

***Fear Less***  
***And Other Patterns for Introducing New Ideas into Organizations***

**PRELIMINARY VERSION OF PATTERNS**

**Last Update: February 25, 2003**

**This document is a preliminary version of the final patterns that will appear in a book on introducing new ideas into organizations.**

**It is only a draft – you can expect to see typos and incomplete material.**

**The book will be published in 2004. It will include an updated version of the patterns, case studies and background material on the research and patterns development.**

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The work in using and writing patterns began with Christopher Alexander who wrote *A Timeless Way of Building* [Alexander79] and *A Pattern Language* [Alexander+77] in the 1970s. When the software community began studying his ideas, interest in patterns began to spread throughout the software development industry in the 1990s. However, efforts to introduce patterns into organizations have had mixed success. The patterns presented here are the beginning of a pattern language whose focus is the introduction of a new idea into an organization. When the language was begun, the focus was on introducing patterns into an organization but over the years, we have come to realize that most of the patterns can be used for introducing most any new idea. The contributors are from organizations all over the world. We have found a close connection between our experiences, which is reflected in the patterns we have written.

The creation of a pattern language should be the work of a community. Many people have contributed, and continue to contribute, to the development of this language. These include the pattern authors, those who have attended the *Introducing Patterns into an Organization* workshops, and the countless others who are providing feedback and ideas for improving the patterns.

Especially valuable was the effort of all the shepherds who have worked with us along the way: Ken Auer, PLoP '97, David DeLano, PLoP'99, Jim Coplien, EuroPLoP'00, Brian Marick, PLoP'01, David Kane, EuroPLoP'02. Special thanks also goes out to Alan O'Callaghan for his unwavering support and his invaluable help with some of our conference sessions.

As Christopher Alexander states, we hope that “many of the people who read, and use this language, will try to improve these patterns—will put their energy to work, in this task of finding more true, more profound invariants—and we hope that gradually these more true patterns, which are slowly discovered, as times goes on, will enter a common language, which all of us can share.” [Alexander+77]

## **The Patterns**

The patterns in this collection can be used to introduce a new idea into an organization. The objective is to build a grass roots group that becomes interested in the idea and can be part of spreading the word throughout the organization.

There are relationships between these patterns, thus forming a pattern language. All useful pattern languages are living things that continue to grow. We describe several sequences in the pattern language in the case studies and we also include the following categories.

### **Roles**

Champion Skeptic  
Connector  
Corporate Angel  
Early Adopter  
Early Majority  
Dedicated Champion  
Evangelist  
Innovator  
Local Sponsor  
Mentor  
Respected Techie

### **Events**

Big Jolt  
Brown Bag  
Do Food  
Hometown Story  
Location, Location, Location  
Piggyback  
Royal Audience

### **Keeping the Idea Visible**

e-Forum  
Group Identity  
In Your Space  
Plant the Seeds  
Stay in Touch  
Treasure  
Token

### **Dealing with Skeptics**

Adopt a Skeptic  
Champion Skeptic  
Fear Less

### **Early Activities**

Ask for Help  
Brown Bag  
Just Do It

Test the Waters

**Reaching Out**

Ask for Help  
Just Say Thanks  
Shoulder to Cry On

**Convincing Others**

Corridor Politics  
External Validation  
Guru Review  
Personal Touch  
The Right Time  
Smell of Success  
Tailor Made  
Whisper in the General's Ear

**Teaching and Learning the Idea**

Just Enough  
Study Group

**Long-term Activities**

Involve Everyone  
Next Steps  
Small Successes  
Step by Step  
Sustained Momentum  
Time For Reflection

## The Pattern Summaries

### **Adopt a Skeptic**

Pair those who have accepted your new idea with those who have not.

### **Ask for Help**

Since the task of introducing a new idea into an organization is a big job, look for people and resources to help your efforts.

### **Big Jolt**

To provide more visibility for the change effort, invite a well-known person to do a presentation about the new idea.

### **Brown Bag**

Use the time when people normally eat lunch to provide a relaxed setting for hearing about the new idea.

### **Champion Skeptic**

Ask for Help from strong opinion leaders, who are skeptical of your new idea, to play the role of 'official skeptic.' Use their comments to improve your effort, even if you don't change their minds.

### **Connector**

To help you spread the word about your new idea, Ask for Help from the people who have connections with many others in the organization.

### **Corporate Angel**

To help align the innovation with the goals of the organization, get support from a high-level manager.

### **Corridor Politics**

Informally work on decision makers and key influencers before an important vote, to make sure they fully understand the consequences of the decision.

### **Dedicated Champion**

To increase your effectiveness in introducing your new idea, make the work part of your job description.

### **Do Food**

Make an ordinary gathering a special event by including food.

### **e-Forum**

Set up an electronic bulletin board, distribution list, WIKI, or listserver for those who want to hear more.

### **Early Adopter**

Ask For Help from the opinion leaders in your organization.

### **Early Majority**

To create commitment to your new idea in the organization, you must convince the majority.

### **Evangelist**

To begin to introduce the new idea into your organization, do everything you can to share your passion for it.

### **External Validation**

To gain credibility for the new idea inside your organization, market your ideas externally so that people inside your organization become aware of them.

### **Fear Less**

Turn resistance to your new idea to your advantage.

### **Group Identity**

Give the change effort an identity to help people recognize that it exists.

### **Guru Review**

Gather Respected Techies and other interested colleagues to evaluate your new idea for managers and other developers.

### **Hometown Story**

To help people see the usefulness of your new idea, encourage those who have had success with it to share their stories.

### **In Your Space**

Keep the new idea visible by placing reminders throughout your organization.

### **Innovator**

When you begin the change initiative, Ask for Help from colleagues who like new ideas.

### **Involve Everyone**

For a new idea to be successful across an organization, everyone should have an opportunity to support the innovation and make a unique contribution.

### **Just Do It**

To prepare to spread the word about your new idea, find out for yourself what the benefits and limitations are.

### **Just Enough**

To ease learners into the more difficult concepts in a new idea, give a brief introduction and then make more information available when they are ready.

### **Just Say Thanks**

To make people feel appreciated, say “thanks” in the most sincere way you can to everyone who helps you.

### **Local Sponsor**

Ask for Help from first-line management. When your boss supports the tasks you are doing to introduce the new idea, you can be even more effective.

### **Location, Location, Location**

To avoid interruptions that disrupt the flow of an event, try to hold significant events off site.

### **Mentor**

When a project wants to get started with the new idea, have someone around who understands it.

### **Next Steps**

Take time near the end of a presentation about your new idea to identify what participants can do next.

### **Personal Touch**

To convince people of the value of your new idea, show how it can be *personally* useful and valuable to them.

### **Piggyback**

To increase attendance and help people see that your new idea isn't anything unusual, hold a presentation about your new idea during a regularly scheduled event in the organization.

### **Plant the Seeds**

To spark interest, carry materials (“seeds”) and display (“plant”) them around whenever the opportunity arises.

### **Respected Techie**

Enlist the support of senior-level people who are esteemed by members of the organization.

### **The Right Time**

Consider the timing when you schedule events or when you ask people for help.

### **Royal Audience**

Arrange for management and members of the organization to spend time with special Big Jolt visitor.

### **Shoulder to Cry On**

To avoid becoming too discouraged when the going gets tough, find opportunities to talk with others who are also struggling.

### **Small Successes**

To avoid becoming discouraged by the challenges and all the things you have to do when you're involved in an organizational change effort, celebrate each small success.

### **Smell of Success**

When your efforts result in some visible positive result, people will "come out of the woodwork" to talk to you. Treat this opportunity as a "teaching moment."

### **Stay in Touch**

Once you've enlisted the support of key persons, don't forget about them and make sure they don't forget about you.

### **Step by Step**

Relieve your frustration at the enormous task of changing an organization by taking one small step at a time to meet your goal.

### **Study Group**

Form a small group of colleagues who are interested in exploring or continuing to learn about a specific topic.

### **Sustained Momentum**

Take a pro-active approach to the on-going work of sustaining the interest in the new idea in your organization.

### **Tailor Made**

To convince the organization of the value it can gain from the new idea, tailor your message to the needs of the organization.

### **Test the Waters**

When a new opportunity presents itself, "test" if there is any interest by using some of the patterns in this language and then evaluating the result.

### **Time For Reflection**

To learn from the past, take time at regular intervals to evaluate what is working well and what should be done differently.

**Treasure**

To recognize special effort, give contributors something they value.

**Token**

To keep an event alive in a person's memory, hand out tokens that can be identified with the topic being introduced.

**Whisper in the General's Ear**

Managers are sometimes hard to convince in a group setting, so set up a short one-on-one meeting to address their concerns and to offer them the opportunity to announce your new idea as their own.

## **Adopt a Skeptic**

*I was a Dedicated Champion, with a cubicle right next door to a skeptical Respected Techie. I tried Personal Touch without success. Finally I found someone the skeptic respected, someone he had worked with at the company for a long time who supported the patterns effort. I asked for her help in convincing the skeptic. She agreed, and now the former skeptic is a supporter.*

**Pair those who have accepted your new idea with those who have not.**

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You are a Dedicated Champion Progress to introduce your new idea has been slowed by skeptics. You have tried using Personal Touch but have not been successful in lessening the resistance.

**Some won't listen to even the most enthusiastic proponent, it's someone they don't know well or trust.**

In many cases, a skeptic may be suspicious of the Evangelist and not the idea itself. Many hardboiled veterans will not listen to a newcomer, no matter how knowledgeable that newcomer may be. Veterans need to hear from one of their own, someone they trust. People like people who are similar in opinion, personality, background, or lifestyle. Even trivial similarities between people have been shown to create a greater openness to new ideas and a willingness to try new approaches. [Cialdini01]

People are often skeptical because they view the problem differently or because their concerns have not been addressed by the proposed idea. Those who have already accepted the new idea can help with this, especially if these individuals are considered to be thoughtful, rather than venturesome, in their decision making. [Rogers95]

*Therefore:*

**Ask for Help from someone who has similar interests as the skeptic and sees value in the innovation to talk with the skeptic about it.**

The person you choose should know the skeptic well enough to point out the personal value the innovation can offer the skeptic. Suggest the use of Personal Touch and Fear Less. In addition, Tailor Made may convince a skeptic that cares about the business side.

You may want to reserve use of this pattern for key people because it takes time and energy to find the right person. On the other hand, if you know someone who is "hot" on the innovation who has a buddy that is a skeptic, you might just simply want to ask, "Will you talk to <skeptic> about your experiences with <the innovation>?"

This pattern may not work for all skeptics. The last adopters or laggards usually adopt a new idea only after most or all of their co-workers have adopted it, and even then, may only do so under pressure. [Rogers95] Therefore, it might be the best use of your limited resources to simply wait for them to come around, if they ever do, rather than putting a lot of effort into trying to persuade them. If the right person doesn't seem to be available, and a skeptic is a member of your team, Just Do It. Even die-hard skeptics appreciate anything that makes their jobs easier.

When someone takes on the challenge of adopting a skeptic, remember Just Say Thanks.

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This pattern “builds” a bridge between the growing community and a formerly unreachable skeptic. The skeptic who wasn’t receptive to you is now more informed about the innovation thanks to the help of someone he will listen to. In addition, the person you asked to do the “adopting” becomes a stronger part of the effort as a result of the contribution that was made.

The risk is that the skeptic may make the “adopter” think twice about the innovation and, you may, sometimes even without your knowledge, lose both of them. Make sure that the “adopter” is someone that truly convinced of the innovation and strong enough to work with a potentially argumentative skeptic.

**Originator:** Mary Lynn Manns, with thanks to the students at the University of North Carolina at Asheville who inspired the title for this pattern during a class assignment on introducing innovation into organizations.

*Shepherded for PLoP’01 (August 2001).*

*Shepherded and workshopped at EuroPLoP’02 (April 2002).*

## **Ask for Help**

*When I started talking about patterns, someone who attended a Brown Bag told me, “No one knows you. If you talk to Jeff or Greg, they know how to get things done and I’m sure they’ll help you.” He was right, that made a big difference. Jeff told me how to reach the editor of the on-line daily newsletter to announce upcoming events. Greg introduced me to the tech support person who could set up a bulletin board for patterns. They were both available whenever I had questions. I felt like I had a chance at it after that.*

**Since the task of introducing a new idea into an organization is a big job, look for people and resources to help your efforts.**

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You’re an Evangelist or Dedicated Champion working to introduce a new idea into your organization.

**The task of introducing a new idea into an organization is too big for one person, especially a newcomer who doesn’t know the ropes.**

The single biggest failing of many change agents is that they do not look for help. They believe they can do it themselves, or they feel they can’t ask for help because that it would reveal their own inadequacy. The likelihood of success is directly related to their ability to ask others for help. [Keough01]

We all need help at times. People who set a high goal will eventually find that they cannot achieve it without the help of others. [Hohmann97] It can take effort to find help but the return can be worth it. Taking the steps to identify out what resources are available will allow you to take advantage of them.

Some people are not quick to volunteer their help or advice. It could be because no one ever asked them before. Most people are more likely to help when they are asked.

*Therefore:*

**Ask as many people as you can for help whenever you need it. Don’t try to do it all alone.**

Get the help, advice, and resources of people who care about you and/or the things you care about. Look around you and talk to everyone about the innovation. You may think you don’t know anyone who can help you with your dream but keep talking and then talk some more. [Waugh01] Be sure to ask them at the Right Time and remember to Just Say Thanks.

Sometimes it takes digging—you might have to talk to someone who knows someone, and so on, before you get the help you need. Every organization provides some kind of support—web development, graphic design, special printing, free advertising, corporate publications, secretaries, and assistants. Help can be there for the asking. Look around. Sometimes just wandering over to a support area and stopping at someone’s desk can help you discover what’s available.

If a person is hesitant to agree to your request for help, turn it around. Explain how this opportunity can be an advantage to him such as allowing him to learn something new, make new contacts, or even add a line to his end-of-year report.

Don’t be discouraged if the help is slow in coming. Even a small start can help you promote your ideas, leading to more resources in the future. Small contributions from a variety of individuals can add up to

significant results. Most importantly, each time you ask for help, you'll bring in more interested individuals and allow them to feel some ownership in your new idea.

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This pattern “builds” connections with people who will now feel part of the effort. When team members ask each other for help, the team becomes increasingly productive. To understand how powerful this technique is, read how it applies in the work of Jim and Michelle McCarthy [McCarthy01] and in agile development processes. [Rising02]

The risk is that asking for help can be seen as a sign of incompetence, especially if you are part of an organization that fosters a “You should be able to do it yourself” image. [Senge+99]

*One Dedicated Champion used this extensively. Support for the patterns activity was provided by the training department, the external web developers, graphic artists, administrative assistants, and managers including a Local Sponsor and Corporate Angel.*

*An Evangelist used this to jumpstart the patterns effort, by contacting the person who could provide resources to advertise and hold patterns workshops and to Do Food at these events.*

*Sylvia Lawry, who started the Multiple Sclerosis International Federation, began her work by asking the Academy of Medicine to donate a one room, eight-by-ten foot office at its headquarters at Fifth Avenue and 103<sup>rd</sup> Street in New York, “I had been in the Academy’s building, reading medical books, and saw that there was an empty office,” Sylvia recalled. “I figured it would be a prestigious address for us. So I asked for the office as a donation. It’s amazing what you can get just by asking.” [Trubo01]*

**Originators:** Jim and Michelle McCarthy

*Shepherded for PLoP’01 (August 2001).*

*Shepherded and workshopped at EuroPLoP’02 (April 2002).*

## **Big Jolt**

*I was invited to give a patterns presentation at a company in another city. Afterwards the local Evangelist said, "You didn't say anything I couldn't have, but more people will listen to you. Your talk will have greater impact than mine would and then they'll come to me for more information."*

**To provide more visibility for the change effort, invite a wellknown person to do a presentation about the new idea.**

???

You're an Evangelist or Dedicated Champion working to introduce a new idea into your organization.

**Brown Bags and Study Groups give a new idea some visibility in your organization, but at some point, you need to attract more attention to the effort.**

Some people are too busy to attend Brown Bags or Study Groups, but will take time to hear an expert in the field. When a speaker has credibility, people will be influenced by what he has to say.

Even those who have adopted the innovation need to have their interest reinforced. They need something to re-energize their interest and strengthen their commitment; otherwise they may fall back into old habits or forget the new approach. [Rogers95]

*Therefore:*

**Arrange for a well-known person who can talk about the new idea to do a presentation in your organization.**

If funding is not available, entice the expert by pointing out that his presentation is an opportunity for publicity for his latest project or book. It can even jumpstart a possible topic for a Study Group in the organization.

Increase the probability of a significant audience with lots of publicity before the event, using In Your Space and e-Forum, and personally inviting and reminding people. If possible, use Location, Location, Location. Tell Connectors. "Big name" people usually expect a big audience, and may consider it an insult if they don't get one at your organization. This is especially important if the speaker is not being paid.

Schedule a pre-event meeting so the speaker can tailor his talk to the needs of the company. Give the speaker some insight into the local power, political issues and the organization's true priorities. Be sure the speaker is willing use Just Enough to speak at a level the organization can absorb. "Big name" people may wish to talk about something that individuals in the organization are not prepared to understand.

If the speaker is willing to do more than just a presentation, arrange Royal Audience to reward those who have helped with your new idea in the organization and to make an impression on the Corporate Angel or Local Sponsor.

If the speaker permits it, videotape the presentation and make the video available for people who could not hear the speaker live. Schedule some group viewings so that you can better to answer questions. Use both the presentation and the video sessions as an opportunity to Plant the Seeds.

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This pattern “builds” an event that will increase awareness of an innovation and provide some training for it. A big name speaker will catch the attention of even the busy people and will raise your credibility since you were able to arrange for this person to visit the organization. Even those who cannot attend may be influenced by the publicity before the event and the talkabout it afterwards.

The risk is that it can create more enthusiasm than you are able to handle. Make sure you have people to help you after the speaker has gone. Without appropriate followup, the enthusiasm is likely to fizzle. Also, dealing with the celebrity will involve a lot of extra overhead, divert resources, and distract you from higher priority tasks but will not necessarily contribute to your longterm community development. [Kim00] Make sure this event is held in the context of a larger plan.

*The interest in and inquiries about patterns increased significantly in one company after a presentation by Jim Coplien.*

*One Dedicated Champion said they “use this as much as we can. For some reason, people don’t believe the in-house experts as much as a visiting ‘dignitary.’”*

*A Dedicated Champion invited a well-known speaker and saw a difference between those who heard the talk and those who did not. Most of those who attended were willing to hear more, while most of the others were still skeptical.*

**Originator:** Mary Lynn Manns

*Shepherded and workshopped at PLoP’99 (August 1999).*

*Shepherded and workshopped at EuroPLoP’00 (July 2000).*

*Shepherded for PLoP’01 (August 2001).*

## **Brown Bag**

*One of the engineers stopped by my cubicle the other day. “You’ve had such great success with patterns—I wonder if you would help me. I have an idea but I don’t know how to get started” I told him that I started by announcing a ‘brown bag’ and talking to people who showed up. It was a small beginning, but the people who were there were those who were interested in the topic and they were willing to help me take the next steps.*

**Use the time when people normally eat lunch to provide a relaxed setting for hearing about the new idea.**

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You’re an Evangelist or Dedicated Champion who would like to call a meeting to introduce a new idea. Members of the user community are free to attend or not.

**People can be too busy to attend optional meetings held during work hours.**

There is always other, more important, work to be done. Even though most people have a natural curiosity about new ideas, it’s hard to find the time to hear about new ideas. This makes it difficult to find a time when people can attend meetings. But, since almost everyone eats in the middle of the day, a meeting over lunch will often find more people with available time.

People are often willing to attend a meeting over lunch. It’s not viewed as wasting time that could be spent doing "real" work, since the time would be spent eating anyway. Getting people together at The Right Time can take advantage of normal “lulls” in work activity that occurs at other times in the day-like lunchtime.

*Therefore:*

**Hold the meeting in the middle of the day and invite attendees to bring their own lunch.**

Consider spending a little of your own money to Do Food to make the event special. Advertise the event in an e-Forum or In Your Space. Talk it up with Connectors and Respected Techies.

Use Next Steps near the end of the event to help keep interest alive. Tell people where they can find more information and who is using the innovation in the organization. Ask attendees if there is enough interest to start a regular Study Group.

You may not be able to have a Brown Bag if the corporate culture doesn't accept food in meetings or having meetings over lunch. [Lindstrom02]

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This pattern “builds” more awareness for the innovation in the organization. The fact that the participants are willing to take the time and bring their own food shows a willingness to invest attitude of themselves that can grow over time.

While a noontime meeting can attract more people than a meeting at midmorning or midafternoon, there will be others who won’t attend because they view lunchtime as their break time. You will need to arrange other events for these people.

One Evangelist for patterns organizes Brown Bag conferences. His recommendations:

- ?? Have a presentation every day at lunchtime for one to two weeks.
- ?? Create a program committee to organize the event.
- ?? Invite attendees to bring their own lunch.
- ?? Draw presenters primarily from inside the organization.
- ?? Invite corporate executives to host a session and introduce the speaker.
- ?? Advertise the conference so it is perceived as an event.
- ?? Track who signs up and attends each session.
- ?? Send reminders to participants who registered.
- ?? Have door prizes and snacks at each session.
- ?? Have attendees evaluate each session.

Charles Schwab uses brown bag training sessions to provide on-the-job training for Java developers.

<http://www.zdnet.com/eweek/stories/general/0,11011,2601709,00.html>

The tester Brown Bag lunch discussions started early last year so testers could network, share ideas, and learn more about testing topics. They are held bi-weekly from noon until 1 p.m. The meetings range from free-form discussions to formal presentations. Topics have included demonstrations of products we test and how we test them, conference experiences, software testing certifications, what kind of testers we are, and our testing process. Initially, I came up with a few topics, but soon began asking for feedback from peers. At the year mark, I formed a committee to: request topic ideas from peers, set up agendas, find speakers, and bring in snacks and supplementary materials. In the beginning, most attendees were testers. Information about upcoming Brown Bags was sent to everyone in the company (Involve Everyone) in addition to those who received a notice of the meeting via the brown bage-Forum. Some topics have attracted managers, developers, and others who are interested in software testing.

**Originator:** David E. DeLano

Workshopped at the OOPSLA'96 "Introducing Patterns into the Workplace" workshop (October 1996).

Shepherded and workshopped at PLoP'97 (September 1997).

Shepherded and workshopped at EuroPLoP'00 (July 2000).

Shepherded for PLoP'01 (August 2001).

Shepherded for EuroPLoP'02 (April 2002).

## **Champion Skeptic**

*We need a balance between two conflicting needs—the most skeptical scrutiny of all hypotheses that are served up to us and a great openness to new ideas. If you are only skeptical, then you never learn anything new. You become a crotchety old person convinced that nonsense is ruling the world. (There is, of course, much data to support you.) On the other hand, if you are open to the point of gullibility and have not an ounce of skeptical sense in you, then you cannot distinguish useful ideas from the worthless ones.[Sagan87]*

**Ask for Help from strong opinion leaders, who are skeptical of your new idea, to play the role of ‘official skeptic.’ Use their comments to improve your effort, even if you don’t change their minds.**

???

You’re an Evangelist or Dedicated Champion trying to Involve Everyone. You are using Fear Less and Adopt A Skeptic to try to interest skeptics in your new idea.

**Some of the resisters are strong opinion leaders in your organization.**

Skeptics who are also Connectors know and talk with many people across the organization. If they are vocal about their reluctance to accept your new idea, this will stifle your efforts unless you change their minds, limit their impact, or ask them to help you. The first option may not be possible— you may not be able to bring them to your side. But if they are offered a role in the initiative, they could change from a skeptical outsider to an insider who could make a positive contribution. They do this by encouraging a “devil’s advocacy” approach to decision-making. This is when a solid argument is made and then subjected to grilling by another person or group. Proponents suggest that it allows only the best plans to survive. [O’Keefe02]

A certain amount of opposition can be beneficial. If there are several strong opinions that provide different points of view, there is likely to be more thought and discussion. As a result you will get a consensus of all the ideas. [Bouldin89]

*Therefore:*

**Ask for Help from a skeptical opinion leader to play the role of ‘official skeptic’ or ‘official realist.’**

Encourage him to point out the problems he sees with the new idea. Be sure he understands that his opinion is helping to discover possible problems with the innovation. Invite him to all meetings and presentations, but if he can’t attend, give him opportunities to talk with you personally.

Use the information these champion skeptics provide. They can anticipate problems so that these issues can then be addressed. Their presence can also ensure that others do not get caught up in the hype. They can help set realistic goals that deliver real value.

Don’t take the idea of “champion skeptic” to the extreme. A moderate amount of disagreement is all right but, avoid people with strong personalities who are openly hostile. [Bouldin89]

If there is more than one skeptic who should be involved, you might consider creating a ‘Greek Chorus,’ a forum where skepticism is featured. This could be a one-time workshop or a group of people who regularly contribute to meetings.

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This “builds” a relationship with a vocal, influential skeptic who can’t be included in any other way. The invitation to become a Champion Skeptic will encourage vocal skeptics to become involved, which also provides the skeptic the opportunity to learn more about the innovation. Assigning this role can feed the skeptic’s ego. Recognizing and validating the ideas of an argumentative skeptic will give him positive reinforcement, and may no longer make it fun for him to argue any more.

If the skeptics are a strong influence in the organization, amplifying their objections could result in the non adoption of your idea. You must be a strong Evangelist and be prepared to handle criticism and negative statements.

*Risk management has to acknowledge directly the Can't Do possibilities. One solution is to have a Can't Do specialist. The boss can explain at the outset, "Lillian is our Can't Do specialist, our risk manager. It's her job to focus on the uglies, all the could-go-wrongs that might interfere with our plans. All the rest of you will succeed if you achieve your ambitious goals. Lillian succeeds if she warns me of every possible eventuality that might reasonably be expected to thwart us. She fails if I get blindsided by anything she hasn't warned me about." [DeMarco01]*

*I was working on a change program where I saw the evolution of the avowed cynic to the best pragmatist. He was a shift worker who (thanks to automation) was no longer going to receive shift bonuses as a result of changes. His buy-in was sought along with his skeptical opinions. He realized that he could either get involved proactively, or be a “victim”(he was going to lose his bonuses either way).*

*This rang true for me. A couple of people in my firm are good at “being critical.” They have great respect, and I get along well with them personally, but they are also difficult people to please. I make a point of having at least one of these folks in any steering group.*

*One programmer on the team hates everything initially but when she starts to use it she usually likes it. Almost everyone on the team listens to her. Her initial skepticism, but openness in the long run, makes her credible. Initially she seems to work against you but in the long run she keeps you honest and, if it's a good idea, she'll come around. [Hill02]*

**Originator:** Jon Collins

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Connector**

*The people who were the most helpful to me when I started introducing patterns were the secretaries. They know everybody and everything. They are the power behind the managers who make the most important decisions. They know who to talk to about any issue. They became my most powerful resource.*

**To help you spread the word about the innovation, find people who have connections with many others in the organization.**

???

You're an Evangelist or Dedicated Champion trying to introduce a new idea into your organization. You are doing some things to give exposure to a new idea, but you know that many people still need more of a Personal Touch.

