Managing Adoption of New Practices-Part 1

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BL UF

Managing the adoption of new practices is very much like managing the adoption of new hardware or software technologies

- The body of research and practice for innovation and technology adoption applies well
- Often, new practices and new software or hardware technologies are adopted together, amplifying the benefits of using sound technology adoption practices

Building knowledge and skill in technology adoption is different than building skill in software

 Most of the challenges are the socio-part of socio-technical Today will be a lot of information that will hopefully get connected with the homework and Part 2 of the workshop!



Agenda-Part 1

Introduction/Purpose/Wants & Offers

Why Use Tech Adoption Practices for New Practice Adoption?

Relevant Tech Adoption Concepts for Practices Adoption

<LUNCH>

TRAIL for Adoption Support

Competencies Needed to Effectively Support New Practice Adoption

Summary/Homework

Introduction/Purpose/Wants & Offers

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Course Purpose



This course is a first step in building your skills and knowledge of technology adoption and organizational change

- Generic models and concepts that apply to multiple environments you may be asked to coach (Part 1)
- Application of the concepts and models to particular adoption contexts in play in the program currently (Part 2)

We will accommodate your knowledge needs throughout the course to the best of our ability and will point to resources where time does not permit us to address your needs in the context of this training

Materials



Slides plus selected handouts

PollEV questions (live answers)

Qualtrics Post-Part 1 Survey (to be discussed in Part 2)

Homework files/assignment (to be returned by cob Monday, Jan 31 for synthesis and discussion in Part 2 on Feb 3)

 Only those who return the homework may participate in Part 2

Audience—Who are You? Answer in PollEv



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Approach



Mix of

• exercises,

• discussions, presentations, and

• required homework (if you want to participate

in Part 2 – otherwise, it's just suggested)

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Course Logistics-Not All Apply in Virtual!!!



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What do You Want to Learn in Part 1? Answer in PollEv





Respond at: <u>www.pollev.com/mainsummit799</u>

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Why Use Tech Adoption Practices for New Practice Adoption?

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A Sobering Thought...

"There is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new order of things.... Whenever his enemies have occasion to attack the innovator, they do so with the passion of partisans, while the others defend him sluggishly so that the innovator and his party alike are vulnerable."

— Niccolo Machiavelli



... and Yet Another

"To get the bad customs of a country changed and new ones, though better, introduced, it is necessary first to remove the prejudices of the people, enlighten their ignorance, and convince them that their interests will be promoted by the proposed changes; and this is not the work of a day."

— Benjamin Franklin



Does this Apply to Agile? Jira/Confluence? OKRs?

"Radical innovation is the process of introducing something that is new to the organization and that requires the development of completely new routines, usually with modifications in the normative beliefs and value systems of organization members."

- Nord and Tucker, Routine and Radical Innovations, 1987

You've Seen This Before....



Source: Adler, Paul. Managing Your Technological Base, Sloan Mgmt Review, 1991.

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Mapping the Winds of Creative Destruction

William J Abernathy, and Kim B Clark, Research Policy 14 (1985) 3-22

This paper develops a framework for analyzing the competitive implications of innovation. The framework is based on the concept of transilience - the capacity of an innovation to influence the established systems of production and marketing.



Exercise: Add a Pin to the Chart...in Poll EV



- →Agile mindset and practices
- → Jira/Confluence



Respond at:

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Adoption Does Not Equal Installation!

Technology adoption is when the people who need to use the new technology

- know the technology is there and what status it is in
- · have appropriate access to it
- are trained to use it
- get support for using it
- actually DO use it to support their work tasks!



Adoption Does Not Equal Installation!-2

Technology installation is when

- the technology gets physically installed in the work environment
- a few people get training in how the system works, which may or may not be related to how they want to use the system in their environment

The technology may or may not achieve its usage goals.

The successful technology implementations you talked about were cases of adoption....



Relevant Tech Adoption Concepts for Practices Adoption

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Relevant Tech Adoption Concepts Satir Change Model

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The Satir Change Model (Research Source for the "J Curve")



For a detailed discussion of the Virginia Satir's model, see G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change, ISBN 0-932633-32-3.

