



Catalog

of Workshops, Seminars,
Coaching, Clinics and Products
from

**Chaco
Canyon
Consulting**

www.ChacoCanyon.com

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Chaco Canyon Consulting

The Race to the South Pole: Ten Lessons in Project Management

On 14 December 1911, four men led by Roald Amundsen reached the South Pole. Thirty-five days later, Robert F. Scott and four others followed. Amundsen had won the race to the pole. Amundsen's party returned to base on 26 January 1912. Scott's party perished. As historical drama, why this happened is interesting enough. But to project managers, the story is fascinating.

We'll use the history of this event to explore ten important lessons about managing complex projects. From this story we can learn ten lessons in project management:

Leadership: it matters most when the project is in trouble. When the leadership fails, not much else can succeed.

Planning: Planning is the foundation of it all. Replanning is a dangerous fiction, because planning is never really finished.

Scope creep: Maintaining focus requires constant vigilance. A single lapse can doom the entire effort.

Risk management: Think of everything that can go wrong, and prepare for it. Then, you will still have missed something important.

Improvisation: Improvisation is a useful skill, but relying on it as an alternative to planning is foolhardy.

Discipline: Self-discipline and self-control are as important to the team as they are to the individual.

Organizational politics: The owning organization always imposes tight constraints. Sometimes, they must be circumvented.

Team dynamics: Multiple overlapping skill sets is a key to harmony.

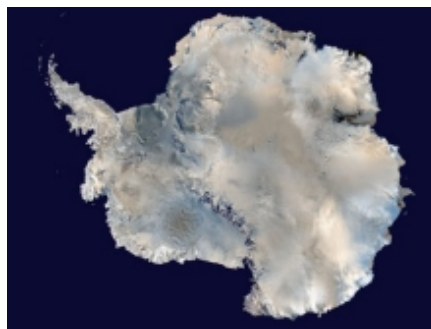
Technology management: Most reliable path to success: do something new with existing

technology. Least reliable: doing something new with untried technology.

Simplicity: venturing into the unknown with a complicated plan is a high-risk endeavor. Simplicity rules.



Amundsen and three of his four companions at the South Pole



Each of these principles is illustrated with a story from the Race to the South Pole, comparing the approaches used by the two teams. The result is a lively, interesting program that deals with these ten topics in a memorable way.

Program structure and content

This program is most suitable for keynote presentations and conference general sessions, or for large groups. Heavily illustrated with maps and original photographs, the stories bring the events of 1908 through 1912 — almost 100 years ago — to life. Audience interaction and table

discussions about accompanying prepared discussion questions bring the lessons of the Race to the South Pole into focus in contemporary experience.

Target audience

Leaders, executives, managers, business analysts, project managers and project team members.

Duration

Available in formats from one hour to one day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience. ■

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Program outline

Introduction

- Amundsen and Scott: Background
- Antarctica as it was known in 1910
- The two expeditions compared

The ten lessons in project management

Each of these ten lessons is presented with stories and original photographs from the two expeditions.

- Leadership
- Planning
- Scope creep
- Risk management
- Improvisation
- Discipline
- Organizational politics
- Team dynamics
- Technology management
- Simplicity

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

Rick Brenner is principal of Chaco Canyon Consulting. He works with people in dynamic problem-solving organizations who make complex products or deliver sophisticated services that need state-of-the-art teamwork, and with organizations that achieve high performance by building stronger relationships among their people. In his 25 years as a software developer, software development manager, entrepreneur, consultant and coach he has developed valuable insights into the interactions between people in a problem-solving environment, and between people and the media in which they work.

Mr. Brenner has held positions at Symbolics, Inc., and at Draper Laboratory, both of Cambridge, Massachusetts. At Symbolics, he was



responsible for development of all products based on Macsyma, a large and very sophisticated computer algebra program. At Draper Laboratory, he was a principal investigator in a DARPA program, the Evolutionary Design of Complex Software, where he conducted

research into advanced concepts for real-time software development environments based on dynamic object-oriented programming languages. From 1993 through 2013, he taught a course in business modeling at the [Harvard University Extension School](#).

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Chaco Canyon Consulting

Customized Executive Team-Building

Time is a precious resource. Because so many people in your organization depend on the availability of members of your executive team, time taken for executive team building creates more difficulties than does time taken for building other kinds of teams. Building your executive team must show a much higher return on time invested than we require for building other teams.

Knitting your team together takes time. Time for experiences, for reflection, for learning new ways, for trying out new ways, and trying again. To have much impact, we need a day together, without distractions.

Our format

By working with the members of the executive team in short sessions prior to bringing everyone together, I orient myself to the team's situation in advance. It helps me prepare for our working time together, which makes the time we do spend together far more productive.

As your facilitator for this team building exercise, it would be my responsibility to craft a safe "container" within which we'll be able to work, using the totality of our relationships with each other. You all know each other well, but you don't know me, and I don't know you. That's why we allocate part of our time to introducing me to you and you to me. For team-building efforts for teams other than executives, that time taken is a sustainable cost.

For executive teams, it's more of an issue, because time is so precious. An alternative is to include an additional short session prior to our team-building day, when we work together for about two hours to map out goals for our team-building day. This is productive in itself, but just as important, it gives us a way for me to get to know you and you to get to know me.

Results orientation

We focus on results. We create experiences that lead to new choices, new abilities, and new

behaviors that apply directly to what's happening in your company.

I've found that abstract tasks or games do help, but tasks that closely emulate what really happens during the workday are much more likely to yield insight and present opportunities for both individual and team learning.

We'll define and explore several problems that are either actual workplace problems, or close analogs of actual problems.

Customized content

What we do during our team-building event depends on what your team wants and needs. Some topics other teams have explored include:

- How Executive Teams are different
- The true costs of killing the messenger
- Using simulation to make better decisions



A full menu of group decision-making processes

Saying "No" and Hearing "No" respectfully and effectively

Names, labels, metaphors, and characterizations: costs, benefits, and consequences

The Pygmalion Effect and its side-effects

Making space for serendipity

ty

Mastering Meeting Madness: more with less

The dangers of WIIFM

"Sitting in" on the meetings of subordinates

Understanding and managing scope creep

How to create a positive political culture

Hows, whys and whens of rumor management

Managing resistance to change

Where we hold the event

We can work at your facility, but if we do, we risk interruptions and distractions. It's your choice, and we can work anywhere, but we recommend off campus. We require nothing fancy—not a resort, not a fancy club. A function room in a hotel will be perfectly fine.

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Program outline

Introductions and goal-setting

- Introductions all around
- Mapping the organization
- What we want to keep, change or add
- Goals for the team-building day

The day itself

- Reviewing and amending our goals
- Working toward the goals: what we can do now, what we will do from now on, and what we need to find out
- Homework

Summary and wrap-up

- What we learned today
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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The Race to the South Pole: The Power of Agile Development

The agile approach to product development can be regarded as a member of a class of methodologies that has probably been with us for a very, very long time — in all probability, millennia. Among contemporary processes, this class includes instances known as agile development, maneuver warfare, blitzkrieg, no-huddle offense, float-like-a-butterfly-sting-like-a-bee, lean manufacturing, and OODA. All of these process paradigms share a single central principle:

Success depends on being the most agile and efficient among the field of contenders.

In this program, we'll explore one particular illustration of the power of the agile approach: the Race to the South Pole. By comparing these two expeditions, we'll reach a deeper understanding of what makes agile processes so powerful. And we'll do it in the interesting and novel context of the race to the South Pole.

In this program, we use the history of this event to explore important lessons about project management and product development.

Here is a concise summary of the topics we cover, based on the Agile Manifesto:

1. Satisfy the customer early and often
2. Welcome changing requirements
3. Deliver frequently
4. Collaborate with the customer
5. Support, trust, and focus on highly motivated people
6. Face-to-face is best
7. Measure progress by what's working
8. Work at a pace sustainable by all
9. Value technical excellence and good design
10. Simplicity is essential
11. Self-organizing teams produce the best results
12. Regular reflection is the basis of behavioral advancement

This program is most suitable for keynote presentations and conference general sessions, or for large groups. Heavily illustrated with maps and original photographs, the stories bring the events of 1908 through 1912 — al-

most 100 years ago — to life. It is especially suitable for audiences that desire some relief from the sometimes-dry style of presentations that address similar subject matter. Audience interaction and table discussions about accompanying prepared discussion questions bring the lessons of the Race to the Pole into focus in contemporary experience.

Learning model

We usually think of product development skills as rather technical — free of emotional content. We hold this belief even though we know that our most difficult situations can be highly charged. Despite our most sincere beliefs, taking a project organization to the next level of performance does require learning to apply knowledge management skills even in situations of high emotional content. That's why this workshop uses a learning model that differs from the one often used for technical content.

Our learning model is partly experiential, which makes the material accessible even during moments of stress. Using a mix of presentation, simulation, group

discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

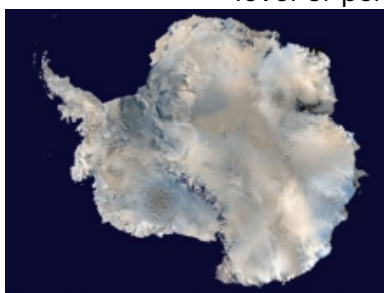
Project managers, program managers, business analysts, managers, executives, leaders and project team members. Participants should have experienced at least six months working with or as a member of a project team.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

Program outline

1. Introduction



**The Race to the South Pole
The Power of Agile Development**

Program outline

Introduction

- Amundsen and Scott: Background
- Antarctica as it was known in 1910
- The two expeditions compared
- Assessing our decision-making process

Agile Manifesto

We use the Agile Manifesto as a guide to comparing the expeditions. We examine each element of the manifesto with stories and photographs from the two expeditions.

- Satisfy the customer early and often
- Welcome changing requirements
- Deliver frequently
- Collaborate with the customer
- Support, trust, and focus on highly motivated people
- Face-to-face is best
- Measure progress by what's working
- Work at a pace sustainable by all
- Value technical excellence and good design
- Simplicity is essential
- Self-organizing teams produce the best results
- Regular reflection is the basis of behavioral advancement

Summary and wrap-up

- How we can apply these lessons in agile projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

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Chaco Canyon Consulting

The Race to the South Pole: Lessons in Risk Management for Leaders

On 14 December 1911, four men led by Roald Amundsen reached the South Pole. Thirty-five days later, Robert F. Scott and four others followed. Amundsen had won the race. Amundsen's party returned to base on 26 January. Scott's party perished. As historical drama, this is interesting enough, but to organizational leaders, the story provides invaluable lessons in risk management.

In this program, we explore important lessons about managing risk in organizational efforts of all kinds, including planned and unplanned change, complex projects, and mergers and acquisitions. We'll see why leaders are uniquely positioned to manage both foreseeable and unforeseeable risks.

The leaders of these two expeditions took very different approaches to risk management. By comparing their approaches, we can better understand the differences in the outcomes of the two expeditions. We'll explore a leadership-based approach to risk management that considers the interplay between three categories of risk sources: the individual, the organizational, and the environmental.

Attendees learn valuable lessons from history that apply immediately to managing current organizational efforts and planning new ones. The drama of history makes these lessons easier to learn, and much, much more memorable.

Course Structure and Content

Here's a description of the framework we use for analyzing the risks these expeditions faced:

The individual

In modern organizations, we aren't as isolated as these expeditions were in Antarctica. But the consequences of turnover, or of individual failures, flaws, and shortcomings can be just as severe, because of the requirement that we work within tight constraints on resources and schedule. Replacing anyone is

possible, but the impact on organizational efforts is often unacceptably severe.

The organization

In modern organizations, when we are actually aware of organizational risk, we can sometimes manage it. Too often, though, we

fail to perceive in our own organizations what is obvious to an outsider. Examining the management of organizational risk in these two historical examples helps leaders understand how difficult organizational risk management can be.

The environment

In modern organizations, we tend to overuse strategies that "fight" the external environment. Approaches that exploit the attributes of the environment to manage risk more cleverly are usually cheaper and much more effective.



**The Race to the South Pole
Risk Management for Leaders**

Learning model

This workshop uses a learning model that differs from the one often used for technical content. Our learning model is partly experiential, which makes the material more accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Project managers, program managers, business analysts, managers, executives, and leaders at all levels. Participants should have experienced at least six months working with or as a member of a team.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

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Program outline

Introduction

- Amundsen and Scott: Background
- Antarctica as it was known in 1910
- The two expeditions compared

Three categories of risk sources, with examples

- Individual
- Organizational
- Environmental

Risk management risk

- Definition
- Sources of risk management risk, with examples
- Comparing the two expeditions
- Mitigation strategies

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Changing How We Change: The Essence of Agility

Managing organizational change has been a favored topic now for over four decades. Books, articles, and entire consulting practices continue to be built around it. Apparently we haven't figured it out yet. Maybe it's time for a change in how we approach Change.

This program helps us create organizations that are resilient, adaptable, and transformable. Conventional organizational change practices address a simply stated problem: "My organization now does this; I want it to do that."

But modern organizations need *emergent change*. The time scale of needed change is now so short that organizational leaders cannot take time to learn of the needed changes and deploy programs to implement them. Modern time scales require that people deep in the organization be empowered to make needed changes, without threatening organizational order.

This is the essence of agile methods, where the collaboration has enough latitude to change its objectives in response to changing conditions. In this program, we examine methods for managing changes whose sources are the customer, competition, technology, social factors, and senior management.

Course Structure and Content

This insight-filled program deals with issues such as:

How can we ensure that the agile development methodology for products or services is compatible with other organizational processes, such as purchasing, or facilities management?

How can we deal with policy and procedural changes deployed by one part of the organization, when the people making those changes are unaware of the detailed impact of those changes on another part of the organization?



How can we encourage emergent change processes without jeopardizing orderly control of the organization??

This program is interactive. We deal with issues that have arisen, or are expected to arise, for the attendees themselves.