**Your organization is too big to personally contact everyone.**

Studies have consistently pointed to the importance of informal networks. This is how people learn about new ideas, coach one another in trying them out, and share practical tips and lessons over time. The information that passes through them has credibility. When people we know talk about something new, we naturally pay attention. [Senge+99]

“Word-of-mouth epidemics” are created when people talk with others. Some people have a gift for bringing the world together and seeing possibilities in everyone they meet. As a result, they know many types of people in different social circles. The closer an idea comes to this type of person, the more opportunity it has. [Gladwell00]

You have to work within the formal structure of your organization but you don't overlook the ability of communication networks to spread the word. You'll improve your chances for success by taking advantage of the many informal relationships in your organization. [Bouldin89]

*Therefore:*

**Ask for Help in spreading the word about the innovation from those who know and communicate with many others in your organization.**

These people will be easy to find because they know so many people, including you! Begin to look for them among the Early Adopters – this group is generally more social than Innovators and more likely to be members of many different social circles. [Rogers95] While they have the special ability to connect with others, they do not need to be close friends with everyone. They will have close friends (“strong ties”) that typically share interests or proximity, and also have many “weak ties” that link them to other social circles. [Gladwell00]

Use Personal Touch to convince them of the value in your new idea. If they are Innovators, it should be easy to convince them. If not, it will be well worth your effort to take the extra time with them because once they become interested, their connection to others will decrease the effort needed to spread the word. Once the “connectors” are convinced of the value in the innovation, they will talk with others about the innovation. Remember to Just Say Thanks.

Be wary of “connectors” that don't support the innovation. Consider giving them the special role of Champion Skeptic

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This pattern “builds” connections that you might not otherwise reach on your own. It will allow you to reach more people than you can on your own.

But “connectors” can also bring in more people than you have time to handle. So make sure you have interesting things to tell them and some plan of action in place so that the new people don’t become intrigued only to find out that nothing interesting is really going on.

*There were many Connectors at our company because it funded organizations that encouraged these communities -- the music club, the flying club, the golf club. There were also people who played bridge at lunch—who went out for lunch every other Friday (pay day), and so on. Some of those people had known each other for years—now they could know each other outside work—but they talked about work, of course.*

*When I read this pattern, I realized that I was a Connector. I know and talk with many different people throughout the organization on a regular basis. So when someone tells me something interesting, it isn’t long before I’ve shared the news with others.*

*While I was trying to spread the word about patterns, I noticed that Ned was quite a popular person. I often saw him chatting with a different group of people at lunchtime and arranging afterwork margarita breaks. So I stopped by his office one day and personally invited him (Personal Touch) to a patterns presentation (a Hometown Story). After the event, I stopped by again and addressed his questions. Once he was convinced of the value in patterns, he would often stop me in the hallway to tell me about the latest person he talked with about this new idea.*

**Originator:** Mary Lynn Manns

*Shepherded for PLoP’01 (August 2001).*

*Shepherded and workshopped for EuroPLoP’02 (April 2002).*

## **Corporate Angel**

*My boss stopped by my cubicle and said, “I hear you’ve been giving brown bags on patterns. I think you should give a presentation to the vice-president. His staff meeting is in a couple of weeks.” I agreed but I didn’t understand why the high-level managers needed to hear about design patterns. I thought these were good ideas for developers but that was it. I was so wrong. That presentation brought training and the purchase of cases of books and, eventually, a new job description that allowed more time to work on patterns. My ideas wouldn’t have gotten far without buy-in from upper management.*

**To help align the innovation with the goals of the organization, get support from a high-level manager.**

???

You’re an Evangelist or a Dedicated Champion trying to introduce a new idea into your organization.

**Support from local management will provide some attention and resources for the new idea, but you need high-level support to have a more lasting effect.**

Brown Bags and enthusiasm can only go so far. Big ticket items – training, books, conferences, and visiting gurus (such as a Big Jolt or Mentor) – are needed if interest in the new idea is to grow. But since each level of management, such as a Local Sponsor, has authority to spend only in a certain area, resources can be limited. High-level support, someone who believes in the importance of the innovation and will lend appropriate coaching and direction, can make many inroads easier. In addition to resources, they can provide the collaboration and encouragement to align the new idea to the broader goals of the organization. This is vital to a successful change effort. It is this alignment that will make the initiatives last beyond any changes in management at the top.

The higher you go in your organization to reach and convince, the more secure your effort will be. [Bouldin89] An analysis of the best technology transfer practices of a broad cross section of government agencies, research institutions, and national and industrial laboratories identified the importance of angels, high-level executives who protect start-up projects until they mature. [Souder90]

*Therefore:*

**Enlist the support of a high-level manager who has a special interest in the new idea and will provide resources and direction to support it.**

Talk to high-level managers about the new idea as early as possible. Explain how the innovation is Tailor Made to match the needs of the organization and show them the results of the Guru Review.

Look for high-level supporters that are respected across their organization; otherwise their involvement could hurt your cause. The wrong kind of executive support can give the impression that the new idea is being “railroaded” through the organization. [Senge+99] Be wary of those who embrace the new idea simply because of personal interest because the initiative may have great difficulty surviving if they move to a different role or organization. Encourage them to align the initiative to the organization’s goals, so that the change can last beyond that individual.

The upper-level management position should not be used to dictate behavior. The role of Corporate Angel is similar to Senge’s “Executive Leader,” who is a protector, mentor, and thinking partner. [Senge96] The role is not an authoritarian one.

Be sure your interests and the plans of the Local Sponsor are aligned with that of the Corporate Angel to avoid competition and limit confusion.

To keep the Corporate Angel interested, Stay in Touch and offer the chance for a Royal Audience when an appropriate Big Jolt visitor is planned.

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This pattern “builds” highlevel management support for the innovation in the organization. The whole process of introducing the innovation is easier since lowerlevel managers and others in the organization are usually open to directives from the top. When highlevel management helps to align the innovation with the business goals, its place in the organization becomes more established.

The risk is that highlevel support can give the impression that the innovation is big dictated and is simply just another buzzword that is being rolled in. Don’t be in a hurry to establish this level of support. It may be better to work on growing some of the “grass roots” interest for the innovation first.

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Coplien’s Patron pattern [Coplien95] describes the role of a highlevel manager who is a development project champion and decisionmaker.

*The Corporate Angel at one company was the vice-president of product development. He was a consistent supporter of all patterns activities. His influence made it easier to bring in trainers and consultants, buy books, and attend conferences.*

*One Corporate Angel had a special interest in patterns and has worked to develop one of the standards as well as setting organization-wide goals.*

*To move from Level 1 to Level 2 CMM, one company reports that the most important success factor was senior level sponsorship. This set the expectations for Level 2 compliance and business goals for the entire organization, and held the process group and the management team accountable for achieving results.*  
[Lowe96a]

**Originator:** Linda Rising

*Workshopped at the OOPSLA’96 “Introducing Patterns into the Workplace” workshop (October 1996).  
Shepherded and workshopped at PLoP’97 (September 1997).  
Shepherded and workshopped at EuroPLoP’00 (July 2000).  
Shepherded for PLoP’01 (August 2001).*

## **Corridor Politics**

*I'm on the board of directors for several non-profit organizations, so it happens all the time. I know when I see the Caller ID of a fellow board member that I'm in for an ear-full. I learn a lot, though. I get the inside scoop, and, in the end, I almost always wind up supporting the guy who called me. I figure he's taken the time and thinks I'm open to his argument. Besides, next time, I might be the one making the phone calls. It makes the vote a lot faster and cuts down on the arguing.*

**Informally work on decision makers and key influencers before an important vote, to make sure they fully understand the consequences of the decision.**

???

You're an Evangelist or Dedicated Champion facing an upcoming decision that will have impact on your effort. The decision makers are peers or at least approachable.

**It's difficult to address the concerns of all decision makers when a new idea is raised in a group meeting.**

It's hard to change the decision of a group once it is made. Yet, decision makers are not likely to agree with a new idea the first time they hear about it. Their automatic response is usually "no" if they hear about the idea for the first time during a meeting. They must first get the opportunity to voice their individual concerns and ask questions. This is difficult to do in a group meeting and much easier and more effective to do one-on-one.

*Therefore:*

**Informally work on decision makers and key influencers one-on-one before the vote. Try to get the approval of anyone who can kill it.**

Approach decision makers with the facts, not your feelings. Be clear about what you want. Make sure they fully understand the problem and the consequences of the decision. Present the important information. Don't present the issue as controversial. No naming; no blaming. Tell a story to make the issue real.

Let each person know if a manager or a Respected Techie has already given support. If you start by talking to the most receptive people first, you can use these people as a reference for others you talk with next.

Don't use this pattern to "get around" a powerful person. Even if you win the votes so the decision goes your way, that powerful person may become angry if his perception is that issue is being steamrolled past him. Use Whisper in the General's Ear to allow a manager to look good in a group setting.

Know when to compromise—it may be the best way to reach your ultimate goals. Don't be a fanatic. As long as it isn't seen as a trick, a concession will likely stimulate a return concession. Making concessions during an interaction is an effective way to win an argument. [Cialdini01]

Build a relationship with the decision maker. It may not be possible for a person that is new to the organization to use this pattern until a trusting relationship has been built with others.

If you are short on time, your key contacts should be the fence sitters, those who are uncommitted and potentially able to vote either way.

If the decision doesn't go your way, remember, "No permanent friends, no permanent enemies." Some day, on some other issue of importance to you, the decision maker may come through. In the meantime, don't allow a decision maker to become an active opponent. Use Fear Less or Adopt a Skeptic to calm the skeptic. Even if your argument isn't convincing, you may turn down the heat on the other side.

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This pattern "builds" a one-on-one communication with decision makers. It gives you the ability to provide information before a meeting to encourage a vote to go your way. Since the issues are understood, the meeting time can be more efficient—there may be no need for discussion since all concerns have been addressed.

The risk is that the people you talk with will expect a favor in the future. If you win support for your issue, remember to Just Say Thanks and pay your debts. If someone supports you, remember to listen when he has an issue that is important to him. Also, one-on-one discussion before a meeting can be perceived as underhanded politics. You want to be as above board as possible. Don't distort the facts just to win the vote because it will come back to haunt you later. Don't use the pattern for personal issues (e.g. to have a specific individual put on a layoff list – it then becomes a personal crusade and can lead to hard feelings). Using this approach for purely selfish reasons is likely to backfire. The pattern is most effective when it is driven by what is best for the community.

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This pattern is related to No Surprises, which addresses the problem of adjusting schedule or feature commitments without losing customer confidence by calling attention to changes early and negotiating solutions. [Dikel+01]

*When our company decided to use the Rational Unified Process (RUP), some of the managers were tied to our old process. Before we voted on the process decision, I talked with all the software managers. Then, at the meeting, they supported me and the vote was taken without any discussion. If I hadn't met with them individually, they wouldn't have understood why we were moving to RUP and they would have automatically reacted against it. If the vote had been taken under those conditions, it would have been almost impossible to undo.*

*I wanted mandatory training for all developers, which had to be approved by our management. I visited each manager in our area and explained how the program would work and the costs and benefits. I explained how the training would reinforce our company values and would be useful in the short term as well as over time. By the time I brought it up at our meeting, it was a done deal. There wasn't any discussion. We just voted.*

**Originator:** Lise Hvatum

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Dedicated Champion**

*My primary job in the organization is to introduce patterns and build a patterns repository. Because of this, I have time to do things like talk with people individually (Personal Touch), arrange special events (e.g. Hometown Story, Big Jolt), keep the ideas visible (e-Forum, In Your Space), and have regular conversations about what is going on (Stay in Touch) with my manager (Local Sponsor). In other words, the biggest and most important resource I've been given is time.*

**To increase your effectiveness in introducing your new idea, make the work part of your job description.**

???

You're an Evangelist who has successfully enlisted a Local Sponsor or Corporate Angel.

**You need more time to devote to introducing your new idea into your organization.**

Without the pro-active effort of someone whose job description includes championing the new idea, it can wither and die on the vine. A single, dedicated individual can bring a focus to the activities necessary to maintain a sufficient level of interest that will keep the idea alive. You will become 'dedicated' if you have: (1) devotion to the cause and (2) time dedicated to the task of 'championing' the new idea.

An Evangelist doesn't usually have enough time to do this. To get this time, the change effort needs to be recognized as part of the person's job.

*Therefore:*

**Ask for Help from a Local Sponsor to expand your role of Evangelist to one of Dedicated Champion.**

Make a case for including the change initiative as part of your job description. Some Local Supporters are interested in metrics. Track the number of Brown Bags, the number and names of attendees, and the people who sign up for the e-Forum. The support of a Respected Techie is convincing, especially if it is someone your Local Supporter has worked with. A Guru Review can be scheduled with nominations from the Local Supporters in your area.

External Validation can also be convincing, especially if the publications are in the domain the manager cares about or business-related books and articles. News about a competitor can make a big difference here! A Big Jolt visitor can help if he spends time in a Royal Audience to address the manager's concerns.

You can start with a small percentage of your time and later argue for expanding it if there are business reasons that will be compelling to your manager.

When you become the Dedicated Champion keep your enthusiasm and don't neglect any of your current Evangelist activities. Even if you are hired as a Dedicated Champion you must still take on the role of an Evangelist.

Realize that you do not own the success of the new idea. Too often, a Dedicated Champion in his zeal to succeed, does all the transition work rather than facilitating and ensuring that others do their part. Involve Everyone and Ask for Help. If you are to achieve Sustained Momentum others in the organization must see it as part of their responsibility. Measure success by how many transition tasks you encourage others to do. You must become comfortable with an emergence of the new idea within the organization, patient as teams

struggle to find how the innovation helps them succeed, and secure enough to create opportunities for others do their part. [Lindstrom02]

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This pattern “builds” a role dedicated to leading the effort to introduce the innovation into the organization. The new idea is likely to grow in the organization because a person now has the time, and possibly other resources, to carry out the necessary tasks in the change effort.

However, the approval of this role may come with the expectation to succeed. If the success of the innovation is on your shoulders, it is therefore important for you to justify your timetrack the results, and continually demonstrate the benefits. In some organizations, especially small ones, there may not be enough company resources to allow the role of a Dedicated Champion even if the Local Supporter or Corporate Angel is convinced that the effort would be worthwhile.

*One Evangelist was able to convince her Local Sponsor that the patterns initiative was worth supporting. While patterns activity was never her full-time job, there was enough flexibility in her job description to accomplish a lot more than she would have been able to do on her own time.*

*A great deal of effort was used to get patterns going at one company. This would not have been possible without the Local Sponsor hiring and supporting a Dedicated Champion.*

*When I was TQM manager, we aligned the "improvement work" with the "daily work." The longer goal, of course, was for the distinctions to blur. The TQM manager had the skill and time to jump in and help a team complete an improvement project. However, if this action was overcoming a lack of time commitment from the team, then that intervention may have done more harm than good. The more difficult challenge of the dedicated champion is to facilitate the teams to overcome their own obstacles.[Lindstrom02]*

*What allowed us to depart from our normal manner business? For us, the most important element ... was a successful champion who engendered interest in process change. A champion should be a respected developer who is part of the team, known for getting work done and respected for desiring practical improvements. [Roberts00]*

**Originator:** Linda Rising

*Workshopped at the OOPSLA'96 “Introducing Patterns into the Workplace” workshop (October 1996).*

*Shepherded and workshopped at PLoP'97 (September 1997).*

*Shepherded and workshopped at EuroPLoP'00 (July 2000).*

*Shepherded for PLoP'01 (August 2001).*

## **Do Food**

*Our small team had to prepare weekly status reports. We hated this job and the wasted meeting time it took each week. Someone told me that the meeting day was our team lead's birthday, so I bought chocolate chip cookies and took them to the meeting. As we gathered for the meeting I said, "I heard it's Tim's birthday today, so I brought cookies!" It was as though we'd been living in a cave and someone turned on the lights. People smiled and began telling stories from their childhood. The meeting was fun. We joked about the report and the task we all hated. We finished early. All this for a few cookies.*

### **Make an ordinary gathering a special event by including food.**

???

You're an Evangelist or Dedicated Champion who has called a meeting to introduce a new idea. Members of the user community are free to attend or not.

### **Usually a meeting is just another ordinary, impersonal event.**

Research shows that we become fonder of people and things we experience while we are eating. [Cialdini01] Even in ancient times, you can find that people understood the importance of breaking bread together. [Bouldin89] In Alexander's pattern Communal Eating(147), sharing food plays a vital role in almost all human societies to bind people together and increase the feeling of group membership. Food turns a meeting into an event. "The mere act of eating together...is by its very nature a sign of friendship...". [Alexander+77]

*Therefore:*

### **Make food available at the meeting.**

Advertise the food on Forum or In Your Space. Tell the Connectors. Because people like free food, it draws people in. Ask for Help from the Local Sponsor or even the Corporate Angel to provide the resources. Funding for the food is an important sign to the attendees that the organization supports the effort. If funding is not available, you could buy some inexpensive snacks—both your colleagues and management will be impressed that you believe in the idea enough to put your money where your mouth is.

Be sure you understand the role of food in the culture. In some cultures, food and work don't mix and the idea of eating during a business-related meeting would not be accepted. In each country, a tradition usually exists that treats certain foods in certain ways during the workday.

Try to be sensitive to health issues. The people who struggle with weight problems may find that cookies on the table are too much of a temptation. Someone with an allergy to the one food you offer will feel left out. Think about offering a bit of variety and some healthier choices.

Be consistent in the distribution of food budget from event to event. There is no need to be extravagant; the forces are resolved in this pattern even if the food is simple.

Food is also important in small meetings, even between two people.

=====

This pattern “builds” a special event from an ordinary meeting. Because everyone likes free food, it can draw people in. It will turn a mundane meeting, presentation or other gathering into a more special event. If offered in the beginning, it starts the meeting on a positive note. If the topic gets controversial, can put people in a more relaxed mood—they can stand up and get a cup of tea or grab a cookie. Food can also hold people’s attention if the meeting gets slow—caffeine and sugar won’t hurt!

When you begin to regularly have food at events, people will expect it and be irritated when it doesn’t appear. If the food budget is depleted, use Brown Bag. There are also other ways to make a meeting special, such as holding a meeting outside on a nice day using a different meetings management technique that people are not used to, cutting the agenda in half and letting people go early, or holding the event in the special executive conference room as arranged by your Corporate Angel.

*Food was offered during a recent retrospective. It was a tough, intense two days. But the food started each morning and afternoon off on a positive note. As people ate their food, they had a friendly chat with others who had also gathered around the food table.*

*When the company started cutting back on everything, the food budget was cut for meetings. So I started bringing cookies myself. Sometimes "scouts" went out before the meeting and reported back to the rest of the group before they decided to show up. It made me realize how important I thought food was for the success of the event. When a manager came to me and asked for a retrospective, I would say, "I think it's important to have food at the meeting, so I will personally pay for cookies for the team." The manager would always reply, "OK, since you obviously think this is important, I'll personally pay for the Pepsi." It never failed. Yes, I had to buy the cookies every time but the manager would always ante up his contribution and the team knew it. It actually was better than when the company paid for everything.*

*A tradition at one company is "Food Place." One department has its own kitchen. Another has the famous espresso room.*

*When doughnuts were provided in the health conscious city of Boulder, Colorado, no one ate them! After the experience with leftover donuts, bagels became the food of choice at patterns events.*

**Originator:** David E. DeLano

*Workshopped at the OOPSLA'96 “Introducing Patterns into the Workplace” workshop (October 1996).*

*Shepherded and workshopped at PLoP'97 (September 1997).*

*Shepherded and workshopped at EuroPLoP'00 (July 2000).*

*Shepherded for PLoP'01 (August 2001).*

*Shepherded for EuroPLoP'02 (April 2002).*

## **e-Forum**

*The first patterns Brown Bag meetings were well attended but a few busy people stopped by and said, “I was caught in a meeting and couldn’t make the Brown Bag. Do you have any hand-outs?” “Sure!” I replied, “I’ll send them to you!” While I was at it, I sent notes to others I knew were interested. That’s how it started. The list grew as others heard I was sending out notices for meetings and other events. It was the beginning of our patterns community.*

**Set up an electronic bulletin board, distribution list, WIKI, or listserver for those who want to hear more.**

???

You’re an Evangelist or Dedicated Champion trying to introduce a new idea into your organization.

**You need to initiate and maintain regular contact with people who might be interested in your new idea.**

It’s hard to get information to everyone. People are so busy and overwhelmed by too many ideas. They may not be able to find the time to attend every Brown Bag or other event but they like to know what’s going on.

Electronic forums allow people to keep in touch and keep a new idea on their minds. When you set up a mailing list for the enthusiasts, or devotees, you’ll get to know some of your most potentially valuable members and give them a chance to meet each other. [Kim00]

*Therefore:*

**Create a publicly accessible electronic, interactive forum. Advertise its existence. Keep it active and growing.**

This can be in the form of an electronic bulletin board, distribution list, WIKI [Leuf+01], or listserver. Have separate “announce” and “discussion” lists, since some people want to actively participate and others want to passively hear what’s going on.

If you monitor the medium, you can use this data to convince management (such as Local Sponsor or Corporate Angel) that there is sufficient interest to take the next step in the change initiative.

This is one way to Stay in Touch with individuals, but it should not be the only way. Use electronic mediums in combination with other communication mediums. Post information in Your Space. Give a status report and tell people what’s happening next during events such as a Brown Bags and Study Groups. Plant the Seeds to spark conversations with people. Use a Personal Touch too.

=====

This pattern “builds” a place to electronically share information and expectations about the new idea. It allows you to keep from becoming isolated from those who are interested in hearing about it. The virtual community will help you establish a real one.

If you use it too much, it can have an overdose effect and can even be viewed as spam. Know your community and what they are interested in seeing. You can also get too accustomed to using electronic means. Don’t forget to maintain personal contact with individuals who are key to your efforts.

*One Evangelist used an e-mail distribution to draw attention to patterns activities. The initial list came from Brown Bags. Later, when training courses were offered, attendees were added. The distribution list was used to advertise pattern news, especially Big Jolt visits. The list made the recipients feel special because they heard about an event before the general population.*

*A Dedicated Champion used an e-mail distribution list to send the latest news on patterns events and useful examples of patterns.*

**Originators:** The EuroPLoP 2000 Focus Group on Introducing Patterns into Organizations: Gerhard Ackermann, Frances Evans, Peter Gassmann, Jan de Groot, Pavel Hruby, Klaus Marquardt, Amir Raveh, Linda Rising, Maks Romih, Didi Schuetz, Alberto Silva, Amy Strucko and Oliver Vogel, with special thanks to Amir Raveh, the originator who also captured the initial version of the pattern.

*Workshopped at EuroPLoP'00 (July 2000).*

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Early Adopter**

*“Visionaries are those rare breed of people who have the insight to match a [new idea] to a strategic opportunity, the temperament to translate that insight into a high-visibility project, and the charisma to get the rest of the organization to buy into that project.” They are the ones who can give your new idea its first break. Even though it is hard to plan for them, it’s even harder to plan without them. [Moore99]*

### **Ask For Help from the opinion leaders in your organization.**

???

You’re an Evangelist or Dedicated Champion trying to introduce a new idea into your organization. You have a small group of Innovators who support your new idea.

### **To create more impact for the new idea in an organization, interest must extend beyond the initial group of Innovators.**

Innovators are helpful as “gatekeepers” for the innovation, but they generally don’t make good opinion leaders because people are wary of their risk-taking attitude. They tend to be effective opinion leaders only in highly innovative organizations. In other organizations, you need the help of people who are more practical – those whose reputation for being sensible makes the rest of the organization look to them before adopting a new idea. The “early adopters” follow the Innovators on the normal curve of adopter categories. They are just ahead of the Early Majority in their level of innovativeness and risk-taking. [Rogers95]

“Early adopters” are “visionaries” who care about fundamental breakthroughs rather than simple improvements. Unlike the more enthusiastic Innovators who like an idea just because it’s new, “early adopters” consider the usefulness of the idea and attempt to match it to a business goal. [Moore99] As a result, they often have the respect of their peers and make good opinion leaders. This is the reason they are generally sought by change agents to help speed up the diffusion process. [Moore99, Rogers95]

*Therefore:*

### **Win the support of a group of people who can be opinion leaders for your new idea and ask for their help in convincing others.**

Look for people who are open to learning and have a reputation for discrete, successful use of new ideas. Give them as much information and training as possible to convince them of your idea. Use Personal Touch and Tailor Made and encourage them to look to Innovators for experiences with the innovation. You have to come down to earth and show the usefulness of the innovation to the organization if they are going to be interested. Be flexible and willing to work with them as they try to realize the business value the idea offers.

Once they are convinced of the new idea Ask for Help. Encourage them to talk with others, using Personal Touch or Adopt a Skeptic. Ask them to lead a Study Group or, after they gain some experience using the innovation, to do a Hometown Story. If you find an “early adopter” that is also a Respected Techie, he may be interested in being involved in a Guru Review to help convince management. Stay in Touch and include them in a Royal Audience. Remember to Just Say Thanks.

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This pattern “builds” a group who can help serve as opinion leaders for your new idea in the organization. The support of these individuals will reduce the uncertainty that others, such as the Early Majority and

skeptics, have about the new idea. They can also help gain the support of Local Sponsor and/or a Corporate Angel.

The support of a group of Early Adopters does not come for free. Unlike the Innovators who usually become excited after attending one event, you will have to convince Early Adopters that the new idea will help the organization. This takes time. As an Evangelist you may not have the time to do this one-on-one, but you can encourage them to attend presentations such as a Hometown Story, Study Group, or Big Jolt to get the information they need. They are attracted by the Smell of Success.

*Soon after I started talking about software patterns in my organization, Carla took the initiative to read "The Patterns Handbook." So I took her for coffee one day to answer her questions about what patterns could offer the organization. She was hooked. Because her work and her opinions were respected in the organization, I asked her to talk with others about patterns. And when I planned an event, I always asked her opinion on the details.*

*The patterns movement at one company targeted the development community with the longterm goal of building a patterns repository to capture "best practices" in the organization. The folks who were involved in the pattern mining for the repository were the respected, down-to-earth developers who were open to new ideas but not the wildly enthusiastic just because it was a new thing.*

**Originator:** David E. DeLano

*Workshopped as Grass Roots at the OOPSLA'96 "Introducing Patterns into the Workplace" workshop (October 1996).*

*Shepherded and workshopped as Grass Roots at PLoP'97 (September 1997).*

*Shepherded and workshopped as Grass Roots at EuroPLoP'00 (July 2000).*

*Shepherded as Grass Roots for PLoP'01 (August 2001).*

*Shepherded for EuroPLoP'02 (April 2002).*

## **Early Majority**

*Marketers of a high-tech product tell this story. In the first year of selling their product, the technology enthusiasts (Innovators) and some visionaries (Early Adopters) quickly jumped on board. During the second year, the company won over more visionaries and a handful of truly major deals. Sales appeared to be going so well that, in the third year, the company expanded its sales force, increased its advertising budget, opened new district offices, and strengthened customer support. But the sales were far less than expected and the growth in expenses was larger than the growth in revenue. What the company interpreted as a steadily emerging mainstream market was only an early market. The company failed to recognize that selling an idea to an early adopter is different than selling it to the early majority. [Moore99]*

**To create commitment to the new idea in the organization, you must convince the majority.**

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You're an Evangelist or Dedicated Champion trying to introduce a new idea into your organization. You have gained the support of Innovators and Early Adopters.

**The support of Innovators and Early Adopters will spark the new idea in the organization but for it to truly have impact, you must convince the majority.**

You begin to build the grassroots with Innovators who are gatekeepers and Early Adopters who are the early opinion leaders. But at some point you want to gain the support of the majority to allow the idea to thrive. The "early majority" represents about one third of the population. Once this group is won over, they are loyal and will often enforce organizational standards to help the innovation succeed.