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Satir Decision Points



Adapted from G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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Food for Thought: Use PollEV to answer

In which of the Satir stages does your organization seem to be most firmly positioned at the moment?

What are the implications for your effort?



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Relevant Tech Adoption Concepts Schein Culture Model

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Culture A Path Fraught with Hazards



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Culture Defines the System's Environment Probability of Success in Change



Culture: A Working Definition

A pattern of shared basic assumptions

- that a group <u>learned</u> as it solved its problems of external adaptation and internal integration
- that has worked well enough to be considered valid

Therefore, these assumptions are <u>taught</u> to new members as the <u>correct</u> way to perceive, think, and feel in relation to those problems.

Schein Layers of Culture



Adapted from Edgar Schein, Organizational Culture and Leadership.

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Food for Thought: Answer in PollEV

Which of the following layers of culture is LEAST reflective of the actual culture in play?

- Artifacts ٠
- **Espoused Values** ٠
- Shared Values ٠
- **Basic Assumptions** ٠

Respond at:





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Hall Dimensions of Culture

Defines the <u>absolutes</u> of a society.

Breaking the rules creates <u>anger</u>.

Defines the <u>de facto latitude</u> that exists around the "absolutes."

Pushing the limits evokes <u>anxiety</u>.

∽ Operational

nformal

Formal

Codifies elements of the formal and informal in a way that helps members live on a <u>day-to-day</u> basis.

Changes are bothersome.

Migrates to formal and informal over time.

Adapted from Edward T. Hall, The Silent Language

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Accounting for Culture

- 1. Sponsorship: Establish sponsor commitment.
- 2. Formal Culture: Chart the mine field.
- 3. Informal Culture: Define desired behavior.
- 4. Reinforcement: Modify the reward system.
- 5. Operational Culture: Build new artifacts and structures.
- 6. Sustaining Support: Look beyond the immediate.
- 7. Communication: Compose the messages.
- 8. Timing:

Wait for operational changes to migrate to the formal and informal.

Relevant Tech Adoption Concepts

Rogers/Moore Adoption Populations

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The Adopter Continuum



Innovators

Gatekeepers for any new technology

Appreciate technology for its own sake

Appreciate architecture of technology

Will spend hours trying to get technology to work

Very forgiving of poor documentation, slow performance, incomplete functionality, etc.

Helpful critics
Early Adopters

Dominated by a dream or vision

Focus on business goals

Usually have close ties with "techie" innovators

Match emerging technologies to strategic opportunities

Look for breakthrough

Thrive on high visibility, high risk projects

Have charisma to generate buy-in for projects

Do not have credibility with early majority

Early Majority

Do not want to be pioneers (prudent souls)

Control majority of budget

Want percentage improvement (incremental, measurable, predictable progress)

Not risk averse, but want to manage it carefully

Hard to win over, but are loyal once won

Late Majority

Avoid discontinuous improvement (revolution) Adopt only to stay on par with the rest of the world Somewhat fearful of new technologies Like preassembled packages with everything bundled

Laggards

"Nay sayers" Adopt only after technology is not recognizable as separate entity Constantly point at discrepancies between what was promised and what is

Adoption Population Analysis for Jira/Confluence Adoption

Using PollEV, use the division abbreviation to identify which division(s) you think belong in each category for the Jira/Confluence adoption?

 \rightarrow one PollEV question for each adopter category

 \rightarrow only add divisions with which you have had enough direct contact to have an opinion based on the characteristics we discussed above

 \rightarrow don't be surprised if some people put a division in one category, and others put it in another (we'll talk about why that might happen in the debrief)

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Relevant Tech Adoption Concepts

Patterson-Conner Adoption Commitment Curve

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Patterson-Conner Adoption Commitment Curve



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Different Groups Approach Commitment to Change Differently



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Adoption Commitment Curve Helps Us to Identify Needed Adoption Support Mechanisms

Communication mechanisms dominate Contact, Awareness, and Understanding



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Success Not Guaranteed!