Learning objectives

Models of change and their domains of applicability

20th century Change Management in a 21st century world

What we mean by *emergent change*

A survey of organizational cultures, from chaotic to autocratic

The fundamentals of agile processes

The inherent differences between products and services, and between product development and service development

The differences between project-oriented and operations-oriented organizations

Whole-organization emergent change

Learning model

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Program outline

Introduction: A conceptual framework for Change

- The issue
- Attributes of changing systems: Resilience, Adaptability, and Transformability
- The psychology of Change: Satir's Change Model
- Terminology

Snags, hitches, difficulties, and issues

- Communicating Change
- Overlapping changes
- Special problems of changing blaming cultures
- Resistance and Psychological Reactance

Comparison of approaches to organizational change

- Conventional organizational change management
- Agile organizational change management
- Conventional change management risks
- Agile change management risks

Boyd's OODA model

- Introduction to the model
- Applications of OODA
- OODA and product lifecycles
- Strategic and tactical decisions in OODA terms
- Effects of situational complexity
- Applications of OODA to change management

Guidelines for agile organizational change management

- Emergent change and agility
- Ten guidelines for agile change management

The path to emergent change

Summary and wrap-up

- How we can apply these lessons in modern change management efforts
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Ten Project Management Fallacies: The Power of Avoiding Hazards

Most of what we know about managing projects is useful, but some of it “just ain’t so.” Identifying the fallacies of project management reduces risk and increases project success. Avoiding these traps can demonstrate the value of the project management profession, and your personal capabilities in particular. In this program we describe ten of these beliefs. We’ll explore the situations where these fallacies create risk most often, and suggest techniques for avoiding them.

For example, we all know that everyone is unique. But effort projections assume that every person produces one hour of output in one hour. And we assume that we can substitute people for one another—maybe not everyone for everyone, but we do believe that substitutions don’t affect projections. Our use of terms such as man-month, person-month, man-year, person-year, headcount, and FTE (full-time-equivalent) are evidence of this belief.

I call this the Fungibility Fallacy. It causes much of the delay and confusion in project-oriented organizations, because some people have rare skills. We schedule our projects so as to avoid human bottlenecks, but projects are somewhat unpredictable. If a project for which one of these people is scheduled happens to slip, that slip propagates through the organization like wildfire.

What to do about this, and how to avoid it, is a topic we’ll cover in this program. There are nine more such fallacies. Imagine working in an organization that successfully, and by design, avoids the hazards these false beliefs generate!

Course Structure and Content

This insight-filled program deals with issues such as:

- Why do so many organizations fall for these fallacies so easily and so often?
- How can we explain to senior management that their expectations can’t be met?
- What can we do when people claim that some of these fallacies are actually true?

Learning objectives

Learning objectives include:

Ten fallacies of project management

How to manage risks these fallacies generate

What situations elevate chances of adverse consequences from these fallacies

What situations create the most significant likelihood of affecting project plans

How to explain the fallacies to project teams

How to explain the fallacies to senior management

How the fallacies affect strategic planning

How the fallacies affect management



Learning model

This workshop uses a learning model that differs from the one often used for technical content. Our learning model is partly experiential, which makes the material more accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Leaders, executives, managers, project managers, and project team members. All levels of experience can benefit. There are insights both for people who work with project teams, and for people who interact with virtual teams—purchasing managers, legal professionals, infrastructure experts (IT, facilities, communications), and human resources professionals.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

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Program outline

Introduction

- Defining fallacies: “principles” that are invalid

What we need to know about a fallacy to avoid its hazards

- Statement of the “principle”
- Indicators of its influence
- How to prevent it taking root
- What to do when you find it in action

The ten fallacies

- The Fallacy of Positivism
- The Bad Actor Fallacy
- The Naturalistic Fallacy
- The Culturalistic Fallacy
- The Fungibility Fallacy
- The Linearity Fallacy
- The Normative Fallacy
- The Availability Heuristic
- The Grandiosity Fallacy
- The Invulnerability Fallacy

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

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Decision-Making for Team Leaders

Have you ever seen a team invest several meetings in deciding an issue that wasn't theirs to decide, only to have their decision overturned by the person who was actually responsible? Or have you ever seen a team try to decide an issue before certain critical information was available? These are some of the fundamental issues of effective decision-making for teams and groups.

In the modern knowledge-oriented workplace, unlike conventional 30-years-ago workplaces, everyone makes decisions that affect others. What distinguishes "decision-makers" from everyone else, often, is merely the number of people their decisions affect. Making effective decisions promptly is thus widely recognized as an important skill for us all.

Less widely recognized is what good decision-making requires. In this workshop we explore both the ingredients of good decision-making, and the obstacles to good decision-making.

Course Structure and Content

We deal with issues such as:

- How do strategic decisions differ from tactical decisions?
- Why do difficult decisions so often create interpersonal conflict?
- What is the relationship between decision-making and the frequency with which we find ourselves in "firefighting" mode?
- How do effective decision-making practices differ for individuals and groups?
- Must virtual teams approach decision-making differently from co-located teams?
- When the situation evolves rapidly, as in emergencies or when deadlines tighten, how can we adapt our decision-making?

Learning objectives

This program helps leaders and team leaders who want their teams to become more effective at making decisions. Learning objectives include:



How to recognize the basic decision-making patterns, and the conditions for which each is most suitable

Boyd's OODA model of combat, and how it relates to decision-making

The seven fundamental phases of all decision-making processes, and what each phase requires

Common obstacles to effective group decision-making

The effects of cognitive biases on group and individual decision-making

The causes and results of groupthink, group polarization, and other group dysfunctions related to group decision-making

Common failure modes in decision making

How leaders can create effective decision-making cultures

How to manage dominant individuals and bullies

Learning model

This workshop uses a learning model that differs from the one often used for technical content. Our learning model is partly experiential, which makes the material more accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Leaders and managers and technical project team members. Participants should have experienced at least six months as a member of a decision-making team.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

Program outline

Introduction

- A model of decision making
- Overview of tools for decision making
- How decisions go wrong

Boyd's OODA model

- Introduction to the model
- Applications of OODA
- OODA and product lifecycles
- Strategic and tactical decisions in OODA terms
- Effects of situational complexity on decision-making
- Effects of virtuality on decision-making
- Applications of OODA in the team context

Tools for orienting to the situation

- Definition of orienting
- Survey of tools for orienting

Dealing with cognitive biases

- Definition of a cognitive bias
- An example: the Planning Fallacy
- A survey of cognitive biases that affect decision-making
- Prevention and mitigation of their effects

Critical thinking and group decision-making dysfunctions

- Definition of critical thinking
- Ten project management fallacies
- Rhetorical fallacies
- A survey of group process dysfunctions

Tools for deciding

- A survey of decision-making tools
- Ten decision making patterns

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Influencing Outcomes Without Authority

In project-oriented organizations, some roles, such as that of the project manager, lie outside the authority hierarchy. People in such roles must accomplish their objectives without invoking the authority that organizational managers can use so effectively. They must negotiate for resources, budget, or schedule, without organizational authority. And often, they must secure the cooperation of others, also without authority. How is this even possible?

Success depends on recognizing that a series of negotiations are required. But it is also essential



to realize that one need not execute all negotiations personally. At times, one can stand aside, and permit, facilitate, or encourage negotiations undertaken by others. These methods, taken together, are perhaps best described as *influence*. And by their nature, these methods require sophistication in organizational politics.

Effective use of influence entails creating or participating in a sequence of exchanges. Some are formally acknowledged; some are so quickly proposed and accepted that they are hardly noticed as exchanges. In any case the exchange partners rely on the health of their relationship as the foundation of their deals. They know each other, trust each other, and respect each other's competence.

This program gives project managers and sponsors the tools and concepts they need to use influence in this way.

This insight-filled program deals with issues such as:

- How can I become more influential?
- When someone seeks a favor from me, how can I ask for something in exchange without triggering a confrontation?
- What can I do when someone I want to influence rejects my attempts?

How can I influence someone with more organizational authority than I have?

How can I influence someone who is a favorite of a powerful person, and who has rejected my previous attempts?

Course Structure and Content

Some of the most important learning objectives:

- What is influence? What is politics?
- The connections between influence, authority, and power
- How to influence others one-on-one
- How to influence groups
- Confusing winning with achieving the objective
- The seduction of dominance
- How to identify influencers
- How to build and maintain alliances
- Techniques for saying no

Learning model

This workshop uses a learning model that differs from that often used for technical content. It's partly experiential, which makes the material more accessible during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

This program emphasizes insights and techniques for using influence—as opposed to formal organizational power—to make things happen. The program is designed for both new and experienced team leaders or team sponsors, managers, project managers, and executives.

Program duration

Available formats range from 50 minutes to one day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- Distinguishing influence and power
- Four principal influence strategies
- Seven types of power at work
- The interrelationship of influence and power

Techniques of persuasion

- What is persuasion?
- General methods
- Specializations for invited persuasion
- Specializations for surreptitious persuasion
- Dealing with the effects of perceived self-interest
- Mediation
- Methods for generating invitations to persuade

Techniques of influence

- Cialdini's Six Principles of Influence
- Ten influence techniques acceptable in the knowledge workplace
- On being manipulated yourself
- Avoiding manipulation of others

Corrosive processes

- Overview of factors that reduce or corrode influence
- Example: Distinguishing being right from being seen as right
- Managing the cost of being right
- Other corrosive processes

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Team Development for Leaders

An entire industry is built on what we call *team building*, in which we take a group of folks, put them through a series of simulations and games, and produce a team. Often, it works pretty well. People do form strong relationships, and some of these relationships are lasting.

But it doesn't work all the time, and part of the reason is that what happens at work is different from what happens in team-building workshops. Typically, after a few months, we start to see some of the same unhelpful behaviors that we saw before the workshop.



This program gives leaders the tools and concepts they need to help groups become teams, and tools for keeping them from drifting back to being groups.

- This program deals with issues such as:
- Are we a team, or just a group?
 - Why can't we collaborate effectively?
 - How do interpersonal relationships affect group processes?
 - How can we benefit from the leadership abilities of people who don't have formal leadership roles?
 - How can we deal effectively with virtuality, split assignments, and reassignments?
 - What makes a kickoff meeting work well?
 - What are re-kickoffs? Why are they needed?
 - What behavioral norms does my team need?
 - With our minimal budget and tight schedule, how can we have celebrations that people enjoy?
 - Why are some milestones so unappreciated?
 - What makes a meeting agenda effective?
 - Why do we have such trouble making decisions?

Course Structure and Content

Here are just a few of the most important learning objectives. Participants learn:

- How teams and groups differ
- The five stages of a team's life cycle
- The costs of team development
- How operational teams differ from task teams
- How team-building and team maintenance differ
- The basics of interpersonal communication
- How organizational policy can constrain team effectiveness
- Common forms of team dysfunction
- Internal and external obstacles to team effectiveness
- What kind of work is best performed by teams as opposed to groups
- Operating patterns for teams
- How virtual teams differ from co-located teams
- How to build high-performance virtual teams

Learning model

This workshop uses a learning model that differs from the one often used for technical content. Our learning model is partly experiential, which makes the material more accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Project managers, program managers, business analysts, managers, executives, and leaders at all levels. Participants should have experienced at least six months working with or as a member of a team.

Program duration

Fifty minutes to one day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

Program outline

Introduction

- What is a team? How do teams differ from groups?
- Team development goals
- Overview of effective team development methods

Team development as a process

- How teams develop
- Six practices that accelerate team development
- Dealing with intra-team conflict
- The true cost of retiring a team

Corrosive processes

- What kinds of processes tend to undermine team formation efforts
- The effects of changes in team composition
- Risks of membership in multiple teams
- Risky practices of team management

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Conflict Resolution Skills for Leaders

Conflict is inherent in collaborations. When it's constructive, and when we manage it constructively, it produces better outcomes. But in other circumstances, it can obstruct success. In this program, we explore the connections between collaboration outcomes conflict in both its forms. And we emphasize the skills leaders need most.



Conflict is contention between people who have differing objectives, needs, perspectives, or values. At work, how we attain those objectives is the focus of the conflict, because people can understand organizational objectives differently; particular parts of the organization can have parochial interests; and personal objectives frequently enter the mix. But conflict need not be limited to differences about objectives. It can focus on anything at all. Anything.

Conflict can generate which debates that lead to better outcomes than any of the contenders could have achieved alone. And it can also have destructive forms that damage relationships and limit the possibilities of fruitful collaboration.

Some leaders feel responsible for ensuring that the parties to conflicts find the "right" resolutions. In this program, we show why leaders should focus instead on helping the contenders find resolutions that preserve or restore their ability to collaborate. This might require temporary adoption of adequate, but less-than-optimal resolutions—a superior alternative to significant and permanent loss of collaborative capacity. That's one reason—and there are many more—why we view the leader's task as one of conflict management, rather than conflict resolution.

Course Structure and Content

- This program deals with issues such as:
- What is conflict? Or conflict management?
- How can we distinguish between constructive conflict and destructive conflict?
- Do command-based approaches work?
- Are there special challenges in virtual conflict?

How do people respond to conflict? What is "fight or flight?"

What are the five conflict management modes?

Should we resolve conflict immediately?

Are the skills needed for resolving constructive conflict and destructive conflict the same?

Learning objectives:

Diagnose root causes of conflict within teams

Recognize conditions internal to teams that escalate destructive conflict

Become familiar with standard tools for resolving constructive conflict

Become familiar with standard tools for resolving destructive conflict

Understand under what conditions deferring resolution might be an appropriate choice

Recognize and identify the five conflict management modes

Understand the role of influence in conflict generation, escalation, and resolution

Become familiar with the conflict life cycle

Learning model

This workshop uses a learning model that is partly experiential, which makes the material more accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Project managers, program managers, business analysts, managers, executives, and leaders at all levels. Participants should have experienced at least six months working with or as a member of a team.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- Defining conflict
- Distinguishing constructive and destructive conflict
- A systems view of conflict
- How conflicts sustain themselves

The dynamics of destructive conflict

- How destructive conflicts are born
- The roles of leaders and managers in sustaining destructive conflict
- How organizational policy affects destructive conflict

Tools for resolving conflicts

- Resolving constructive conflicts
- Resolving destructive conflicts
- Externalization as a resolution technique
- The uses and abuses of mediation

Anti-tools for resolving destructive conflict

- Some conflict resolution methods that actually make things worse
- A survey of techniques to avoid and when

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Strategic Thinking for Project People

Project managers, project teams, and project sponsors spend most of their days trying to reach the project objective, but their focus is the “next doable step,” or perhaps the next two or three doable steps. This kind of thinking is *tactical*.

When we think strategically, we emphasize the longer-range objective. Effective strategy can dramatically reduce the level of tactical effort required to achieve the longer-range objectives.