The "early majority" are much more deliberate in their decision making. Before they commit to a new idea, they want to know how others have succeeded with it. They would like it to work properly and integrate well with the way things are currently done. Risk is viewed as a waste of time and money rather than a chance for opportunity or excitement. [Moore99, Rogers95] Unlike Innovators, the "early majority" adopts too late to take on the role of gatekeeper for the new idea. Unlike the Early Adopters, they are followers and generally do not hold positions of opinion leadership. Yet, they provide the link between people that adopt early and those who are relatively late. This is the link that closes the gap or "chasm" between the majority and the early adopters. You must cross this chasm to get a new idea into the mainstream and achieve Sustained Momentum [Moore99]

*Therefore:*

**Expand the group that has adopted the new idea rapidly to include the more deliberate majority that will allow the new idea to gain a strong foothold in your organization.**

Look for individuals who are practical and want incremental, measurable, predictable progress. Show them the visible improvements that can be obtained with the innovation. Demonstrate some results with Must Do It. Connect them with Early Adopters and other peers who have already adopted the innovation. Encourage them to attend a Hometown Story. Use Personal Touch to show them that the risk is low while the value to their immediate needs is great.

Once they are convinced, Ask for Help. Encourage them to talk with their peers about the innovation. Since they are the link to the later majority, ask them to use Adopt a Skeptic to connect with individuals who are more conservative than they are. Remember to Just Say Thanks.

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This pattern “builds” a grass roots majority for a new idea in the organization. Acceptance by the Early Majority defines the tipping point for the innovation. Gaining their support will accelerate the acceptance of the new idea in the organization because the chasm has been crossed and the innovation is in the mainstream. In addition, unlike Innovators who usually move from one new idea to the next and Early Adopters who often see themselves on the fast track, the Early Majority can offer more stability and long term commitment. [Moore99]

The risk is that you can become frustrated with this group because they can be hard to reach by simply talking with them. Be patient. You must first have some successes to show before you can begin to convince them.

*A faculty member in a neighboring department stopped by my office to get some advice on a proposal he submitted for creating a new undergraduate major. He explained that he had been encouraged by the initial enthusiasm from some members of his department. So he moved forward with the planning and thought that the other members would eventually become convinced that it was a good thing to do. But this did not happen. Rather, the majority of the department was not behind him. I suggested that these people needed more assurance that his idea was not a risky one. So he talked with each individual about the advantages the new major would offer the department and provided some evidence that it would not take large amounts of resources away from other projects. It wasn't an overnight process, but the majority of his colleagues eventually agreed that he should move forward with the planning.*

*How do you know that you have a patterns culture? I think I knew that we had passed a significant point when a high-level manager stopped by late one evening. He sat down heavily and began to talk about some problems he was having and then asked, "So, can you think of any patterns to help me?" This was a manager of a large legacy system. Patterns had never been "pitched" to his department and although anyone could take the patterns training, most of the interest came from the new OO projects. If this manager was asking for patterns, clearly the majority was being won over.*

**Originator:** Mary Lynn Manns

*Shepherded and workshopped for EuroPLoP'02 (April 2002).*

## **Evangelist**

*How I'd thought it worked was, if you were great, like Martin Luther King Jr., you had a dream. Since I wasn't great, I figured I had no dream and the best I could do was follow someone else's. Now I believe it works like this: It's having the dream that makes you great. It's the dream that produces the greatness. It's the dream that draws others around us and attracts the resources it takes to accomplish the dream.*

[Waugh01]

**To begin to introduce the new idea into your organization, do everything you can to share your passion for it.**

???

You're part of an organization that wants to stay abreast of innovation. You're excited about your new idea. Maybe you went to a conference, read an article or book and, as a result, started learning more. You feel your new idea will have value for your organization and you want to spread the word.

**You want to get a new idea going in your organization but you don't know where to start.**

Ralph Waldo Emerson said, "Nothing great was ever achieved without enthusiasm," but it's hard to translate enthusiasm into action that has lasting impact. New ideas are always out there—more than we can handle. Even the best ideas still need to be sold. This depends on the enthusiasm of people who are the natural instigators of new ideas and new practices. [Senge+99] They are the ones who can grow an idea into real change for the organization.

*Therefore:*

**To introduce a new idea into your organization, let your passion for this new idea drive you.**

Invest yourself in your cause. In other words, the first person to convince is you. If you don't believe in your cause, it will be difficult to sell it to anyone else. This is not a role for the fainthearted. Look for possibilities in every situation; take advantage of even small opportunities to get your idea across.

Share your vision with others. Let them feel your enthusiasm. Tell your story—this is the driver for real change. Your story should convey your passion, excitement, and conviction and inspire others to do the same way.

Don't worry if you don't have an all-encompassing vision. Test the Waters with a simple plan of action. Then move Step by Step, letting each stage build on the previous one. [Senge+94] Take Time for Reflection and learn as you go. Get beyond a quick-fix mindset.

Give Brown Bags and try Plant the Seeds. Set up an e-Forum. If there is interest, start a Study Group. If you have a well-known contact who will come in to your organization at no cost, bring in Big Jolt. Do Food at events when you can. Begin to identify Innovators and Connectors. Use Personal Touch. Always remember to Just Say Thanks. Progress can be slow. Celebrate Small Successes, be prepared for setbacks, and realize that real change takes time.

Show that there's value in your new idea. Don't "preach"—any improvements should just radiate from you and from your work. Hopefully the rest will notice and inquire. [Edralin02]

If you are seen as an Innovator, people are less likely to trust what you have to say, since Innovators get excited about new things just because they are new. If you are seen as an Early Adopter, you are likely to be more effective in reaching the rest of the organization because of your reputation for being more down-to-earth in your decision-making.

Research suggests that if you are naturally likeable and attractive, your job will be easier because people are unconsciously more open to people they like. If you are introverted or opinionated, people are not likely to trust you, even if you've got the best data in the world. You must be a strong communicator, someone who can build personal credibility. [Alexander01,Cialdini01] The Introvert- Extrovert pattern suggests that you should teach yourself to play the role of an extrovert, so that an observer believes you are extroverted, bold, and outgoing. Teach yourself to recognize the situations in which this role is appropriate and then gather your resources and turn the role on. [Bergin]

Involve Everyone and Ask For Help. It's hard to be a Salesman **and** a Connector, **and** a Maven but all three roles are needed to lead a change initiative [Gladwell00] Don't try to do it all. For example, a Respected Techie is a good candidate for a Maven. Encourage others to be Evangelists in their own teams. Be on the lookout for possible managerial support. Real impact will require a Local Sponsor and a Corporate Angel.

Keep your determination in the face of resistance. Use Fear Less to get skeptics involved in the effort.

Look for the positive side in each person you are talking to. If you have a deterministic view of people—that they come programmed by their genes, there's only a 10% margin of improvement and 20% of them will screw you if they get a chance—then that belief, in itself, will severely limit your ability to lead profound change. On the other hand, if you love people, and if you believe there's an enormous reservoir of untapped potential in each person then you want to help them be all they can be. If you can bring that attitude to your work, and if you can muster the courage and compassion to act upon that love, then you can be effective. [Senge+99]

Your goal is to earn credibility. Others may not always agree with you but they need to trust what you say. This is the most important part of being a change agent [Hill02] Once you've earned credibility, you're in a good position to become a Dedicated Champion

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This pattern “builds” a role for an initial enthusiastic introduction of a new idea. It gets the new idea going in the organization and sparks some support from Innovators and possibly some interest among management.

The risk is that the Evangelist can become too passionate about the new idea and turn off some people. Maintain the enthusiasm, but don't get carried away. Keep in mind that most others have to be convinced before they will feel the same enthusiasm you do.

*Several years ago, I set out on a crusade. Management declared me a missionary and commanded me to go forth and convert everyone in our organization. I was preaching the need to embrace the concept of productivity in the form of an automated software tool called Excelerator. As far as I can tell, management selected me because I was a true believer; in other words, I was the first convert. [Bouldin89]*

*The pattern's movement at one company began with an Evangelist who talked to everyone about patterns and gave Brown Bags. A small group of Innovators supported this early effort and helped identify others who might be interested. An e-Forum was established and ultimately a Local Sponsor helped identify a Corporate Angel.*

One Evangelist for patterns was thrilled when so many people attended the first patterns event in the organization. She attributed the high attendance to the way she advertised the event, but a colleague suggested that people attended because the Evangelist was a likeable person.

A manager at one company notes -- The important thing about new product development is that the 'champion' of a new product develops a passion for that product, and inspires passion in others. It's like a new business venture. People who have a passion for something find the time to work on it, at lunch time, before or after work, weekends, whenever."

As I look back on the beginning of the patterns activity, I can see that I did a lot of things unconsciously, in other words, I was lucky! I was naturally enthusiastic about patterns. I wanted to share this information with others. I tried to think of ways of getting the message across. I didn't do all this because I understood how to get things going. I did it because that's the way I was.

**Originator:** Linda Rising

Workshopped at the OOPSLA "Introducing Patterns into the Workplace" workshop (October 1996).

Shepherded and workshopped at PLoP'97 (September 1997).

Shepherded and workshopped at EuroPLoP'00 (July 2000).

Shepherded for PLoP'01 (August 2001).

## **External Validation**

*The “Design Patterns” book [Gamma+95] provided useful information and gave validation to patterns in the early days before this idea was well known.*

**To increase the credibility of the new idea, bring in information from sources external to the organization.**

???

You're an Evangelist or Dedicated Champion working to introduce a new idea into your organization.

**Before being persuaded to accept a new idea, people want assurance that the idea has validity outside the organization.**

The innovation-decision process begins with knowledge. When people become aware of an innovation, they want to understand how it works. This information can come from within the organization but, initially, external sources of information are more important to them. External publications can have more credibility than internal technical reports that are often WODs (written only documents), sometimes distributed widely but largely unread.

Most people want some evidence that the innovation is not just an impractical notion of a few individuals in the organization; therefore, endorsement from outside the organization will catch their eye. External sources of information are especially important for those who are first to adopt an innovation in the organization (the Innovators and Early Adopters) because, at the time they are seeking knowledge, there aren't many others in the organization who have experience with the new idea. [Rogers95]

*Therefore:*

**Give people in the organization external sources of useful information about the new idea.**

Mass media sources are a good place to start—books, articles and web pages with no nonsense information. Include success stories when you can. Make sure the publications are ones that are trusted by the people you are trying to reach. For example, managers read business journals, not technical ones. Distribute the information one-on-one with Personal Touch or on a wider basis with e-Forum and In Your Space. In addition to the written word, bring in a Big Jolt speaker.

Present your work externally in a venue that is recognized by your colleagues. Publish in journals read by your internal customers, especially Respected Techies and Connectors. Present your work at conferences attended by people in your organization. Consider writing a book and getting it published by an external publisher. Make your publications known to others in e-Forum or In Your Space. This will bring in those who are attracted to the Smell of Success.

Be careful how you distribute the external sources throughout your organization. One innovator tried to introduce new ideas by sending books or articles up and down the management chain. Only rarely is that successful. Finally, a colleague told him that others saw his penchant for crediting sources (which he regarded as honesty and humility) as intellectual browbeating. They felt they couldn't keep up the pace of reading, and he was making them feel inadequate. He was encouraged to state ideas as simple, authentic statements [Just Enough], and if anyone asked, he could then provide more background. [Senge+99]

Although external sources can and should be provided at any time, use this pattern in the early days of your efforts, when many people need knowledge and few opinion leaders are in the organization.

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This pattern “builds” some validation for a new idea within the organization. It shows that the innovation is not just a local phenomenon. Because this is what people seek, it is effective in gaining the awareness and for raising the credibility of what you are trying to do. It can attract a crowd. There’s also the possibility that management might see these external validation as a sign that the competition is gaining ground in this area. This can spur decision makers on to support the innovation.

External marketing involves risks. Others across the organization might label your effort as ‘writing only and not working’ Make your topics factual, relevant and useful so that your colleagues don’t dismiss them as academic.

*We have a Brown Bag after someone goes to a conference. Often some of the initial information about an innovation comes from this presentation or a trip report. The implication is: “... this is what others in the industry are paying attention to—maybe we should too.”*

*It was interesting to watch how the book “Patterns in Java” [Grand98] could spark interest in patterns. When I simply showed a Java developer the book, they became intrigued even before they read a word.*

*My manager never paid much attention to my research work until the day I showed him a book which referenced one of my publications. He wasn’t familiar with the subject matter of the book, but was extremely impressed that my name appeared in it. I did not expect such an enthusiastic reaction from him, but it showed me the power of externally validating my work.*

*One Evangelist wrote a paper that was submitted to a local conference and ranked first among those submitted. The Corporate Angel learned about this honor and spread the word throughout the company. This helped the Evangelist’s credibility in other parts of the company.*

*Several papers and a book were published about patterns at one company. It was not only exciting for authors to see their work in print but each publication increased the credibility of the patterns movement in the organization.*

*At one division within a global Fortune 500 company, Dedicated Champions produced white papers and journal and conference publications based on their work. This visibility within the company and across the industry helped spread the word about the value of their work. [Radle+01]*

*Five authors working in the same company realized they weren’t having the impact they needed when they tried to introduce patterns into their organization. They decided to write a book on Pattern-Oriented Software Architecture [Buschmann+96] and now they find their credibility has vastly improved!*

*When Sylvia Lawry founded the MS Society, she was told she needed to recruit a board of directors from the power structure of the nation—people whose names could create public confidence in the organization and get attention from the press. Sylvia had a difficult time with this assignment until Dr. Putnam introduced her to Otto Frohnknecht (Corporate Angel), founder and chairman of the board of the International Minerals and Metals Corporation. With Frohnknecht’s help, several high-powered colleagues were recruited. [Trubo01]*

*When we moved from Level 1 to Level 2 CMM, we asked a few speakers from other companies at Level 2 and 3 to talk about the benefits they had realized in their organizations when they achieved these levels. This*

*helped people to understand what could be achieved, and how these other organizations approached the changes. [Lowe96a]*

**Originator:** Peter Sommerlad. This pattern was originally called Bread Upon the Waters.

*Workshopped at the OOPSLA'96 "Introducing Patterns into the Workplace" workshop (October 1996).*

*Shepherded and workshopped at PLoP'97 (September 1997).*

*Shepherded and workshopped at EuroPLoP'00 (July 2000).*

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped for EuroPLoP'02 (April 2002).*

## **Fear Less**

*You always know who “they” are—the people who don’t show up for your Brown Bags, the people who don’t stop by to ask about patterns, the people who just don’t care. So, you slip into denial and focus on the positive responders. You tell yourself that “they” will come around because your idea is so good. That was my strategy until another re-org and subsequent move put me next to one of “them”—one of those guys who had been with the company forever. I was polite, smiled and nodded, “Morning! How’s it goin’?” One day I heard him over the cubicle wall, “OK, Linda, tell me about patterns!” I was up like a shot. We spent nearly a half-hour and it was great. I got to hear first hand what he thought the problems were and it was amazing because we were almost always in agreement. Patterns were not a silver bullet. There was a lot of hype. I learned a lot from that discussion. He brought up some things I hadn’t considered and I used that in my next presentation. We still have great discussions, even though we’ve both left the company. I still enjoy hearing his side of things.*

### **Turn resistance to your new idea to your advantage.**

???

You’re an Evangelist or Dedicated Champion trying to introduce a new idea into your organization.

### **Some people who are not interested in your new idea are introducing noise and gossip.**

Any innovation is disruptive, so resistance is likely. Every change agent complains about it, but if you think resistance is bad, consider the alternative-- it’s frightening to encounter no resistance because that places the full responsibility on you to be correct at all times. Nobody’s perfect-- we need resistance to test our ideas. So, the first step in dealing with resistance is to appreciate it. Fortunately, resistance is universal. It is like fungus. It doesn’t thrive in daylight. Therefore, once you suspect that there is resistance, your next step is to get it out in the open, rather than let it fester in the dark. [Weinberg85]

You will eventually have to address fear, both the listener's and your own. Listeners may fear loss of position or status, loss of comfort, or being taken in by hype. Someone resists change because he is trying to avoid the pain he believes will result on the loss of something positive and enjoyable that will no longer be present if the new way is adopted. [Kerth01] Fears manifest themselves as resistance. Your reaction is likely to be to advocate your views harder. That, too, is motivated by fear, the fear of looking wrong when everyone's looking at you, the fear that your ideas may in fact be wrong. The collision of two fearful people leads to impasse. Resistance is not the primary reason why changes fail. It’s the reaction to resistance that creates problems.

When you start stirring things up, you never know who’s going to show up. Most likely it will be the people you least expect. The ones who have been sitting in their cubicles not making waves, maybe being cynical, maybe just looking bored and boring. In many cases, a high proportion of cynics show up—but cynics are just disappointed idealists. Your job is to play with whoever shows up. If you present even a sliver of hope, some of them will come out of hiding. [Waugh01]

Don’t ignore the skeptic— he “can teach us a lot about what we are doing wrong.” [Moore99] No matter how determined we are, how “righteous” our cause, we’re going to run into obstacles. That’s a given. In fact, we should want to run into them. No course of action is perfect at its conception. Obstacles are a gift because they provide us with information about the route we’ve chosen. They are feedback that tells us how to alter our approach, even our goal. That’s why we have to assume that resistance is a valid response. It’s going to tell us something about our vision, what we’re doing, or how we’re doing it. [Waugh01]

It's hard to listen to people when we don't agree with them. Usually we just elaborate our point of view or repeat what we've said. A better approach is to encourage the other person to say more about his point of view. Sometimes just hearing what another has to say will help each of you reach a better understanding. [Senge90]

*Therefore:*

**Ask for Help from the resistors.**

Listen to what a skeptic has to say and learn from him. Make note of his objections. Ask questions; try to understand his arguments. Address his concerns before he has a chance to use them to stifle your efforts. Bring his objections to light. Include them as limitations in the new idea when you do presentations and as topics to consider when leading discussions. Rather than hiding the potential problems, ask for input on ways to solve them.

Invite resistance so that all concerns are heard Just Say Thanks. Find something to appreciate in all those who aren't on your wavelength. Appreciation asks for nothing and gives everything. Research now shows that it is physiologically impossible to be in a state of appreciation and a state of fear at the same time. Thus, appreciation can be an antidote to fear. [Prevention03] Even if you can't satisfy the resistor, take the time to listen. Look for value in the differences. When someone disagrees with you, you can say, 'Good! You see it differently.' You don't have to agree with them; you can simply affirm them, and then seek to understand." [Covey89] [Waugh01]

While listening to their objections, help resistors understand that learning a new idea does not mean throwing away their experience. Use Personal Touch to show how the innovation can improve things for each person.

Anticipate objections by examining the organization's history and culture and determining what issues you should be prepared to answer. It's much better to bring up those issues instead of waiting for someone else to do it for you.

Be humble in your efforts and compassionate toward imperfections, including your own. While you may like some people more than others, keep in mind that a range of personalities lives within each person. The way you operate toward them will elicit the personality you see—the resistor you fear or the best person someone is capable of being. [Senge+99]

The skeptics must be willing to talk and to listen— if they are not, put your energy elsewhere. Sadly, there are also people who will never be happy no matter what— you probably don't want to encourage them by spending a lot of time with these folks either. Sometimes the resistance is due to a personality clash. If others who have adopted the new idea are willing to help, try Adopt A Skeptic.

This pattern won't work for all skeptics; you can't reach everyone. If some resistors become too difficult, find a Shoulder to Cry On— you might discover other ways to deal with them.

If you know a resistor who is a strong opinion leader, consider giving him the role of Champion Skeptic.

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This pattern “builds” a relationship with a skeptic. It allows you to use resistance to your advantage, rather than allowing others to use it against you. Listening to the skeptics will bring to light the limitations of the new idea so that these limitations can be addressed frankly and honestly throughout the organization. Giving

resistors special attention and validating their concerns may bring them around to your side. Those who see you dealing respectfully with these resistors, and even raising objections in advance, are likely to be impressed with you as the messenger of a new idea.

The risk is that resistors can overwhelm you if you are not prepared to handle criticism. Encourage them to talk with you one-on one to protect you from a verbal attack in public that can end up damaging your cause.

*In a medium-sized European organization that works with insurance companies, an Evangelist tried to introduce object-oriented approaches. There were signs of resistance at the beginning, but resistance decreased when the resistors were actively involved in the process.*

*I usually tried to follow-up on negative comments one-on-one to hear the detractor's side and to address issues. These issues were always brought up in subsequent presentations—to deal with problems before they were raised. In some cases, detractors became enthusiastic supporters. In other cases, detractors remained unconvinced but they were no longer as noisy about it.*

*I was giving a talk about patterns and someone in the audience was angrily disagreeing with everything I said. After hearing a few negative comments, I decided to ask the guy to have lunch—scheduled just after the talk. I sat down with him, pulled out my notebook and said, "I can't promise to do anything about your concerns but I want to hear all of them. Fire away!" He kept me busy for the entire meal and after it was over he said sincerely, "Thanks for listening. Everyone is usually too busy to care and they treat me like a crackpot. I appreciate that you took the time. Thanks." I'm not sure that I won him over but I think he knows that I want to hear his viewpoint. That's important—for patterns or anything else.*

*In trying to introduce eXtreme Programming at a process-intensive company, the group understood what the main objections would be as they tried to sell XP to the management team. Like good lawyers, they anticipated questions and the answers for their presentation. [Grenning01]*

*I force myself to ask of every obstacle, "What if this is a gift? What is it that this obstacle or setback is telling me?" Someone who is initially the most skeptical of our effort may become my best partner, constantly detecting the hype and fluff and unnecessary complexity in my thinking about what we are doing and what the next steps are. [Waugh01]*

**Originator:** Rob Westgeest

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Group Identity**

*As Sylvia Lawry struggled to form an organization that would support investigation of a cure for multiple sclerosis, she needed to gain public awareness. She met Edward Bernays, called by the New York Time the “father of public relations.” He suggested that the organization use the term “MS” rather than “multiple sclerosis.” He said, “It will be easier for people to remember than the long words they can’t say and can’t spell” The name is part of your identity. His advice helped raise public awareness of an unknown disease. [Trubo01]*

**Give the change effort an identity to help people recognize that it exists.**

???

You’re an Evangelist or Dedicated Champion who has sparked some interest in a new idea among Innovators and maybe some Early Adopters.

**To introduce a new idea, people need to recognize that the effort exists.**

It’s easier to recognize and talk about something if it has an identity. This is why software developers give their projects a name. This is why patterns are given a name! When the name is mentioned, others know what you are talking about. If they don’t, they are likely to ask.

Assigning an identity to a change initiative helps people become aware that it exists and what it is trying to do.

*Therefore:*

**Give the change effort an identity.**

A good way to begin is to give your group a name. It should be one that is created by the group itself. This builds camaraderie. Use the name often and everywhere you can. When other people first hear the name, they will ask what it’s all about, and will think about the new idea every time they hear the name after that. Keep it visible on e-Forum and In Your Space and when holding an event. The more people hear and see the name, the more likely they are to become curious about it and get involved.

There are other ways to give a group an identity. For example, a regular meeting schedule is a sign to others that the group is an organized effort. The meetings can be solely for planning and other business, or can be incorporated with another activity. Ask for Help from this group. Some may choose to be an advisory board while others maybe willing to take a more active role. The meetings may have few attendees, especially in the beginning, but even a small group begins to build a community. But use the meetings carefully. In some company cultures, having meetings will give the initiative a negative identity. This is especially true if they are run badly. In this case, it is better to encourage informal communication by creating some open areas of work, perhaps around the In Your Space area, that reflects the identity of the group.

Create a web page. A URL and an email address, and even an e-Forum, helps to make the group look official.

If the group decides to write a mission statement and objectives, display them where all can see. Mission statements and/or group objectives help those involved in the effort identify what they are trying to do.

=====

This pattern “builds” an identity for your efforts with the innovation. An identity makes the initiative more visible in the organization, gives it more credibility, and forms it into something that others can ask about, talk about and get involved in. It helps develop a vocabulary for the group that supports the new idea—the beginning of a sub-culture.

But as soon as you label something, people can label you. If they see your group as exclusive, they will develop misconceptions. Be clear about the purpose of the group and make every effort to involve Everyone.

*My school gives an identity to the internal faculty of practitioners, known as the organization’s “University Faculty,” who contribute to their internal training program. They have web pages that list the bios and pictures of the faculty. Each person is given a new shirt every semester with the semester, corporate logo, and the title of the training program. This creates a sense of identity for the faculty so that there is a pride of ownership and participation.*

*A group of people involved in facilitating retrospectives gathered in a hotel in Oregon to share their interest in retrospectives and increasing their use across the software development industry. When the group created a list of action items, the first on the list was: Who are we? What are trying to accomplish exactly? Do we share a set of common goals? Once these fundamental questions were answered, the group was ready to move forward and make progress. The group is called Retroasis, <http://www.retroasis.it/>*

*An Evangelist at HP wanted to do something at the corporate level with a focused topic: thermal cooling in computers. He only knew six people who were interested but each of them knew another six, and so on. Ninety people showed up at his first meeting—the beginning of an annual thermal cooling conference. The “COOL TEAM” of 100 engineers, technicians, and managers meet weekly by phone, e-mail, and conference call. The technology developed out of this conversation delivers tens of millions of dollars to the bottom line, and with regard to cooling, leaves their competitors behind. [Waugh01]*

*The desire to establish a group identity is one of the reasons that teams wear uniforms.*

*When leading a workshop on the topic of introducing innovations into organizations, I asked each group to decide on a new idea they wanted to introduce and then to select a name for their team. They really took it seriously and spent time coming up with a good “identity.” When the exercise was over and we went around the room to hear their plans, they all seemed pleased to introduce themselves by name and then to say what their innovation was. These two things seemed to pull the groups together. I think taking the time to establish an identity meant they were better able to work effectively on the assignment.*

*In expedition courses ([www.xpeditiustraining.de](http://www.xpeditiustraining.de)), the first assignment for teams of participants is to come up with a name. During a break, one of the trainers arranges for t-shirts to be printed for each team with their name. Since the training only lasts two days, this helps the team jelling process to happen faster.*

**Originator:** Mary Lynn Manns

*Shepherded and workshopped at EuroPLoP’02 (April 2002).*

## **Guru Review**

*When the first patterns-based project was initiated, a peer-review board was required almost as a test for the Early Adopters who proposed the system. This had a two-fold effect: it made thorough preparation and thoughtfulness on the part of the adopters essential, and also convinced the gurus that what was proposed had merit for the larger organization. As I recall, there were evenskeptics on that review board, who were eventually won over, to the benefit of all concerned [Olson02]*

**Gather Respected Techies and other colleagues to evaluate the new idea for managers and other developers.**

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You're an Evangelist or Dedicated Champion working to introduce a new idea into your organization.

**Some managers and developers are supportive but others are reluctant to join in until they have some assurance, from one or more respected colleague, that this is a worthwhile idea.**

Managers and developers are overwhelmed by information. They can't take the time to keep up with the latest and greatest. They have probably been disappointed by the promises of the neverending stream of silver bullets and have become cynical and reluctant to go along with even the most convincing arguments.

However, they are always interested in something that will help make their jobs easier and improve the quality of their products. They just need solid evidence. Usually, managers and developers will trust the judgment of the local guru, especially if they have a long-term relationship.

Because this guru usually keeps up with the latest trends, he can be referred to as a Maven—a reliable source of knowledge. [Gladwe100] This perception of reliability gives him the ability to influence a much larger audience, including the managers.

*Therefore:*

**Gather the respected technical gurus into a review team that will evaluate the new idea.**

Look for gurus who are respected by management and other influential people. Ask for Help to get names of these gurus from managers or from Connectors. Include all the right people—leaving someone out could hurt your cause. If one of the gurus is a vocal skeptic, you may want to include him as Champion Skeptic in this group.

Personally invite these individuals to be part of an organized review. Do Food or use Location, Location, Location if the budget allows. Hold a series of information sessions or a half-day or full-day workshop. Give the team a collection of questions or issues to address. Encourage discussion to uncover any areas where there is doubt. Use Corridor Politics to improve your chances of success.