Source: Adapted from Daryl R. Conner and Robert W. Patterson, "Building Commitment to Organizational Change," Training and Development Journal (April 1983): 18-30.

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McLyman/Satir Model

Deciding When Transition Mechanisms are Needed



Source: Lynda McLyman, as described in G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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Summary

Adoption commitment curve has been a consistent "winner" of the "how do I go about enabling this change?" challenge

Combined with Adopter Curve and Satir Change Model, it provides a powerful set of diagnostics and prescriptions for moving a change forward.

• Especially helpful in figuring out "what do we need to focus on next?"



TRAIL for Adoption Support

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Enterprises Need to Monitor Both Adoption and *Project/Programmatic* Progress toward Success

Most organizations have multiple ways of monitoring project programmatic progress

- How much of that success can be attributed to a particular practice or technology adoption is always a nebulous case to make
- Understanding adoption progress can at least help organizations to understand when it is relevant to bring adoption of new practices/technologies into the discussion of success

TRAIL provides both measurement support and planning/implementation support for adoption

- TRAIL leverages many of the models we have already discussed
- TRAIL informs, either explicitly or implicitly, many of the recommendations SEI provides on adoption support

SEI's Trail Model Provides a Framework for Supporting Adoption and Assessing Its Success



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The Goals of TRAIL

Achieve and manage "transition readiness and fit" between a technology and its adopter community

Provide a flexible framework for assessing technology adoption progress and success

Using TRAIL for Adoption Support

Each phase of TRAIL has a set of Success Criteria for completing the phase

• Using these criteria to report progress toward success and to communicate issues provides a rich context for understanding



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Goals for Transition Management Startup

Problem that proposed technology is meant to solve is understood

Common transition issues related to the technology(ies) under scrutiny are understood

- Scope & goals for the adoption are defined
- Expectations for sponsor's involvement are understood
- Transition infrastructure needs are identified/ planned
- Scope of adopter population for this adoption cycle is understood



Goals for Readiness & Fit Determination

"Maturity"/readiness of the technology is understood (TransPlanT is a method for understanding technology readiness)

Relevant characteristics of the intended adopters are understood (Rogers adopter curve)

(Initial) adoption risks are identified (Readiness & Fit Analysis technique)

(Initial) risk mitigation actions are defined

Decision to move forward with this adoption cycle is made



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Readiness and Fit Determination

Successful technology transition depends on a successful matching of the characteristics of the technology itself and on the characteristics of the context (community, organization, or work group) for which the technology is intended.

Understanding both the technology and the context of its adoption ensures that risks can be anticipated and proactively managed



Increasing adopter readiness

Technology Assumption Tables as a Basis for Readiness & Fit:

- -Lean/Agile
- -Jira/Confluence
- -OKRs?

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Technology Assumptions Table for Agile-1

Fit Dimension	Agile & Devops Assumptions
Business & Acquisition	•Program acquisition strategy and practices enable, or at least don't dis-able, differences in developing and deploying using Agile approaches
Organizational Climate	 Reward systems, values, skills, sponsorship explicitly support Agile values and principles
Project, Team & Customer Environment	 Frequent collaboration between development team and test, operations, customers, and end users is actively supported Program management practices don't force teams to work across different projects
System Attributes	 System architecture is loosely-coupled (interfaces are external vs internal among system components) System solutions benefit from fast user/operational feedback

Technology Assumptions Table for Agile-2

Fit Dimension	Agile/Devops Assumption
Technology Environment	 Technology support for virtualization, automated testing and continuous integration are in place Integrated collaboration platform is in place, including monitoring and feedback
Team Technical Practices (subset of Practices)	 Technical practices that support high quality code production in small batches from a prioritized product backlog are in place Technical practices integrate automated testing and integration
Team Management/ Coordination Practices (subset of Practices)	 Decentralized decision making that allows team members to self- organize their work are in place and supported Team management practices that support short (2-4 week or less) time boxes are in place Coordination practices among dev, test, and ops stakeholders are routinely used
Program Practices (subset of Practices)	 Synchronization of multiple teams is occurring Practices that reinforce respecting team management and measurement boundaries are in place Automated governance mechanisms are used where appropriate