At every level of detail of execution, there is both strategic thinking, which is focused on the goal, and tactical thinking, which is focused on how we achieve it. For example, when designing a meeting agenda, the tactical thinker might order the agenda items in declining order of importance, to ensure that important items are addressed. The strategic thinker, on the other hand, might manage the risk of time depletion by designating a timekeeper, allocating time to each item, and alerting the attendees to the importance of the schedule. This approach removes a constraint from the agenda, enabling the agenda designer to place items in an order that might be more efficient, thus shortening the meeting.



Course Structure and Content

This program deals with issues such as:

- Project planning with business strategy in mind
- Designing agendas
- Reporting and presenting uphill
- Strategic politics
- Planning for disrupted plans
- Designing durable deals
- Techniques for critical thinking
- Exploiting situational momentum

Learning objectives

- Know the difference between tactics and strategy

Understand how strategy applies in everyday situations

Learn how to apply strategic thinking in communications, especially when communicating with groups and with management

Apply strategic thinking to career decisions

Know how to design durable deals with peers

Understand and exploit situational momentum

Learning model

This workshop uses a learning model that differs from the one often used for technical content. Our learning model is partly experiential, which makes the material more accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

This program emphasizes insights and techniques for using strategic thinking in everyday workplace interactions. The skills transferred are both “horizontal” and “vertical.”

Horizontal skills include matters such as apologies, difficult conversations, and gathering organizational intelligence.

Vertical skills include issues such as leading meetings attended by people who outrank you, dealing with constraints from high in the organization, and motivating or influencing others.

The program is designed for both new and experienced team members, team leads, managers, project managers, and team sponsors.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

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Program outline

Introduction

- Distinguishing strategy and tactics in everyday life
- Examples of strategic decisions for three time scales

The tactics trap

- Recognizing the tactics trap
- Extricating yourself: it's easier than it seems
- How to let go of attachments

Project strategies

- Project planning with other projects in mind
- Planning for your own exit
- Strategic delegation and development for resource management
- Strategic delegation for meeting management
- Risk management strategies

Career strategies

- How your projects affect your career
- Image management strategies
- The importance of politics and political skills
- Defenses for devious political tactics

Summary and wrap-up

- How we can apply
- these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Creating High Performance Virtual Teams

Many people experience virtual teams as awkward, slow, and frustrating. To some, the term *high performance virtual team* is an oxymoron. Even when most team members hail from the same nation or culture, and even when they all speak the same language, geographic dispersion or the presence of employees of multiple enterprises can be enough to exclude all possibility of high performance. If virtual teams can deliver the goods within 2x the estimated budget and schedule, some people are grateful for almost adequate performance. Hopes of high performance usually evaporate somewhere near the middle of the kickoff meeting.

The problem isn't that virtual teams are virtual. Rather, it is that we lead, manage, and support virtual teams in ways



that are too much like the way we lead, manage, and support co-located teams. This is good news, because we can change our approach.

This program gives leaders and managers the tools and concepts they need to help their teams achieve high levels of performance, and to help them maintain high performance once they achieve it. It deals with issues such as:

Do we really need to meet in person for a kickoff? What happens if we don't?

What is the effect on virtual team effectiveness of the so-called lean-and-mean policies?

Compared to co-located teams, why do virtual teams take so much longer to accomplish even the simplest things?

Do we really have to spend money on travel to support a virtual team? Isn't the whole point to avoid travel?

Why do some project managers who were successful managing co-located efforts have trouble managing virtual efforts?

Why do our software virtual teams keep asking for videoconference capabilities?

Why is conflict on virtual teams so much more difficult to deal with? So much more common than conflict on co-located teams?

Course Structure and Content

Learning objectives

Understand why virtual teams face such complex operating environments

Appreciate the budgetary and schedule consequences of merely-adequate performance

Understand why we must reset expectations and operational practices with respect to calendars and wall-clock time

Learn how to increase effectiveness by treating as a project the deployment and maintenance of a team's communications substrate

How to run a virtual meeting effectively

Understand the skills of remote facilitation

Understand the elements of Simons' Four Spans model of high performance

Learning model

This workshop uses a learning model that is partly experiential, which makes the material more accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

This program emphasizes insights and techniques for creating (or asking for) supportive environments for virtual teams. The program is designed for both new and experienced team leaders or team sponsors, managers, project managers, and executives.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- The challenges of the virtual environment
- How we (usually) fail to meet those challenges
- Drivers of failure: why we keep making the same mistakes
- Strategies for success in the virtual environment

The psychology of the virtual environment

- Where the challenges of the virtual environment come from
- Why conventional methods fail to address those challenges
- The psychology of cost control: how it leads to uncontrolled costs

Enabling high performance

- Distinguishing teams from work groups
- Definition of a high performance team
- Strategies for enabling high performance: Simons' Four Spans model
- Effective cost control in the virtual environment
- Managing virtual politics

Summary and wrap-up

- How we can apply these lessons in modern projects
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Leading Virtual Meetings for Real Results

In some fields, virtual teams are more common than the old-fashioned face-to-face teams. Everything about virtual teams is more difficult than face-to-face teams—most especially, meetings. Virtual meetings are more difficult to schedule, more difficult to run, and take longer to do even the simplest things.

What's a virtual team? You'll find various definitions, but the main features of virtual teams are that their people are dispersed geographically, they meet in person infrequently or never, and they come from different organizations. These factors conspire to make what's usually easy, difficult—and what's usually difficult, impossible.



This program helps people who sponsor, lead, or participate in virtual meetings. Participants learn how to:

- Classify virtual meetings and anticipate their peculiar challenges
- Understand the effects of crossing the boundaries of organizations, language, and culture
- Deal with destructive virtual conflict
- Avoid consuming meeting time unnecessarily
- Convey appreciation to participants
- Estimate time requirements
- Enlist assistance from participants
- Create a sense of teamwork

Participants learn strategies and tactics to make the virtual environment productive and effective.

Program structure and content

We learn through presentation, discussion, exercises, simulations, and post-program activities. We can tailor the program to your specific challenges, or we can deliver a tried-and-true format that has worked for other clients. Participants usually favor a mix of presentation, discussion, and focused exercises. Based on attendee interest, topics will include, for example:

Virtual sidebars, interruptions, distractions, and inattention

Relationships and lack thereof

Tailoring exhibits for virtual meetings

Choosing substrate technologies: audio, video, and Internet

Dealing with late arrivals and absentees

Language issues

Virtual negotiation

Dealing with virtual conflict

Remote facilitation

The importance of scheduling breaks

Choosing a time to meet

Agendas are not enough

When power attends the meeting

Controlling attendance

Sarcasm and other risky patterns

Whether you're a veteran of virtual meetings, or a relative newcomer, this program is a real eye-opener.

Learning model

When we learn most new skills, we intend to apply them in situations with low emotional content. But this program's concepts and techniques are most needed in highly charged situations. That's why we use a learning model that goes beyond presentation and discussion—it includes in the mix simulation, role-play, metaphorical problems, and group processing. This gives participants the resources they need to make new, more constructive choices even in tense situations. And it's a lot more fun for everybody.

Target audience

Managers of global operations, sponsors of global projects, team leads, project managers, business analysts, and team members.

Program duration

Available formats range from 50 minutes to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

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Program outline

Introduction

- The fundamental problems of virtual meetings
- Introduction to General Morphological Analysis (GMA) and Zwicky boxes
- Classifying virtual meetings
- Contexts in which virtual meetings are held
- Flavors of virtual meetings
- Modes of virtual meetings
- Applying GMA to Context • Flavor • Mode

Managing risks in virtual meetings

We use an approach based on risk management to make virtual meetings more effective.

- The eight risk families that govern virtual meetings
- Six classes of risk mitigations
- Overall strategy for managing risks in virtual meetings
- Generic mitigations useful across all risk families
- Recognizing and dealing with performance issues
- Examples of selecting mitigations for particular [Context • Flavor • Mode] Zwicky boxes

Summary and wrap-up

- How we can apply these lessons to actual meetings
- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

Rick Brenner is principal of Chaco Canyon Consulting. He works with people in dynamic problem-solving organizations who make complex products or deliver sophisticated services that need state-of-the-art teamwork, and with organizations that achieve high performance by building stronger relationships among their people. In his 25 years as a software developer, software development manager, entrepreneur, consultant and coach he has developed valuable insights into the interactions between people in a problem-solving environment, and between people and the media in which they work.

Mr. Brenner has held positions at Symbolics, Inc., and at Draper Laboratory, both of Cambridge, Massachusetts. At Symbolics, he was responsible for development of all products based on Macsyma, a large and very sophisticated computer algebra program. At Draper Laboratory, he was a principal investigator in a DARPA program, the Evolutionary Design of Complex Software, where he conducted research into advanced concepts for real-time software development environments based on dynamic object-oriented programming languages. From 1993 through 2013, he taught a course in business modeling at the [Harvard University Extension School](#).

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Managing in Fluid Environments

Most people now work in environments that can best be characterized as fluid, because they're subject to continual change. We never know what's coming next. In such environments, managing — teams, projects, groups, departments, or the enterprise — often entails moving from surprise to surprise while somehow staying almost on track. It's a nerve-wracking existence.

Modern enterprises are steadily becoming more and more dynamic. The environments in which most people find themselves can perhaps best be characterized as fluid, in the sense that they are subject to continual, if not continuous, change. No status quo remains in pace for very long. This workshop provides numerous tools that help managers who work in fluid environments.

In these environments change is predictable in the large, but not in the details of what, when, where, or how much. For instance, we can be fairly certain that sometime soon we will experience a hiring freeze, a contractor price increase, unexpected voluntary turnover, staff raids by other projects, and much more.

Course Structure and Content

In this program, we explore an approach to management that relies on five competencies:

Knowing your situation

If the goal is reduction of the time required to adapt to a changing environment, situational awareness is essential.

Planning for resilience

Resilient plans are more easily adapted to change, but planning for resilience is a bit different from conventional planning.

Mastery of change management

Conventional change management assumes that change events are spaced widely enough so that we can adapt to one change before the next comes along. In fluid environments, we must move to the next level of mastery.



Mastery of logistics

Logistics capabilities must also deal with change in ways that are unique to fluid environments.

Effective force protection

In fluid environments, staff frequently become unavailable, unless we take precautions to ensure their availability.

We show attendees eight tools for enhancing situational awareness, two fundamental principles of resilient planning, two models of change, and four fundamentals of logistics and force protection.

Learning Model

We usually think of management skills as rather free of emotional content. We hold this belief even though we know that our most difficult situations can be highly charged. Despite our most sincere beliefs, taking an organization to the next level of performance does require learning to apply specific skills even in situations of high emotional content. That's why this workshop uses a learning model that differs from the one often used for technical content.

Our learning model is partly experiential, which makes the material accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Leaders and managers of dynamic, problem-solving organizations.

Program duration

Available formats range from 50 minutes to one half-day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

Program outline

Below is an outline of the program:

Introduction

- What Is a Fluid Environment?
- Establishing the learning environment
- Gauging the level of fluidity in the organization

The Challenges of Fluid Environments

- Problems for managers
- Where the problems come from
- The nature of change in the fluid environment
- Limitations of conventional change management methodologies

Five competencies for management in fluid environments

- Situational awareness
- Resilient planning
- Change management
- Logistics
- Force protection

Tools for Fluid Environments

- Situational awareness
- Resilient planning
- Change management
- Logistics
- Force protection

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Creative Conflict Workshop

When Conflict occurs in a business context, it might not be restricted to business issues. Whether it's interdepartmental, intergroup, or interpersonal, it can sometimes escalate enough to endanger people, careers, projects, or companies.

If we believe that we can somehow eliminate Conflict, or that Conflict is an enemy of productivity, then we're in conflict with Conflict itself. This program, which is available in workshop, seminar, or course formats, provides the tools people need to convert Conflict from a threatening foe to an important ally. Participants learn:

To notice the difference between Creative Conflict and Destructive Conflict. They come to see Creative Conflict as a natural, positive force in the business environment.

To accept that Conflict itself is not manageable—only our responses to Conflict are.

To understand that much of the discomfort we feel in Conflict arises from experiences in our pasts, rather than from what's happening here and now.

To grasp what's happening here and now, to gain some measure of control of our responses to Conflict. This enables us to use Conflict as a force for creativity.

Participants learn to detect destructive Conflict in its earliest stages, and gain new insight into those elements that turn Creative Conflict into more destructive forms. They learn about the different types of Destructive Conflict, and acquire new tools for dealing with each type. They learn how (and when) to convert Destructive Conflict to Creative Conflict.

Participants experience an energetic and humorous atmosphere that many readily carry back to work.

Program structure and content

We learn through exercises, simulations and post-program activities. In a full-day or half-day session, we explore where Conflict comes from, and where our responses to Conflict come from.

We apply models of Conflict and team behavior to show participants how they might:

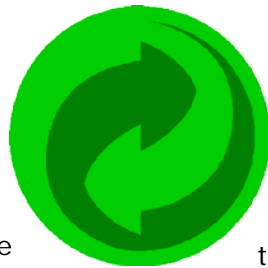
Distinguish the business and personal dimensions of Conflict.

Maintain a feeling of centeredness.

See what's happening here and now, as opposed to anticipating catastrophes that might happen someday.

Contend with their partners in Conflict without threatening them.

Deal with interpersonal issues before they become project issues or even organizational issues.



Learning model

When we learn most new skills, we intend to apply them in situations with low emotional content. But knowledge about how people work together is most needed in highly charged situations. That's why we use a learning model that goes beyond presentation and discussion—it includes in the mix simulation, role-play, metaphorical problems, and group processing. This gives participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Leaders, executives, managers, project managers, business analysts, and team members. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

Available in formats from one hour to one day. The longer formats allow for more coverage or more material, more experiential training and deeper understanding of issues specific to your workgroup. ■

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- What is Conflict?
- Establishing the learning environment
- Gauging the level of Conflict

The Anatomy of Business Conflict

- Why dealing with Conflict is so difficult
- Creative and Destructive Conflict
- The value of Creative Conflict
- Signatures of Destructive Conflict

Choice

- The role of Choice in Conflict
- Expanding the range of available choices
- Freedoms and Constraints

Interactions

- Models of personal interactions
- Rules for interactions
- Avoiding train wrecks
- Interaction laboratory

The Role of Context

- Systemic causes of Conflict
- Measuring a group's temperature
- Temperature regulation
- The effects of Change

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

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Chaco Canyon Consulting

Decision-Making from the Inside Out

Decision-making is the process of choosing. It can be easy or difficult, pleasure or torture. When a decision is emotionally difficult, the difficulty usually comes from within—it doesn't depend on whether we're choosing between conflicting goals, or between action and inaction, or between a set of options we wish we could avoid altogether. When decision-making is frustrating, anger-inducing, endlessly recycling or continually delayed, chances are good that the difficulty comes from within. By examining our inner process, we can improve our decision-making.

