their spending outlooks from 2008 onwards
 - At the same time the number of opportunities offered by new technology and process paradigms is growing
- Business expectations for IT are gradually outstripping IT's internal capability to deliver
 - Enterprises need to significantly increase speed of product development, while reducing their costs
- The smart use of technology has become the key to any company's success

Application Development and Maintenance typically consumes 40 – 50% of the total IT budget

IT Spend by Technology Domain (WW – all industries)
average



- 80 – 85% of the spending in ADM is on personnel
 - in ADM 30% to 50% of the personnel are external contractors
- 30 – 40% of the spending in ADM is outsourced
- 49% of Application Development projects complete on time
- 59% of Application Development projects complete on budget
- 5% of Application Development projects are cancelled prior to delivery

Key Issues

1. Is there a problem?
- 2. How do application organizations currently manage change and why doesn't it work?**
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Unconscious Incompetence and Change: Sound Familiar?

**Unconscious
Incompetence**



**Conscious
Incompetence**



**Conscious
Competence**



**Unconscious
Competence**

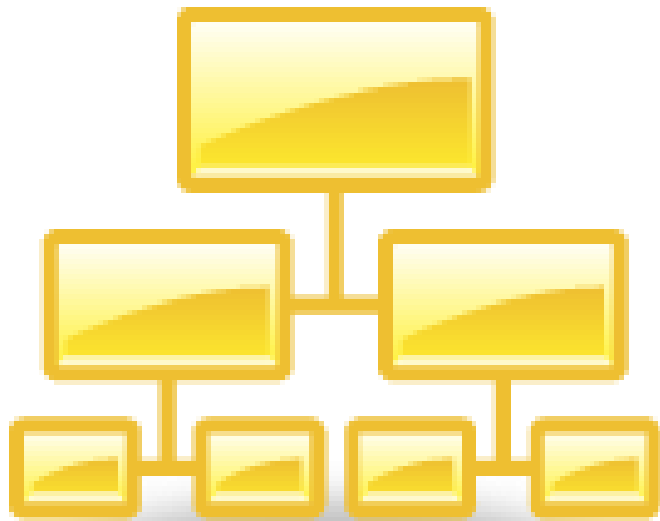
Typical change patterns:

- Bulletin board
- Training
- Blunt force

Becoming competent:

- Establish a competency center (or competency)
- Don't change too much, too often or too small
- Measure the impact of change
- Avoid Einstein; focus on rewarding changed behavior

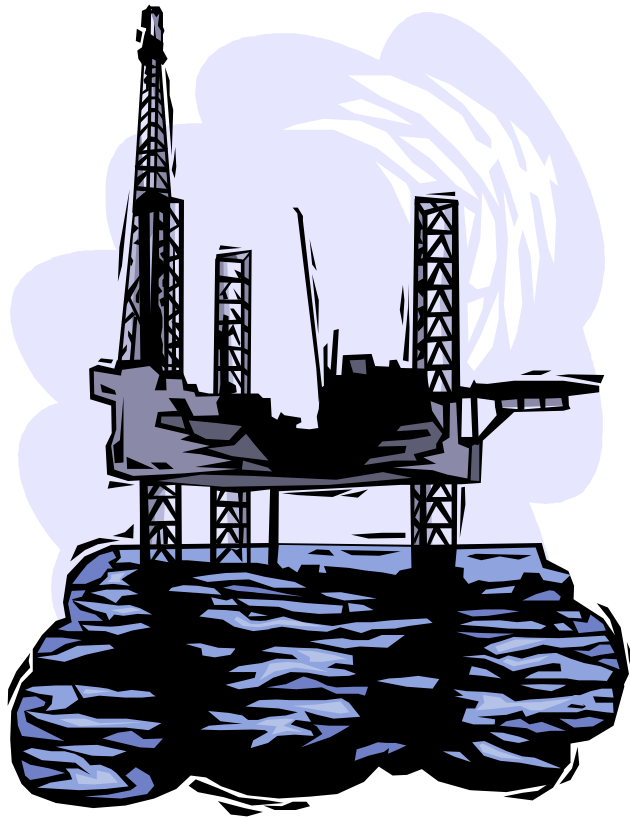
Making the Change Relevant: Constituency Analysis



A "Constituency" ...