Technology Assumptions Table for Jira/Confluence-1

Fit Dimension	Jira and Confluence Assumptions
Business & Acquisition	 Licenses for end user divisions are consistently available
Organizational Climate	 Reward systems, values, skills, sponsorship explicitly support use of workflow management tools Training and skill building activities address the integration of Jira/Confluence into the work of the organization
Project, Team & Customer Environment	 Interactions among multiple work teams are supported by clearly defined roles
System Attributes	 Infrastructure is established that supports the number of licenses and users anticipated, including Help Desk and coaching as well as training

Technology Assumptions Table for Jira/Confluence-2

Fit Dimension	Jira & Confluence Assumption
Technology Environment	 Platform used for infrastructure can accommodate all the classification levels needed by the adopting group
Team Technical Practices (subset of Practices)	 Team tasks are amenable to break down into <2 week increments
Team Management/ Coordination Practices (subset of Practices)	 Decentralized decision making that allows team members to self-organize their work are in place and supported Team management practices that support short (2-4 week or less) time boxes are in place
Program Practices (subset of Practices)	 Synchronization of multiple teams is necessary Practices that reinforce respecting team management and measurement boundaries are in place Automated governance mechanisms are used where appropriate

EXERCISE

The following two slides contain blank technology assumption tables, ready for you to annotate (using Zoom's text annotation feature) items that are assumptions about OKRs (Objectives, Key Results) – looking at OKRs from the viewpoint of technology adoption.

We will spend 5 minutes annotating each slide, then will discuss.

Technology Assumptions Table for OKRs-1

Fit Dimension	OKRs Assumptions
Business & Acquisition	
Organizational Climate	
Project, Team & Customer Environment	
System Attributes	

Technology Assumptions Table for OKRs-2

Fit Dimension	OKRs Assumption
Technology Environment	
Team Technical Practices (subset of Practices)	
Team Management/ Coordination Practices (subset of Practices)	
Program Practices (subset of Practices)	

Goals for Adaptation & Planning

Changes needed for the technology & adoption contexts have been identified

Adoption plan has been defined, including technology implementation events

Communication and implementation support mechanisms have been defined

Adoption measures have been defined



TRAIL

"Drink the Champagne You're Serving!" (or "Eat Your Own Dog Food", but I like champagne better!)

To the extent feasible, the adoption support function (Agile Resource Center or equivalent) should use the same processes, practices, and tools that the rest of the organization are adopting.

- Demonstrates commitment to the adoption by those dong the coaching
- Makes it clear that the adoption is feasible to other parts of the organization
- Enables the ARC and coaches to "feel the pain" of adoption so they can be appropriately empathic
- Helps the ARC staff to identify barriers in the practices or tools that need to be addressed by leadership, governance, or technology specialists
- Helps the ARC staff to identify leadership goals that are a "bridge too far" for the infrastructure and/or governance of the organization at a particular point in time

Build at least a Minimal Communications Plan

At minimum, some approach for figuring who needs to know what as the implementation progresses should be developed by the implementation team.

The categories in the next slide are useful to think about in building that plan (could be as simple as a table)

Categories in a Communications Table

Objective

• the purpose the communications is meant to achieve

Responsibility to Report Information

• who needs to make sure it gets communicated

Member(s) Receiving Information

• who needs to get it

Receiving Information Mechanism

what "it" (the communication event/artifact) is called

Medium Used

• how the material should be transmitted

Frequency

how often this kind of communication should occur

Goals for Implementation & Monitoring

Transition mechanisms (both communication and implementation support) are elaborated and used in the implementation

Technology meets the defined success criteria for the work context

Progress of the implementation is understood

Measuring: Numerical Data

"Hard" indicator of perceptions

Interpretation may turn into "contest of opinions"