Prepare a report for management. Keep the results of this activity around to use whenever a manager wants to hear “What's this stuff all about?” Be ready to answer questions generated by the report and have a plan for the next step. If this sparks some management support, it may be a sign that it is The Right Time—take advantage of this.

This one-time task force may be willing to continue as an ongoing review committee for the innovation. It can include gurus who were appointed to the original task force and others who are interested enough to join in.

Remember to Just Say Thanks for any support and be sure to invite the evaluation team to any Royal Audience

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This pattern “builds” data about the innovation through a firsthand evaluation from respected colleagues. The report, if positive, can be used to spark more support for the new idea, especially among management.

But use of this pattern can be risky. If the team’s report is not positive, or if a few members are vocal about their apprehensions, the efforts to introduce the new idea can be brought to a standstill. Head off this possibility by making yourself available to answer questions and address concerns during the evaluation process.

*Our Vice-President and his staff requested a review after my initial presentation on patterns. Each member of the Vice-President’s staff named a Respected Techie for the evaluation team. Innovators who had been involved with patterns from the beginning were also invited to join the team. After a positive evaluation, the management became active supporters of patterns and the word spread throughout the organization that patterns were a good thing.*

**Originator:** Linda Rising

*Shepherded and workshopped at EuroPLoP’02 (April 2002).*

## **Hometown Story**

*I'd been using patterns for some time when I heard about Mike's experience with applying the Mediator pattern in a project with rapidly changing requirements. The story helped me see that one of the powerful things about patterns is that a simple idea could save an architecture. Without Mediator, the team would have produced a spider web of interactions. Instead, an easily maintained design ensured project success. We can always learn from the experiences of others.*

**To help people see the usefulness of the new idea, encourage those who have had success with it to share their stories.**

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You're a Dedicated Champion trying to Involve Everyone.

**People who haven't used the new idea may not be aware that other people have used it successfully.**

Hearing the experiences of respected colleagues is the next best thing to personally having the experience. [Rogers95] People want to know what successful individuals are doing. However, we tend to see the same people up front giving presentations. We know others could talk about their experiences, but they don't want to take the time to prepare and deliver a formal presentation. Yet, informal, interactive presentations require little preparation and can be very effective. People are more likely to talk about experiences when they can do it in an informal way with little or no preparation.

*Therefore:*

**Encourage individuals to share their experiences with the new idea in an informal, highly interactive session.**

Do the legwork to prepare and promote the event Advertise In Your Space and on e-Forum. Do Food or Brown Bag. You do not need a large audience. Small group settings can create the atmosphere you want. Be there to help, especially if the presenter is not good at leading a discussion.

Although you may wish to ask anyone who has had a positive experience with the innovation to do a Hometown Story, Respected Techies and Early Adopters are likely to have the biggest impact because they are generally seen as opinion leaders. They are likely to be attracted by the Smell of Success.

Repeat this pattern as often as you can. Make sure numerous experiences are heard, not just the ones from a few elite groups. Innovators are the only ones likely to get excited about the new idea after hearing only one success story. Most other people will need to see a variety of experiences from many different people before they become eager supporters.

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This pattern "builds" an event in which individuals share their experiences. It is likely to increase the appeal of the new idea because most people are intrigued by success stories.

But if you choose the wrong person, this can run the risk of hurting your cause. For example, arrogant presenters who are likely to drone on about all the wonderful things they did could end up turning people off. Try to encourage individuals who are liked and respected. If someone with an unpleasant personality

insists on doing a Hometown Story, you can ease his influence by combining him with other, more likeable, speakers in the same event.

*One of the people who are actively involved in the patterns community said that he initially thought patterns had nothing to offer him. Then he noticed that “smart people” he respected were using and writing patterns, and this made him think he should find out more. Today, he writes patterns and attends one or two PLoP conferences each year. This pattern is one way to show what the “smart people” are doing with a new idea.*

*Patterns success stories were often reported at team meetings. One presenter went on to tell his story at OOPSLA. Others published papers about their successes. Ultimately, a group of us collected our experiences in a book about the company.*

**Originator:** Mary Lynn Manns

*Shepherded and workshopped at PLoP'99 (August 1999).  
Shepherded and workshopped at EuroPLoP'00 (July 2000).  
Shepherded for PLoP'01 (August 2001)*

## **In Your Space**

*We put a whiteboard in a high traffic area, displaying the “Pattern of the Week.” A pen was available to encourage comments. This gave pattern writers a chance to exhibit their work and get feedback from others. It drew attention to the patterns effort and stimulated conversation as people passed by. Some of the patterns were “ready for prime time” while others were protopatterns that still needed some work. The patterns were changed on the same day each week so people knew when to look for a new one. One week we played “Pattern Jeopardy” and posted a pattern solution and asked for the problem and forces.*

**Keep the new idea visible by placing reminders throughout the organization.**

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You're an Evangelist or Dedicated Champion trying to introduce a new idea into your organization.

**Unless people are reminded, they may forget about the new idea.**

People like to be in the know, but many don't find time to periodically read printed documents or information on the web. Yet, they'll notice, and are likely to discuss, things that are in places they see frequently. To communicate your idea and show progress, have a gathering place where a group can come together and talk amongst themselves. [Kim00]

Keeping a new idea visible throughout an organization has a positive impact on the rate at which people adopt it. [Rogers95]

*Therefore:*

**Post information about the new idea around your organization wherever people are likely to see it and have the opportunity to discuss it.**

Package information so that it is noticed and not forgotten. Materials placed in high traffic areas may be easy for people to see but also easy to forget as they move on. Make a message “stick.” [Gladwell00] Use bright colors, an unusual graphic, or an memorable quote. Provide ways for the viewers to interact with the space by asking for feedback or by posing a question that will stimulate discussion. Give them a chance to provide input. Ask for Help. Include announcements about upcoming events, such as Big Jolt, Hometown Story, Brown Bag, or Study Group. Change the information regularly— otherwise, people will get used to it and not even notice it any more.

Consider putting information in the “public space” of your Work Community [Alexander+77] or your Team Space. [Taylor00] Be creative in finding the space. For example, you can post a sign near your office that says, “Ask me about <new idea>.”

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This pattern “builds” a space where people can see and discuss the latest information about the new idea. It will stay “in the space,” and in the mind of the organization. People who see the space may become intrigued enough to become involved in the change initiative.

But despite your best efforts to make the message noticeable, people can become immune to the “space” if they see it all the time. Try to making it something that people look forward to seeing, and consider moving it to a new location once in awhile.

*In my organization, the disciplines are highly disparate and a new technology simply doesn't garner widespread interest. Patterns could be useful across disciplines, but it isn't known outside Architecture and Software Engineering. In Your Space captures eyes, imagination, and interest in patterns just as Don Olson's HandsInView [Olson98a] does, by showing a useful pattern that is not necessarily technical.*

*Alistair Cockburn describes an Information Radiator that displays information in a place where passersby can see it. The passersby don't need to ask questions; the information simply hits them as they pass. The information should change over time—this makes it worthwhile to look at the display. [Cockburn02]*

*I posted a small sign on my workstation that said "Ask me about patterns." That prompted quite a few inquiries.*

*A company-wide, electronic bulletin was sent out several times a week with important notices for everyone in the company. Everyone read this bulletin. Important patterns activities were always advertised and patterns publications mentioned. This kept patterns news in front of everyone, but especially management.*

*Joe Bergin applies this pattern to a larger "space." He creates buttons about the pedagogical patterns project. Contributors to this patterns community wear these buttons and provoke interest at conferences and other gatherings.*

**Originators:** Mary Lynn Manns and Carol Stimmel

*Shepherded and workshopped at PLoP'99 (August 1999).*

*Shepherded and workshopped at EuroPLoP'00 (July 2000).*

*Shepherded for PLoP'01 (August 2001).*

## **Innovator**

*Some people know when you're back from a conference and drop by to see what new books you've bought or new techniques you've seen. They wanted to be there but couldn't take the time. Their need to be in on the "latest and greatest" is almost physical. I always tried to have something special for these guys. They were happy to get anything and it made me feel a little less guilty because I was able to go. I think this is what my boss meant, when he said, "Sure, you can go to OOPSLA, but bring something back for the team!" He was thinking about these guys.*

**When you begin the change initiative Ask for Help from colleagues who like new ideas.**

???

You're a new Evangelist or Dedicated Champion just starting to introduce a new idea into your organization.

**You need people to jumpstart the new idea in your organization.**

You can't interest everyone in a new idea all at once. But you need to start somewhere. A community, of even a few people, who share your interest and want to work together, will make a world of difference in the confusion and inconsistencies that invariably arise in organization wide movements. [Senge90] Virtually every significant change initiative starts with a genuine partnership among a small number of deeply committed individuals, often as few as two or three. [Senge+99]

It is easiest to begin with those people who will be most receptive to the new idea. "Innovators" are the small percentage of the population that get intrigued and excited about something just because it is new. They don't need much convincing, only a little information. They enjoy trying to figure out how the latest thing works. This puts them in a good position to help launch the new idea into the organization.

*Therefore:*

**Find the people who are quick to adopt new ideas. Talk to them about the innovation and enlist their help in sparking an interest for it in the organization.**

Look for "innovators" among the first to attend Brown Bags and other meetings where new ideas are being introduced. Some of them will come to you once you start talking about the new idea around the organization.

Ask For Help by encouraging these individuals to take on the role of "gatekeepers." [Rogers95] Invite them to Test the Waters by doing an early evaluation with Just Do It. Listen to their suggestions for appealing to the larger community. Because they are the first to come on board with a new idea, invite them to lead one of the first Study Groups for other people who are curious about learning more. Solicit their help in setting up In Your Space and an e-Forum.

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This pattern "builds" support from a group who can help get a new idea going in the organization. It doesn't take a lot of work to interest them and then you don't feel so alone. Since they are willing to accept some of the uncertainty that comes with a new idea, they ease the risk for later adopters. Those who are especially enthusiastic may become Evangelists in their own groups.

However, you may not be able to depend on them in the long term. Their interest in new ideas makes them move from one thing to another. In addition, their willingness to accept risk causes others to be suspicious their claims. Therefore, they generally aren't good opinion leaders. [Rogers95] Count on their help as gatekeepers in the short term. If they offer more, consider it to be a bonus.

*Our patterns community began with Brown Bags that were attended by a small group of Innovators and Early Adopters. These people were invaluable to the Evangelist, since many of them had been with the company for a number of years and could offer suggestions about reaching others in the organization.*

*Bill's eyebrows seem to rise to his hair line when he hears about something new. So he was one of the first people I talked with about patterns. He tried some patterns in his code, reported the results, and helped me plan a few patterns events. His enthusiasm is just what I needed to keep me going in the early days of trying to convince others whose eyebrows did not rise as quickly.*

**Originator:** Linda Rising

*Workshopped at the OOPSLA'96 "Introducing Patterns into the Workplace" workshop (October 1996).  
Shepherded and workshopped at PLoP'97(September 1997).  
Shepherded and workshopped at EuroPLoP'00 (July 2000).  
Shepherded for PLoP'01 (August 2001).*

## **Involve Everyone**

*Great things are possible when we increase participation. I always want more people, from more diverse functions and places, to be there. I learn a great deal from other people. I expect them to see things differently from me, to surprise me. [Wheatley99]*

**For a new idea to be successful across an organization, everyone should have an opportunity to support the innovation and make his own unique contribution.**

???

You're an Evangelist or Dedicated Champion working to introduce patterns into your organization. There are others in the community who might get involved with a little encouragement.

**Even if you Ask for Help, there's a tendency to take on too much. Others, especially those who don't see the value in the new idea, may think of it as "your show."**

You're the person dedicated to spending time on introducing the new idea. You want to do as much as you can to help your organization improve but you don't want the organization to be too dependent on you. Moreover, the corporate picture of the new idea may tend to converge around your own. As a result, there's less definitional discussion because you are setting the stage and the pace.

If you take on too much, you will become the single point of failure. Because people will tend to see the new idea as being about you; your personality and history can color their picture. People who might contribute to a discussion of how best to make the innovation work will instead defer to you, seeing themselves as students learning "the right way."

Even a small group interested in a new idea can become a clique, isolated from the needs of the organization. Those who aren't part of the effort may become defensive and withdrawn, afraid of not being able to keep up with the change. Wide involvement is essential for the development of a good implementation strategy. Some things might be less stressful if everyone you worked with were homogeneous, but the long-term plan would not be robust enough to stand the test of time. You can never predict who will be the real enthusiasts for the new technique. Within organizations, as with prairies, you can't get far with pristine and hermetically sealed experiments. This is one reason for reaching out to a broad cross-section of support. In addition to contributing skills and strengths, a diverse group of people will bring awareness of the limitations and organizational constraints that any successful change effort must transcend. [Pascale+00]

Increasing the number of people involved means that the innovation that belongs to the entire organization instead of just one person or a small group. Because of the extensive participation, it becomes everyone's product. [Bouldin89] The effort will be strongest if as many people as possible play a part in sustaining it. Shared experiences can keep others interested. When you share the opportunity to lead, you discover that the extent to which people "own" a project is the extent to which they invest their time and energy to make it succeed. [Waugh01]

"Ownership" is important. It is a term that describes not only literal owners, but more importantly, the emotional investment of employees in their work. It describes personal connections to the organization, the powerful emotions of belonging that inspire people to contribute. A tried and true maxim of organizational behavior is that "people support what they create." [Wheatley99]

*Therefore:*

**Early on, make it known that everyone is welcome to be part of the change effort. Involve people from as many different groups as possible: management, support people, marketing, and training.**

Involve everyone from the start. If the innovation is viewed early on as a clique, it may never be able to lose that image. Even when you're not sure how it will work out, even when you're not sure where things are going, involving everyone creates a stronger community.

Give everyone "ownership" of some part of the change effort. For example, encourage the innovators to help test the new idea and the Early Adopters to be responsible for some leadership roles. Find Connectors and one or more Respected Techies to help spread the word. Identify a Local Sponsor and a Corporate Angel to get management participation. Don't restrict involvement because of any preconceived ideas--even skeptics can contribute by becoming a Champion Skeptic

Put the "spotlight on others." Convince individuals to take on public leadership tasks: running events, speaking, and the like. Take the time to help each individual become an effective leader. People have different abilities and interests. Some are not comfortable writing, others don't like public speaking. Sometimes you can just Ask for Help to hear what they would like to do.

Give everyone the freedom to express an individual perspective on the new idea. If you're appointing them as a leader, you have to be ready to follow. Prepare yourself mentally to cede ownership of the new idea to someone else.

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This pattern "builds" a community of people committed to the new idea and ready to take on leadership roles in the change effort. Increasing the number of people involved in the process results in an innovation that belongs to the entire organization—not something produced by one person or a small group. Your attempt to involve everyone ensures that as many individuals as possible perceive themselves as active participants in the change process. People who have this perception will view the success of the innovation as their responsibility. This means that they have accepted the change in some small measure, and you have that much less resistance to overcome. Those who become leaders of the change effort will soon become experts in others' eyes, and they will probably do so as your close partners. Your effectiveness will be multiplied because you have people to talk with and fall back upon. They'll tell you which ideas worked out well and which didn't work out so well. They'll tell you which contacts were helpful and which weren't. They'll keep talking to you. And you'll keep learning from them. It's a loop. [Sanders02]

But every time you involve another group, you run the risk of diluting the appeal of it to other people. Stay in Touch with key supporters and opinion leaders and use Personal Touch to make sure that their needs are met. If the new idea continues to be useful, people will stay with you.

*At our company everyone in the organization was involved in the patterns community: system test, marketing, management, and product development. It was surprising how much commonality there was and how much everyone understood the problems outside their own domains.*

*The scope of our training was extensively communicated via the informal network of our attendees. Since we encouraged cooperation and wanted to extend our own network, we did not limit the workshops to our own users. The result was that we trained people from all over our corporation, gained tremendous visibility, and enjoyed the diversity of our new participants' experiences. [Bouldin89]*

*A small group of secretaries stopped by my cubicle. "We heard that your patterns classes are open for everyone. Do you think we could understand it?" I replied, "When I said "everyone" I meant all technical people, but I think except for a few patterns, you should be fine! Don't worry about the design patterns, just focus on the rest." It opened up lots of possibilities. Why not encourage marketing, legal, HR, and others? If we wanted to grow a real patterns community, everyone should be invited. Increased participation means increased commitment.*

*In 1993, Joel Birnbaum, senior vice president of R & D for HP asked Barbara Waugh, "Why does no one out there consider HP Labs the best industrial research lab in the world?" Waugh was directed to hire a consulting firm to find the answer. She was unhappy with the answers from initial contacts with several consulting firms and returned to Birnbaum with, "Why don't we just ask HP employees?" They added four questions to the annual employee survey:*

- 1. What would it take to become world's best?*
- 2. Why aren't we?*
- 3. Is what you are working on world class? If not, why not?*
- 4. What do you need to be your best?*

*Instead of declaring a vision, as many leaders do, Birnbaum catalyzed an organization-wide vision inquiry, inviting the collaboration of all, as equal voices. [Waugh01]*

*I was coaching an XP transition, working with the nonprogrammers. The company had made a big visible commitment to the transition. The Sales and Customer Service managers asked if I would hold a session to explain what was going on. Over the next few weeks, those groups were exploring how they could use some of the same values, principles, and practices and improve their work areas. Some ideas worked, some did not, but it made them feel a part of the transition, even though most of the focus was on programmers and Product Management. [Lindstrom02]*

*I've been actively trying to convert others into the leaders of the effort. For example, I was asked to give a keynote on patterns at a testing conference. Instead of accepting, I said, "You should ask Elisabeth. She's up and coming, working with patterns, and a good speaker." That's what happened. Similarly, I nudged someone else to be the host of PoST 3. Neither started out that enthusiastic about patterns, but they gained enthusiasm at the workshops, and, I think, will get more caught up in it as they play a more public role. In addition to that, having them take public roles makes patterns seem like less of one of my weird enthusiasms, which, I think, was the impression of some.*

**Originator:** Linda Rising. This pattern includes Spotlight on Others, written by Brian Marick.

*Workshopped at the OOPSLA'96 "Introducing Patterns into the Workplace" workshop (October 1996).  
Shepherded and workshopped at PLoP'97 (September 1997).  
Shepherded and workshopped at EuroPLoP'00 (July 2000).  
Shepherded for PLoP'01 (August 2001).*

## **Just Do It**

*A letter in the “In My Humble Opinion” column of Fast Company expressed frustration about a company filled with people who refuse to try anything new. The writer claimed that she knew exactly how to save the company, but no one above would let her do it. Seth Godin, Change Agent, responded:*

*What you're looking for is an insurance policy that will protect you against retribution if your plan goes awry. What you're waiting for is someone way up the ladder to tell you that you can launch a product or institute a cost-savings plan. You want their approval to free you from risk. That's not going to happen.*

*Just do it. If you wait for approval, it means that you want someone to cover your backside if you fail. People higher up on the corporate ladder are well aware of the risk that comes with trusting you. If you screw up after receiving their approval, then they'll be the ones who get into hot water, not you. [Godin01]*

**To prepare to spread the word about the new idea, find out for yourself what the benefits and limitations are.**

???

You're on a project—an Evangelist wanna-be—motivated to adopt a new idea. You are interested in spreading the word to the larger organization. Your local group has some, perhaps limited, tolerance for experimentation.

**You haven't any experience with the innovation yourself, just good ideas that might work. You believe that the innovation can help but you're not sure.**

“It's easier to ask forgiveness than permission.” [Grace Hopper]

A new idea usually incurs resistance if it has no internal track record. You don't want to make a big deal too soon or people might reject it. Sometimes it's better to labor in secret until demonstrable success is in hand. [Olson02]

Fear is what stops us from doing it and keeps us stuck talking about it. [Lindstrom02] But lack of hands-on experience is easy for opponents to attack. On the other hand, positive experience is more difficult to refute. In addition, an understanding of the innovation's limitations helps you avoid overselling and provides insight into approaches that will work. This is particularly important for Early Adopters because they need to see real-world benefit. [Rogers95]

“When in doubt, do it. In my professional career as well as my personal investments, trying new things has paid off more than 90% of the time. I'm glad I did it, and I wouldn't want it any other way. Even the 10% of experiences that can be unpleasant help you appreciate the other 90% all the more.” [Edler95]

Step out, even if you're shy, even if you really don't know what you're doing. If you wait until you're comfortable, if you wait until you know what you're doing, you will have wasted precious time. You will have missed opportunities to be taught by all who will come forward to help you learn because they can see that you're stumbling around. Many of us who could be doing something do nothing because we think we don't know enough. But we can learn whatever we need to know as we go. [Waugh01]

*Therefore:*

**Gather first-hand information on the benefits and limitations of the innovation by integrating it into your current work and encouraging your team to do the same.**

While you are doing this, record any benefits and pitfalls. If possible, quantify the benefit (although this can be difficult). Gather enough information so that you can show others how the innovation will be useful for them. To spread the word about your findings, hold a Hometown Story. Convince your colleagues that the innovation is not beyond their grasp with Personal Touch and show that it is useful to the organization with Tailor Made.

Take a low-key approach when you report the results— this helps to minimize the resistance to change. Don't be overly optimistic or insistent that the new approach is a silver bullet. You may want to simply demonstrate it to a few people and summarize how they can benefit from it. This can be done informally without elaborate meetings or a four-page memo. [Hohmann97]

Don't expect to get everyone on board with this limited experiment. It is likely to be most effective for reaching the Innovators and Early Adopters. Address the concerns of the more skeptical individuals with Fear Less and Adopt A Skeptic.

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This pattern “builds” the knowledge you need to play the Evangelist role. You will increase your understanding of the innovation and be able to apply it to your work. There will be some lessons learned and some concrete ideas for using the innovation further in your organization. You may also be able to collect some rationale for supporters of the status quo who stress the reasons why a new idea shouldn't be adopted. This is one way to Test the Waters so that you can determine what your next steps should be. You might even be able to create the beginning of a framework or process that other teams can use as a prototypical example. This puts you in a better position to capture the attention of a Local Sponsor and to justify continuing work with the new idea.

But you may be putting your credibility at risk. You use this pattern because you know so little, so if it doesn't work out, you can look bad. Be realistic about what you can and cannot do.

*You can incorporate design patterns into design sessions, presentations, system documentation, and code. If a Mentor is available, enlist his help. Add relevant pattern references to an existing design document template. Record any benefits and pitfalls of patterns. Any patterns that are written from the experience in this project will become effective tools to increase software development productivity in your organization. The project will also provide an opportunity for writing patterns in your organization and create a legacy for other projects.*

*People hate to change, but love to experiment. A change is a risk. An experiment is something you can undo, can walk away from all the wiser. I've learned to make new projects into experiments, usually with small pilot programs. [Dauten99]*

*We were novices at object-oriented technologies, but the pilot project produced good practical patterns. These patterns increased the software development productivity by the end of the project.*

*Developers on a project used the pattern format to write some portions of their project documentation. They did a Hometown Story to explain and show how much easier the documentation was to write and to read.*

*The system engineering organization was using an old interface development practice (a derivative of a hardware development technique) that did not work well with the object-oriented development approach we*

*were using for software development. We developed a Programmer Interface Guide (PIG for short—a catchy title helps) and used it to document several interfaces. Even developers outside the group immediately saw the benefit of this approach. A process was written to accompany the document, support tools were developed, and the concept was adopted by the entire organization. Without a concrete example, built internally, this infusion of object-oriented programming practice would not have been adopted.*

*I thought our team should do more unit testing and, to do that, we had to start using testing tools. I played with the tools and talked to the team lead. I also gave a presentation to the group about the tools and everybody thought it was a good idea but nothing happened. I was playing the role of Evangelist but I wasn't an expert on testing. I worked with someone else and we decided rather than have the team lead mandate it, we would just start using the tools. This would show us whether or not it was worthwhile. We started doing Java docs along with a nightly build to see the benefits.[Hill02]*

**Originators:** Jeff Garland, Rieko Yamamoto and Tadhiro Uehara, Frances Evans

*Workshopped at the OOPSLA'00 “Introducing Patterns into Organizations” workshop (October 2000).  
Shepherded for PLoP'01 (August 2001).  
Shepherded for EuroPLoP'02.*

## **Just Enough**

*“Alexander could have written a one-sentence definition of a pattern or an essay, but instead he wrote a 550-page book. Because the concept is hard.” [Gabriel96] Concepts such as QWAN, generativity, and pattern languages cannot be clearly understood in a short period of time. However, these concepts must be understood if quality patterns and pattern languages are to be written. Giving a thorough explanation of complicated concepts while you are covering the basics can put people on the right path to striving for better patterns and pattern languages, but can also confuse them and possibly turn them off.*

**To ease learners into the more difficult concepts in a new idea, give a brief introduction and then make more information available when they are ready.**

???

You're an Evangelist or Dedicated Champion working to spread the word about a new idea in your organization.

**Difficult, complex concepts can overwhelm novices.**

New ideas involve a learning curve. Some of the things people will have to learn are complex and cannot be understood in a short period of time. Although learners should understand the complex concepts at some point to be able to use the innovation effectively, giving a thorough explanation of such concepts while you are covering the basics can be overwhelming and confusing. This may cause them to think the innovation is too complicated. It may discourage busy people from taking the time to learn more.

An analogy can be drawn with Alexander's recommendation for creating a complex building structure, "... build a building in such a way that it starts out loose and flimsy while final adaptations in plan are made, and then gets stiffened gradually during the process of construction, so that each additional act of construction makes the structure sounder." [Alexander+77] In software, this is how large, complicated systems are built. We create the foundation for a software system around what we understand from the analysis, and then add incrementally as we understand more about what the system can and should do.

*Therefore:*

**When introducing your new idea, concentrate on the fundamentals and give learners a brief overview of the more difficult concepts. Provide more information when they are ready.**

If you are doing a presentation to introduce the new idea, describe more advanced concepts in a simple slide or two. If you are having an informal discussion, just provide the amount of information they can comfortably handle and let them know that there is more to learn. Provide enough information to start interested individuals on an investigation of their own. Don't overwhelm them with too many details but offer the encouragement and resources they need to look at more advanced concepts when they have more experience. Give URLs or a list of references to help. Make yourself available to answer questions. Use Personal Touch to show how the innovation can be useful in their jobs. After learners have had time to understand the basics, find opportunities to revisit the advanced concepts for a more in-depth discussion.

=====

This pattern "builds" a slow but sure understanding of complex topics. Learners will be aware of the essentials and will be provided with opportunities to build their knowledge of the innovation as they are ready. This will allow them to develop their confidence about what they've learned, which is likely to spark

their interest in learning more. A slow but sure approach also keeps change leaders from hyping the innovation as a perfect and complete solution from the beginning.

But what works for some people will not necessarily work for others. At one extreme, there may be people who won't comprehend the basics and become concerned that there are even more difficult concepts to come. At the other extreme, there will be people who want to know more and may have the perception that you don't think they're smart enough to handle the advanced concepts. Keep an open line of communication with everyone so that they feel comfortable asking questions to get the amount of information they desire.

*In our "Introduction to Patterns" course, difficult topics are introduced in a few bulleted points. A high level discussion is initiated that could become deeper depending on questions raised by participants.*

*When patterns were introduced during workshops, QWAN and generativity were mentioned as important but were not covered in detail. Attendees were pointed to *The Timeless Way of Building* [Alexander79] if they wished to read more, and the workshop leader mentioned that she was available to answer questions for those who wished to learn more about these and other more advanced concepts.*

*When moving from CMM Level 1 to Level 2/3, the process introductions were synched with the development cycle. Rather than try to give the team all the process changes at the beginning, they introduced "just enough" of the process changes to get through the next stage.*

**Originator:** Mary Lynn Manns

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Just Say Thanks**

*A friend of mine was laid off from a large company where he had worked nearly 30 years. I saw him after his last day and he said that the worst thing about the experience was that no one, not even his boss, had come by to say they would miss him or that they appreciated his work. I thought about my last day when I was laid off. I recall a constant stream of people coming by to share a brief story—how something I had done or said had influenced their life for the better—how I had made a difference for them and the company. I don't remember sadness on that day but an overwhelming gladness at having had the chance to work in that company with those people—and all they did was just say “Thanks!”*

**To make people feel appreciated, say “thanks” in the most sincere way you can to everyone who helps you.**

???