Group decision-making is no different. When a group has difficulty with a decision, or with all decisions, chances are good that the problem lies not in what's being decided, but in the dynamics of the group itself.

To improve decision-making, in groups or as individuals, begin by looking at the processes we use. But that's really difficult to do, because we get in our own way. Our desire to see ourselves as decisive and effective interferes with our ability to examine our effectiveness.

We can circumvent this interference by adapting a model used by Virginia Satir, a pioneering family therapist who applied systems thinking to human relationships. In our model, we represent the elements of personal or group decision-making as an Executive Committee. We then examine the workings of this committee both to learn how it works and to suggest interventions to help it work more effectively.

The model helps us look at our inner process, or at our group's process, from the outside, using a technique called *externalization*. While standing outside, we can see things more objectively. It is this objectivity that gives the model its power to transform individuals and groups, to move them to new levels of effectiveness rapidly.



Program structure and content

We learn through exercises, simulations and post-workshop activities, exploring how we make decisions by getting acquainted with our personal Executive Committees. We learn who they are, how they function, and what their strengths and weaknesses are.

We then apply the model to examine real decisions, exploring how our Executive Committees work on real problems. Participants learn:

- How to detect difficulty in decision-making
- What types of decisions are most likely to present difficulty
- What interventions will be most effective for those kinds of decisions
- How to facilitate decision-making when difficulty appears in the group context

Learning model

When we learn most new skills, we intend to apply them in low-intensity situations. But knowledge about how people work together is most needed in highly charged situations. That's why we use a learning model that goes beyond presentation and discussion—it includes in the mix simulation, metaphorical problems, and group processing. We make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Leaders, executives, managers, project managers, business analysts, and project team members. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

Available in formats from one hour to one day. The longer formats allow for more coverage or more material, more experiential training and deeper understanding of issues specific to your workgroup. ■

www.ChacoCanyon.com
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Program outline

Introduction

- What is Decision-Making?
- Establishing the learning environment
- Assessing our decision-making process

The Executive Committee Model of Decision-Making

- Meet your executive committee
- How the model works
- What the model can tell you

Applying the Executive Committee Model

- Personal decision-making
- Group decision-making

Interventions

- Decision-making pitfalls: anticipation and detection
- How to intervene effectively
- Intervention laboratory

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Great Teams Workshop

Great teams don't just happen. The people who belong to them, and the organizations the teams belong to, make them great teams. It takes skill, resources, commitment, and—usually—the right guide. That's my role. I might be that guide for your team.

Great teams are rare. To make your team a great team, the first step is to recognize how rare the desire for greatness truly is. Most teams are focused on putting out yesterday's brush fires. They have little energy left to think about making the team a great team. But you're one of the lucky few that thinks about greatness. And that puts you a long way down the path to achieving it.

We must do three things to make a team great. Keep what's working, Change what isn't working so well, and Add some new things that might work better than what you're doing now. Keep, Change and Add. Simple, but not easy.

And as the team develops, we have to evolve what we Keep, what we Change and what we Add. Choosing wisely and choosing the timing wisely are delicate matters.

It takes commitment—months, rather than weeks—because changing a team requires changing the relationships between the people on the team, and changing the approaches of the team members themselves.

In the Great Teams Workshop, we'll take a look at your team—together. We'll learn its strengths and weaknesses. We'll explore its limitations. We'll uncover which limitations we can deal with right now, and which ones we have to accept for the time being. This examination can be difficult, because we have to see things as they really are. But we can do it if we follow a process of purposeful change:

Becoming aware: We uncover the current state of things.

Accepting: Through discussion and simulation we explore the premise that you can change only what you accept as real.

Acknowledging: Whatever does change will change only as a result of actions that we ourselves take.

Charting: The team devises a plan for making the changes.

Executing: The changes begin. Based on results, we might revise the plan, or even discover new insights we had previously missed. We flex.

Changing: With experience we learn about changing, and we change how we change.

Program structure and content

We learn through exercises, simulations and conversation. The order of what we actually do is driven almost completely by the team's needs, and the content itself is chosen from a library I've built up over the years. Some of it is common to many teams, some will be devised on the fly for your unique situation.



Learning model

When we learn most new skills, we intend to apply them in situations with low emotional content. But skills for working together are most needed in highly charged situations. That's why we use a learning model that goes beyond presentation and discussion—it includes in the mix simulation, metaphorical problems, and group processing. In that way, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Executives, leaders, managers, business analysts, and project managers. We work either with individuals, with entire teams or with groups drawn from many teams.

Duration

Available in formats from one to two days. The longer formats allow for more coverage and deeper understanding of issues specific to your workgroup. Usually we have one or two follow up sessions, depending on need. ■

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- What is a great team?
- Establishing the learning environment
- Defining the goal

Change

- Models of change
- The Satir Change Model
- Applying the Satir Change Model

Discovering what is

- Organizational mapping
- Team mapping
- Keep, Change and Add

Applications

- The use of simulations
- Developing targets to explore
- Running simulations
- Rediscovering what is

Interactions

- Models of personal interactions
- Rules for interactions
- Avoiding gridlock
- Dealing with duels and feuds
- Interaction laboratory

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

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Chaco Canyon Consulting

Organizational Politics For People Who Hate Politics

Have you ever felt powerless to implement an important new idea? Have you ever been “blind-sided” at a meeting? Have you ever lost two good employees because you could find no way to keep them from attacking each other?

These are some of the issues of organizational politics. Many of us have become enmeshed in them from time to time, but we've also known some people who seem to be able to engage and prosper. How is that done? We'll cover the territory from three perspectives.

Politics of the Self Unless we can manage our own inner politics, we have little hope of mastering organizational politics. We've all had the experience of “acting without thinking”—yet, in a literal sense, all action requires thinking. So when we act without thinking, we're really acting without awareness. We'll explore possible paths to increasing self-awareness—for practical purposes—and learn what immediate benefits become available to the self-aware.

Dyadic Politics: Relationships Close, trusting relationships are essential for health and political success. In a dynamic workplace, where people come and go ever more rapidly, forming these relationships quickly is a decided advantage politically, and makes work a heck of a lot more fun. We'll explore what works for you personally, and try to broaden your skills in relationship formation and maintenance.

Politics and the Organization Wherever we sit in the hierarchy, the culture of the organization is more powerful than we are. We can influence it, but we cannot control it. Success lies in understanding our limitations and searching for solutions that respect our limitations. We'll explore several techniques for navigating the organizational sea, and for knowing when to seek safe harbor.



Program structure and content

We learn through exercises, simulations and post-program activities. We explore these aspects of politics, and apply models of group behavior to show participants how they might:

- Distinguish the three domains of political interaction.
- Develop enhanced self-awareness and situation-awareness.
- Maintain a feeling of centeredness.
- Become more adept at seeing things from the viewpoints of others.
- Recognize political ploys in routine patterns.
- See opportunities that might now be going unnoticed.
- Become more skilled at choosing from among political options.

Learning model

When we learn most new skills, we intend to apply them in situations with low emotional content. But knowledge about how people work together is most needed in highly charged situations. That's why we use a learning model that goes beyond presentation and discussion—it includes in the mix simulation, metaphorical problems, and group processing. We make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Executives, leaders, managers, business analysts, and project managers. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

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Program outline

Introduction

- What is Politics?
- Establishing the learning environment
- Gauging the level of political activity in the organization

The Anatomy of Organizational Politics

- Politics within: the Self
- Politics between: Relationship
- Politics among: Organization

Trouble or Triumph?

- Constructive and destructive politics
- Coping strategies: Why so many of us have difficulty with politics
- The role of Choice in politics
- Expanding the range of available choices
- Choosing from among choices

Interactions

- Models of personal interactions
- Rules for interactions
- Avoiding gridlock
- Dealing with duels and feuds
- Interaction laboratory

Summary and wrap-up

- What to do tomorrow
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Chaco Canyon Consulting

The Organizational Politics of Risk Management

Let's suppose that it's your job—or part of your job—to identify risks that might arise during a major reorganization. You recognize that the engineers in the Springfield facility won't take well to being relocated and combined with Portland. You also know that the designers of the reorganization justified their plan, in part, on the savings from that consolidation. You think it only wise to create response plans to mitigate the consequences of product development delays caused by voluntary turnover among those engineers. You're also aware that even broaching these ideas is politically risky. Does this conundrum feel at all familiar? In its various forms, it's quite common.

What happens in these situations is usually subtle and often undetectable. Without realizing it, some risk managers might shade projections so as to reduce the political risk of raising the issue. With each new shaded projection, the risk plan gradually becomes increasingly unrealistic. Its value to the organization is degraded to the extent that politics intimidates the risk planner.

Political dynamics isn't responsible for all defects in risk processes, but controlling the impact of politics would help. In this program we explore ways not to eliminate the impact of politics on the risk process; rather, the goal is control. This distinction is important because eliminating all politics from the risk process — if such a feat were possible — would eliminate the creative effects of politics along with the destructive.

The framework for Enterprise Risk Management developed by the Treadway Commission provides a useful way to explore the effects of organizational politics. We will examine how politics affects the six components of that framework.

We can view the contributions of organizational politics to all these processes, taken together, as components of risk management risk: the risk that the overall risk management process is inadequate.

Understanding the sources of political contributions to risk management risk is a good beginning. But what we really need is a means of controlling how politics influences risk management. We'll then explain and explore the six principles of controlling political effects on risk management.

Learning model

The one-day and two-day formats of this workshop include copies of *303 Secrets of Workplace Politics* for all participants and their supervisors. Ideal for those who like to supplement their learning by reading, or as a reference for later study. We usually think of workplace skills as if they were free of emotional content. We hold this belief even though we know that our most difficult situations can be highly charged. Despite these sincere beliefs, taking personal or organizational performance to the next level does require learning how to apply what we know even in situations of high emotional content. That's why this workshop uses a learning model that differs from the one often used for technical content.

Our learning model is partly experiential, which makes the material accessible even during moments of stress. Using a mix of presentation, simulation, group discussion, and metaphorical team problems, we make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Executives, risk managers, managers, business analysts, project managers, and leaders at all levels. We work either with individuals, or with an entire team or with a group drawn from many teams.

Program duration

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Program outline

Introduction

- What is organizational politics?
- The six components of the COSO framework for Enterprise Risk Management
- How organizational politics can influence the risk management process

Risk management risk

- What is risk management risk
- The effects of organizational politics: elimination or control?
- The six principles of controlling politics

Gaining control of organizational politics

- Kotter's Eight Guidelines for Organizational Change
- Tailoring Kotter's Guidelines for the politics of risk management
- Metrics for monitoring political effects

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

Rick Brenner is principal of Chaco Canyon Consulting. He works with people in dynamic problem-solving organizations who make complex products or deliver sophisticated services that need state-of-the-art teamwork, and with organizations that achieve high performance by building stronger relationships among their people. In his 25 years as a software developer, software development manager, entrepreneur, consultant and



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Chaco Canyon Consulting

The Politics of Meetings For People Who Hate Politics

Suppose you're preparing for a team meeting in about an hour. It's your meeting, and you expect a difficult discussion, because a very polarizing issue must be decided by the close of business today. As you're puzzling through the problem of how to handle the mess, your boss phones to tell you that the VP of Marketing called her, and he wants to "sit in on this one."

Are you confident that you can lead the team through such a complex situation effectively?

Running an effective meeting involves a lot more than having the right room, the right equipment, and the right people. With meetings, the whole really is more than the sum of its parts. How the parts interact is as important as the parts themselves. And those interactions are the essence of politics for meetings. This program explores techniques for leading meetings that are based on understanding political interactions, and using that knowledge effectively to meet organizational goals.

People need to feel heard, they hate to waste time, and the chair needs to know how to handle sticky situations. This insight-filled program deals with issues such as:

- What to do when powerful people "sit in"
- Where to sit in the room
- How to craft an agenda that drives the meeting
- How to prevent duels and how to intervene when necessary
- How to prepare and run telemeetings
- How to handle handouts
- How to plan and run an "issues-only" meeting

Most of us begin our careers not leading meetings, but participating in them. As we advance in our organizations, we tend to carry this participation-oriented stance with us, and that causes problems. As leaders, we focus too often on participating in meetings, rather than leading them.

Managing a meeting begins with managing yourself. To keep your head clear, and to be ready to handle the sticky issues that sometimes arise, you must limit your load. In this workshop

we provide a general framework that helps meeting leaders focus on leading the meeting rather than participating in its content.

We learn through exercises, simulations and post-workshop activities. We explore these aspects of politics, and apply models of group behavior to help participants learn:

Learning goals

- As chair, how to ask for (and receive) the right kind of help from the meeting attendees
- How to establish a sound political foundation for the meeting before it even starts
- How room geometry and seating position affect human behavior
- How and when to intervene in toxic conflict
- The seven most deadly logical fallacies and how to prevent their use
- The art of crafting agendas and using the parking lot

Learning model

When we learn most new skills, we intend to apply them in situations with low emotional content. But knowledge about how people work together is most needed in highly charged situations. That's why we use a learning model that goes beyond presentation and discussion—it includes in the mix simulation, metaphorical problems, and group processing. We make available to participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Executives, leaders, managers, business analysts, and project managers. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

Available in formats from one hour to one day. The longer formats allow for more coverage or more material, more experiential training and deeper understanding of issues specific to your workgroup. ■

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- What is a meeting?
- What is politics?
- Establishing the learning environment
- Defining the goal
- What is Politics?