- Is an individual or group of people who do similar tasks (that is, programmer, tester, analyst, project manager)
- Can be described based upon wants and needs
- Is the target for a specific change activity
- May span multiple organizations within the applications department
- Is a named individual at a certain level of the organization chart, typically first-line bonus level in a private sector organization or the equivalent in a public sector organization

Building the Burning Platform



What's the height of the platform?

- How big is the change?
- How widely will the change be implemented?
- How high does acceptance go in the organization?

How many sharks are below?

- Who and what are the barriers?

Why should we jump?

- What are the outcomes now and why are they "bad"?
- Why will our changes be "better"?

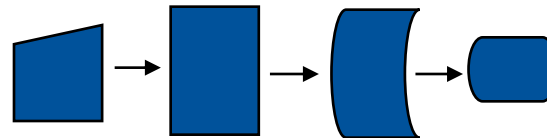
It's Got to be Just Enough

There is *no* single "right"...



Organization Style

- Pooled vs. pyramid
- Centralized vs. federated
- Internal vs. externally sourced
- Packaged vs. custom



Process

- Waterfall
- Agile
- Iterative
- Off the shelf vs. internally developed



Roadmap for Change

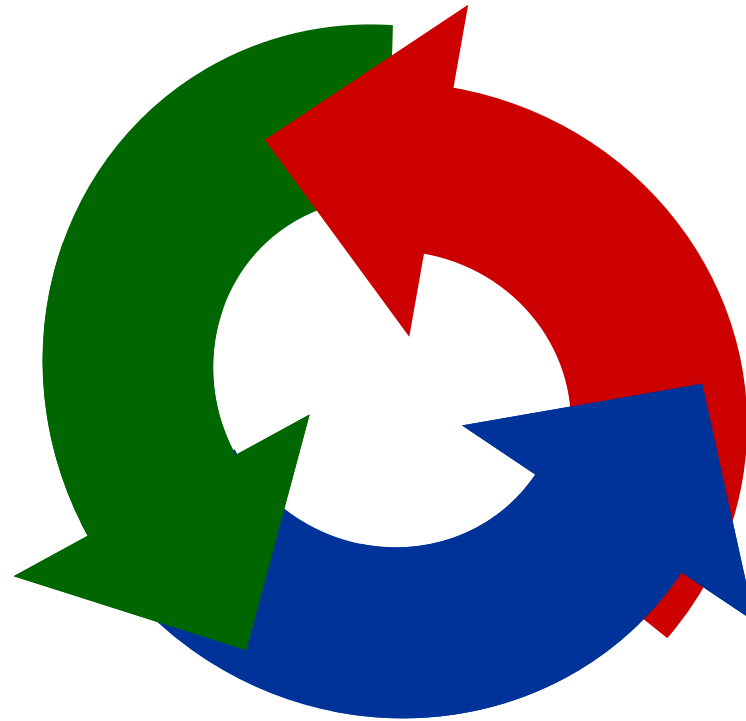
- Must be based on pain or need
- Should be framework focused, not cookbook style
- Must be measurable

What fundamental processes must be in place to ensure successful application organizational change?

A "3-D" Approach to Software Process Improvement

Diagnose

- Focus groups
- JAD
- Metrics reviews
- Gap analysis
- Single "owner"



Deliver

- Identify targets
- Create incentive plan
- Create rollout plan
- Pilot
- Evaluate
- Rollout

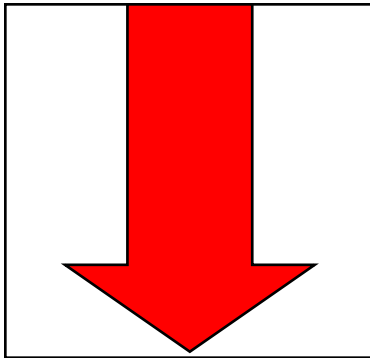
Develop

- List potential areas for improvement
- Prioritize
- Create change efforts

Key Issues

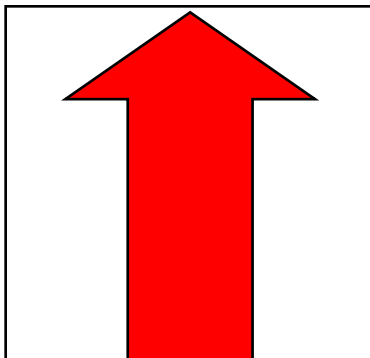
1. Is there a problem?
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Success Factor: Work With Your Friends