You're an Evangelist or a Dedicated Champion Others are helping you introduce your new idea into the organization.

**People feel unappreciated when they work hard and no one notices or cares.**

It's easy to take for granted the people who work with you. But people are happy and feel their contribution is appreciated with just simple acknowledgement and encouragement. Even when you don't have resources to reward supporters with anything tangible, an expression of your gratitude costs nothing and means so much to the receiver. [Kerth01]

A recent survey of 1,400 chief financial officers shows that a simple thank you can go a long way in motivating employees. When asked what, other than monetary reward, is the most effective means of motivating employees, 38% chose frequent recognition of accomplishments as the best way to encourage staff members. [Accountemps]

Usually, everyone on a team performs a heroic act during any project. We seem to have lost the ability to give someone a “high five” or say “great job,” so heroes often remain unappreciated. [Kerth01] Yet, when many different company presidents and CEOs were asked the following question, “What do you know now that you wish you'd been told twenty-five years ago?” they had strong advice to occasionally stop for a few moments and think about the people to whom you owe thanks and then take the effort to express your gratitude to them. [Edler95]

However, in today's fast-paced business world, there often isn't enough time and resources to acknowledge these efforts in large ways. There may not be enough money to buy Treasures for everyone or time in busy schedules to celebrate accomplishments with a meal.

*Therefore:*

**Find everyone who has helped you and say thanks in the most sincere way you can.**

Informal methods of recognition will make an impression: a private, one-on-one e-mail, a private phone call. Spending a small amount of money can generate a huge return. A token, such as a card, a morning pastry, a piece of fruit, or a small gift, shows that you took extra effort and spent time thinking about what the receiver might like.

Take a few minutes to write a thank you note. It is “shoestring marketing,” a quick, responsive, cheap, and surprisingly effective way to win friends and influence people. “People remember thank you notes (and the people who write them) because good ones are so rare.” [Austin00]

When appropriate, acknowledge achievements publicly. Tailor the thanks to each individual. Let people know they are appreciated by interacting with them frequently. [Messmer00] Be generous with the acknowledgement and always make people feel important. Even if a large amount of time has passed, don't let this stop you from telling people you are still thankful for what they have done. [Edler95]

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This pattern “builds” better relationships with the recipient of the expression of thanks. A sincere thank you is likely to make such an impression on people that it will be easier to ask for Help and receive their help again in the future. The spirit that it creates is incredible. More importantly, it will remind you that you didn't do it all alone. It will keep you humble and be a real boon for those who've made a difference in your efforts. [Edler95]

But once you start thanking people, you run the risk of offending others who feel they were left out or did not receive the same level of appreciation as another person did. Try to reward equally. Thank everyone who helps you, not just the people who do the high profile tasks.

*Among the techniques in his book on retrospectives, Norm Kerth describes the Offer Appreciations exercise that gives project team members the opportunity to recognize what each person has accomplished, contributed, or knows, or simply for whom each person is. [Kerth01, Loeschen91] When I facilitate the Offer Appreciations at a retrospective, I am always a bit afraid. What if no one expresses any appreciation? Of course, they always do and once it gets going, everyone feels so great about it. You can see it. You can feel it. It is such a tremendous thing to do.*

*The inspiration for this pattern came from a co-worker who expressed extreme frustration because her manager did not say thanks after a long, difficult project was completed. Although she didn't mind working the long hours, she was upset that her manager didn't show appreciation with even a simple thank you to the team.*

*So many times when “pattern mining,” I knew I was taking the valuable time of a Respected Techie. I don't know how many times I just dropped by someone's office to say thanks for the time and say the pattern had been posted. Almost without exception, every hardboiled, tough engineer would just beam and tell me that it was great to have someone listen to his story and then come by to thank him. They said, “We're all too busy to say thanks!”*

*I was a team leader at a large satellite telecom company. As each phase of the project was completed, I wrote personal, printed hardcopy letters to the supervisors of everyone who contributed (they were all contractors), expressing my appreciation for their effort. The trickle down benefit was amazing. The contractors were surprised and delighted to be treated well and even complimented, and consequently the barriers between the company I worked for and the contractors came down, at least in this area. When we completed the contract, we were all bummed out because we had to be disbanded. Such expressions have a big pay off over the long term. [Olson02]*

*It didn't go unnoticed that the CEO of an organization immediately said “thank you” to any person who gave a presentation that the CEO attended. One presenter said that it bolstered up the presenters and made them feel important. [Jaslow02]*

*Since I read this pattern, I've been making more of an effort to thank people for everything and anything. I've noticed something interesting—it's fun to thank people when they don't expect to be thanked. When people do something they consider quite ordinary or part of their job and I go out of my way to thank them, they seem quite pleased and I really enjoy that.*

*Most published works include an Acknowledgement section. It's gratifying when you see your name mentioned by an author and that alone is sufficient for an enormous amount of work.*

*Among practitioners of eXtreme Programming, programming pairs will thank their buddies after completing a task—usually with a high five*

**Originator:** Mary Lynn Manns

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Local Sponsor**

*I had three Local Sponsors who were the backbone of all the paterns activity at my company. Yes, I did the legwork. Yes, I wrote the articles. Yes, I devoted my time. But it was the encouragement, the unflagging support of these managers, and their belief in me that made it happen.*

**Ask for Help from first-line management. When your boss supports the tasks you are doing to introduce the new idea, you can be even more effective.**

???

You're an Evangelist, trying to introduce a new idea into your organization.

**You need attention and resources for the new idea.**

Management support legitimizes things in the workplace. It's hard to get some people involved in a new idea unless they think their manager is behind it.

“One of the most important things is the notion of sponsorship.” There must be management who believes that the change needs to happen, who understands the decisions that need to be made and has the power to allocate the resources that will be needed during the transition. [Hildebrand96] Site leadership is critical. Experience suggests that an innovation will have broad impact in those cases where local management takes responsibility for committing to it. [Korson96]

We have seen no examples where significant progress has been made without firstline management and many examples where sincerely committed Corporate Angels alone have failed to generate any significant momentum. Managers have significant business responsibility and 'bottomline' focus. They head organizational units that are large enough to be meaningful microcosms of the larger organization, and they have enough autonomy to undertake meaningful change independent of the larger organization. [Senge96]

*Therefore:*

**Find a first-line manager to support your new idea, ideally, your immediate supervisor or boss.**

Use Tailor Made to help the manager understand how the new idea can help the organization Offer to organize a Guru Review. Personally invite managers to attend events such as a Brown Bag or Hometown Story. If a Big Jolt visit is planned, offer the chance for a Royal Audience. Address any concerns with Whisper in the General's Ear Stay in Touch; keep the manager informed on a periodic basis.

The Local Sponsor should focus on business results and commit resources to efforts that can show results. Their part in the change initiative should be one of support. He may play the role of Coplien's Fire Walls (keep pests away) or Patron (project champion and highlevel decision-maker). [Coplien95]

If Local Sponsor is your manager, Ask For Help in becoming a Dedicated Champion Sponsors may also be your best hope for capturing the attention of a Corporate Angel.

Sponsorship does not necessarily come from just one person. Try to build sponsorship among all the people who have the power to kill projects. [Hildebrand96]

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This pattern “builds” first-line managerial support for your work in introducing a new idea. This allows you to get resources for the change initiative and capture the interest of those who look to management for guidance. You may even be able to become a Dedicated Champion.

But the wrong kind of sponsor can cause you to lose other people. Any time you bring in management, you run the risk they will push things in a direction that is different from yours. An overpowering one can even steal your ideas and take the credit. A manager that is too overzealous can give the damaging impression that the new idea is being mandated. Look for respected sponsors that will help, not hurt, your good intentions.

*Two Local Sponsors have supported the patterns activities and the work of a Dedicated Champion in one organization. The Local Sponsor was instrumental in opening the door to the Corporate Angel.*

*At another organization, the pattern effort would not have been started without the budget from the Local Sponsor to support the Dedicated Champion.*

*In one small organization, the Corporate Angel was also the Local Sponsor as well as the Dedicated Champion and was even involved with project implementation.*

**Originator:** Linda Rising

*Workshopped at the OOPSLA'96 “Introducing Patterns into the Workplace” workshop (October 1996).*

*Shepherded and workshopped at PLoP'97 (September 1997).*

*Shepherded and workshopped at EuroPLoP'00 (July 2000).*

*Shepherded for PLoP'01 (August 2001).*

*Shepherded for EuroPLoP'02 (April 2002).*

## **Location, Location, Location**

*On-site locations “may be seen by participants as cheap and therefore unimportant, the site is ‘the same old place,’ the [event] is easily interrupted, and participants may not prepare as well since they can duck out to look for whatever materials they need at the last minute.” [Kerth01]*

**To avoid interruptions that disrupt the flow of an event, try to hold significant events offsite.**

???

You are planning a half or whole-day seminar or workshop event. You may be bringing in Big Jolt speaker or organizing a training course for your company, rather than sending people away to an open enrollment public course.

**On-site events suffer from interruptions and day-to-day distractions that disrupt the flow of the event.**

It is natural to assume that company events will be held onsite. This is normally seen as a good use of resources, and presents attendees with a comfortable and familiar environment. However, holding an event that is half a day or longer inevitably leads to breaks, and people will wander off to look at their email or be grabbed by their managers or co-workers to just look at "a small problem." This disrupts your event—people always seem to spend longer than planned, and "a small problem" is rarely that so people are late, distracted, or even pulled out of the event for a few hours or its duration.

Such disruption reduces the impact of the event, makes it seem less special, and becomes an obstacle to getting back to some other task that may suddenly seem more important (to someone ~~ed~~, if not the attendee in question). Even without actual disruption, there is often the feeling that "real work" is just a knock-the-door away.

As any real estate agent will tell you, the three most important qualities of any property are: location, location, location. The same can be said of holding special events for your company, with the observation that the location should be away from the usual office environment. This is old wisdom that applies to training courses, retrospectives, team days, and so on.

Some companies don't have internal resources for separate meeting or training rooms, which means that they are either completely disrupted—the office is basically "turned off" every time there is a significant event

*Therefore:*

**Hold significant events of half a day or longer offsite but nearby.**

The best place to conduct training is your company's own offsite facility. [Hadden+02] If this is not available, try a nearby hotel, training center, or retreat facility. This alternative location should not introduce inconvenience. People still have children to pick up from school, car pools to organize, and so on. A nearby location means that the usual beginning and end of day rituals can continue uninterrupted, and that if interruption during the day is required, it is not a big effort to get back to the office.

Make sure the event is a beneficial one! It may take a little extra effort for people to come to the offsite location, so this puts an additional responsibility on you to make it worthwhile. Use of this pattern can't overcome a bad agenda.

Remind attendees to turn off their mobile phones and pagers. Nothing brings back the daily work pressure more urgently, even if you're offsite.

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This pattern "builds" a better environment for an event related to the new idea. Participants can be more focused because they are encapsulated from the worries of work minutiae as the sources of work minutiae are from them. A new context often makes the event more special, creating a freer environment, less constrained by the expectations back at the office. It allows the opportunity for constructive discussion about the event in the breaks and over lunch, and better personal contact and bonding. The sense of a company outing makes the event more fun. Some people behave more openly because the perception is that "this isn't work."

Inevitably, off-site venues will cost more than on-site ones. But if you're going to do it, do it right. Training costs money, so don't squander your investment. That means paying attention to things that may seem trivial but make a big difference. Location is one of these. The worst place to conduct workplace training is at work. Distractions are legion. [Hadden+02] But, despite your best efforts, some people will not be able to get their minds off what needs to be done back at the office. Assure them that the genuinely high priority interrupts will get through. Minor queries and problems will resolve themselves or wait, as will email. Try a variation of the "I'm Too Busy" exercise [Kerth01] to help people understand that the things they want to do back at the office are not as important as what will transpire during the event.

*I was a Big Jolt for a team from a worldwide company in the Midlands. They have instituted teamdays that are off site in exactly the way described in this pattern.*

*I worked for a company that used this pattern to run workshops for a project. The offsite location was a very nice country manor.*

*My company is located in Campinas in Brazil. A partnering organization is located in Curitiba. Meetings were held in one city or the other, which provided an offsite experience for the visiting group. The on-site group suffered all the disadvantages mentioned in this pattern, while the offsite group gained all the benefits. The two organizations decided to have future meetings in a third city, to allow both groups to go off-site.*

**Originator:** Kevlin Henney (An early version of this pattern Gone to Maui, was created by David DeLano.)

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Mentor**

*We held a three-day pilot patterns training. Everyone in the class thought there was too much material. They felt overwhelmed by the number of patterns. One suggestion in the evaluations was some help in actual use of the patterns. We expanded the three days to a week: Monday training, TuesdayFriday half-day training and half-day mentoring. The half-day mentoring was consulting on real projects. It made a tremendous difference in the effectiveness of the training*

**When a project wants to get started with the new idea, have someone around who understands it and can help the team.**

???

You're a Dedicated Champion trying to introduce a new idea into your organization. A project is interested the innovation but some/all of the team members are unfamiliar with it.

**People want to use the new idea on their project but don't know how to begin.**

If team members are willing to introduce the new idea into their project, they can study it on their own to some extent. However, they probably need help to apply it effectively. The team is likely to make more progress if it has access to an expert who can guide them as needed through their problems. Mentors can prevent small mistakes from growing into huge delays. [Hohmann97]

Beginners need to understand what experts do. Apprenticeship learning is ideal because it gives beginners access to an expert's "cognitive library" [Guzdial93]– this is better than any help system or other documentation. [Hohmann97]

*Therefore:*

**Find an outside or internal consultant or trainer to provide mentoring and feedback while project members are working with the innovation.**

The mentor should use a hands-on approach, work side-by-side with the team members, and let them know that he has struggled with the same problems. This will help open their minds to the innovation. [Letourneau00] He should introduce complicated topics carefully using Just Enough and use a Personal Touch to help each team member understand how the innovation can be useful.

Check the credentials of a potential mentor– don't simply trust what anyone claims to be able to do. Ideally, the mentor should have experience in using the innovation and should know something about the team's problem domain.

In addition to the appropriate skills, look for a mentor with a personality that will mesh with the team. But it may be impossible to find one person that everyone will like and relate to. If the mentor manages to alienate some team members and turn them off from using the innovation, you may need to bring in other types of personalities for these people to work with.

Make certain you are clear about what the mentor should do. Why are you hiring him and what are the deliverables? Ask the mentor to help with outlining the specific goals for the educational experience the team members will have. [Hohmann97]

Don't allow a team to become dependent on the mentor. Otherwise, they may not want to let him go or will call on him for every little thing. Ask the mentor when and how he plans to leave his role. The best mentors strive to work themselves out of a job. [Hohmann97] You may need to set a period of time that the mentor will be available and then, at some point, encourage the team members to move forward on their own.

The organization may wish to use a mentor to train the entire team together to prepare for the project, as described in Don Olson's pattern, TrainHardFightEasy. [Olson98b] The benefit lies in the shared experience of training together as a team, which not only enables the team to communicate effectively about the innovation but also serves as a team building exercise.

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This pattern "builds" an understanding of the innovation while people are trying to use it. Individuals will have an easier time using the innovation because they will have an experienced person around to get them over the hurdles. This helps to create a good impression of the innovation and increases the likelihood that people will be willing to adopt it.

A mentor is not always easy to find. The number of experts is usually small compared with the number of projects. In addition, the experts don't always know the project's problem domain or have the time to understand it. In these cases, it may be better to use another form of training for the team.

*At our company, patterns training was available to anyone in the company. In some training classes, the instructor worked as a consultant with teams who were taking the class together. This combination of classroom instructor and hands-on Mentor was very effective.*

*Several organizations I worked with initially staffed a project with people who had no real understanding of object technology and thus their pilot showed that objects would not work in their environment. I have seen similar things happen in recent years with patterns. I still recommend proof of concept starter projects as a training experience but always recommend having an external expert jumpstart the efforts.[Goldfedder01]*

*Jim Coplien says that "the use of pattern mentors in an organization can speed the acceptance of patterns and can help provide a balance between encouraging good design practices based on patterns and discouraging overly high expectations of designs based on patterns.[Beck+96] Initially Mentors can help developers recognize the patterns that they already use in their application domain and show how they could be reused in subsequent projects. Mentors should also watch that the wrong patterns are not applied to a problem (i.e. people tend to reuse things that they know and the same temptation will apply to patterns, regardless of whether the pattern actually fits the problem)." [Anderson94]*

*I worked for a large defense sub-contractor back in the early 80s. We were learning Ada and objectbased design from a group of consultants. The owner of the consulting firm had hired people who used very different approaches. I thought it was just a curiosity at the time but now I see that this consultantowner was very wise. He knew that different people learn differently and that what would work with one person might not work with another. His team included: Gary the Nice (everyone liked Gary, but as I look back on it, I think if he had been the only mentor he wouldn't have been as effective, as it was he balanced the others); Ed the Barbarian (Ed was the owner and knew a lot but he could be a little over the top for some); Johan the Master (he also knew a lot but he was more subtle and more laid back, a "slow reveal"); Brad (just Brad, plain spoken, good guy to work with). This way, we could all find someone we felt comfortable with and it provided the best way to learn the new approaches. They each brought their own take on the material to the table. Hearing different views is always good.*

**Originator:** Junichi Yamamoto

*Workshopped at the OOPSLA'96 "Introducing Patterns into the Workplace" workshop (October 1996).*  
*Shepherded and workshopped at PLoP'97 (September 1997).*  
*Shepherded and workshopped at EuroPLoP'00 (July 2000).*  
*Shepherded for PLoP'01 (August 2001).*  
*Shepherded for EuroPLoP'02 (April 2002).*

## **Next Steps**

*At the end of a patterns training class, one of the attendees stopped by my desk and said, “I enjoyed the class today. That’s one of the perks of working here—the chance to learn the latest and greatest but the problem is, I go back to my cubicle and I don’t know what to do next. Any ideas?” I realized then that I was saturating students with knowledge but not helping them to apply it.*

**Take time near the end of a presentation about the new idea to identify what participants can do next.**

???

You’re giving a presentation or having a meeting to explain the new idea to the organization.

**A presentation in a training class, or another event, can leave attendees uncertain about what to do next with what they have learned.**

Hearing or learning about a new idea is different from applying it. Training classes are useful for sharing a variety of information in a short, intensive period of time. However, the experience is often compared to drinking from a “fire hose” because it can leave participants exhausted and overwhelmed about being able to apply what they learned to their real work. A successful event can stimulate attendees to do more. Build on this excitement before the attendees leave the room.

When an innovation is introduced in an organization, it must be redesigned to accommodate the organization’s needs and the organization must be modified to fit the innovation. [Rogers95] Give interested individuals the opportunity be a part of this.

*Therefore:*

**Take time near the end of a presentation to brainstorm and discuss how the participants can apply the new information.**

Topics for discussion include: How can the individual participants use the information? Where can it be put to use in the organization? How can participants learn more? What can be done to spread the word? Should we start a Study Group? Invite a Big Jolt? Begin an e-Forum?

Lead the participants in brainstorming ideas and creating a plan. If you’re an outsider and have experience in introducing your new idea into other organizations, you may be tempted to tell the attendees what they should do next. Don’t do this. They know their needs better than you do. Make suggestions only when appropriate. To ensure your credibility, however, have suggestions if you are asked to contribute.

Make a list of ideas and action items. Prioritize them and decide what can be done now and what should wait until later. Add some time frames. Ask for Help – encourage those who attended the event to be responsible for each action item. Email the list to everyone as a reminder. Use e-Forum and In Your Space to publicize the plans.

=====

This pattern “builds” the opportunity for people to expand their knowledge of the innovation and get involved in introducing it into their organization. It leaves attendees at a presentation or meeting with more than just a good idea— rather, they are left with things to do to begin applying the innovation.

The risk is when brainstorming becomes so enthusiastic that it causes people to become overwhelmed with all the things that need to be done to implement the idea. Help them to keep the action items realistic and centered on what the people in the organization can truly do; encourage them to take things Step by Step.

*When we give patterns training classes, we use this pattern in the last 30 minutes to lead the attendees in brainstorming what they would like to do next with patterns in their organization.*

*In Norm Kerth's "Make It A Mission" exercise, he shows how a project retrospective can launch a revolution because it can excite people so much that they want to carry their message throughout the organization. [Kerth01]*

**Originator:** Mary Lynn Manns

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Personal Touch**

*I often hear frustrated managers declare a particular person a lost cause because he doesn't respond in exactly the same way another did to a particular technique. When one manager asked if I agreed that he should terminate a certain employee, I asked the manager to show me his key ring. I selected a key and asked, "What does this open?" "The door to my car." "Will it also unlock your wife's car?" "No. Of course not." "Well it's a perfectly good key. We know it works. Why don't you just junk her car and get another one that will open with this key?" [Brown85] We're all different. We all need a slightly different approach to unlock our resistance to new ideas.*

**To convince people of the value of a new idea, show how it can be personally useful and valuable to them.**

???

You're an Evangelist or Dedicated Champion who is introducing a new idea into an organization.

**Changing a paradigm in an organization means convincing the individuals in the organization.**

Coplien has noted, "Change happens one individual at a time."

Old habits die hard, and usually not without effort. Brown Bags and training will arouse curiosity and some interest in a new idea, but you must do more. Regardless of the accuracy of the information, the listener's appreciation of the innovation will depend on his own personal experience. [Mackie+88] People take change personally – they want to understand how the new idea can personally benefit them.

One of the biggest mistakes made by people who initiate a new idea is to talk solely about the technical benefits. [Hohmann97] When individuals don't see the need for an innovation, they usually won't listen to an argument about the benefits. Successful change agents will determine what is needed and ensure that the innovation addresses those needs. [Pricewaterhouse95] This should include an evaluation of how the innovation is an improvement over what is already in place. [Rogers95] When people see a personal advantage, they will move past simple curiosity and become more interested and enthusiastic. This creates the momentum you need to get the idea off the ground.

*Therefore:*

**Show people how the new idea can be personally useful and valuable to them.**

Stop trying to change people. Start trying to help them become more of who they already are. [LaBarre01] Spark their interest by pointing out how the new idea will help with a work-related problem. Do a lot of listening—consider "eavesdropping" on problem discussions. Take advantage of the fact that people who learn about a promising innovation will seek additional information. [Mackie+88] When you see that someone is interested, find a comfortable, informal environment for discussion. Use Just Enough to introduce them to the concepts.

Discover how the innovation can solve an immediate problem. When people are first introduced to an idea, they are usually more interested in how it will help them meet their deadlines, not how it may improve the quality of their work. [Bouldin89]

Don't wear yourself out trying to talk with everyone. Ask for Help from Early Adopters, Respected Techies, and Connectors who have already adopted the innovation. Introduce them to people who have interests

similar to theirs and encourage them to discuss how they found the innovation useful. This is especially important if you don't have many things in common with those you are trying to convince. Communication is most effective between people who are alike— individuals enjoy the comfort of interacting with people who understand where they're coming from[Rogers95]

Don't get frustrated with people who are not prepared to hear what you have to say. If you use this pattern and still encounter resistance, try Adopt A Skeptic.

=====

This pattern “builds” a relationship in which individuals can discuss their personal ~~lead~~ for the innovation. People who hear about something useful are more likely to become excited about it and tell their friends and colleagues.

But some people may see you as their personal guide to the innovation and will run to you with every problem. This can take time away from your primary responsibilities. Create a Forum to communicate general solutions and uses for the innovation.

*When anyone showed interest in patterns, I stopped by their office or invited them for lunch or coffee to discuss how patterns might be helpful.*

*We began to spread the word about the usefulness of patterns by showing developers how they could use the GoF patterns. They claimed, “Immediate results, it hooked them in.” Innovators also used this approach. Those who were excited early on about patterns seemed to naturally work one-on-one with others on their teams to show them how patterns would be personally useful.*

*This is a valuable lesson for anyone who wants to keep any new technology (or process improvement) going. I used this during retrospectives. When I heard about troubles in a project, I pointed out patterns (design, organizational, customer interaction, etc.) that could help.*

*One consultant used this pattern when introducing patterns. He “first figured out what their frustrations were” and then identified patterns that would help ease those frustrations.*

*This is what shepherds do in the pattern community. They take a personal interest in the work of the author they are shepherding.*

*This pattern can also work on a collective level. When one consultant presented organizational patterns, it was clear the patterns addressed problems whose perception was widely shared by the team, for example, Firewalls (protecting engineers from requests from marketing for a change in direction). This pattern, therefore, may be more powerful when you appeal to the pain of a shared cultural malaise.*

*This pattern is written with the assumption that when first working with any new innovation, most people think about what it can do for them. This was reflected in a comment during the question and answer time near the end of the OOPSLA'00 “Sequel to the Trial of the Gang of Four” panel session. Someone at the microphone said that all he cared about was that patterns “help me do my work faster, cheaper, easier – that will be of value to me as a human.”*

*Some people want you to solve their problems for them, others want to find it on their own. You learn to tell the difference. I've played a consultant role in many companies. When I would just give good ideas for free, they were rejected in many cases. When I learned to say to these people, “I'm not sure what to do here. I*

*think maybe there's a GoF or POSA pattern that could help. I can't remember whether it's Proxy or Broker." This would send the designer off to discover the right solution for himself. Different strokes.*

*At one site in a global Fortune 500 company, the new technology group worked hard to become a part of each development team. They attended process and development team meetings, listened for developers' pain and team dynamics, which helped formulate a strategy to use when negotiating changes later. They looked for opportunities to add value and provide impromptu explanations of the new technology.*

[Radle+01]

**Originator:** Mary Lynn Manns

*Shepherded and workshopped at PLoP'99 (August 1999).*

*Shepherded and workshopped at EuroPLoP'00 (July 2000).*

*Shepherded for PLoP'01 (August 2001).*

## **Piggyback**

*My first patterns presentation was held in the monthly Tech Talk series. It was well attended and offered an chance for me to identify some of the Innovators and a Respected Techie.*

**To increase attendance and help people see that your new idea isn't anything unusual, hold a presentation about your new idea during a regularly scheduled event in the organization.**

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You're an Evangelist or Dedicated Champion working to introduce a new idea into your organization. Periodic forums are held for technical topics where internal or external speakers are invited to present their work.

**It can be difficult to schedule a special event and encourage people to take the time to attend something that appears different and unusual.**

Your new idea is just another tool to help people do their work. If seen in that light, it might be more appealing than if there is too much hoopla surrounding every mention of the word.

People are busy. They can forget about a special presentation but will often remember to put regularly scheduled events on their calendars.

You are busy, too. It will require more of your time to plan a complete event than it will to become part of an event that is already scheduled.

*Therefore:*

**Schedule a presentation about the innovation as part of a regularly scheduled event.**

Choose the right kind of event— one that attracts people who are likely to be interested in the new idea. If the event is a multiple presentation one, try to get a time slot when attendance will be highest.

If your company has a waiting list for regularly scheduled events, develop a good relationship with the list owners. If you keep several prepared presentations, the list holders will call on you more often, even at the last minute, because they know you are always ready to go. On the other hand, you don't want to give the same talk over and over. Even if you think you're reaching a different audience, try to spice up the usual overview with the latest and greatest to give your listeners the sense that this is a dynamic movement.