Managing the environment

- What to look for in a room: size, ventilation, lighting, acoustics
- All about equipment: seating, tables, projectors, laptops, *etc.*
- Choosing where to sit (and seat others)
- Dealing with environmental troubles

Managing the agenda

- Gathering agenda items is a political act
- Construct the agenda with politics in mind
- Agenda writing skills
- Keeping time with timekeepers
- Parking lots and their attendants

Leading the attendees

- The benefits of asking for help
- How to arrange seating
- The elements of fair debate
- Three discussion frameworks and their uses

Dealing with toxic conflict

- Detecting toxicity early
- Dealing with duels and explosions
- Toxic alliances
- What to do when you're involved yourself

Dispersed meetings and their politics

- Symmetric and asymmetric meetings
- The costs of asymmetry
- Dealing with organizational alignments
- The effects of dispersion: time zones, language, *etc.*

The politics of chairing

- Inherent conflicts of interest
- Perceived (as opposed to real) conflicts of interest
- How to choose a facilitator
- When Power attends the meeting

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

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Chaco Canyon Consulting

Human-Centered Risk Management

Effective risk management is a critical success factor for most projects. Although most of us can do a pretty good job assessing technological risks, risks related to human behavior — and misbehavior — tend to resist many of our best efforts.

This program provides executives, managers, business analysts, project sponsors, project managers, and risk managers a framework for assessing and monitoring risks that relate to human behavior — including the behavior of individuals, teams, organizations and people in the larger context outside the organization.

Most risk managers are accustomed to dealing with factors associated with old and new technologies, markets, and “acts of God.” Human-centered risk is different from these risks, because objective assessment and evaluation requires acknowledging personal and organizational limitations and past failures.

Since some of those limitations and failures might apply to the risk managers themselves, or to their superiors, there is a tendency to deny their existence, to underestimate their effects, or to invent alternative explanations for past performance disappointments.

Our approach relies on two sets of tools. The first is a framework of categories related to capability, organization, external context, risk management, and workplace politics. The second is a set of principles for guiding the assessment and management of human-centered risk.

Using a framework encourages risk managers and their superiors to accept a more objective assessment of the realities of human-centered risk.

Finally, because no methodology is universal, we show how to extend these tools to suit the needs of any specific situation.



Program structure and content

We learn through exposition, application to simulations and cases, and post-program activities. We explore these aspects of human-centered risk management, and apply models of group behavior to risk management. For example, we show participants how they might:

- Identify sources of risk in human behavior
- Recognize systemic and individual barriers to acknowledging risk
- Assess the effects of organizational turbulence
- Determine the risk associated with inappropriate internal risk transfer
- Estimate the effects of team dysfunction, toxic conflict and turnover
- Measure changes in the impact of workplace politics
- Become more skilled at choosing from among political options.

Learning model

The learning model of this program is both conventional and flexible. It is conventional in that it can be presented in a seminar format that emphasizes tools and techniques, using fictitious cases designed to illustrate their use. But at your option, we can also include a “clinic” approach in which we address specific examples drawn from your own experience or from your own immediate needs.

Target audience

Executives, leaders, managers, business analysts, project sponsors, risk managers, and project managers. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

Available in formats from one hour to one day. The longer formats allow for more coverage or more material, more emphasis on your own immediate situations, and deeper understanding of issues specific to your workgroup. ■

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- What is human-centered risk?
- The ambiguity of “Human-Centered Risk Management”
- Establishing the learning environment
- Gauging the level of political safety in the organization

The Sources and Transfer of Human-Centered Risk

- Sources of human-centered risk
- Internal risk transfer: appropriate and not
- Political causes of inappropriate risk transfer
- Consequences of inappropriate risk transfer

A Framework for Assessing Human-Centered Risks

- Categorizing human-centered risk
- Identifying and dealing with risk denial
- Understanding and managing risk transfer

Principles of Human-Centered Risk Management

- Risk management contours
- Relevant uncertainty
- Situational awareness for risk managers
- Continuously tracking risk plans
- Extending the framework

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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People and Projects

Why are we always changing how we do things? Why don't they just leave me alone so I can get this project done? Why do they ask me to take responsibility for something I have no control over? How much financial analysis is enough? Why do they want such a detailed schedule when they know that it's pure fiction? Why don't the business people get it?

Questions like these *do* have answers. Part of the answer is that project management is a *systems* activity—it's carried out by the organization as a whole. Project leaders and team members who understand which parts of the project management problem are theirs—and which parts belong elsewhere in the organization—are well on the road to managing projects more effectively and with less stress.



Much of the difficulty organizations face when managing projects relates to the fundamentally untestable nature of the work they do. For example, when you're developing requirements for a software project, the "work product" is a set of requirements. Unlike mechanical parts, requirements cannot be tested—to "test" them, we have to think about them.

In this workshop, we explore these issues, and we learn how conventional project management practice fails to address them. We learn why projects fail, and how to avoid the common traps. We learn what makes an activity a *project* and how its unique features require management approaches that differ from conventional operational management. We learn how to assemble a project plan that is a living, useful document—one that provides day-to-day guidance and actually helps to forge and maintain organizational consensus. And we learn how to use some simple low-tech tools that give us advanced warning of looming obstacles, in time to swerve to avoid them.

Program structure and content

We learn through exercises, simulations and post-workshop activities. Some highlights:

- The project-oriented versus the operations-oriented organization
- Forming and maintaining organizational consensus
- Managing conflicts of interest
- Managing change
- The importance of the project vision
- Avoiding the Microsoft Project® seduction cycle
- Developing a project plan
- Roles and responsibilities of the project team
- The role of organizational management
- The Zebra effect in project management

Learning model

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Target audience

Leaders, executives, managers, business analysts, project managers, and project team members. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

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Program outline

Introduction

- There is no silver bullet
- What is a project?
- Establishing the learning environment
- Gauging the level of project experience in the organization

Conceptual framework for managing projects

- Managing change
- Projects and operations compared
- The role of Truth in project management
- Knowledge projects and conventional projects

The life cycle of a project

- Conception and planning: the role of the para-project
- Managing requirements
- The elements of a project plan
- Retrospectives

Problems and pitfalls

- The effects of centralized authority
- The Zebra effect: too many projects
- Interruptions
- Requirements volatility
- Conflicts of interest

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Saying No & Hearing No: A Short Course for Project People

People who are involved in project work—as sponsors, as functional managers, as project managers, as task managers and as team members—work together toward a shared objective. Sometimes, even though they have common goals, their agendas conflict.

And when these conflicts appear, one person or group might want to deny the request of another. This can lead to escalating pressure and tension.

Knowing how to say no—and hear no—effectively is a critical skill for project people.

Often, pressured parties tire of the tension, or fear sets in, and they “cave”—they yield to the pressure. At times, yielding leads to an agreement that simply cannot be fulfilled, which then threatens the project’s success, and can even threaten the enterprise. When this happens, saying “no”—finding a way not to yield—is best for the health of the project.

Why is it so hard to say “no”? This presentation explores:

- The structure of these pressure situations
- Typical tactics used by both sides
- The dynamics of saying yes or no
- Perils of saying yes inappropriately
- Traps and pitfalls when you say no
- Honest, direct ways to say no

Saying no is only half the problem—hearing no is the other half. Failing to hear a sincere, factually correct no is a problem that plagues many of us who have organizational power.

When someone says no, and you refuse to accept it, you can force the group into an impossible situation—if you have the clout.

How can you accede to the “no” of a subordinate without risking your organizational authority? Participants learn:



The perils of failing to hear a real “no”

The cultural factors that must be in place to enable you to hear “no” while maintaining your authority

How to move your culture to one where hearing “no” is safe for everyone

Program structure and content

Our approach is unusual. Far from the dry, laptop-driven format of most corporate presentations these days, the workshop is highly interactive and experiential. Not only is the method effective as a training tool, it’s lively and fun.

Using the Satir Interaction Model, we gain insight into the dynamics of saying No, and we come to a new understanding of how it can go wrong. We explore:

- Typical failure modes
- The Satir Interaction Model
- The dynamics and uses of conflict
- The role of choice and freedom
- The “temperature” of communication—and how to keep cool

We learn through exposition, exercises, experience and simulations.

Target audience

Leaders, executives, managers, business analysts, project managers, and project team members. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

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Program outline

Introduction

- What is Communication?
- Establishing the learning environment
- How saying no uncovers conflict

Communication Fundamentals

- Your Five Freedoms
- Coping and communication
- Detecting your coping patterns

Survival rules

- Examples of survival rules
- How rules limit our freedom
- Transforming rules into guides

Power in Organizations

- The role of power in organizations
- How power relations are defined and maintained
- Why saying no is increasingly necessary

Saying no

- Saying no to power is different
- Interacting with survival rules
- Tactics: effective and ineffective

Hearing no

- How we resist hearing no
- The perils of resistance
- Effective ways to hear no
- Creating the "no"-friendly culture

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Person-to-Person Communications for Project People

When we talk, listen, send or read emails, read or write memos, or when we leave or listen to voice mail mes-

sages, we're communicating person-to-person. And whenever we communicate person-to-person, we take risks.

We risk being misunderstood, offending others, feeling hurt, and being confused. There are so many ways for things to go wrong that we could never learn how to fix all the problems after the damage is done—there's just too much to know. And when things do go wrong, the personal and organizational costs can be unbearable. Careers can founder; new products can be too little too late; companies can fail.

A more effective approach avoids problems altogether, or at least minimizes their occurrence. If everyone in the group understands how interpersonal communications can fail, they can frame their communications to avoid problems.

Participants in this workshop learn a model of interpersonal communications that can help them stay out of the ditch. Virginia Satir, a pioneering family therapist who applied systems thinking to the study of human relationships, originated the model. It provides a new understanding of how communications can go wrong.

Understanding, though, is not enough. We must have access to what we know *in the moment*, when we're deeply involved intellectually and emotionally. In those moments of intense involvement, we're most likely to slip, and least likely to remember what we've learned. That's why we use an interactive learning model in this workshop.

We emphasize communication under stress, where the most expensive failures occur. We'll learn to appreciate that it's far easier to avoid damage than to repair it once it's done. And we might just change how some of us communicate.



Program structure and content

Our approach is unusual. Far from the dry, laptop-driven format of most corporate presentations these days, the workshop is highly interactive and experiential. Not only is the method effective as a training tool, it's lively and fun.

Using the Satir Interaction Model, we gain insight into the elements of the communications process, and we come to a new understanding of how it can go wrong. We explore:

Typical failure modes for interpersonal communication

The Satir Interaction Model

The dynamics and uses of conflict

The role of choice and freedom

The "temperature" of communication—and how to keep cool

We learn through exposition, exercises, experience and simulations.

Target audience

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Program outline

Introduction

- What is Communication?
- Establishing the learning environment
- Gauging the level of communications effectiveness

Communicating with Yourself

- Your Five Freedoms
- Coping and communication
- Detecting your coping patterns

Survival rules

- Examples of survival rules
- How rules limit our freedom
- Transforming rules into guides

Communicating with Others

- The Satir Interaction Model
- The role of survival rules
- Applying the model in real time

The Anatomy of Conflict

- Why dealing with conflict is so difficult
- The value of Conflict
- Signatures of destructive Conflict
- Avoiding train wrecks
- Conflict laboratory

The Role of Context

- Measuring a project's temperature
- Temperature regulation in projects
- The effects of Change

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Cognitive Biases and Workplace Decision-Making

For most of us, making decisions is a large part of what we do at work. Some people are called “decision makers” and they do indeed make decisions. But what many don’t realize is that the rest of us make decisions constantly—and these decisions do matter. When you’re choosing a name for a variable or subroutine while writing a program, or choosing your words while talking to a customer, or participating in a debate at a meeting, or writing an agenda or invitation list for a meeting, or even deciding what to do next, you’re making decisions.

We tend to believe that, for the most part, we make our decisions rationally. We’ll admit that when stressed or hurried, we might not make our most rational decisions, but otherwise, we decide rationally.

That is a mistaken belief.

Very few of our decisions are purely rational. Almost all decisions are subject to a range of non-rational influences that psychologists call *cognitive biases*. They affect the quality of our decisions, and most of the time, we’re unaware of their influence.

In this eye opening yet entertaining program, Rick Brenner serves as a guide through the fascinating world of cognitive biases. He’ll introduce the concept and survey some of the more common cognitive biases, showing how they can affect the decisions we make at work. And most important, he’ll give concrete tips to help you control the influence of cognitive biases on those decisions.

After you’re introduced to this vital and still-growing field of knowledge, you’ll have more awareness of the limitations of your decision-making practices. You’ll learn how to improve them by dealing with the effects of cognitive biases, and you’ll learn how to structure group decision-making to improve the quality of decisions your teams make.

Program structure and content

Our approach is unusual. Far from the dry, laptop-driven format of most corporate presentations these days, the workshop is highly interactive. Not only is the method effective as a training tool, it’s lively and fun.

This insight-filled program deals with issues such as:

How can I tell whether I’m biased?

What kinds of cognitive biases are most likely to affect hiring?

How do cognitive biases affect a team’s ability to recognize risks?

Do cognitive biases play any role in determining one’s credibility?

Is it possible to exploit cognitive biases to make a group decide to do what it ought not do?

Is the likelihood of cognitive bias effects dependent on any circumstantial factors such as stress?

Can cognitive biases affect our ability to recognize bad decisions made by others?

We learn through exposition, exercises, experience and simulations.

Target audience

Leaders, executives, managers, business analysts, project managers, and project team members. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

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Program outline

Introduction

- What is a cognitive bias?
- Establishing the learning environment
- Assessing the incidence of cognitive biases at work

Examples of cognitive biases

- Decision-making, belief, and behavioral biases
- Social biases
- Memory errors and biases

Managing the influence of cognitive biases

- The dual process model, System 1, and System 2
- Appropriate roles for each process
- Achieving control by slowing down

Motivated cognition

- The uses of intentional bias
- Controlling intentional bias in the decision process

The Role of Context

- The effect of pressure on decision quality
- The effects of Change on decision quality

Summary and wrap-up

- What to do tomorrow
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Person-to-Person Communications: Models and Applications

Misunderstandings and unintended offenses are just some of the ways person-to-person communication can go wrong. When we communicate with each other, we run great risks. Analyzing information flow using the Satir Interaction Model, we gain insight into the elements of the communications process, and we come to a new understanding of how it can go wrong. In this fun and interactive program, we explore how our communication system works — and how it doesn't. We'll emphasize communication under stress, where the most expensive failures occur. And we might just change how some of us send and receive interpersonal communications.