Top-down change

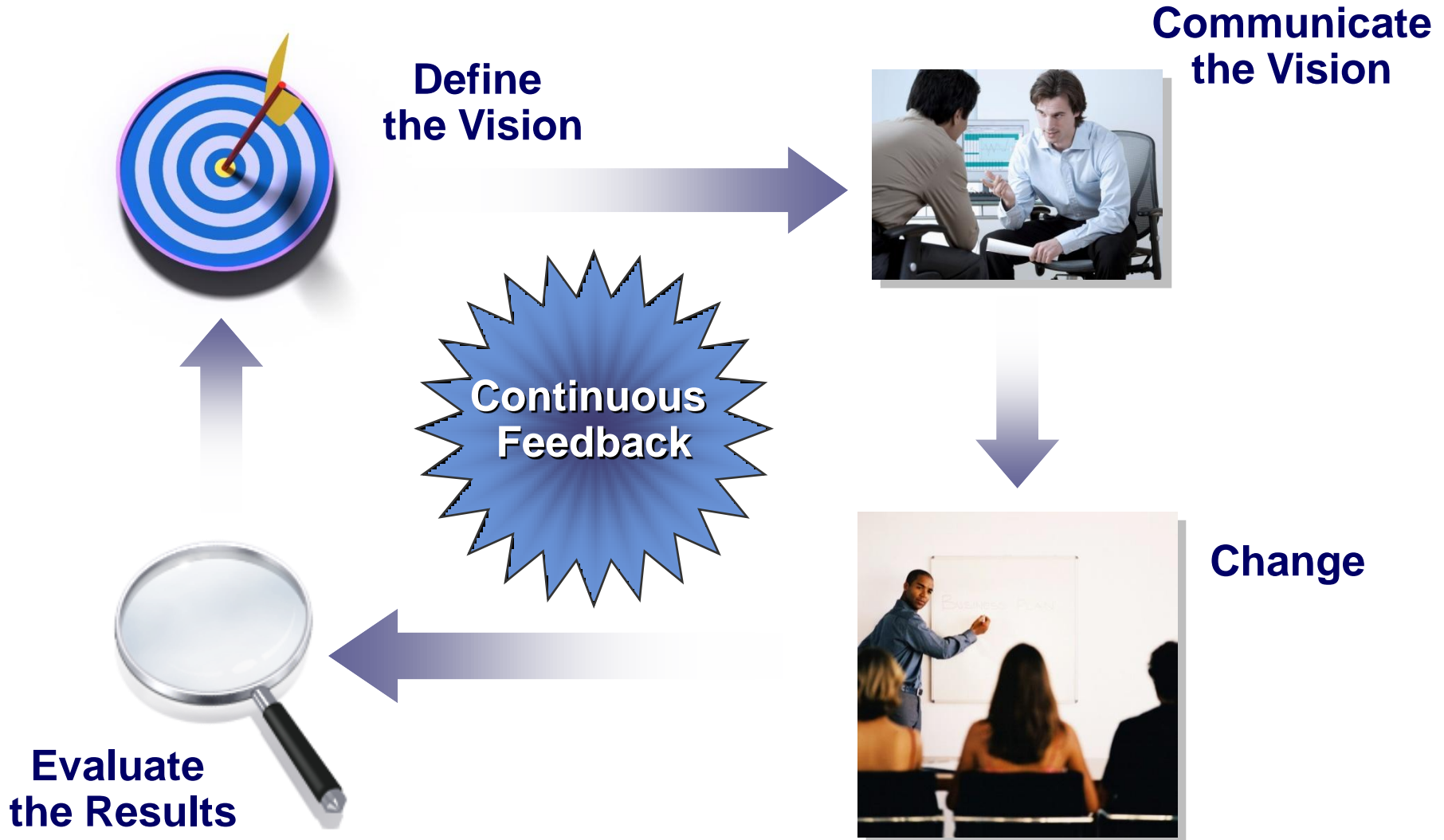
- Requires upper management "skin in the game" (that is, bonus or incentives linked to the change)
- Requires significant investment in political capital
- Appropriate for risky, save-the-business change