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This pattern “builds” an opportunity to get the word out. By being associated with a regularly scheduled event, you show that your new idea is acceptable and not some half-brained scheme. You are likely to get a larger audience, have less work to do, and spend less money than if you planned it at a special time.

However, many attendees may be there because it is a regular event on their calendars, not because the topic is of interest to them. So be prepared for resistance— use Fear Less. In addition, your effort to help people see that the innovation is not something unusual may cause them to think that it isn't really anything special either. Since your presentation is part of another event, it may not get the attention it deserves. Consider this just one way to capture the attention of the people who go to the regularly scheduled events. You must follow-up with an event that is especially for the innovation, such as a Brown Bag or a Big Jolt.

*We held monthly Tech Forums where a multitude of technical topics were presented. Patternsrelated issues were frequently on the agenda for the forum. This was a good place to introduce new patterns or talk about the productivity savings of patterns use.*

*At one site in a global Fortune 500 company, the IP Local Sponsor (who was also an Evangelist) created a presentation explaining how a new technology related to creating new products. She looked for opportunities to present this to other managers as part of their regular meetings. [Radle+01]*

**Originator:** Clive Menhinick

*Shepherded and workshopped at EuroPLoP'02 (April2002).*

## **Plant the Seeds**

*One consultant takes patterns books to every object technology or UML training course he delivers. They always get a response. In fact he's learned only to bring them out on the last day, or he loses the attention of the participants for the topic at hand. Most often, if consultancy follows, it's on patterns, not object technology or UML.*

**To spark interest, carry materials (“seeds”) and display (“plant”) them around whenever the opportunity arises.**

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You're an Evangelist or Dedicated Champion working to introduce a new idea into your organization. You have some printed materials about the idea.

**You want to spark some interest in the new idea.**

People like to keep up on the latest buzzword and will be drawn to sources of information, especially if the sources are easily accessible. When they are in the early stages of making a decision about a new idea, they are persuaded by mass media materials, such as articles and books. [Rogers95]

The rule of reciprocity holds across cultures. We feel an obligation to repay others when they have given us a gift. Charities rely on reciprocity to help them raise funds. For years, the Disabled American Veterans organization, using only a wellcrafted fund-raising letter, reported an 18% response rate to its appeals, but when they started enclosing a small gift, the response rate doubled to 35%. The gift, personalized address labels, was modest, but it wasn't what the donors received that made the difference. It was that they had received anything at all. [Cialdini03] The articles and books you bring to a meeting may not seem like much, but those who take a copy or “check out” a book will be influenced positively toward you and your idea. As an extension of this approach, you can elicit attitudes toward your idea by displaying it first. Your enthusiasm and your passion will encourage others to feel the same. This is important in your role as Evangelist.

*Therefore:*

**Carry materials about your new idea to events where people gather. Put them in places where people are likely to pick them up and look at them.**

When you give a presentation or attend a meeting, provide sources of External Validation such as books, journal articles, and online articles. Make copies of online materials, rather than simply providing the URL, so that it is more likely people will see the information you think is important. If you want to point out some interesting things on the web, make the URLs available electronically to save the recipient the trouble of typing it in. Be sure to prominently display anything that has your name as author or acknowledged contributor because this increases your credibility.

If possible, don't just place the materials on a table and walk away. Make yourself available to address inquiries. Your presence will also help to ensure that valuable things, like your books, won't disappear.

Don't be discouraged if most people simply store any handouts you provide in their office and never look at them again. People like to pick up free material; however, only some will refer to them again and become interested in the new idea. Even still, don't underestimate the power of this pattern. Although the “seeds”

usually spark interest in only a few, they may be key individuals, such as Connectors or Respected Techies, who can help you spread the word.

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This pattern “builds” awareness of a new idea and sparks some interest in it. People will be drawn to the materials, pick them up, and ask about them. If you are scheduled to give a presentation during the event, the books or articles will attract attention and get conversation going during breaks. If you refer to the materials during a presentation, you are likely to spark even more interest. People may ask to ~~ke~~ or borrow the materials, stop by your office later or send an e-mail asking for more information. Use Personal Touch and Just Enough to show how your new idea may be useful to them.

Carrying a lot of books or articles can be a problem on a plane. Even in a car, you might have to make several trips to the parking lot or get help unloading material. If books are displayed, you run the risk that someone could borrow one and not return it. Make sure your name clearly appears on all your valuable materials.

*I've had good experience bringing drafts of unpublished books. This shows my audience that the topic is still evolving and interesting and ensures that you are a source of information about what's going on, so they are getting the latest information.*

*Whenever one consultant gives a presentation on patterns, a stack of books is always available, both for reference during the talk and for perusing at breaks and after the presentation. People like looking at books. At one talk, a participant said, “Some of my happiest times have been spent with books.”*

*I brought patterns books to a project retrospective session. They generated curiosity and questions about patterns among the participants. Funny story: One of the participants picked up one of the Pattern Languages of Program Design books during a break. At the end of the break, he placed the book back on the table and told the others, “You should check out this book— it has a great ending.” ☺*

*People at trade shows often hand out free materials related to the product they are promoting. The intention is to keep the product in the minds of recipients after they leave the show.*

*Seeds can take unusual forms. When donuts were leftover from a patterns presentation, I took them to the Tech Staff. This prompted them to ask questions about patterns—while they were eating the donuts.*

**Originator:** Linda Rising and Mary Lynn Manns

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Respected Techie**

*After I gave the first Brown Bag on patterns, one of the attendees said, “This is good stuff but no one knows you. You should talk to Jeff or Randy. If they like it, then others will follow.” I immediately went to see these senior programmers and sure enough, at the next Brown Bag, attendance doubled and most of the newcomers said, “Jeff (or Randy) said I should hear about this.” I was grateful for the help!*

**Enlist the support of senior-level people who are esteemed by members of the organization.**

???

You're an Evangelist or Dedicated Champion trying to introduce a new idea into an organization.

**People in an organization can be reluctant to show interest in a new idea unless it has captured the interest of colleagues they respect.**

“Reputation is a fundamental aspect of social identity; it helps people know how to interpret each other's words and actions and make decisions about who to trust.” [Kim00]

People are bombarded with information and are too busy to keep up with the latest and greatest. My people depend on those they trust to help evaluate new ideas. Usually these trusted advisors are senior-level people who are respected by everyone. When these people get behind an idea, it's one of the strongest kinds of approval you can have.

*Therefore:*

**Enlist the support of experienced, senior-level gurus who are respected by both managers and non-managers alike.**

Approach gurus with humility. You're there to learn from them, not educate them about every nuance of the innovation. Instead of hitting them over the head with your new idea, present it gradually, asking for opinions about it. Instead of saying, “Wow! I was at this cool conference and I found this great new way of doing things. I'm so excited about it! I thought I'd have a meeting and tell the team,” try, “I'm sorry you didn't get to go to the cool conference last week. You would have enjoyed seeing all the new stuff. I heard about this great new way of doing things and I wanted to see what you thought of it before I run off the mouth telling anyone.”

Research has shown that engineers are fearful of being labeled an expert in an area if it keeps them from learning new things. They don't want past knowledge to limit their potential for future growth. [Desouza03] You might approach the guru by saying, “I know you're the local database guru but I also know that you're interested in new things, so I thought you'd like to hear about a symposium I attended last week.”

Take the guru out for coffee. Give your abbreviated spiel on the innovation Just Enough and then be prepared to listen. Someone with a great deal of experience has a lot to share. Use Personal Touch to show how the innovation can address any problems he mentions and Tailor Made to propose where the innovation would fit in the organization.

Give the guru a chance to be involved, if he finds the innovation worthwhile. Ask for Help. Encourage him to talk with others and invite them to be part of a Guru Review.

If you're new to the organization, Ask for Help to find out who these gurus are. It helps if you know a high level manager or another guru who can make an introduction.

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This pattern “builds” support for your idea from people who can provide technical credibility. If you can convince a guru that the innovation is a good idea, others will at least hear you out. Management, especially upper management, often depends on these respected individuals to provide an assessment of potential solutions. So once they are on your side, your battles are half over.

But these veterans can make or break you. If the person thinks the idea sounds like a “pile of garbage,” he is likely to share his feelings with others. In cases like this, encourage him to fill the role Champion Skeptic so that his resistance can make a constructive contribution.

*It was hard to get the momentum going for patterns. I was new to the organization. I held some information sessions, such as Piggyback and a Big Jolt and talked with a lot of people (Personal Touch). But the real break came when I convinced a respected technical person of the value in patterns. She was so excited that she talked it up with management and her fellow technical friends.*

*After an initial presentation had been made to the Corporate Angel and his staff, each manager at the meeting was asked to name a Respected Techie to be part of a Guru Review. They heard what patterns were all about and made recommendations back to the appropriate manager. The favorable outcome of this evaluation resulted in full management support, including that of the Corporate Angel, and an increased number of engineers who became part of the patterns community.*

*I was the Evangelist for the introduction of Java in our organization. The biggest worries were the fear of the new technology and worries about performance and scalability. The hardest person to convince was the head of the architecture group. He was a very active, vocal skeptic who had the ear of the VP. He was convinced by: (1) the proof of concept and (2) subsequent discussion of how much more difficult it would be to implement the project in C++. After that he said Java was OK. Usually the hard-nosed technical guys are open to technical argument—if you can find the right technical argument. If you listen long enough, they'll usually tell you what they need to be convinced.*

**Originator:** Linda Rising

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **The Right Time**

*Timing has a lot to do with the outcome of a rain dance. [A Cowboy's Guide to Life]*

**Consider the timing when you schedule events or when you ask people for help.**

???

You're an Evangelist or Dedicated Champion

**When people face deadlines and have too much to do, they will focus only on things that move them toward completing necessary tasks and making the deadlines.**

People are busy. However, there are less busy times.

When you're really excited about the new idea, you want to tell everyone immediately. But, if you don't temper your enthusiasm with the realization that springing your news at a time that's not convenient for your target audience, you risk irritating them and losing converts to your cause.

*Therefore:*

**Be aware and make note of those times when people are likely to be the busiest. Schedule your events and requests for help outside those times.**

Look for the less busy times immediately after a project has been delivered, just before the Christmas holiday when people are winding down, or possibly during the summer. The best timing will vary from organization to organization, group to group, and person to person. What is good timing for one will not be for another. Avoid planning events or visits when almost everyone is too busy to attend.

If you're able, personally ask as many individuals as you can about their time preferences for the upcoming event. This will make them feel that you would really like them to attend.

Don't worry about finding a time that's perfect for everyone. You can spend a lot of effort trying to find the best time and there really isn't one. If you can, schedule the event more than once—choose different days or times, so more people can attend.

Busy people need some lead time and occasional reminders. Announce all dates as early as possible and then send out reminders one-Forum and In Your Space. Personally invite and remind people when you get the opportunity.

Get feedback. Ask attendees at any event what could have been done to improve the event—and this includes timing. You might learn that some people, for example, would like an early morning event, while others prefer noontime Brown Bag or late afternoon.

You do not need to consider timing in planning every event. For example, Study Groups are usually held on a regular basis and it is expected that people will come when they can. Big Jolt presentations often have to be held at the convenience of the speaker.

Timing is also crucial when approaching someone to Ask for Help. If people are busy, they could react as if you're trying to add one more thing to their busy schedules. But if your request comes when they're less busy, they are likely to be more responsive.

The right time is also something to be constantly sensitive of during team meetings or conversations. "When the student is ready, the teacher appears" is a big part of this pattern. Keep your ears open for a problem statement that the new idea can help to address. The receptiveness of your team increases considerably when they can see an immediate application.

=====

This pattern "builds" the best time for things you want to do to introduce the new idea. If you are able to find that right time, you are more likely to increase the participation of others.

But, despite your efforts, some people will claim to be too busy to do or attend anything that doesn't directly relate to their immediate job. Use Personal Touch to reach them. Encourage them to attend a one time Big Jolt.

*Our first patterns event was held at lunchtime when people usually wind down for an hour. The second one was held at the end of the semester, just after grades were due. Both events were well attended. Attendees were excited about continuing the workshops. But when the third event was scheduled during the fourth week of the semester, just as the workload was heating up, it had to be cancelled due to lack of replies.*

*It's good to request the last or second-to-last interview slot of the day, since these are the time slots that are the most memorable for the interviewer. If you want to be remembered, make it as late in the day as possible. They say that "timing is everything."*

*I tried to be aware of many different kinds of patterns, waiting for the opportunity to help someone with a problem. It doesn't help a team to talk about testing patterns during design or to talk about configuration management patterns during analysis. When the solution fits the needs, people will be ready to listen.*

*In our project, we were at just the right time to develop our architecture using design patterns. Our team had been through design patterns training together and we had the opportunity to take advantage of the trainer as a Mentor. Our increased understanding of the architecture and our chance to learn how the patterns could be used was a double win for our team. [Olson02]*

**Originator:** Mary Lynn Manns

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Royal Audience**

*The first time a Big Jolt visitor came to our company, I tried to make sure the day was full of activities. I wanted as many people as possible to take advantage of the opportunity. When the visitor said, "I'll be here the night before, if anyone is interested, we could do dinner." Aha! Dinner! Lunch! These are chances to spend time with the Big Jolt visitor. After that, people were always invited to meals with any Big Jolt visitor. Do Food makes the event special.*

**Arrange for management and members of the organization to spend timewith a specialBig Jolt visitor.**

???

You're an Evangelist or Dedicated Champion A Big Jolt visitor has a few spare hours during the day or during the evening before and/or after the day of the visit.

**You want to get the most out of aBig Jolt visit.**

It's better if an event is more than just a presentation to a large group. Famous people are usually charismatic and can give your cause a boost. If management and other influential people in the organization will take time for a short, oneon-one meeting that can lead to more interest and support.

*Therefore:*

**Use spare hours or lunchtime during the day or evenings before and/or after the featured presentation to make theBig Jolt visitor available for teams, individuals, or managers.**

Arrange a lunch,dinner, or time for informal discussion with the speaker. Personally invite people to attend, especially those who have helped with the change effort. The visitor may also be willing to help the efforts in your organization by spending oneon-one time withmanagers who need convincing. This can lead to sponsorship from a Local Sponsor or Corporate Angel, or it can be a good way to Stay in Touch.

If you can, try to schedule several "audiences"-- enough opportunities to take advantage of the visitor so that no one minds not being invited to any one of them. For example, dinner may need to be a small group, but lunch in the cafeteria could be opened to everyone. You might be able to schedule time slots when the visitor could meet with teams to discuss their particular problems.

Be sure you don't wear out the visitor. Check in advance to be certain he agrees to do more than a presentation. Give him a chance to turn down any oppportunities that he wishes. Sometimes we assume that someone who comes in for a presntation will want to spend lunch and dinner with us, but we should be sensitive to that fact that everyone needs time to relax away from others.

Don't expect everyone to accept the invitation. It is important that you offer them the opportunity. For thos who can't come, it may be enough to know that they were invited.

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This pattern "builds" increased support for your new idea by providing an oppportunity for people to meet a Big Jolt speaker. Participants will enjoy the time spent getting to know a famous person. This can be a reward for those who have helped with the effort, and can be a public relations opportunity for management who have not yet bought into your new idea.

But be careful that this doesn't backfire. If you need to keep the audience small, people can get upset at not being invited. But if you Involvement Everyone as much as you can and are a fair person, then people will accept that they weren't invited to a particular occasion but will be included in the next one or will get some other opportunities.

*We sent invitations to everyone to join Big Jolt visitors for lunch or an open discussion forum. Free consulting time was also announced on the e-Forum. Even if people couldn't attend, they always felt that the opportunity was open to them.*

*Everyone was invited to meet with each Big Jolt visitor for lunch or a coffee break after the presentation. Because this Royal Audience was held in the cafeteria, there was room for everyone at the presentation to attend. Even those who weren't able to talk one-on-one with the visitor still enjoyed listening to him in an informal setting.*

**Originator:** Linda Rising

*Shepherded and workshopped at PLoP'01 (August 2001).*

## **Shoulder to Cry On**

*When I began introducing patterns in my company, I wasn't sure most of the time whether I was doing the right thing. If it hadn't been for the patterns-discussion listserver, I would have had a much harder time. The people on that list were supportive and helpful. They always had good suggestions and provided an ear when I needed it. That saying about standing on the shoulders of giants certainly applied in this situation.*

**To avoid becoming too discouraged when the going gets tough, find opportunities to talk with others who are also struggling.**

???

You're an Evangelist or Dedicated Champion working to introduce a new idea into your organization.

**When you're struggling alone, it's easy to become discouraged.**

Satchel Paige, hall of fame baseball player said, "Never let your head hang down. Never give up and sit down and grieve. Find another way."

Misery loves company, but if it's the right kind of company, commiserating can lead to rejuvenation. Getting together with others who share the same or similar problems can lead to surprising solutions. The group dynamic helps everyone become more creative in tackling tough situations. Research has shown that for certain issues, group support is very helpful. Even if you are enthusiastic about the new idea, you will need and deserve a boost now and then. You'll want to feel like you're not the only one dealing with an issue. This by itself is useful.

Those that are first to adopt an innovation are often frustrated when they can't understand complicated material. A common solution is to form a user group. Together they can "group think" and can solve problems that individuals in isolation can't. [Rogers95]

*Therefore:*

**Get together regularly with others who are also struggling.**

Meet informally for lunch, dinner, or coffee. Try to find a place away from home or the office. Look for a "third place"-- a local, public establishment that is a friendly, neutral spot where people gather together to relax and talk and take a break from everyday life. [Oldenberg89]

A Study Group and Brown Bag are also good ways to gather. If funding permits, attend a conference where you can learn more about the innovation and meet with others to talk about your mutual struggles.

There should be give and take among the people who are interested in the innovation. Give everyone a chance to "cry" and to "provide a shoulder to cry on." Ask for Help but remember to Just Say Thanks for any support.

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This pattern "builds" a community in which you can discuss the challenges and successes you are having with your change effort. This community begins to form wherever people gather with a shared purpose and start talking among themselves. The community provides a confidence boost, a shoulder to cry on when

you're discouraged, and a source of helpful suggestions and strategies. This is also a good way to meet Innovators and Connectors within your larger community.

Be careful not to let any of the meetings degenerate into a whining session. This will only make people drown in the negative and feel sorry for themselves. While some complaining is appropriate, focus on solutions to the problems that people raise. Once people have the chance to unload, use the larger intelligence to move forward.

*There are patterns users groups all over the country.*

<http://c2.com/cgi/wiki?PatternsGroups>

*The eXtreme Tuesday Club is a group of extreme programmers that meets every Tuesday at The Old Bank of England Pub on Fleet Street. <http://www.xpdeveloper.com/cgi-bin/wiki.cgi?XtC>*

*The Sussex XP Group holds regular monthly meetings to discuss XP.*

<http://www.smr.co.uk/cgi-bin/sussex-xp/FrontPage>

*The Cardboard Consultant by Charles Weir and James Noble recommends: Explain the problem out loud to someone or something. Apparently this works even with your dog.*

<http://www.argo.be/europlop/Papers/Final/Weir2doc>

**Originator:** Rachel Davies

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Small Successes**

*Since 1961, Peace Corps volunteers have embarked on ambitious projects that aim to change the world—one village at a time. Feelings of frustration often overpower volunteers, but successful change agents persist despite setbacks and allow their small successes to snowball into larger accomplishments. A small success is worth a lot because it empowers the volunteer and the community members to try another new project. After a small victory, a volunteer may be able to make more suggestions because the locals will no longer think that the outsider is quite so crazy. Some volunteers finish their stint with Peace Corps thinking they didn't accomplish much. Often, they don't see that they achieved a great deal: successfully negotiating a cross-cultural meeting, teaching one child to read, helping one woman start her own business, or changing one person's view of Americans. [Layne00]*

**To avoid becoming discouraged by the challenges and all the things you have to do when you're involved in an organizational change effort, celebrate each small success.**

???

You're an Evangelist. You've applied some patterns from this language. Some worked but some didn't.

**Every organizational change effort has its ups and downs. It's a difficult process.**

"Great things are not done by impulse, but by a series of small things brought together." Vincent Van Gogh

After successfully completing a task we often don't acknowledge an achievement and may even underestimate the effect of what we have done. Our memory can get focused on the struggle it took to get the job done and, as a result, we don't take the time to step back and appreciate what we have accomplished. [Kerth01] We often concentrate on everything that still needs to be done instead of on the small successes that have come our way. Usually we're too busy. Our "To Do" list is infinite, so when we finish any task, we're already thinking about the next one. This can cause us to become burned out and discouraged.

All too often, our focus is on that "big win"—some dramatic event that guarantees success. We care more about some magic silver bullet [Brooks95] than the continuous improvement that will eventually lead to our desired goal. [Hohmann97] As a result, most jobs provide few opportunities to be recognized as a winner. Celebrations are usually reserved for big events and only a few are singled out.

But you should enjoy your achievements. "Achieving any goal should be an opportunity for enjoying the fruits of your labor. You've earned it! More importantly, achieving one goal gives you the confidence to do it again, producing a positive feedback loop of goal-setting and goal-achieving success!" [Hohmann97]

*Therefore:*

**As you carry on Step by Step, take the time to recognize and celebrate each success, even the small ones.**

These don't have to be big celebrations. You can Do Food, such as a cake for everyone to share, or just give a "high five" all around. Involve Everyone who has helped to achieve the small success. Remember to Just Say Thanks. Even when you can't include others, it is still important to give yourself a pat on the back. Take Time for Reflection and view each success as an opportunity to begin even larger accomplishments.

Success comes in many forms. Look for it. For example, at the end of the week, ask yourself what you and your team have learned or done differently. This simple question can go a long way in promoting continual, but focused, change. [Hohmann97]

Use e-Forum and In Your Space to inform others about the progress. This gives your effort the Smell of Success to draw in others.

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This pattern “builds” a clearer picture of your progress to your goal. Even though there is still work to be done, recognizing and celebrating small accomplishments encourages people to focus on the positive. It makes them feel like they’ve been productive and gets them energized to do even more.

But your success can turn off people who are jealous and resentful of what you are trying to do. Others may see the celebration as a sign that the effort is at an end Stay in Touch with supporters and nonsupporters alike to be sure that everyone is on the same page. Help them understand that small successes are cornerstones for tackling the bigger problems and that support is still needed to reach the final goals.

*When I started telling people about patterns, I got an e-mail from someone who had been to a Brown Bag. He said he had been explaining the architecture for their new project and suddenly he realized it was Bridge, one of the GoF patterns. [Gamma+95] He and the team got really excited and decided to note the pattern in their documentation. It was one pattern use from one team but all of us who were involved in the effort to encourage people to use patterns celebrated!*

*While writing my PhD, I set small goals along the way and took the time to reward myself when I reached each one. Sometime I simply savored a piece of chocolate, while other times I took a few hours off to go to a movie. This allowed me to be focus on what I had accomplished since the last small milestone rather than becoming discouraged over all the work that still had to be done.*

**Originator:** Linda Rising

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Smell of Success**

*It is both invisible and intangible, and yet it invokes such powerful human reactions that people are swayed to affection or revulsion because of it. It is that most subtle and subjective of senses—the sense of smell.*  
[Vaughen00]

**When your efforts result in some visible positive result, people will come out of the woodwork to talk to you. Treat this opportunity as a teaching moment.**

???

You're an Evangelist or Dedicated Champion trying to Involve Everyone

**When you start to realize some success, newcomers will come to you to inquire about the innovation.**

Some people, especially the Early Majority and the skeptics, are drawn to a new idea when there is visible progress. Unlike Innovators who love the challenge of the latest and greatest, most others wait until the early bugs are worked out and there is some evidence that a new idea is useful. This evidence can be provided by the successes others are having. When people who have not yet adopted a new idea “smell” success, they are likely to become interested enough to ask you about it. [Rogers95]

*Therefore:*

**When people comment on the success they see with the innovation, treat their inquiry as a teaching moment.**

Use Just Enough to spark some interest and Personal Touch to match the innovation to the inquirer's needs. If you think it is appropriate, Ask for Help—identify a small task and ask him to complete it. This is the “Yes, that's a difficult problem, would you volunteer to tackle it” ploy!

Celebrating Small Successes is one way to bring people to you. Learn what you can from these inquiries. Even as you experience success and become convinced of the value in the new idea, remain open and listen to comments from others.

If your success has negatively impacted the inquirer who is now looking to neutralize that effect, listen to his story and use Fear Less to find a win-win solution.

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This pattern “builds” the opportunity to use your successes to create more successes. It draws people to the new idea, giving you the opportunity to answer their questions and encourage them to be active supporters.

But people who come to you because they “smell” success might be expecting too much. They may be hoping for a silver bullet. Manage their expectations by giving them a realistic view of what has been accomplished and what still needs to be done. If an innovation is to spread, it must prove its practical merits. This keeps us honest. It prevents us from being champions simply because we “believe in this work.”  
[Senge+94]

*After an early project went in on schedule and received high acclaim from the users, someone from another team dropped by to talk about some issues that concerned her in our project's technology. She seemed*

*interested in knowing how our techniques, which were quite different from the "standard" practices, allowed us to be productive and successful with an inexperienced team.*

*My work with patterns attracted the interest of someone who was wellknown and well respected in the patterns community. When he offered to come to my organization to give a Big Jolt presentation, people were impressed. As a result, inquiries about patterns increased. I made sure I addressed each one, often by suggesting that we take a coffee break or have lunch sometime to discuss all their questions.*

**Originator:** Steven E. Newton

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Stay in Touch**

*It was easy for me. The company brought in 8 by 8 cubicles and our vice president decided to be right there with us. OK, he had **two** cubicles, one with a little conference table **and** his secretary's cubicle was also part of his area but still—he was just around the corner from my team. When I walked in each morning, he was often there, and if he looked up, I could sometimes catch his eye and say, “Good morning!” If he asked, and usually he did, I could tell him what the latest patterns activity was and who the next Big Jolt visitor would be. I wouldn't let him forget about patterns!*

**Once you've enlisted the support of key persons, don't forget about them and make sure they don't forget about you.**

???

You're an Evangelist or Dedicated Champion working to introduce a new idea into an organization. You've captured the interest of key persons throughout the organization.

**Your key supporters have too many things to think about and can forget about the new idea.**

Support for any new idea depends on the continuing awareness of management and other key people, but their support can lapse. Since there's always something important going on and critical decisions to be made, your message will be lost if you don't call attention to it. You need to build a relationship with key individuals so you can casually but continually make them aware of progress in small ways. [Senge+99] On the other hand, you don't want to make a pest of yourself. Some people are always anxious to hear more about the latest and greatest technical innovation; others are less interested.

Just because people decide to adopt an innovation, that doesn't mean they can't change their minds. They're always seeking reinforcement for their decisions. They always have new questions about any innovation. If they don't get answers, they may revert to old habits. [Rogers95]

*Therefore:*

**Stay in touch with your key supporters.**

This includes Innovators, Early Adopters, Respected Techies, Local Sponsors and Corporate Angel. You're busy too, so put the “stay in touch” time on your calendar. It can be a short meeting, lunch or coffee break, or just an informal stop by an office. Present information in a helpful manner. Keep messages timely and interesting. Use External Validation to make them aware of what is happening outside the organization. If a Big Jolt visitor is of special interest to your supporters, offer them a Royal Audience.

Talk to management even when you don't need anything. A lot of people make the mistake of talking about projects only when they need funding. As a result, managers will think that any time you come to talk, you must want something. [Alexander01]

Be sensitive to individual tolerances for new information. Don't overwhelm supporters with too many distractions or they will become annoyed when they see you coming.

If you need a more formal approach to staying close, submit a regular status report that contains a concise record of your activities. Record your accomplishments so that people know the progress you are making, as well as your concerns so that your manager, or your Local Sponsor, has the information he needs to help you. [Hohmann97]

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This pattern “builds” more solid connections with stakeholders. Over time, it turns support into an expanding community of relationships.