Core message:

- Person-to-person communications are complex
- Problems that do arise are difficult to fix
- Preventing problems is easier than repairing them
- We have little control over how others interpret what we communicate
- For best results, prevent problems by changing our inner processes

Program structure and content

Introductions

Since we'll be doing some actual communication, we begin with introductions. We'll introduce ourselves to each other, and we'll introduce the ideas we'll be talking about.

Examples of problem communications

The human communication system can fail in a variety of different ways. We'll explore them from a humorous and provocative perspective.

What do we mean by communications?

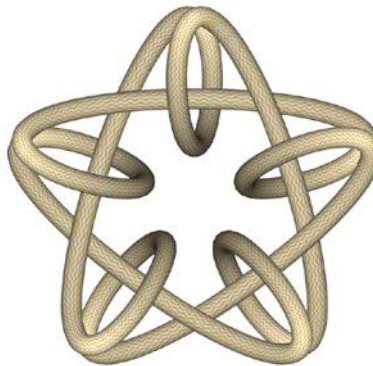
One problem that can arise is the failure to align the meanings of words. So let's agree on what we mean by communications.

A model of interpersonal communications

We'll show how to analyze information flow using the Satir Interaction Model to come to a new understanding of how we can go wrong.

Sources of defects

We'll use the model to explore how communications failures can so easily arise. This is a fun and interactive illustration that always amazes.



Interventions

We'll see how we can limit the occurrence and impact of failures.

Application

One of the most difficult situations we face at work is saying no to power. We'll apply the communications model to devise more effective and respectful ways to say no to

power.

Learning model

Since we must have access to what we know in the moment, we use an experiential approach in which participants actually get out of their chairs and do things. The doing itself becomes practice and heightens understanding and retention.

Our approach is unusual. Far from the dry, laptop-driven format of most corporate presentations these days, the workshop is highly interactive and experiential. Not only is the method effective as a training tool, it's lively and fun.

Target audience

This is one workshop that brings benefits to everyone. There's no need to segregate participants by profession, by specialty or by "org chart level" — in fact, this workshop gives your organization a way to bring together people from diverse parts of the organization.

Program duration

Available formats range from two hours to one full day. The longer formats allow for more coverage or more material, more experiential content and deeper understanding of issues specific to audience experience.

Program outline

Introduction

- What is Communication?
- Establishing the learning environment
- Gauging the level of communications effectiveness

Communicating with Yourself

- Your Five Freedoms
- Coping and communication
- Detecting your coping patterns

Survival rules

- Examples of survival rules
- How rules limit our freedom
- Transforming rules into guides

Communicating with Others

- The Satir Interaction Model
- The role of survival rules
- Applying the model in real time

The Anatomy of Conflict

- Why dealing with conflict is so difficult
- The value of Conflict
- Signatures of destructive Conflict
- Avoiding train wrecks
- Conflict laboratory

The Role of Context

- Measuring a project's temperature
- Temperature regulation in projects
- The effects of Change

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

Rick Brenner is principal of Chaco Canyon Consulting. He works with people in dynamic problem-solving organizations who make complex products or deliver sophisticated services that need state-of-the-art teamwork, and with organizations that achieve high performance by building stronger relationships among their people. In his 25 years as a software developer, software development manager, entrepreneur, consultant and



coach he has developed valuable insights into the interactions between people in a problem-solving environment, and between people and the media in which they work.

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Chaco Canyon Consulting

Managing Virtual Teams for Real Results

Global teams are now officially the way of things. Everything about such projects or operations is more difficult than face-to-face teams—including figuring out how to declare victory when failure is what actually happened.

What's a global team? You'll find various definitions if you surf around a bit, but the main features of a global team are what make them so difficult to manage—the people are dispersed geographically, they meet infrequently or never, and they come from different cultures. And these three factors conspire to make what's usually easy, difficult—and what's usually difficult, impossible.

This program helps people who sponsor, lead or participate in global teams.

Participants learn:

How to build trust in a multicultural team where “trustworthy” means something different to everyone.

How to run a telemeeting effectively when attendees are speaking the same language with varying degrees of skill.

How to minimize errors when critical documents are translated from one language to another.

How to divide the work so as to minimize turf battles and battles over budget.

How to minimize resentments when only some team members can attend worldwide meetings.

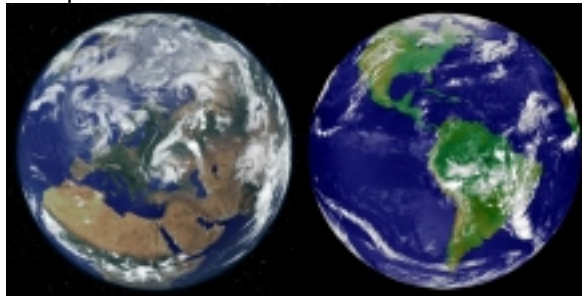
Participants learn to appreciate the true challenges of the dispersed environment. They learn how the economics of the dispersed environment differ from the economics of the face-to-face environment, and how the picture conveyed by the organizational cost management system distorts our view of these differences.

Most important, they learn strategies and tactics for making the dispersed environment productive and effective.

Program structure and content

We learn through presentation, discussion, exercises, simulations and post-program activities. Participants learn how they can:

- Assess the degree and kinds of dispersion a particular effort might entail
- Tailor a Communications Plan for the situation
- Anticipate how dispersion reduces some costs—and dramatically increases others
- Become more expert in resolving conflict in the dispersed environment
- Create a sense of teamwork among people who rarely (or never) meet



Learning model

When we learn most new skills, we intend to apply them in situations with low emotional content. But knowledge about how people work together is most needed in highly charged situations. That's

why we use a learning model that goes beyond presentation and discussion—it includes in the mix simulation, role-play, metaphorical problems, and group processing. This gives participants the resources they need to make new, more constructive choices even in tense situations.

Target audience

Managers of global operations, sponsors of global projects, team leads, business analysts, project managers, and team members.

Duration

Available in formats from one hour to one day. The longer formats allow for more coverage or more material, more experiential training and deeper understanding of issues specific to your workgroup. ■

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- What is distributed team? What's a global team?
- The dimensions of dispersion
- Consequences of global dispersion
- Best practices for managing global teams

Building and Maintaining Trust

- Trust-building strategies
- Trust-building tactics

Planning your Communications

- Issues for dispersed communications
- Elements of a communications plan
- Dealing with voicemail and email
- Using the telephone effectively

Dealing with Dispersion

- Personal and organizational issues in the dispersed environment
- Managing dispersion risk
- Tactics for dealing with dispersion

Cultural Differences

- Strategies and tactics for cultural differences
- Tactics for dealing with dates

Language Differences

- Strategies and tactics for language differences
- Translation planning

Allocating Work

- Strategies and tactics for module design
- Reconfiguring architecture for dispersion

Meetings

- Making face-to-face meetings count
- Strategy and tactics for celebrations
- Orchestrating and leading telemeetings

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Brief Coaching for Executives™

Brief Coaching for Executives™ answers the coaching needs of the time-constrained executive. It offers a sharply focused, time-limited program of custom-tailored training and skills development based directly on the current experience and needs of the client. The issues addressed and the means of addressing them can be carefully selected and timed to a degree that is impossible in coaching programs of wider scope or in more group-oriented skills-development modalities.

Why Brief Coaching?

The key elements that make Brief Coaching for Executives so successful are:

- Founded on the work of Virginia Satir
- Joint development of narrowly focused goals and objectives
- Minimal impact on workplace routine
- Discretion

The approach is based on the work of Virginia Satir, a pioneering family therapist, renowned for her ability to help clients resolve issues of long standing very quickly. Fundamental to the approach is making a connection with the client. It is that connection that enables the coach and client to discover together new ways for the client to address the issues that arise in the client's work life.

Discretion is an essential element of the program. At no time will the coach appear publicly with the client in the workplace setting. This serves to protect the client from speculation and rumor, two burdens that affect performance of executives much more dramatically than they do the performance of those in positions of less visibility in the workplace. Discretion extends to everyone in the client's workplace—the content of the coaching program is never revealed to anyone.

What is Brief Coaching?

Brief Coaching begins with several in-person meetings in which the client and coach together explore how they might work together to uncover and address opportunities for improving client performance. Together, client and coach develop

goals, objectives for the program, including a desired date for completion.

This joint exploration also serves as a means of getting acquainted and forming the connection that serves as a foundation for further work.

With goals, objectives and dates in mind, we can proceed. In this phase of the engagement, most communication is by telephone, though in-person meetings can play a part as needed. Telephone appointments are available at any time of day or night. In this way, we provide maximum flexibility to the client, while limiting the impact on the client's workplace routine.

When to choose Brief Coaching

Brief Coaching is one approach of many possible. When would you consider it? For what kinds of situations? Three factors suggest it:

- Immediate need** The intensive style and narrow focus help the client achieve results quickly.
- Clear Direction** When the desired outcome is clearly defined, the client can focus on specific goals more easily.
- Commitment** When the client's organization and the client share a commitment to success together, both are willing to supply the effort required to achieve that success.

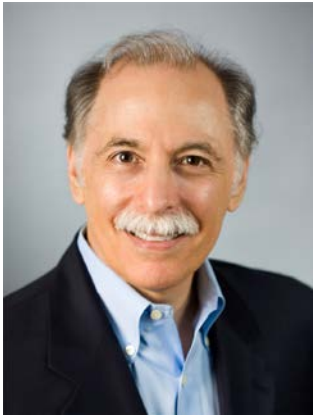
Call today

Find out if Brief Coaching for Executives is for you. Call for a free one-hour consultation. ■

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Chaco Canyon Consulting

Pandemic Flu Workshop

for Pandemic Flu Planning Team Leaders

Is your organization already engaged in preparing for pandemic flu? Are your preparations lagging against your plan? Are you discovering new problems you hadn't anticipated every time you attend another conference? Is senior management fully prepared for the questions that will certainly come up at the next annual meeting? Are you planning for survival, for continuity, or for expansion during a pandemic? These are some of the issues that face organizations as they plan for the potential—some say *certainty*—of pandemic flu.

The *Pandemic Flu Workshop* gives you a new perspective on pandemic flu preparedness. You'll get new ideas and learn new ways to move your organization from grumbling acceptance of the need for preparedness to true excitement about the challenge.

Successful pandemic preparedness depends on recognizing that although pandemic flu is probably a rare event, pandemics are not. After the current threat subsides, a new one will surely emerge. That's why we're now on a path that requires fundamental change in our operations, and the current threat is just making that clear.

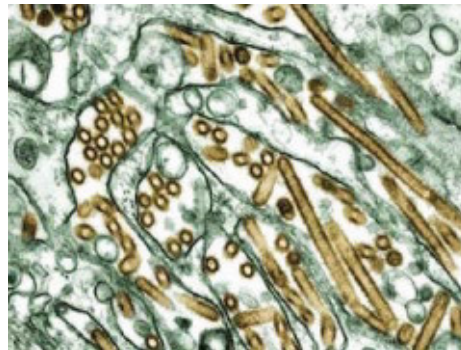
The workshop is organized around the three principles of successful pandemic preparedness planning: continuous planning, periodic exercises, and integrating pandemic preparedness into normal operations.

Continuous planning "Finishing" a pandemic response plan and putting it on the shelf is probably the most critical error an organization can make. Knowledge, products, and services that address the needs of pandemic preparedness and response are constantly evolving. Workshop participants learn what it takes to keep the planning process active and vital continuously.

Periodic exercises Exercises and drills are the points where planning meets reality. Until you actually exercise a plan, you won't really know

where its defects and vulnerabilities lie. Still, marshalling resources for drills can be difficult for organizations focused on this quarter's financial performance. Workshop participants learn not only how to conduct drills, but how to make them return real value to the organization.

Integrating preparedness into normal operations Pandemic preparedness is usually seen as yet another source of work load, and a distraction from our real business. This is the principle source of difficulty flu preparedness teams face. The truth is rather different: done right, pandemic preparedness makes the organization more effective *right now*. And then, if a pandemic does strike, the organization is well positioned to gain market share.



Workshop content

Participants learn insights and skills they need to make their organizations pandemic-resistant. Some examples:

- How to configure the organization to seize the opportunities pandemics create
- Which preparations for pandemics provide immediate benefits—even before the pandemic
- Which supply chain configurations and inventory management strategies offer pandemic resistance
- How to plan and manage drills for maximum learning and minimum disruption

Who should attend

This workshop is designed for the leaders of pandemic planning teams and their sponsors. We work either with individuals, or with groups drawn from within a single entity.

Duration

Available in formats from one hour to one day. The longer formats allow for more detailed coverage, and for deeper understanding of issues specific to your organization. ■

www.ChacoCanyon.com
(866) 378-5470

Program outline

Introduction

- What is Pandemic Flu?
- Establishing the learning environment
- Gauging the level of flu planning activity in the organization

The Anatomy of a Plan

- Understanding pandemic alert stages
- Internal planning
- Planning your relationships with geographical neighbors
- Planning for distributed organizations
- Planning for increased market share

Preparedness Activities with Immediate ROI

- Isolating activities that pay for themselves
- Using some preparedness activities to fund others
- Interactions with financial planners

Suspending and Resuming Operations

- How to operate in the pandemic environment
- Pre-emptive suspension
- Suspension and resumption triggers

Planning and Executing Drills

- Planning a drill
- Instrumenting a drill to maximize learning
- How to make drills pay for themselves

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

About Rick Brenner

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Chaco Canyon Consulting

Statistical Methods for HR Professionals Using Microsoft Excel

Whether your specialty is compensation, training/development or benefits, statistical analysis tools offer powerful methods for measuring and monitoring organizational performance.

Much of what you need is available in Microsoft Excel, but finding it is another matter. And even when you do find it, some of Excel's built-in statistical capabilities can be much more effective when you couple them with a few well-chosen additions.

This workshop shows HR professionals how to use Excel to calculate and present statistics on benefits usage, compensation, evaluations and a host of other data sets that you deal with every day.

And it includes a set of macros that make Excel's built-in capabilities much more convenient to use.

Workshop content

Participants learn what Excel has to offer in support of statistical analysis:

- Frequency distributions and histograms
- Linear and non-linear regression
- Weighted averages
- Average, mode, median
- Percentiles, deciles, P90/P10, the Lorenz Curve and the Gini Coefficient
- Standard deviation and coefficient of variation

These techniques are powerful, but when we use them in a straightforward manner we create worksheets that can be difficult to maintain when changes are required. Using Excel's Naming facility, together with a few macros that will be provided, makes statistical analysis with Excel much easier.