Relatively easy to "explain away"

Easy to treat statistically and track progress over time



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Measuring: Verbal Data



"Soft" indicator of perceptions

Consensus on interpretation is relatively easy to achieve

Difficult to "explain away"

Relatively difficult to treat statistically and track progress over time



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Numerical and Verbal Data Together



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Monitoring: Finger on the Pulse



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Miller Adoption Success Measurement Model

Measure along 3 dimensions:

Deployment: the extent to which the change effort has reached and influenced the behavior of the organization

- HOW MANY have participated in events/contributed to new ways of collecting data?
- This is usually the first element that can be measured!

Infusion: the extent to which the new work processes are being used (levels of use)

• Use process audits as part of normal process governance function to determine adherence and usage levels of new processes

Results: the extent to which the change effort meets the business success criteria defined at the beginning of the effort

• Implies you need to establish the success criteria at the beginning—this one takes the longest to measure

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Food for Thought: Answer on PollEV

What measures is your organization currently collecting on a routine basis? How can you use them to monitor your effort's progress?

What additional measures would be useful for monitoring your effort's progress? What will be needed to begin collecting them?

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Goals for Learning & Adjusting

Adoption success of the technology/practices has been assessed

Lessons learned from implementations have been shared with the relevant community

Adoption plan elements have been updated to support future transitions

TRAIL

One Slide Picture of TRAIL Phase Goals



Competencies Needed to Effectively Support New Practice Adoption (Agile used as the Example)

Not All Coaches Need to be Expert in All Competencies

(But having all these competencies available in the coaching staff in aggregate makes support much easier!)



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The Consulting Role Grid Helps to Understand What Level of Competence is Needed for Different Consulting Roles



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Typical Role Statements for the Consulting Role Grid



Counselor "You do it; I will be your sounding board."	Coach "You did well; you can add this next time."	Partner "We will do it together and learn from each other."
Facilitator "You do it; I will attend to the process."	Teacher "Here are some principles you can use to solve problems of this type."	Modeler *I will do it; you watch so you can learn from me.*
Reflective observer "You do it; I will watch and tell you what I see and hear."	Technical advisor "I will answer your questions as you go along."	Hands-on expert fl will do it for you; I will tell you what to do.*

Exercise: Put a star where you feel most comfortable! And an "X" for Least...

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"Coach" is Only One of the Modes of Consulting

There are times when a different consulting role will be more helpful than an actual Coach role

Not everyone is ready to be a coach at the same time

Summary/Homework

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A Mural from another Tech Adoption Workshop (If we were in person, we would be building one for us!)



Source: Lewis Gray et al. Workshop, June 1999, Managing Innovation and Technology Change, sponsored by SEI.

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Shepard's Laws

Rule 1: Stay alive.

- Rule 2: Start where the system is.
- Rule 3: Never work uphill.

Corollary 1: Don't build hills as you go.

- Corollary 2 : Work in the most promising areas.
- Corollary 3: Build resources.
- Corollary 4: Don't over-organize.

Corollary 5: Don't argue if you can't win.

Corollary 6: Play God a little.

- Rule 4: Innovation requires a good idea, initiative, and a few friends.
- Rule 5: Light many fires.
- Rule 6: Load experiments for success.
- Rule 7: Keep an optimistic bias.
- Rule 8: Capture the moment.

This is the Tip of the Iceberg!

There are deeper discussions relevant to using each of the models presented today

Your homework provides an opportunity to apply what we have discussed to a realistic adoption scenario

- Note: this scenario draws from multiple contexts SEI has observed or participated in – you may recognize some elements as being relevant to YOUR context, and others not so much
 - Don't go looking for the things you DON'T recognize!
 - Don't think you're the only ones who are experiencing the things you DO recognize!