But this takes work. Although a personal interaction is best, an e-Forum or In Your Space can help. If it is difficult to reach some upper-level managers, ask Connectors or your Local Sponsor to help. It can be hard to determine the happy medium of information, so you may want to ask how often each person would like to receive a formal report, and at the same, provide informal reports when you get a good opportunity.

*During the period of time we worked to move from Level 1 to Level 2 CMM, monthly and quarterly status reports were used to remind management and engineers of the progress being made and to keep the improvement project visible to the entire organization. [Lowe96a]*

**Originator:** Linda Rising

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Step by Step**

*E.L. Doctorow once said that "writing a novel is like driving a car at night. You can see only as far as your headlights, but you can make the whole trip that way." You don't have to see your destination or everything you will pass along the way. You just have to see two or three feet ahead of you. This is right up there with the best advice about writing, or life, I have ever heard. [Lamott95]*

**Relieve your frustration at the enormous task of changing an organization by taking one small step at a time to meet your goal.**

???

You're an Evangelist. After applying Test the Waters, you realize that there is interest in the new idea in your organization.

**You wonder what your plan should be for introducing the new idea into your organization.**

If we can see the path ahead laid out for us, there is a good chance it is not our path; it is probably someone else's we have substituted for our own. Our own path must be deciphered every step of the way. [Whyte94]

It is impossible to instantly convert everyone to your way of thinking. Yet, an attempt to create a master plan for the change initiative is probably setting yourself up for failure because there are too many unknowns in any organization. The very nature of a complex problem can bring you to your knees and cause you to make no progress at all. Yet, to climb a ladder, a person doesn't leap from the ground to the top. Rather, he climbs, slowly, surely, one step at a time. Similarly, organizational change happens, not with a giant leap, but in small, sometimes hardly noticeable steps. Lots of small changes will ultimately create major shifts.

We all become discouraged and find it difficult to maintain enthusiasm for a single goal that is so far out it's hard to imagine you can ever reach it. There's an advantage to setting short-term goals and seeing clear progress. It's definitely more exciting to identify small steps and celebrate when you reach each one than it is to outline an overpowering vision that will take months or years to achieve.

The most common mistake change agents make is to take on too much, too soon. [Bouldin89] They are often like anxious gardeners standing over their plants, imploring them: "Grow! Try harder! You can do it!" But good gardeners don't try to convince a plant to grow. Instead, they persist with the realization that significant change starts slowly and evolves steadily over time. In organizational change, as in nature, new developments should spread quietly at first, so that the leaders can learn from the failures and build on the successes. [Senge+99]

"The longest journey begins with a single step." [Lao Tzu]

*Therefore:*

**Use an incremental approach in the change initiative, with short-term goals, while keeping your long term vision.**

Begin by identifying your long-term vision. Don't try to solve all the organization's problems or make your vision so precise and definite that it is likely to lead to disappointment rather than success. Be realistic and try to have a few short-term goals in mind.

Locate gains that can be achieved quickly. Implement some small portion of the initiative Just Do It. In any change, it is important to realize early wins. Build support for the system even in the face of the problems that are sure to follow. [Hildebrand96] Draw on your initial successes as stepping stones to increasingly ambitious gains. Remind yourself each time you achieve a short-term goal and celebrate the Small Successes. Use Next Steps to brainstorm some of the things you can do along the way. Take Time for Reflection to identify and analyze what is working well and what can be done differently. Keep Sustained Momentum.

Make small changes that don't disrupt the system and trust that the collection of small changes will result in big change. Before you go tearing in to changing something, step way back, calm down, and think about the least perturbation you can introduce and still get the result you want. Over time, with enough little efforts, a new order emerges—one you could not have planned no matter how many flip charts you hauled out. Help what wants to happen, happen. Rather than attempting a complete system overhaul, remove just one little obstacle or add one little ingredient. Launch your first step then see what happens. [Waugh01]

Avoid promising specific times in which certain goals can be achieved. Cultural change tends to be organic and hard to force. Be suspicious of people who promise big changes on a cultural level in some specific time frame—they're blowing smoke. [Olson02]

Don't be concerned if you take one step forward and two steps backward. Have faith in your dream and be optimistic. Piecemeal growth is based on the healthier and more realistic view that mistakes are inevitable. [Alexander+75]

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This pattern "builds" an incremental approach to your change initiative. Because you can't possibly know everything that can and will happen, it gives you the chance to learn as you go.

But people might think you don't know where you're going. Help them understand that the goal and the path to get there are not the same thing. Even though you don't know the path, devise a clear goal and continually communicate it and the objectives you are working to reach along the way.

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An evolutionary process is encouraged in Alexander's Gradual Stiffening [Alexander+77] where a flimsy structure is gradually made sturdier by building on prior work. It is also related to Piecemeal Growth [Foote+00] in which the solution to rigid and misguided master plans is to incrementally address forces that encourage change and growth.

*I want to change the way we do things, so the new idea will be a natural part of the way we work. I want the new idea to become part of our belief system. You have to begin by behaving "as if" you could do it and then it gradually becomes true. In our work environment this should be the way we do things. We have to continually refine the process. There's no sudden "aha" - it's a slow, gradual process of discovery. Change is evolutionary. [Hill02]*

*Some command principles are just common sense. Good small-unit leaders make for good battalions, so I fired two small-unit leaders and replaced them with my men. A thousand other changes needed to be made, but I didn't want to bury my staff on our first day together. If I'd ordered all shortcomings squared away immediately, I'd have sent them into overload. I approached this conversion from slack to soldiering the same way I'd train a pup. Just a few tricks at a time. "Starting now, we're going to follow the two rule plan," I said. "I'll tell you what the two new rules are and you'll make them happen. Once your troops have*

*mastered the first two rules, we'll add two more and we'll keep doing that until we're squared away. First we'll crawl, then we'll walk and then we'll run. Just stay with me—because we're going to run faster and faster every day. [Hackworth+02]*

*At Amstar Corporation, maker of Domino Sugar, all the refinery's departments needed improvement, but trying to tackle everything at once would be an overwhelming task. Instead, they chose to focus on the packaging area, where much sugar was lost when bags were overfilled or broke while being filled. The first project included only one supervisor and seven hourly employees. The project was launched with a few short-term goals: making adjustments to the weighing scales, identifying damaged bags before they could break; resolving the unique packaging problems caused by one kind of sugar. In 6 weeks, the team had reached its first step goals and by the end of 3 months, had reduced breakage by 80% and overfills by 56 %. The process was expanded to other packaging lines and over the next several years to every department in the refinery. The first success led to very far-reaching improvements as they learned not only how to achieve significant, immediate results but also new work patterns that enabled them to use their initial successes as stepping stones to sustained improvement. [Schaffer88]*

*From 1992 to 2001, the University Hospital of North Norway gradually introduced a digitized radiology system. This was successful because the system "grew" into place. First it was a small, customerbuilt image managing system, then a patient flow handling system, and, finally, an upgraded common version in all eleven hospitals in northern Norway. What started as a small computer program that served one hospital department grew into a system that serves all the hospitals in northern Norway, and the hospitals share both the image archives and the radiologists' expertise over the network. The gradual approach let developers alter the system based on user feedback without spending large sums and involving too many users. The more robust and well-tested system was then introduced to a wider user group.[Tveito+02]*

*After converting from Level 1 to Level 2 CMM in 12 months, we admitted that, despite the success, we could have done a few things differently to improve the results. We put too much effort into our initial planning and definition of procedures. Most of the procedures underwent major changes when we planned the actual process to be used for a specific project team. Project planning, estimating, scheduling and tracking were process areas where a general procedure outline would have worked better than a specific description of the process initially. [Lowe96a]*

*In 1993, Eric Saperston graduated from college and hopped into a 1971 Volkswagen Bus with his golden retriever, "I decided to call up some of the most powerful people in the world and ask them out for a cup of coffee." The result, nearly nine years later, is *The Journey*, a 91-minute documentary that chronicles Saperston's three years on the road asking an array of figures—CEOs, movie stars, leadership gurus, a former U.S. president—for advice on how to lead a successful life. His approach was to use each successful interview to land another. A checkers game with Ann Richards led to a conversation with Henry Winkler, which led to a meeting with Billy Crystal and so on. [Pink02]*

**Originator:** Linda Rising

## **Study Group**

*While attendees of a lecture may seek information, attendees of a study group seek transformation; they want to make what they study not only something they understand, but something they may use in their everyday lives or work. The study group thus acts as a bridge, helping people move from passive to active learning. [Kerievsky01]*

**Form a small group of colleagues who are interested in exploring or continuing to learn about a specific topic.**

???

You have an interesting book you'd like to read or an interesting topic you'd like to know more about.

**There may be little or no money for formal training on a specific topic.**

The lecture method has been described as "getting material from the teacher's notes into the student's notes without passing through the brain of either one." [Weinberg+99] The intense training experience can be compared to drinking from a fire hose. This isn't the best learning environment, especially for adults, who want to contemplate and examine useful information that can apply to their daily work.

When you read a book by yourself, what you get out of it is limited by your own perspective and experience. When you read a book in a group setting, you can take advantage of a variety of backgrounds and expertise. More formal independent study has its own difficulties. The learner relies on a technical interface, videotapes or broadcast classes, and little social interaction. As a result, the learner goes through material in isolation with no chance for discussion or timely questions.

Research shows that simply explaining or lecturing to a group does little to change their way of thinking while discussion groups or roleplaying or visualization techniques are powerful persuaders. In these experiments, two groups were used. One group was given a presentation on the advantages of the new behavior. The other was led through a discussion and decision-making process leading to a group decision to try the new behavior. There was little or no change in behavior resulting from the "training" presentation, while the number of people changing behavior varied from over 60% to 100% in the group that had used facilitated decision-making. [Mills00]

Institutional learning depends on developing the ability to "flock."—moving people around and fostering an effective mechanism of social transmission. Teams of disparate people must undergo some kind of training experience where people are expected to both teach and learn. [deGeus97]

*Therefore:*

**Form a study group of no more than eight colleagues who are interested in exploring and studying a common topic.**

Cover a well-defined topic or chapter in a book at each regularly scheduled meeting. Make certain participants understand that they must prepare for each meeting. Assign one participant as the facilitator who must spend a little more time to steer the group through the material. Rotate the facilitation role to spread this responsibility throughout the group.

If resources are available, ask your company to buy the material you will study, such as books or copies of articles. Consider meeting over lunch if this is usually the time when most people are free. Do Food or use Brown Bag if no organizational resources are available for food.

A project team may wish to form a study group to regularly evaluate their use of the innovation. This can be part of the overall project plan. For example, the team can take Time for Reflection to formally review one well-defined outcome each month. [Hohmann97]

For more information about setting up a study group and one company's experience, see a report written for the Bell Labs Technical Journal. [Rising+98] Also see *Knowledge Hydrant: A Pattern Language for Study Groups*. [Kerievsky01]

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This pattern “builds” an opportunity for individuals to explore and learn about an interesting topic at a reasonable pace. A study group provides adults with a genuine educational experience, focusing on topics learners have chosen. It allows timely, convenient scheduling and a sense of ownership of the learning path. The result is maximum learning with minimal money invested. Even when companies buy lunch for eight participants and individual copies of a book, the cost per learner for a 12week study group is less than \$200. Other, more formal, training costs can run from \$800 to \$2000 per learner. [Rising+98]

However, the discovery process in study groups isn't appropriate for all types of learning. Technical topics, such as a programming language, may need an expert to be present when learners get stuck on problems. In addition, this type of exploration may not work for all individuals, such as those who are not energized by interaction with others and are sponges rather than contributors. Study groups are only one way of learning; they should be considered as part of the total organizational teaching and learning plan for any organization.

*Patterns discussion groups meet all over the world to discuss and learn about various books on patterns.*  
<http://c2.com/cgi/wiki?PatternsGroups>

*A couple years ago, we recognized a real gap in our company's knowledge of XML. Since we are a systems integrator, this could have been a fatal hole. We didn't have any homegrown experts, and so we formed a study group to make ourselves smart on the subject. That turned what we learned in the study groups into a course, which we originally described as 'The Myopic Leading the Blind.' We now have key work done with XML, and a broad-curriculum of XML classes we teach internally, and we even have one that we are teaching externally as well.*

*Our developers went through two days of patterns training and then formed a study group to continue their learning. They chose to go through the GoF patterns first.*

*Two Evangelists started Friday afternoon “chalk talks” to toss around technological issues people were grappling with. In their first two years, the chalk talks drew 15 to 150 engineers; in their third year they became a regular sponsored part of the HP Labs program. [Waugh01]*

**Originator:** Linda Rising

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Sustained Momentum**

*We can think of introducing ideas as planting a sapling. If this is an appropriate metaphor, then it's clear that without water, sun, and a source of nourishment, the young tree will die. It will need attention to keep it alive and growing. Sometimes we forget how important this ongoing support is—for all living things.*

**Take a pro-active approach to the ongoing work of sustaining the interest in the innovation in your organization.**

???

You're a Dedicated Champion trying to Involve Everyone

**There's a danger that when some success is evident in the change initiative, it's easier to just rest on your laurels and not do anything for awhile.**

It takes work to maintain interest. Without pro-active efforts, any new idea can wither and die on the vine. If you don't reinforce the benefits of your new idea, you run the risk that excitement and interest will fade, especially when people get busy with other things. Don't become complacent. You may have told your story countless times, but you have to keep on giving your sales pitch and providing support. [Bouldin89] Even when the new idea has been accepted and is being used, people still require periodic confirmation that their decision to adopt it was a good one or they may discontinue their use. [Rogers95, Chew+91]

Newton's Third Law was never so true: An object at rest tends to stay at rest until acted upon by external forces. We need continuous invitations to become involved, continuous assurances that we will get our wins. [PriceWaterhouse95]

*Therefore:*

**Take a pro-active approach to the ongoing work of sustaining the interest in your new idea in the organization. Take some small action each day, no matter how insignificant it may seem, to move you closer to your goal.**

Among the continuous activities you can do is:

- ?? Keep an e-Forum and In Your Space alive and interesting.
- ?? Keep others caught up in the effort— Ask for Help and Involve Everyone
- ?? Plan frequent events, such as a Brown Bag and Hometown Story. Remember the importance of Location, Location, Location.
- ?? Bring in a Big Jolt to stir up more curiosity and interest.
- ?? Start a regular Study Group that keeps people learning.
- ?? Piggyback on already scheduled events.
- ?? Stay in Touch with your Local Sponsor, Corporate Angel, Respected Techie, and other key supporters.
- ?? Be aware of outside events and call them to the attention of the organization. Attend conferences to learn new things and network with others. Use External Validation to share this information with others.
- ?? Find a Shoulder to Cry On when you become discouraged.
- ?? Keep your knowledge up to date. Your continuous learning is an important part of this effort. Read and send information to the appropriate people—Plant the Seeds

- ?? Keep skeptics close at hand with Fear Less.
- ?? Just Say Thanks to allow people to feel that their continuing support is appreciated.

=====

This pattern “builds” a sustained change initiative. It keeps the idea alive in you and in others and helps to reinforce individuals’ decisions to adopt it. Members of the organization will have a sense that they are keeping up with the latest and greatest, even when they are too busy to take advantage of everything that is offered. Those who are not yet involved with the innovation will be given reminders of what others are doing and the benefits that can be gained.

But keeping a steady momentum on any one project goes against the grain. Our natural tendency is to work in cycles – after completing a big task, we like to do something else for a while. But the longer we wait, the harder it is to return to the project because we lose some of our passion for it. In the long run, we usually find that periodic bursts are more stressful and less effective than simply doing something, even something small, on a regular basis.

*I guess it never occurred to me that introducing patterns is like growing a garden. You can't just throw the seeds in the ground and say -- that's that! No, you have to water, feed, and weed. I discovered this after I had given a few brown bags. As more and more people came by to ask about one design pattern or another, I realized that I was now the official encourager of pattern use and that once the mantle had been placed on my shoulders, it was up to me to make sure I thought about it all the time. After a while it became second nature--I "do" patterns!*

*I've been in academia for over 20 years, so I've seen many students attempt to finish a master's thesis or doctoral dissertation. It seems clear to me that there is a higher completion rate among students who work on their large research and writing project on a regular basis, at a steady pace, than among those who work on their project when they are inspired or find the time. To keep it alive in your mind, you have to keep it going. If you leave it alone too long, it loses meaning for you and becomes harder and harder to resurrect.*

**Originator:** Linda Rising

*Workshopped at the OOPSLA'96 “Introducing Patterns into the Workplace” workshop (October 1996).  
Shepherded and workshopped at PLoP'97 (September 1997).  
Shepherded and workshopped at EuroPLoP'00 (July 2000).  
Shepherded for PLoP'01 (August 2001).  
Shepherded for EuroPLoP'02 (April 2002).*

## **Tailor Made**

*One manager found it difficult to convince another manager of the value of patterns until she mentioned that patterns could be used as a tool in the organization's knowledge management efforts. This was something the other manager could understand. He knew that knowledge management was important. That was enough to convince him that patterns could be of some value in their organization.*

**To convince the organization of the value it can gain from the new idea, tailor your message to the needs of the organization.**

???

You are a Dedicated Champion using Personal Touch to show how your new idea can be personally useful.

**Individuals can be intrigued by interesting ideas, but organizations won't adopt something just because it's interesting.**

An innovation is good not because it is cool or trendy; but because it is *useful*. [Olson02] The value a new idea can provide an organization is not always apparent because results do not appear overnight. Yet, when management and Early Adopters consider a new idea, they want to see the benefit to the organization.

An organization is more willing and able to adopt innovations that offer clear advantages, do not drastically interfere with existing practices, and are easy to understand. [Fichman+93] They want to see how a new idea can fit into and improve what the organization already does. When it comes to new ideas packaging matters. Even the best ideas will have no impact if they are not sold in a way that gets through people's filters. [Weeks+01] A commonly heard piece of advice is "Don't sell the technology, sell the business solution."

*Therefore:*

**Tailor your message about the innovation to the needs of the organization.**

Study the organization's development processes and its business goals and requirements. Find a need in the organization that the innovation can fill. Then, rather than presenting the general benefits of the new idea, present the specific advantages it can offer the organization. Use buzzwords and information about projects in the organization that people will relate to. Persuade them from their point of view. Focus on what people are trying to do and show how the innovation can create change for the better.

When doing a presentation, give the conclusions first. Paint the big picture and save the details to present only if you're asked. Stress the gains rather than the losses. Emphasize the wins without stretching the truth or ignoring the risks. [Paulk95] Don't hype the innovation as a perfect solution because no matter how beneficial it may be for the organization, implementation is usually riddled with glitches. [Hildebrand96] If you can identify an opportunity to Just Do It, this will give you hard data to include.

Be clear about the motivations for the change. While these can appear "obvious" to you, this understanding may not be shared by everyone. [Hohmann97]

If there is an organization similar to yours that is having success with the innovation, use External Validation. Management likes to hear what other companies are doing, especially if the organization is in the same business, a partner, or even a competitor.

Make no mistake about it—this is a sales job—and you will need to give a different sales pitch to different groups, even though each pitch should contain the same basic facts and philosophy. [Buldin89]

=====

This pattern “builds” an understanding of how the innovation can help the organization. It helps to spark confidence in the decision makers that the innovation is not simply a good idea but rather is something that can allow the organization to improve what it already does.

But it takes special effort to use this pattern. Instead of using a canned presentation, you have to do some research. You must take the time to examine the needs of the organization so that you can match the new idea to these needs.

*Thanks to Shawn Dagley, whose comment sparked the idea for this pattern.*

*Thanks to Russ Stinehour for the additional inspiration for this pattern. He said that his clients would be interested in patterns only if it could be shown how patterns can improve the client's existing processes.*

One Evangelist advises:

*Particularly in today's market when everybody is tightening belts the only thing that will sell to upper managers are those things that can be executed fairly quickly and will lead to either faster time to market reduction of cost or a proven practice that leads quickly to higher quality.*

*I frame any new idea as an outcome that speaks to the manager who will be funding the effort.*

*I listen a lot the first couple of times I meet with him and then include the needs that I have heard in the proposal that I make. I describe the steps we can take to solve the problems.*

*Patterns have been introduced into our organization by adding pattern writing as part of the organization's project retrospective process. The concept of patterns is introduced during the second half of a retrospective event. Participants then record the lessons they learned during the retrospective in pattern form. The goal is to build a pattern repository from the “lessons learned” during project retrospectives.*

*The manager who hired me to talk about project retrospectives said, “Let's talk, before the presentation, about how you can tune this management presentation to what is going on in the organization right now. Let's design the message for maximum impact!”*

*This pattern was used to spark the interest in pedagogical patterns among our faculty. The advertisement for the initial presentation appealed to their desire to capture and share practices in teaching and learning with each other. The presentation highlighted this need, and then introduced patterns as a way to capture the practices.*

*This pattern may be implemented in a Solution Alignment Workshop. One Evangelist uses this workshop to determine how to tailor out of the box solutions to meet a customer's requirements. The purpose is to quickly and directly focus the customer on the available solution and their issues relevant to immediate use of that solution.*

*The effort to start patterns at one company was helped by management's awareness that the parent company was using patterns.*

*We wanted to hold the conference on company time. To get management to see the light, we had to speak their language. I had to adjust my mind-set to say that, of course, HP wanted to do the right thing. We just had to show them why this was the right thing. We reframed the context of the conference. Instead of presenting it as an event that benefited women, we presented it as an event that benefited HP. We focused on the benefits to HP of supporting its women employees in their professional development and in their community. We pointed out that the conference was not only a employee development tool but an employee retention tool--and an excellent one. It was pretty cheap and it was something the target audience wanted.*  
[Waugh01]

*I remember reading that the one reason people say “no” to a salesperson is the fear of making a mistake. This changed the way I sold my ideas to the company. I realized that while I was going on about the wonderful things we might accomplish, executives were sitting there thinking only one thing: What can go wrong? I’ve learned to explain how we can minimize risk, especially the risk of management looking bad.*  
[Dauten99]

*Stephen Covey states, “ To make an effective presentation, you’ve got to empathize with the listener. You’ve got to get into his frame of mind. You’ve got to make your point simply and visually and describe what he is in favor of better than he can himself.” After hearing this, one Evangelist started by saying, “ Let me see if I understand what your objectives and your concerns are about this presentation and my recommendation.” He did it slowly, gradually. In the middle of his presentation, demonstrating his depth of understanding and respect for their point of view, a senior manager turned to another manager, nodded, turned back to him, and said, “ You’ve got your money.”*[Covey89]

**Originator:** Mary Lynn Manns

*Shepherded for PLoP’01 (August 2001).*

*Shepherded and workshopped at EuroPLoP’02 (April 2002).*

## **Test the Waters**

*When new Peace Corps volunteers arrive at their destination, they are brimming with energy and with enthusiasm. Often, the last thing they want to do is sit back and take notes. But volunteers must fight the impulse to hit the ground running—a slow crawl ultimately works much better than a full sprint. "During your first two weeks on site, don't start calling meetings and making pronouncements," volunteers are advised. "Spend time observing your village and listening to people talk about their lives. Slowly, you will identify some natural places where you can intervene and share some ideas. To earn trust, you must demonstrate a presence and show that you're genuinely interested in learning as well as teaching."*  
[Layne00]

**When a new opportunity presents itself, “test” if there is any interest by using some of the patterns in this language and then evaluating the result.**

???

You are excited about a new idea and you would like to be an Evangelist for it in your organization.

**When there is a new opportunity, you wonder if the organization is ready for it. You don't want to put much effort into introducing it if there really isn't any interest.**

It's not always obvious where to start introducing any opportunity into an organization. There's a natural tendency for an enthusiastic change agent to hit the ground running and try to make a tremendous impact as soon as possible. Yet, you need to get your bearings. A “listen and learn” approach shows that you are willing to consider the opinions of others as you explain your new ideas.

You can't fix everything at once. The trick is to find the minimum number of leverage points that can make a dramatic impact. Once you find the hot buttons, you can get things going.

*Therefore:*

**Choose a few patterns, use them, and then evaluate the result. If there appears to be a spark of interest, move ahead Step by Step with the opportunity.**

Begin with a few things that don't take much effort, such as:

- ?? Use Personal Touch during a coffee break to informally talk with one of your colleagues (Innovator, Respected Techie) about the new approach.
- ?? Just Do It and then give a simple demo or a Hometown Story to a few colleagues.
- ?? Give a Brown Bag to present the idea to the rest of your team.
- ?? Piggyback on a regularly scheduled event.
- ?? Plant the Seeds around your organization.
- ?? Talk with a possible Local Sponsor about how the idea can solve a current problem.

These initial steps can help you decide what to do next. Use Time for Reflection to determine if it is The Right Time for the opportunity in your organization. Evaluate what went well and what didn't. If you encounter resistance, you may need to modify how you are presenting the proposed change. If you see some spark of interest, try some other patterns that will take more effort, such as Big Jolt and Guru Review.

Don't use this pattern only when you begin to introduce an innovation. Test the waters along the way use it every time you see a new opportunity.

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This pattern “builds” a foundation upon which to build other patterns. It is the first step in trying to become an Evangelist for a new opportunity. It allows you to learn if you should proceed and, if so, what you should do next.

But be prepared for possible disappointment. Sometimes an idea is too new or radical for ready acceptance by an organization, or it may run counter to other constraints, such as a preference for a vendor or product. Rather than pushing harder, it may be better to wait a bit until the organization can support the change. [Hohmann97] Save your energy for when you can get payback. An understanding of the innovation will still be your own personal competitive advantage.

*I went from successfully introducing patterns at a medium-sized company to a small company. Even though the support of a Local Sponsor and Corporate Angel were easy to get and the developers were enthusiastic about the idea of patterns, most had no time to attend Brown Bags. The company had no resources for training or conferences, so despite all the support, I got tired and gave up. I realized that some companies with tight schedules have no room for investing in new ideas.*

*One of the four core values of eXtreme Programming is Feedback. This works at all levels. Programmers write unit tests for all the logic in the system. Running these tests provides instant feedback on the state of the system. When customers write user stories, programmers immediately estimate them, so the customers have concrete feedback about the quality of the stories. Tracking the completion of tasks gives the whole team feedback about whether the delivery date will be met.[Beck00]*

**Originator:** Chuck Hill

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Time For Reflection**

*Here is Edward Bear, coming downstairs now, bump, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there is another way, if only he could stop bumping for a moment and think of it.* [Milne26 in Kerth01]

**To learn from the past, take time at regular intervals to evaluate what is working well and what should be done differently.**

???

You're an Evangelist or Dedicated Champion trying to introduce a new idea into your organization.

**We make the same assumptions and the same mistakes based on those assumptions over and over again.**

It is much easier to keep on doing what we have always done than to stop and think about whether this is the best thing to do. Asking these questions makes us uncomfortable. We may discover that what we are doing is no longer working. [Bouldin89]

In our attempts to make use of every moment, we rush to do this, to do that. Keeping this continual pace makes it difficult to step back and reflect, to take a broad view. [Norman99]

In the movie *Dances with Wolves*, a tribe of Native Americans takes time to examine the success of a buffalo hunt by telling and retelling the story of the hunt around a campfire. This is an important ritual because it provides lessons for all the hunts to come. It is the way wisdom is passed on. A retrospective analysis works much the same way—its purpose is to help review a recent project to understand what worked well and what to do differently next time. [Kerth01]

In 1988, Joseph M. Juran wrote about deriving lessons learned from retrospective analysis and named this process after philosopher George Santayana, who once observed, "Those who cannot remember the past are condemned to repeat it." [Godfrey99] Most large organizations have some form of the Santayana review and call it a retrospective, postmortem, postpartum, or project review. The idea is simple—examine what happened on the last project and learn from it. Capture what worked well and what should be done differently. [Kerth01]

At the end of a project, people are so focused on the pain they experienced that they don't remember their accomplishments. Even failed projects can identify valuable accomplishments for which a team can be proud. At the same time, even in the most successful project, things can be improved. To create learning organizations, we must learn to stand back and hear what went on in our projects. To learn as an individual, we must stand back and take the time to reflect. Insanity means doing the same thing you did in the past but expecting different results. [Kerth01]

*Therefore:*

**Pause in any activity to reflect on what is working well and what should be done differently.**

Take time out at regular intervals. Reflection is more likely to occur if it is made part of the process rather than something that may happen "when we have time." Pause in the beginning of your effort, when you Test the Waters, to determine if you should proceed. Build reflection time into the Step by Step process so that

you can evaluate what adjustments should be made in your plan as well as what is going well and should continue. Don't forget to celebrate your Small Successes.