Learning model

This is a hands-on workshop. Participants are encouraged to bring their laptop computers, with

Microsoft Excel 98 (or later) installed. All examples and macro utilities will be distributed during the workshop by means of compact disc or floppy disc.

We demonstrate all principles and techniques using simple but realistic examples that enable participants to apply what they learn easily when they return to work.

Attendees also receive one hour of free email coaching after the workshop.

Target audience

The workshop is aimed at compensation, benefits and training professionals, and their managers.

Duration

Available in formats from one hour to one day.

Call today

Find out if Statistical Methods for HR Professionals Using Microsoft Excel is for you. Call for a free consultation. ■

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No serious financial professional would consider making a high-stakes financial decision without first modeling the what-if's using a spreadsheet program—typically Microsoft

Excel. The models we build help us explore options and alternative configurations, and we choose among them on the basis of what the models tell us.

There's just one problem. Most of the models we build are wrong. We often make multi-billion-dollar decisions using models that have serious errors. Spreadsheet researchers have studied actual worksheets obtained from major corporations, and discovered errors in more than 90% of them, some quite serious.



When a few percentage points can make the difference between profit and failure, we want our spreadsheets to actually do what we think they do. We must do everything possible to reduce development time, improve reliability, and reduce maintenance costs.

Program structure and content

We'll survey practices and spreadsheet design approaches that enhance spreadsheet reliability, reduce maintenance costs, and reduce development time.

We cover three categories of practices:

Use (or avoidance) of built-in facilities of Excel

We'll discuss the importance of specific techniques such as using names, avoiding parameter sprinkling, using parameter blocks, and using array arithmetic. For instance, formulas are far more understandable when you give names to parameters and ranges. This practice reduces maintenance costs and improves reliability.

Architecture and design conventions

This topic explores the value of repeating structures, using macros, and separating display structures from computational structure.

For instance, we often want to display data for quarters interspersed with annual totals: Q, Q,

Q, Q, Y, etc. While the people who read the information often prefer this structure, it makes spreadsheet construction expensive and slow. We'll show you a way to have the best of both worlds.

Enterprise-scale processes

Here we discuss reviews and inspections, configuration management, using contractors and consultants, and enterprise-scale projects such as budgeting.

For example, reviewing spreadsheets offers several immediate benefits:

- We find errors at the earliest possible stage—before we replicate or build upon invalid structures and assumptions
- We learn about each other's work, reducing dependence on the original author
- We learn not only learn what to avoid, but we also learn new techniques

We assume that participants use one or more versions of Microsoft Excel. Participants will receive a set of macros that will help put these ideas into practice.

Learning model

This is a hands-on workshop. Far from the usual PowerPoint-oriented corporate presentation, participants can try the approaches we discuss during the workshop. Participants should bring a laptop computer loaded with Microsoft Excel 2000 or later.

Target audience

Executives, managers, financial professionals, business analysts, project managers, and project team members. We work either with individuals, or with an entire team or with a group drawn from many teams.

Duration

Available in formats from one hour to one day. The longer formats allow for more coverage or more material, and deeper understanding of issues specific to your workgroup. ■

Program outline

Introduction

- Survey of spreadsheet defects and cost sources
- What we can do about them and what we can't

Using Excel Effectively

- Names and naming
- Array arithmetic
- Importance of organizational conventions
- Spreadsheet architecture

Managing and Macros

- When and where to use macros
- What constitutes good macro design?
- Self-awareness and self-identification in spreadsheets
- Add-ins: why and why not?
- Managing macro development

Time to Market

- Reducing the time scale in spreadsheet development
- Rules for interactions
- Avoiding gridlock
- Dealing with duels and feuds
- Interaction laboratory

Reviews and Inspections

- What is a review? What is an Inspection?
- Benefits of reviews and inspections
- How to run a review or inspection
- Introducing reviews and inspection into your organization

Summary and wrap-up

- What to do tomorrow
- Monitoring your own learning
- Resources for the future

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Chaco Canyon Consulting

Spreadsheet Clinic™

Do you use spreadsheet projections to make critical decisions? Have you ever discovered an error in a spreadsheet model? If you answered "Yes" to these questions, you might have an uneasy feeling about what your spreadsheet models are telling you. Can you really believe them?

Spreadsheets are everywhere

They're everywhere, but are they "right?" Can you build them as fast as you need to? Are the spreadsheets you build easy to use? Or is your company now completely dependent on the authors of key spreadsheets used every day for tracking projects, budgeting, or reporting? The Spreadsheet Clinic shows you how to build spreadsheet models and tools that are easier to use, cheaper to maintain, faster to develop and above all, more reliable.

Don't let another day go by being unsure of what your spreadsheet models actually model

These days, with so many companies and investments in difficulty, we need to make the right decisions fast. Reliable, fast-turn analysis can be a critical success factor—or a critical failure-avoidance factor—for any business or investor.

Ask yourself:

Are we about to make a key decision based in part on a spreadsheet model?

Are our spreadsheet calculations reliable?

Are we building and updating our spreadsheets quickly enough?

Are our spreadsheet tools easy to use, or are we completely dependent on the author?

If any of these questions make you a little uneasy, your firm can benefit from the Spreadsheet Clinic:

We come to your facility

You choose the format: Q&A, Tutorial, Seminar, Workshop, Audit, Review, Assessment

You choose the duration: 3-hour evening, half-day, full-day

You choose the content: spreadsheet techniques, organizational processes, spreadsheet evaluation, user interface design, macros, ...

Included with the clinic is a copy of a spreadsheet technology course, including dozens of examples and solved problems—a \$199 value—for the special attendee price of only \$99.

About Rick Brenner

Rick Brenner, who created the course "Spreadsheet Models for Managers" at the Harvard Extension School, delivers the Spreadsheet Clinic. He has coached and taught spreadsheet courses to hundreds of professionals, mostly managers in Boston-area companies and venture capital firms, since 1993.

Pricing

3-hour evening	\$1500
Half Day	\$1750
Full Day	\$3000

Call today

We know that spreadsheet needs are sometimes urgent. Contact us now to schedule a clinic for your organization at (866) 378-5470 or rbrenner@chacocanyon.com. ■

www.ChacoCanyon.com
(866) 378-5470

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In 1993, he developed Spreadsheet Models for Managers for the Harvard Extension School, where he has taught it continuously to hundreds



of students. It is this course that is the basis for the Spreadsheet Models for Managers Workshop.

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Mr. Brenner holds a Masters Degree in Electrical Engineering from MIT. His interests focus on improving personal and organizational effectiveness in abnormal situations, as in the case of dramatic change, in technical emergencies, and high-pressure project situations. He publishes a free email newsletter, *Point Lookout*, and has written a number of essays available at his Web site, www.ChacoCanyon.com.



Chaco Canyon Consulting

Spreadsheet Coaching

Does your firm need more spreadsheet consulting than your budget allows? Don't just shelve projects. Maybe your own people can do the work—with a little coaching. Here's how to tell whether spreadsheet coaching is a viable option for you:

Is your firm being held back by time-consuming manual alterations to your spreadsheet models?

Are your spreadsheet models so difficult to use that only one person knows how to update them?

Is your budget too tight to hire or outsource the skills you really need?

Are your people smart and eager to learn?

Do you want to enhance your in-house capability?

If you answered yes to these questions, your firm can benefit from Spreadsheet Coaching. We'll coach an individual or team as they work on upgrading your spreadsheet infrastructure or developing a spreadsheet project.

Why it works

Most businesses today rely on spreadsheets for financial data tracking, collection and analysis. For instance, spreadsheet tools are often used for decision support and for the annual "budget exercise."

These projects can be so complex that organizational capabilities are stretched. Because of constraints in our ability to invest in spreadsheet infrastructure, tool development and maintenance can be underfunded. The result is that we make critical decisions using antiquated and inadequate spreadsheet infrastructure.

Most organizations can't do much about this because they can't muster the resources to invest in spreadsheet infrastructure.

Spreadsheet coaching addresses this resource issue. By developing the staff you already have, we help you address your spreadsheet infrastructure needs economically, *while they work on a real project.*

How it works

You decide what project is most pressing, and we'll coach your people as they address it. After an initial three-hour get-together, we'll work entirely by telephone and email.

We can help with all aspects of spreadsheet project development, including spreadsheet technology, design, testing, project planning, effort estimation and risk management.

About Rick Brenner

Rick Brenner, who created the course "Spreadsheet Models for Managers" at the Harvard Extension School, coaches spreadsheet developers. He has coached and taught spreadsheet courses to hundreds of professionals, mostly managers in Boston-area companies and venture capital firms, since 1993.

Special offer

Included with the coaching is a copy of a spreadsheet modeling course, "Spreadsheet Models for Managers," including dozens of examples and solved problems—a \$199 value.

Pricing

\$1500 per ten hours. Initial meeting included in the first ten hours.

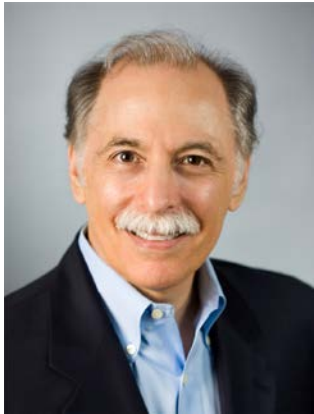
Call today

We know that spreadsheet needs are sometimes urgent. Call now to schedule a clinic for your organization at (617) 491-6298 or rbrenner@chacocanyon.com. ■

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About Rick Brenner

Rick Brenner is principal of Chaco Canyon Consulting. He works with people in dynamic problem-solving organizations who make complex products or deliver sophisticated services that need state-of-the-art teamwork, and with organizations that achieve high performance by building stronger relationships among their people. In his 25 years as a software developer, software development manager, entrepreneur, consultant and



coach he has developed valuable insights into the interactions between people in a problem-solving environment, and between people and the media in which they work.

Mr. Brenner has held positions at Symbolics, Inc., and at Draper Laboratory, both of Cambridge, Massachusetts. At Symbolics, he was responsible for development of all products based on Macsyma, a large and very sophisticated computer algebra program. At Draper Laboratory, he was a principal investigator in a DARPA program, the Evolutionary Design of Complex Software, where he conducted research into advanced concepts for real-time software development environments based on dynamic object-oriented programming languages. From 1993 through 2013, he taught a course in business modeling at the [Harvard University Extension School](#).

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Spreadsheet Models for Managers™

Here is a set of descriptions of the modules of the Spreadsheet Models for Managers Workshop. Use

these descriptions to help you decide if a particular module would be useful to you. Each module last two hours and requires about 3-6 hours of homework. Modules 1-3 are prerequisites for all the others. They contain fundamental approaches that serve as a basis for everything else we do in the Workshop.

1. Introduction to Spreadsheet Models

What is a model? Running sums, running differences. Parameters, parameter blocks. Named parameters. Relative and absolute references.

What is a spreadsheet model? What is the role of spreadsheet modeling in a modern organization? An effective modeling capability provides a competitive edge, because if an organization can quickly and effectively model its processes, markets, and finances, it can make better decisions faster.

To be effective, models must be simple, maintainable, and faithful. In this session, we begin a survey of modeling techniques that support these three goals. We include examples of calculation techniques, development techniques, and Excel technology.

Among the most basic of calculation techniques are two common spreadsheet clichés—running sums and differences. We also look at parameters and parameter names—a development technique that provides a strong foundation for maintainability. Finally, a bit of Excel technology that is a key to modeling mastery: absolute and relative references. We'll straighten out any confusion you might have about the dollar sign, and make it your friend.

2. Analysis and Synthesis: Array arithmetic and matrix products

Using array formulas to manipulate arrays of data. Matrices and associated operations — matrix multiplication, matrix transpose. Matrix operations using array formulas.

Analysis is a technique in which we decompose a problem into parts, and then deal with the parts. In synthesis, we reassemble the parts to obtain the solution to the original problem. For many problems, only this approach makes them tractable.

But when we try it, we can still get lost in a maze of details and complexity. For example, when furnishing offices, there can be 20 different components to deal with, each with four or more different styles or grades. To limit this risk, Excel offers a variety of tools, the most valuable of which are array arithmetic and matrix products. These methods enable us to deal with arrays of data at a very high level, reducing the need to enter formulas in individual cells, removing from the formulas any dependence on the size of the arrays, and reducing the number of cells that we have to maintain.

These methods are powerful. And the best part is: relatively few people use or understand them. Many of our students have remarked that these techniques alone justified the cost of taking this course.

3. Cushioning, Crowding and Quantization

Modeling cushioning and crowding in space and capacity planning problems. Excel worksheet functions for rounding, truncating, and finding ceilings and floors. Managing circular reference computations in spreadsheets.

Since modeling is inherently inexact, we sometimes build into our models a safety margin. We call this cushioning. The contrary practice of planning to overtax resources is called crowding. In business modeling, there are occasions when both cushioning and crowding are valuable techniques.

Quantization is the effect we observe when some of the model parameters are restricted to lie in bands, or when they must adhere to specific values. For example, the practice of “staircasing” price schedules produces quantization effects in expense or revenue models.

Excel provides some facilities that are useful in all these situations, and we’ll explain them and illustrate their use. Cushioning, crowding and quantization can lead to complex and confusing models, but if you’re systematic about how you handle these effects, your models will be simpler and easier to maintain.

One effect that appears in complex models is usually an error—the circular reference. We’ll talk about circular references, and how to unwind them.

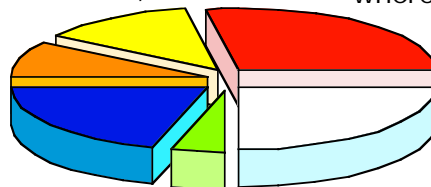
4. Temporal Response

Response of systems to time-varying stimuli. Calculating system response using tables vs. using macros. Convolution. Operations on references—regions, union, intersection. Excel worksheet functions for array access and modification.

The focus of this session is the use of arrays to model temporal response of systems. We’ll show you how using both a high-level method, called convolution, and a more “nitty-gritty” approach using arrays.