Bottom-up change

- Requires a willing partner to "try"
- Requires little to no political capital
- Small initial scope (pilot or "skunk works")
- Must be measurable to be repeatable on an organizational scale

Change Failure Factor: A Lack of Vision



Success Factor: If you Can't Measure it, it Doesn't Matter

Develop/Enhance

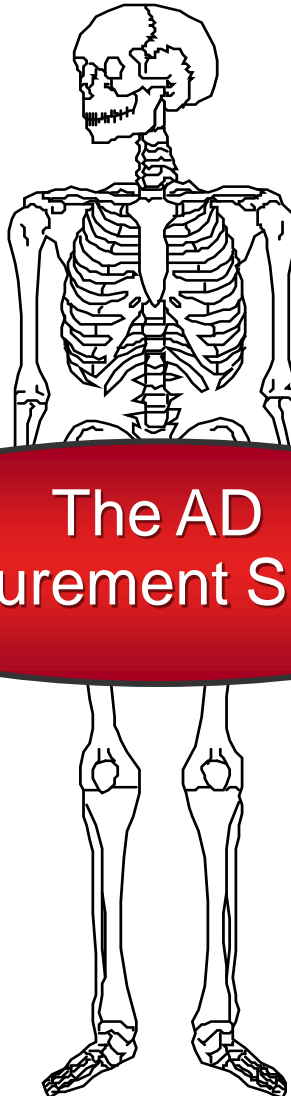
Productivity: Function points or KLOC per staff hour

Quality: Defects per function point or KLOC, rework

Cost: Dollars per function point or KLOC

Customer Satisfaction: Scored survey based on client view of project results

*Variances:
Budget, effort and schedule*



The AD
Measurement Skeleton

Maintenance

Productivity: Function points or KLOC per FTE year

Quality: Defects per function point or KLOC per year

Cost: Dollars per total function points or KLOC

Customer Satisfaction: Time-based survey aimed at reliability, responsiveness and return

KLOC = 1000 lines of code

Maturity in ADM performance management is low



Measurements without taking subsequent action is a waste of time

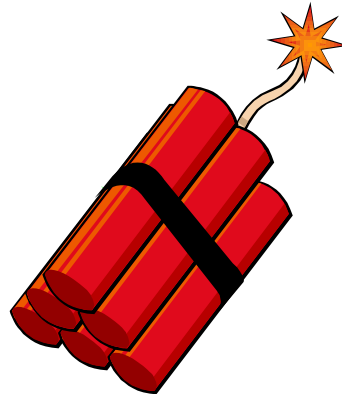
- Most organizations don't measure
 - Approximately 20% to 30% of AD organizations have formal measurement processes
 - Only 5% to 15% of AD organizations measure and use their measures to drive improvements
- Measurement programs should focus on the critical few measures, not the useful many
- The measures collected must be a by-product of the work process and require minimal to no addition collection work
- Once the measures are collected and published, someone in the organization must have responsibility to do something with them
 - Any attempt at improvement *by osmosis* (hoping that the measures will somehow create change by themselves) will fail

Change Failure Factor: Lack of Management Continuity

Typical process efforts:

- Begin by management (that is, "We need to improve productivity.")
- Begin with great hoopla and attention
- Are multiyear efforts
- Span multiple business leaders
- Span multiple AD leaders