Homework

Homework package includes:

- A set of Powerpoint slides with a written scenario description and slides that include topics we have discussed today
- A Word document of Agile Coaching Competencies synthesized from SEI experience

Assignments:

- Read the scenario, and note in the Powerpoint slides connections between scenario elements and the subtopics in the slide deck
 - You will not find a one to one mapping between scenario statements and the topics
- If you are or will be in a coaching role in the program for Agile, fill out the Qualtrics survey so we can build a custom curriculum for you to improve your knowledge and skills

Qualtrics survey link for Agile Competencies:

https://sei.az1.qualtrics.com/jf e/form/SV_doRHuRsYSqRnKm O



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BACKUP Satir Change Model Details (go back to slide 23 in main body)

Late Status Quo

The system has developed a set of expectations and predictions.

The status quo represents a kind of success.

Everything is familiar and in balance.

Different parts of system may pay different prices to maintain the balance/state of affairs.



The price each part pays is demonstrated by the personal and organizational symptoms it displays in its state of unhealth.

Late status quo always precedes the "crisis."

Source: G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

A "Foreign Element" Precipitates Crisis



Source: G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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Expelling the Foreign Element

The organization, and its members, may use many tactics to expel a foreign element. For example:

• Tighten internal controls

- Issue memos underscoring the importance of following administrative procedures
- Hold [often oppressive] meetings to discuss meeting schedules, saving costs, and other [often irrelevant] topics
- Require more frequent and detailed status reporting
- Waste time and energy doing studies
 - to determine "How did we get here?"
 - rather than "Where are we?" and "What should we do?"
- <u>Attack and/or blame the outside world</u>
 - Ask the government for a bailout
 - Sue someone

Why does the system do such things?

"Familiarity is always more powerful than comfort." — Virginia Satir

Source: G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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Moving into CHAOS



Eventually, some foreign element can't be ignored or rejected.

Someone recognizes that [ahem] the emperor's modesty has been compromised.

Old predictions no longer work.

Old expectations are not realized.

The system is literally turned upside-down.

Adapted from G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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Adapted from G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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Getting through CHAOS





What's Not Needed

Brutal "facts" that will destroy

Feel-better placating that will

- > provide an excuse to stay in denial
- allow a temporary return to status quo

Integration and Practice



During Integration new feedback mechanisms begin to appear.

During **Practice** some order is restored. but...

Feedback is often slower than needed, leading to continued ups and downs in performance

Time

Adapted from G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change, ISBN 0-932633-32-3.

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Getting through Integration and Practice



Vhat's Needed

A learning environment in which

- senior technical leaders are allowed not to know
- people are allowed to ask questions about what they don't know
- schedules build in considerable slack.

Critical Understandings

Patience is essential.

The performance payoff will not be realized until a New Status Quo is achieved.

Source: G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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New Status Quo





Adapted from G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change, ISBN 0-932633-32-3.

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Getting on with the New Status Quo

What's Needed

Permission

- to make mistakes
- to be honest
- to explore and learn about newly-acquired professional skills.

Critical Understanding

"People cannot optimize their performance if they are not allowed to make mistakes."

Source: G. Weinberg, Quality Software Management, Vol. 4: Anticipating Change.

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BACKUP Adoption Curve Transition Mechanisms

To Move Beyond Awareness, You Need....

Communication Devices

- "Elevator speech"
- Standard 45 minute pitch road show
- FAQ

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- Magazine/e-zine articles
- Blog Posts
- Conference briefings
- You Tube "One Minute of...." Videos

Flash cards with objectives, benefits, URL, etc.

Web site devoted to the technology, with links and dialogue

Successful ROI stories, case studies

Communications that focus on **concepts**, not the buzzword

Executive summary of policy

To Move Beyond Understanding, You Need...

All the Communication Mechanisms from Contact/Awareness

PLUS Education about "what will this mean to me?"

Training in the skills needed to be successful using the new practices/technology

One-day seminars, symposia for various vendors

Detailed case studies

Technical brief

Identified and authorized champions

Identified stakeholder roles, responsibilities, and interrelationships

To Move Beyond Trial Use, You Need...