We use the term “temporal response” to denote the response of a system to a time-varying stimulus. For instance, when you hire, you expect overall productivity to improve. But there is a learning curve—new people gradually contribute more and more, until they are full contributors. Modeling this gradual increase in productivity is easy for one person, but when hires occur in a stream, over time, managing the addition of all those “learning curves” can be very difficult. Convolution makes it easy.

Since we use arrays so often, we need to be skillful in manipulating them, including extracting pieces from arrays. In this session, we’ll survey Excel’s facilities for extracting subarrays from arrays, using worksheet functions and reference operators.



With knowledge of arrays in hand, we’re prepared to examine an approach to computing temporal responses of systems to changing inputs. Our approach is based on a method that is routine in physics, statistical analysis, and communications theory—convolution. Convolution is a powerful approach, one that—once learned—enables you to solve complex modeling problems with a single form. Models that use convolution instead of less powerful alternate methods are more easily understood, more reliable, and cheaper to maintain.

5. Graphics: Communications and intuition

Terminology, styles, tips for effective charts. Chart Wizard. Selecting chart objects. Adjusting data from the chart.

What use are graphics? Graphics—both as representations of numerical data, and as elements of screen and page display—offer two advantages. They enhance communications, and they develop intuition.

Communications consist not only of presentation to others, but also presentation to yourself. Graphics on the worksheet can make it easier to understand what you’re seeing, and to remember where things are. Appropriate use of color, type style, font, shading, and so on, make your projects easier to use, easier to understand and easier to maintain. And when the time comes to present your numerical results, an effective graph or chart is vastly superior to a table of numbers.

Graphics also develop your intuition about the model. As you’re building the model, you can use charts and graphs to display numerical results. These intermediate displays help you understand what you’re building as you go along.

But what is appropriate use of graphics? How exactly do you use charts, graphics, and graphical elements to make things easier to understand? Come to this session and get some ideas.

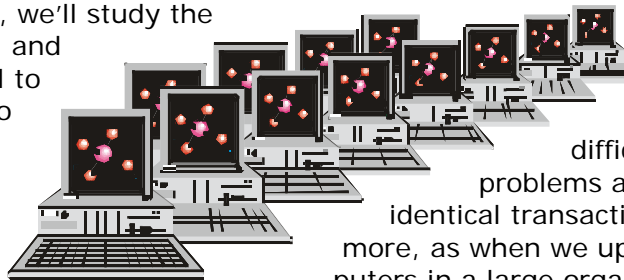
6. Managing Spreadsheet Modeling Projects: Spreadsheet inspections

Key practices for organizations that use spreadsheet technology on an enterprise scale. Defined development and maintenance processes. Standards, model architecture, configuration management, quality control, reviews and inspections, defect tracking, metrics.

As a manager, you're responsible for the processes people use for developing spreadsheet projects. One practice stands out as a way of making your department more effective—structured technical reviews. In this session, we'll study the practice of technical reviews, and learn why they are so helpful to the organization, as it tries to become more sophisticated about business modeling.

Structured reviews and inspections help you find out as early as possible about any defects of design or implementation that might be present in your project. But they do more. They provide a way for your more capable people to show the rest of the organization how they do what they do. By example, and by offering constructive feedback to others, they gradually propagate their knowledge through the organization in the context of the structured technical review.

In this session, we'll actually practice a technical review, so you can see how the structure works. And we'll demonstrate tools that you can use to do your own reviews and inspections of spreadsheets.



plan. In this session, we'll present a high-level view of the modeling issues associated with modeling entire businesses.

We'll look at the structure of the three fundamental financial statements—the income statement, the balance sheet and the cash flow statement. Our focus is “prospective” rather than “retrospective.” When modelers look at financial statements, their interest is in predicting the impacts of various strategies on the financial position of the organization.

As an illustration, we'll consider capital transactions. We'll develop techniques for computing the effects of a class of capital purchases that are particularly difficult to model.

Single-point capital transactions, such as the purchase of a factory, are certainly complex. But as difficult as they are, imagine the problems associated with a stream of identical transactions, in the hundreds or more, as when we upgrade all the desktop computers in a large organization. Clearly, we need a more sophisticated approach to these computations. This session is the first of three that lay out such an approach. And that approach uses convolution.

8. Capital Leases I: Present and future value

Modeling leases is complicated, but Excel offers useful tools that greatly reduce the effort required. Present Value and Future Value functions, Payments function.

To model capital leases, we must include the effects of the lease term, interest rate, and number and frequency of payments. In this session, We'll thoroughly explore the use of these Excel's relevant worksheet functions, not only in the straightforward situations that one usually encounters, but also in the more complex arrangements that arise when payments or interest rates are non-uniform. Sadly, these situations are more common than we often suppose, so it pays to know how to handle them.

7. Financial Models: Capital transactions

Financial statements—income statement, balance sheet, cash flow. Implementing these statements in a spreadsheet—pitfalls and tips. Overview of depreciation, leasing.

Having a fundamental understanding of accounting is a great help in modeling businesses, especially in the context of writing a business

9. Capital Leases II: Modeling and the Lease Characteristic Array

Application of convolution to multiple lease events.

We explain how to model a stream of lease events that occur under the terms of a single lease agreement. Since each event triggers its own set of cash transactions, interest payments, principal payments, and depreciation, tracking the effects of such a stream on the three financial statements can be nightmarishly complex.

We'll show you how to use convolution and the Lease Characteristic Array. Using this technique, the fidelity of your model will be limited not by your ability to deal with complexity, but by your ability to forecast the business terms of the lease and the schedule of purchases. This is our goal—to remove complexity as a barrier to model fidelity.

10. Inventory Modeling: Optimum Order Quantity and Quantity Discounts

Overview of inventory, servers, space. Economic Order Quantity. Purchasing decisions in the context of volume discounting.

In operations in which inventory costs are significant, modelers must understand the issues related to inventory and inventory maintenance. We'll look at a simple model for inventory replenishment, the Economic Order Quantity.

We'll apply it in the simplest case—constant price. Then we'll explore techniques that apply when prices depend on quantity. In this instance, no analytical formula for reorder point is possible, but we'll show you how to determine optimum reorder points.

This approach has value in inventory modeling, but also illustrates the value of spreadsheets for solving problems that cannot be solved symbolically.

11. Service Systems: Single-server queues

Modeling waiting lines, taking into account arrival rate of customers, service rate, queue

length, and related factors. The Fast Food Drive-Thru. How long should the driveway be?

In a service system, customers present themselves, are serviced, and depart. For example, an airline ticket counter is a service system. Service systems are very common in business, and knowing how to model a service system's capacity is an important skill for a modeler.

As common as service systems might seem, they are actually even more common. For example, a telephone switch is a service system—and so is a computer's printer and copier, as is the cafeteria, the PC Support Help Desk, the HR counter, and Shipping/Receiving. So modeling service systems is even more important than you might think at first.

In this session, we'll study single-server systems, probably the simplest form of service system, but also the most common. We'll give you the tools you need to model them with enough fidelity that your models will make useful predictions of their capability and capacity. This is just what you need to determine whether these systems fulfill—or over-fulfill—the needs of the businesses they serve.

12. Using Macros I: Function macros in Excel

Kinds of functions and macros. Variable declarations, returning a value, methods, properties. Focus on functions that return a single value.

Macros, usually seen as a technical element of any spreadsheet model, are also an important tool of the manager. By encapsulating commonly used techniques in macros, managers assure that those techniques are used in exactly the same way every time. This is the most valuable attribute of any macro—it increases the reliability of the models that use it.

A second advantage, of course, is decreased development cost. Once you have the macro, using it is as easy as using any Excel worksheet function. All intermediate forms are subsumed into the macro. While the costs of any models that use the macro decline, the organization does have to build and maintain the macro, and that isn't free. So choose wisely those clichés that you capture in macro form.

In this session, you'll build a few simple macros. Our goal is to introduce you to some of the issues that arise for a macro writer. As a manager, you'll benefit from some appreciation of those issues—you'll be better able to manage macro writers, and you'll have a better feel for what the tradeoffs are.

13. Using Macros II: Function macros in Excel

Functions that return arrays of values. VBA techniques for dynamic arrays and iteration.

Function macros are macros that return values. They correspond to worksheet functions, and let you to add capability transparently. In this session, we'll examine macros that return a rectangular array of values. Convolution is an example of such a macro.

To deal with array macros, we'll have to learn about iteration and dynamic arrays, two techniques that are fundamental to manipulating arrays of data.

14. Using Macros III: Spreadsheet tools for managers

Using macros to save effort. The macro recorder. Overview of the Excel object model.

A command macro executes Excel commands. It doesn't return a value, as function macros do. Instead, it changes the state of Excel. Think of it as a menu command or keyboard command.

You can use command macros to perform routine formatting, complex copy-and-paste routines, or to mail your workbook to someone else. They enable you to encapsulate complex sequences of Excel commands in a form that you can easily remember, or easily propagate through an organization. For instance, you can attach a command macro to a budget worksheet and arrange for a button click to submit the workbook by email to the right person.

We'll explore construction of command macros, and show ways to use them to enhance organizational performance while reducing organizational overhead. ■

About Rick Brenner

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Spreadsheet Models for Managers™: Frequently Asked Questions

As you decide whether the Spreadsheet Models for Managers Workshop is the right investment for you, you'll probably ask some questions. We've collected the questions that people have asked over the years, and worked out some answers that we think will help you evaluate whether this workshop is a fit for you. Some questions might correspond exactly to questions you have; some might be slightly different. And some of your questions might not appear here at all. Read through this list, and let us know about any unanswered question you still have.

I already know lots of Excel functions. Why would I need a workshop?

For learning about the basics of any worksheet function in Excel, you probably don't need a workshop, or even a book. On line help is fine. This workshop assumes that you can do that. We aren't trying to teach what Excel worksheet functions do. Instead, we focus on applications. We look more at the problem space than at the details of the tool.

For instance, the effect of the first argument of the Excel function `PMT` is clear. But knowing when to use it, when to avoid it, and how to use it effectively comes only with experience—or from the experience of others, via a workshop.

Making effective business models requires more than understanding worksheet functions. Selecting a model architecture, choosing appropriate names, reducing formula counts, and using a layout with useful visual cues are just some of the other techniques that make the difference between an expensive, rigid, unreliable model, and one that provides effective decision support.

Will I need to know how to write macros?

You won't need to know anything about writing macros before you start. Even if you sign up for the macro modules (11, 12, 13), you won't have to know anything at the outset. You'll learn all you need in the modules you study. One slight exception—since Module 11, in which you learn the basics of function macros, is a prerequisite for Module 12, Module 12 does assume that you've done Module 11.

I see that there are problems to solve. How long does it take?

The problems are designed to take no longer than five hours per module. As a rule of thumb, if a problem set takes you longer than five hours, you're probably barking up the wrong tree. Many take far less time.

We encourage participants to work the problems in teams. Since that's the way most decisions are addressed today, practicing with the problem sets gives you experience with using Excel in a team environment.

Which functions will this workshop cover and which modules cover them?

Although we do use some selected Excel worksheet functions, introducing new functions isn't the focus of this workshop. We don't spend much time on them, and we expect you to handle them more or less on your own, except, perhaps, the functions of Module 9.

Module	Functions Introduced
1	INT
2	MMULT, IF, SUM, TRANSPOSE
3	CEILING, FLOOR, ROUND, TRUNC
4	INDEX, OFFSET
8	COLUMN, ROW
9	FV, PV, PMT, IPMT, PPMT
11	SQRT, MAX, MIN

Why should I care about the difference between `B4`, `$B4`, `B$4` and `B4`. Will I find this workshop too difficult?

We'll cover that topic, known as absolute and relative references, so don't let that stop you. Most Excel users—even some power users, believe it or not—don't understand absolute and relative references either, so you're in good company. We'll quickly place you among the elite of Excel users.

I already understand the difference between `B4` and `B$4`. Is this workshop too easy?

Although you already understand some topics well, most of the material is unique, and unavailable elsewhere. The more fundamental topics are included to give us standard terminology, and to make certain that all participants have the needed skills. Even those who come well prepared find new insights into ideas they already understand.

What's the big deal with charts? I already know how to use the Chart Wizard.

We do briefly discuss the fundamentals of chart creation, but our focus is at a much more advanced level. We'll show you how to make your charts effective, how to avoid common design errors, how to automate some chart features, and how to use charts during the development process, as an aid to analysis.

I can already do everything I really need to do in Excel. Why should I sign up?

We'll take your skill to the next level. We assume that you already know at least one way to do everything you need to do, and we'll expand what you know how to do to increase your sense of possibilities. After this workshop, you'll know how to do things that you not only couldn't do before, but didn't even know you wanted to do.

For instance, we'll show you the importance of design for maintainability. You'll learn that getting an answer isn't necessarily enough—because next month, next quarter, or next year, you'll probably have to repeat the exercise. If you've done it in a reliable and easy-to-maintain way, you benefit. We'll show you approaches that have high payoffs for you and your organization.

Excel is frustrating and complicated, so I avoid it. Why would I want to learn about something I use so rarely?

If you have no use for it, you wouldn't. But we believe that most managers today could benefit from using Excel as a quick-and-dirty decision support tool. Sadly, the obvious approaches to using Excel are not quick-and-dirty—they're slow and painful. When you improve your Excel skills, when you become familiar with its more powerful but widely ignored capabilities, it becomes a handy tool for making management decisions, and you'll use it more often.

Some people make a big deal out of arrays, but I get by just fine without them. Who cares about arrays?

Certainly you can solve any problem *without* arrays that you can solve *with* them. So it might not be obvious why they're so wonderful.

As a refresher, enter 1 in A1, 2 in A2, 3 in B1 and 4 in B2. Then select D1:E2 and type this in the formula bar: =A1:A2 * A1:B2, and press Control+Shift+Enter. This enters an array formula

that produces an array that has values equal to the rows of A1:B2, multiplied respectively by A1 and A2.

When you're modeling business processes, you often have to deal with objects that have lots of parts. For instance, in modeling revenue, you might have a number of store locations, or a number of products for sale.

The conventional approach is to work out each part, and then "roll it up" into a summary. This approach is laborious and error-prone. Arrays reduce the labor needed and increase reliability.

Unfortunately, Excel lacks one or two tools to make arrays really easy. We provide them as macros, for you to keep after the workshop.

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More questions? Contact Rick. ■