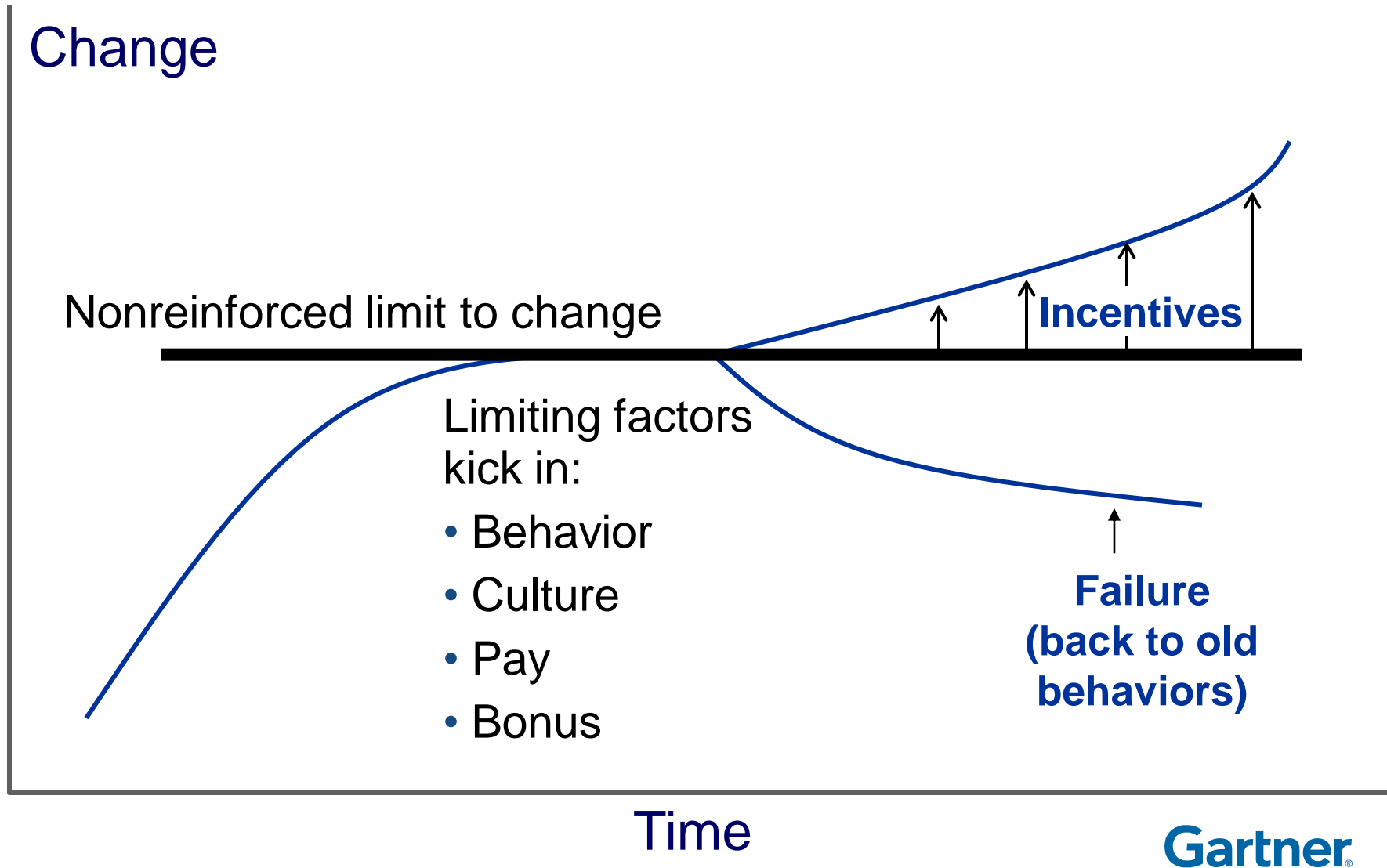
which leads to...



Unless...

- Processes are explicitly changed
- There is agreement in writing in the SLAs between the business and AD
- Relationship management is in place for AD and the business
- AD and the business use metrics on a regular basis
- Incentives or compensation are explicitly changed

Success Factor: Incentives Are the Key Structure for Institutionalizing Change



Recommendations

- ✓ Each set of measures has its own focus. Don't confuse effectiveness, efficiency and in-process measures.
- ✓ "Run" measures focus on efficiency; "grow" measures focus on a combination of effectiveness and efficiency; and "transform" measures focus mainly on effectiveness.
- ✓ Use dashboards for critical measures. Create second and third tier measures based on need.
- ✓ Establish change management as a key competency.
- ✓ Use the measures or don't bother gathering them.
- ✓ Plan for the short term, mid term and long term (that is, quarterly).

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