Pilot Programs

- Carefully identify a couple of focused pilots (or "experiments")
- Characterize the goals differently for technical feasibility pilots versus adoption feasibility pilots
 - *Technical feasibility:* remove constraints and see if there any conditions under which the practices or technology work
 - Adoption feasibility: test adoption within the existing organizational setting to see what may need to be adapted on either the organization or practices side
- Define incentives for pilot participation
- Observe and record information needed for future decision making from pilots
- Document pilot results
- Protect and support the pilots

Communication, Education, Training, and Support

Defined measures of success

Long enough courses for pilots and interested others to leave with "how" we do this not just "what" we do

Users Group (may be external, facilitated by someone like an ARC) - share experiences

Lessons learned from innovators and early adopters

Case exercise for transitioning from one set of work practices to one with the new practices/technology support

Startup and execution coaching for new practices

Identified barriers and workarounds

To Move Beyond Adoption, You Need...

Strong set of incentives; rewards and consequences

Refined guidance on practice or technology usage choices and implementation

Education and Training - mature courses, modularized for Just-In-Time delivery

In-Process Job Aids (checklists, templates)

Repository on business cases and lessons learned

Sample implementation plan with impact analysis

Learning Job aids - process guides, start-up guides, coaching, JIT training, guidebooks

Identified and drafted supporting policies or standards

Sustainment infrastructure in place and resourced

To Retain Institutionalization, You Need...

Fully realized curriculum of training for different types of users

New employee training/orientation

Stability in leadership use of data

Reinforcement by leadership by the questions that they ask

Grandfathering vs. cutover policy

Continuous improvement to adoption support artifacts (guides, etc.)

Adoption Commitment Plus Satir

Carnegie Mellon University Software Engineering Institute

Managing Tech Adoption Support © 2022 Carnegie Mellon University

The Red Zone - Chaos to Early Integration and Practice

Foreign element hasn't been transformed, integrated, or rejected.

When new foreign element arrives

- chaos from both the old and new elements increases
- chance of finding a transformation for either decreases
- · likelihood of rejection or accommodation of both elements increases

Impact

- In general, change is much less likely to take hold.
- Rapid hits may get system "stuck" in chaos.
- BUT... Concurrent changes and synergy <u>may</u> be possible when a transforming idea accommodates multiple concurrent changes.

Implications

- Avoid "piling on" in search for something that works.
- Integrate multiple changes around single transforming idea, e.g., CMM/CMMI maturity level.
- · Transition mechanisms focus on reducing anxiety.

The Yellow Zone - Completing the Integration

New approaches haven't yet been mastered.

When new foreign element arrives

• The system may lose focus on original transforming idea.

Impact

- Likelihood of successful change is reduced, but not as seriously as in Red Zone.
- System may regress to chaos.
- Multiple hits build "energy debt," virtually eliminating possibility of success with <u>any</u> change.

Implications

- Be very careful about introducing additional change.
- Avoid introducing multiple new changes to "capitalize" on apparent success.
- This is where the bulk of your transition mechanisms will be used.
The Green Zone - Late Integration to Early New Status Quo

System is aware of—and beginning to enjoy—fruits of successful change.

When new foreign element arrives

- System is "primed" for change by recent success.
- New ideas generally are greeted with excitement by system participants.

Impact

• System's chances for successfully implementing a new change are at their maximum.

Implications

- Strike while the iron is hot!
- Be prepared to move forward, avoiding loss of momentum.
- Get your transition mechanisms ready for the next round.

Cautions...

- Avoid trying to do too much... It's still possible to blow it.
- Remember that all people/parts of the system may not be in the same zone !!!

The Gray Zone - "Back to Normalcy"

People have lost some of their meta-change skills.

When new foreign element arrives

• It is met with apathy, skepticism, pessimism, or perhaps even antagonism.

Impact

• Change will once again be slow and difficult.

Implications

- Don't allow the system to atrophy.
- Don't lose what you've learned from building transition mechanisms for the previous change!
- A philosophy of continuous improvement—and a commitment to it—is essential.

Commitment Curve and the McLyman/Satir Change Cycle