To reflect as a group, run a "project retrospective." This is a series of fun and highly effective activities that help a team review the past so that the members can become more effective in the future. If possible, use Location, Location, Location. For more information on leading a project retrospective, see Norm Kerth's excellent book. [Kerth01]

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This pattern "builds" an understanding of what happened in the past and what can be improved in the future. You'll see things that hadn't occurred to you. You'll be able to plan your next step, make note of the things that are going well and think about how you can improve. You can even document your successful practices so that they can be shared with others.

But you have to carve out time to reflect and this isn't easy in our fastpaced world. Yet, it can be argued that failing to think about the past and plan your next step can cause you to lose even more time in the long run because of the mistakes you may be making over and over again.

*At our company, retrospective data was used to document patterns for software design, system test, and customer interaction. When data from successful teams showed that a team size of no more than ten was a factor in the successes of the projects and when those results are backed up by observations by the literature [Cockburn98, Brooks95, Coplien95] this is an important pattern. Capturing this information and giving the pattern the name, "No More Than 10," was a useful way to ensure that this knowledge was not lost.*

*You must never feel badly about making mistakes as long as you take the trouble to learn from them. For you often learn more by being wrong for the right reasons than you do by being right for the wrong reasons. [Juster61]*

*One of the principles of the Agile Manifesto is: "At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly." [Agile]*

**Originator:** Linda Rising

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Token**

*I collect the name badges from conferences I attend and hang them on the walls of my cubicle. They remind me of the conferences I have attended, the many friends I have met at the conferences, and the things I have learned. They are not Treasures, so I'm not afraid that someone will take them in the middle of the night.*

**To keep an event alive in a person's memory, hand out tokens that can be identified with the topic being introduced.**

???

You're an Evangelist or Dedicated Champion trying to get people interested in a new idea. You have limited resources.

**People may be enthusiastic about a topic when it's presented, but the enthusiasm quickly wanes as they forget tomorrow what excited them today.**

Our brains can only hold so much; today's information will be quickly replaced by tomorrow's information. We need reminders. A physical object associated with a particular topic can become a reminder. It can help people continue to reconnect with an event long after it has taken place. It is one way to keep an idea in your Space.

Sociologists have observed that in all cultures, the receipt of even a small gift obligates the receiver, even if the gift was not highly valued. Free samples are given away in supermarkets and by salespeople in a variety of settings because the worth of the return has been shown to be more than the outlay. [Cialdini01]

*Therefore:*

**Hand out small tokens that will remind people of the topic being introduced.**

Examples of tokens are magnets, buttons, coasters, cups, pencils, or a set of bound notes, a "quick reference" printed on special paper, or copies of articles. Be creative in finding or constructing items that will form a link with the event. The monetary value need not be high; it doesn't need to be a Treasure.

Don't get carried away and distribute too many tokens— it reduces the effect. Don't be disappointed if some people dispose of them— not everyone will appreciate them. Those who don't "get" the topic will be less inclined to keep them around. We all know what it's like to have another thing around that just takes up space. Most will get cleaned out over time, and this is okay.

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This pattern "builds" a reminder of an event that is associated with the new idea. People who identify with the topic will keep their token, often prominently displayed, as a memento. Initially, this identifies the group of people to each other, helping to create a critical mass and establish a Group Identity. Over time, the token serves as a reminder to the individual to revisit the topic.

But it might be difficult to convince your organization to fund tokens. In this case, think about spending some of your own money. It doesn't have to take a lot of cash, but your colleagues and your management will be impressed that you believe in the new idea enough to support it.

*Several trinkets have been used over the life of patterns introduction at our company. Writers Workshop reference cards were given to people who attended Pattern Writing classes.*

*A good salesman knows the value of giving away Tokens. Even after a sale is made, a Token is invaluable for maintaining a good customer relationship and often results in more sales.*

*Attendees at a PLoP conference usually take a tangle of yarn home with them—a piece of the web that was woven in the last game at the conference. It reminds them of the connections they have with the participants..*

*One consultant has a foldable card that he gives out at his training sessions. He says that there is not only benefit for the receiver of the trinket, but also to the giver. The consultant feels that he gives a bit of himself away with the card.*

*A group of human factors experts introduced new techniques by conducting short usability tests at their own workstations and gave chewing gum as a thank-you gift. [Radle+01]*

*At our poster session at OOPSLA 2001, we gave “Good Job!” stickers for participants’ badges if they drew a picture of any pattern we had displayed on our poster. The sticker was just a Token but it got their attention, many who said they couldn’t draw were convinced by the ridiculously small sticker and it meant they had to read every pattern, looking for one that spoke to them.*

*Craig Tidal, president and CEO of Net Solve Inc. teaches customer interaction to all new employees, ranging from receptionists to senior managers. He rewards correct answers with a crisp \$2 bill. “They’re unique, and if somebody puts one in their wallet, it will remind them of the event,” he says of the gimmick [Reingold01]*

**Originator:** David E. DeLano. This pattern was originally called Trinket.

*Workshopped at the OOPSLA’00 “Introducing Patterns into Organizations” workshop (October 2000).*

*Shepherded for PLoP’01 (August 2001).*

*Shepherded and workshopped at EuroPLoP’02 (April 2002).*

## Treasure

*People were always getting awards at my company. It was a great place to work. Usually the memento was accompanied by a small check. The award that I treasure the most was a hand-made framed piece of paper from our fledgling patterns community. It cost nothing but their time but it meant a lot. It was peer recognition, a special way to Just Say Thanks.*

**To recognize special effort, give contributors something they value.**

???

You are a Dedicated Champion trying to introduce a new idea in your organization. You have resources to reward supporters.

**Sometimes it's not enough to Just Say Thanks when someone has made a special contribution.**

In most projects, there are people that make special things happen because of their special efforts. So you want to put some extra effort into recognizing their contributions. Saying thanks is essential, but sometimes it just doesn't seem like enough. Yet, "things" are important— they can recognize achievement or a level of commitment. People will attach significance to an object when they are proud of the circumstances in which they received it.

*Therefore:*

**Recognize people who make special contributions to the change effort with something they will value.**

Some examples of special contributions are:

- ?? A Hometown Story presentation.
- ?? Participation in a pilot project (Just Do It).
- ?? Help with Personal Touch or Adopt a Skeptic.
- ?? Leadership in a Study Group.

Examples of things people may value include books, shirts, plaques, and a special recognition ceremony. It does not need to be expensive, but the recipient has to attach importance to it and associate it with what they did to help introduce the new idea. It's not about the specific item, but rather the circumstance that allowed the person to receive it. For example, if everyone gets a t-shirt just for showing up, it's a Token. If a special t-shirt is awarded for an accomplishment, it's a Treasure.

Distribute an appropriate number of treasures. If you give too many, they will become Tokens. Too few and they create an atmosphere of exclusion. Make sure the reward is not too valuable and it is given for special effort. This pattern is not about an expensive incentive but one way to build a community.

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This pattern "builds" a connection with people who contribute to a change effort. It gives special thanks for a special contribution.

But it can be hard to define what a special contribution is. If you are concerned about hard feelings, you may need to define and publicize the kinds of efforts that warrant a treasure.

*We have a special recognition (if there is a winner) for the Employee of the Month. The winner is nominated by peers and receives a coupon for a free dinner. The most enduring piece is the write-up of the nomination, which appears in the company newsletter.*

*Patterns books were given as prizes to pattern writers whose patterns went through a writers' workshop and were then updated. The patterns were then posted on the internal patterns repository.*

*It is common practice in sales departments to motivate people by giving rewards.*

*One company selects an "employee of the month" for some strange stuff or funny mistake he did. This prize is part of the fun in the company, not to upset people. As a result of this prize, all employees tell each other about the mistakes they make and while laughing about it, learn how to avoid them.*

*The boy scouts receive badges for exhibiting learned skills or attaining predetermined goals.*

*Joe Bergin has written a pedagogical pattern Gold Star that says students should get praise when they do well. <http://csis.pace.edu/%7Ebergin/PedPat1.3.html#goldstar>  
His compiler course is seen as difficult, so he publishes Gold, Silver, and Bronze Medal winners each semester: <http://csis.pace.edu/~bergin/compiler/CompilerAward.html>*

**Originators:** David E. DeLano and Nicolai Josuttis

*Shepherded for PLoP'01 (August 2001).*

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **Whisper in the General's Ear**

*I noticed that a particular manager was always absent from my patterns presentations. He had good excuses but I think he was avoiding the subject. His people never came to any of my training classes. I stopped by his office, "I know you're too busy to come to my presentations. I understand that. I'm willing to get together one-on-one, any time, to answer any questions you have." He was caught. He fumbled with his calendar. "Hmm, not much time. I do have an open slot but it's at 7 a.m. next Friday. That's probably too early for you (he was hoping)." I jotted down the date and said, "Great! Thanks for your time!" I stopped by the day before our meeting and said, "See you tomorrow!" On Friday, we spent a good half hour and he seemed relieved that my idea wasn't just some new OO thing but really did apply to his area. He never became an enthusiastic supporter but he never spoke up against it and his people started coming to my training classes.*

**Managers are sometimes hard to convince in a group setting, so meet privately to address any concerns.**

???

You're an Evangelist or Dedicated Champion working to get management support for your new idea. There are troublesome managers that have not been convinced by any presentations you have made.

**Managers who are against your new idea have the power to block your progress.**

Gaining management confidence is 70% politics and 30% facts. [Alexander01]

Many managers aren't that interested in technical details. In a group situation their attention span is much less than it is one-on-one. Managers are overwhelmed by new ideas and are reluctant to head blindly down new paths without some justification. You can't publicly push a manager in a new direction but in private you can gently show the benefits of a new way of doing business that will reflect well on those who are successful with the new approach.

Because accountability is always centralized and flows to the top of organizations, executives feel an increasing need to know what is going on, while recognizing that it is harder to get reliable information. That need for information and control drives them to develop elaborate information systems alongside the control systems and to feel increasingly alone in their position atop the hierarchy. [Schein96]

Many high-level executives are "productive narcissists" and are extremely sensitive to criticism or slights. They cannot tolerate dissent. In fact, they can be extremely abrasive with employees who doubt them with subordinates who are tough enough to fight back. Some are so defensive that they go so far as to make a virtue of the fact that they don't listen. As one CEO bluntly put it, "I didn't get here by listening to people!" [Maccoby00]

*Therefore:*

**Set up a short one-on-one meeting with a manager to address any concerns with the innovation and the effort to introduce it.**

Say exactly what you know and what you can do to help. Don't exaggerate what your new idea can do. Nothing can hurt you more than overselling something. [Alexander01] Play the evangelist role. Let your natural enthusiasm show. Encourage the manager to Ask for Help in understanding technical details- this may be embarrassing for him to do in front of others. It's human nature to want to save face in front of a group. [Alexander01]

Make sure the information is Tailor Made appropriately to the management audience. Be ready to address the costs and benefits of your idea but don't overwhelm him with data. Tell him Just Enough – educate, but don't talk down or overburden him with too many technical details. When first hearing of a new idea, managers usually want to know the big picture and how it will impact them. [Alexander01]

Give the manager ideas, but consider letting him take the credit for them. Find out what he thinks before presenting your views. If you believe he is wrong, show how a different approach would be in his best interest. Take his views seriously. Analyze them, don't brush them aside they often reveal sharp intuitions. Disagree only when you can demonstrate how he will benefit from a different point of view. [Maccoby00]

Always empathize with the manager's feelings, but don't expect any empathy back. Understand that behind his display of infallibility, there hides a deep vulnerability. Praise his achievements and reinforce his best impulses, but don't be shamelessly sycophantic. An intelligent narcissist can see through flatterers and prefers independent people who truly appreciate him. Show that you will protect his image, inside and outside the company. [Maccoby00]

Great salespeople will tell you the way to influence others is to understand their needs and communicate on their level, not on yours. Persuade, don't alienate. Stay calm. Back off when he starts to glaze over or push back. The idea is that in the process of talking to him, he will have an "aha" moment and because he's come to this realization on his own, he'll "own" the idea and feel comfortable about asking for help with the next steps. [HBR00]

If you are persistent and patient but still have not succeeded in meeting with the manager, there is one other tactic you can use in extreme cases. Next time you see the manager heading from the office to the cafeteria, walk along and causally mention some arresting piece of news. Keep a "2-minute pitch" or "elevator speech" in your head at all times. A good salesperson must take advantage of unscheduled opportunities as well as rehearsed and organized ones.

Remember that your goal is to build trust with the manager. This will take time. The manager who needs this kind of special attention may be insecure or may have been burned by false promises; it will take patience and great strength of character on your part to face these obstacles.

Once you have the manager's support, Stay in Touch so he won't forget about you.

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This pattern "builds" management support for the new idea. It maintains the manager's dignity while giving you the chance to get your story heard and achieve your objectives.

But your private meetings with a manager can look like "backroom dealing" to outsiders. Be open and straightforward with others. Let them know you have talked with a manager, but be honest that you don't want to break any confidences by sharing every detail of the discussion.

*David Pottruck, the number-two executive for Charles Schwab Corp., frequently clashed with his boss, Larry Stupski, at top-management meetings. Pottruck made two big mistakes: He failed to recruit others to his cause (Corridor Politics), and he disagreed disagreeably. Then he met with Stupski and proposed a solution: He would never publicly argue with him again. He might disagree, but he would do so only in private. By questioning his boss behind closed doors only, he got his ideas into the room and kept the power struggle out of it.*

*An Evangelist once had a boss who was hard to convince in a groupmeeting (darn near impossible!). He would move forward on an issue during a meeting only if he had all the information and all his doubts removed before the meeting. He rarely asked questions during the meeting. So, when an upcoming meeting would have an issue that was important, the Evangelist would meet with him before the meeting and address all his questions and concerns one-on-one.*

**Originator:** Linda Rising

*Shepherded and workshopped at EuroPLoP'02 (April 2002).*

## **External Pattern References**

Body Follows Eyes. In almost any activity, if you want to go somewhere, simply look there.

Cardboard Consultant. Explain the problem out loud to someone or something.

Communal Eating. Give every institution and social group a place where people can eat together. [Alexander+77]

Gradual Stiffening [Alexander+77]

HandsInView. Skiers should always keep their hands where they can be seen. [Olson98a]

Introvert – Extrovert. Teach yourself to play a role in which an observer thinks you are extroverted, bold, and outgoing. Teach yourself to recognize the situations in which this role is appropriate and to then gather your resources and turn the role on. [Bergin]

Leaky Bucket Counters. To handle transient faults, keep a counter for each failure group. Initialize the counter to a predetermined value. Decrement the counter for each error or event and increment it periodically (but never beyond its initial value). If the leak rate is faster than the fill rate, then an error condition is indicated. [Adams+95]

Master and Apprentices. Learn something by assisting an expert. [Alexander+77]

Mercenary Analyst. Have a professional documenter remove the burden of creating documentation from developers. [Coplien95]

No Surprises. Adjust schedule or feature commitments without losing the confidence of groups that depend on your components by calling attention to changes early and negotiating solutions. [Dikel+01]

Null Object. A surrogate for another object with the same interface that does nothing. [Woolf98]

Patron. Give the project access to a visible, high-level manager, who champions the cause of the project. [Coplien95]

Piecemeal Growth. Incrementally address forces that encourage change and growth, allow opportunities for growth to be exploited locally as they occur, and refactor unrelentingly. [Foote+00]

Team Space. To maximize people's productive time at work, allow team members to own their space for everything from decision-making to social events. [Taylor00]

War Stories. Include real-life experiences in a pattern to make it come alive. [Harrison99]

Work Community. To create a feeling of community in the workplace, build small clusters of workplaces that have their own common area. [Alexander+77]

## References

- [Accountemps] Press Release by Accountemps, *Just Say Thanks*, [http://www.recognition.org/articles/article\\_just\\_say\\_thanks.asp](http://www.recognition.org/articles/article_just_say_thanks.asp)
- [Adams+95] Adams, M. et al., “FaultTolerant Telecommunication System Patterns,” in Vlissides, J., J. Coplien, and N. Kerth, eds, *Pattern Languages of Program Design 2*, Addison-Wesley, 1995.
- [Agile] Manifesto for Agile Software Development. <http://agilemanifesto.org>.
- [Alexander+75] Alexander, C.A. et al., *The Oregon Experiment*, Oxford University Press, 1975.
- [Alexander+77] Alexander, C.A. et al., *A Pattern Language*, Oxford University Press, 1977.
- [Alexander79] Alexander, C.A., *The Timeless Way of Building*, Oxford University Press, 1979.
- [Alexander01] Alexander, S., “The politics of value,” *Infoworld*, May 11, 2001.
- [Anderson94] Anderson, B., “Toward an Architecture Handbook,” *OOPSLA Addendum to the Proceedings*, Washington, D.C., January 1994, ACM Press.
- [Austin00] Austin, N.K., *Just Say Thanks*. 1099. <http://www.creativepro.com/story/feature/4046.html>
- [Beck+96] Beck, K., J.O. Coplien, R. Crocker, L. Dominick, G. Meszaros, F. Paulisch, and J. Vlissides, “Industrial Experience with Design Patterns,” Proc. 18th International Conference on Software Engineering, Technische Universität, Berlin, Germany, 25– 30 March 1996, 103-114.
- [Beck00] Beck, K., *Extreme Programming Explained*, Addison-Wesley, 2000.
- [Bergin] <http://csis.pace.edu/~bergin/patterns/introvertExtrovert.html>
- [Bouldin89] Bouldin, B.M., *Agents of Change*, Yourdon Press, 1989.
- [Brooks95] Brooks, F. P., *The Mythical Man-Month*, Addison-Wesley, Reading, MA, 1995.
- [Brown85] Brown, W.S., *13 Fatal Errors Managers Make and How You Can Avoid Them*, Berkley Books, 1985.
- [Buschmann+96] Buschmann, F., Meunier, R., Rohnert, H., Sommerlad, P., Stal, M *Pattern-Oriented Software Architecture: A System of Patterns*, Wiley, 1996.
- [Cargill95] Cargill, T., “Localized Ownership: Managing Dynamic Objects in C++”, in Vlissides, J., J. Coplien, and N. Kerth, eds., *Pattern Languages of Program Design 2*, Addison-Wesley, 1995.
- [Cargill97] personal communication with N. Harrison.
- [Chew+91] Chew, W.B., Leonard-Barton, D., *Beating Murphy’s Law*, *Sloan Management Review*, 32, Spring 1991, 5-16.
- [Cialdini01] Cialdini, R.B., *Influence: Science and Practice*, Allyn and Bacon, 2001.

- [Cockburn98] Cockburn, A., *Surviving Object-Oriented Projects: A Manager's Guide*, Addison-Wesley, 1998.
- [Cockburn02] Cockburn, A., *Agile Software Development*, Addison-Wesley, 2002.
- [Collins01] Collins, J. "From Good to Great," *Fast Company*, Oct. 2001, 90-104.
- [Coplien95] Coplien, J.O., "A Generative Development Process Pattern Language," *Pattern Languages of Program Design*, J.O. Coplien and D.C. Schmidt, eds., Addison-Wesley, Reading, MA, 1995, 183-237.
- [Coplien96] Coplien, J.O., "Lessons Learned," <http://www.belllabs.com/user/cope/Patterns>
- [Coplien00a] Coplien, J.O., Shepherd comment for EuroPLoP'00, May 2000.
- [Coplien00b] Coplien, J.O., *Sequel to the Trial of the GoF*, panel presentation at OOPSLA'2000, October 18, 2000, Minneapolis MN.
- [Coplien00c] Coplien, J. O., "A Pattern Language for Writers' Workshops" in Harrison, N., B. Foote, and H. Rohnert, eds., *Pattern Languages of Program Design 4*, Addison-Wesley, 2000.
- [Covey89] Covey, S.R., *The 7 Habits of Highly Effective People*, Simon & Schuster, 1989.
- [Dauten99] Dauten, D. *The Gifted Boss*, William Morrow & Company, 1999.
- [Davenport+98] Davenport, T. H. Davenport and L. Prusak, *Working Knowledge: How Organizations Manage What They Know*, Harvard Business School Press, 1998.
- [deGeus97] de Geus, A., *The Living Company*, Harvard Business School Press, 1997.
- [DeMarco01] DeMarco, T., *Slack: Getting Past Burnout, Busywork, and the Myth of Total Efficiency*, Broadway Books, 2001.
- [Desouza03] Desouza, K.C., Barriers to Effective Use of Knowledge Management Systems in Software Engineering, *CACM*, January 2003, 99-101.
- [Dikel+01] Dikel, D.M., D. Kane and J.R. Wilson, *Software Architecture: Organizational Principles and Patterns*, Prentice-Hall, 2001.
- [Edler95] Edler, R., *If I Knew Then What I Know Now: CEOs and other smart executives share wisdom they wish they'd been told 25 years ago*, G. P. Putnam's Sons, 1995.
- [Edralin02] Edralin, J., "Letters" in *IEEE Software*, May/June 2002, 11.
- [Fichman+93] Fichman, R.G. and Kemerer, C., "Adoption of software engineering innovations: The case of object orientation," *Sloan Management Review*, Winter 1993, 7-22.
- [Foote+00] Foote, B., Yoder, J., "Big Ball of Mud," In: Harrison, N., Foote, B., Rohnert, H. eds., *Pattern Languages of Program Design 4*, Addison-Wesley, 2000.
- [Gabriel96] Gabriel, R.P., *Patterns of Software*, Oxford University Press, 1996.

- [Gamma+95] Gamma, E., R. Helm, R. Johnson, J. Vlissides, *Design Patterns: Elements of Object-Oriented Software*, Addison-Wesley, 1995.
- [Gladwell00] Gladwell, M., *The Tipping Point*. Little, Brown and Company, 2000.
- [Godin01] Godin, S., *In My Humble Opinion*, Fast Company, November 2001, p. 80.
- [Goldfedder01] Goldfedder, B., *The Joy of Patterns*, Addison-Wesley, 2001.
- [Godfrey99] Godfrey, A., "The Santayana Review," *Quality Digest*, Feb. 1999, 20.
- [Grand98] Grand, M., *Patterns in Java, Vol. 1, A Catalog of Reusable Design Patterns Illustrated with UML*, Wiley, 1998.
- [Green+00] Green, G.C. and A.R. Hevner, "The Successful Diffusion of Innovations: Guidance for Software Development Organizations," *IEEE Software*, November/December 2000, 96-103.
- [Grenning01] Grenning, J., "Launching Extreme Programming at Process-Intensive Company." *IEEE Software*, November/December 2001, 27-33.
- [Guzdial93] Guzdial, M., *Emile: Software-Realized Scaffolding for Science Learners Programming in Mixed Media*, PhD Thesis. Ann Arbor, MI: University of Michigan, 1993.
- [Hackworth+02] Hackworth, D.H. and E. England, *Steel My Soldiers' Hearts: The hopeless to hardcore transformation of U.S. Army, 4<sup>th</sup> Battalion, 39<sup>th</sup> Infantry, Vietnam*, Rugged Land, LLC, 2002.
- [Hadden+02] Hadden, R. and B. Catlette, "Training—Your Place or Mine?," February 19, 2002, <http://www.contentedcows.com/20020219.html>
- [Hanmer01] Hanmer, R., e-mail correspondence, Jan 9, 2001.
- [Harrison99] Harrison, N., "The Language of Shepherds: A Pattern Language for Shepherding," *Proceedings of the 6<sup>th</sup> Annual Conference on the Pattern Languages of Programs* 15-18 August 1999, Monticello, Illinois.
- [Harrison01] Harrison, N., e-mail correspondence, Jan 3, 2001.
- [HBR00] "Case Study: What to do when the boss won't budge," *Harvard Business Review*, Jan/Feb 2000, 25-35.
- [Highsmith00] Highsmith, J., "Retiring Lifecycle Dinosaurs," *STQE*, July/August 2000, 22-28.
- [Hildebrand96] Hildebrand, C. "Our Own Worst Enemy," *CIO Magazine*, Nov. 1, 1996, [http://www.cio.com/archive/110196/chan\\_content.html](http://www.cio.com/archive/110196/chan_content.html)
- [Hill02] Hill, C., interview at OOPSLA'02, November 2002.
- [Hohmann97] Hohmann, L., *Journey of the Software Professional*, Prentice-Hall, 1997.
- [Jaslow02] Jaslow, H., personal conversation, September 2002.

- [Juster61] Juster, N., *The Phantom Tollbooth*, Knopf, 1961.
- [Keough01] Keough, D., former President of the CocaCola Company, in the movie *The Journey*.
- [Kerievsky01] Kerievsky, J., *Knowledge Hydrant: A Pattern Language for Study Groups*.  
<http://www.industriallogic.com/papers/khdraft.pdf>(1 July 2001).
- [Kerth01] Kerth, N., *Project Retrospectives: A Handbook for Team Reviews*, Dorset House, 2001.
- [Kim00] Kim, A.J., *Community Building on the Web*, Peachpit Press, 2000.
- [Klein1961] Klein, J., *Working with Groups: The Social Psychology of Discussion and Decision*, London, Hutchison, 1961.
- [Korson96] Korson, T. D. and V. K. Vaishnavi, *Object Technology Centers of Excellence*, Manning Publications Co., 1996.
- [LaBarre01] LaBarre, P., "Marcus Buckingham Thinks Your Boss Has an Attitude Problem," *Fast Company*, August 2001, 88-98.
- [Lamott95] Lamott, A., *Bird by Bird: Some Instructions on Writing and Life*, Anchor Books, 1995.
- [Layne00] Layne, A., "Training Manual for Change Agents," *Fast Company*, November 2000.
- [Letourneau00] Letourneau, J., workshop contribution, ChiliPLoP'2000.
- [Leuf+01] Leuf, B. and W. Cunningham, *The Wiki Way*, Addison-Wesley, 2001.
- [Lindstrom02] Lindstrom, L., personal communication, 2002.
- [Loeschen91] Loeschen, S., *The Magic of Satir: Collected Sayings of Virginia Satir*, Event Horizon Press, 1991 (7-15).
- [Lowe96a] Lowe, Douglas E., "A Rapid Design and Deployment Method for CMM Level 3" 1996 SEPG Conference.
- [Lowe96b] Lowe, Douglas E., Cox, G., "The Fast Track to Implementing the Software Engineering Institute's Capability Maturity Model Level 2," Hewlett-Packard Journal, August 1996.
- [Mackie+88] Mackie, R.R., Wylie, C.D., *Factors influencing acceptance of computer-based innovations*, In: Helander, M., ed, *Handbook of Human-Computer Interaction*, Elsevier Science Publishers B.U., 1988.
- [Maccoby00] Maccoby, M., "Narcissistic Leaders: The Incredible Pros, the Inevitable Cons," *The Harvard Business Review*, January-February 2000, 69-77.
- [McCarthy01] McCarthy, J. and M., *Software for Your Head*, Addison-Wesley, 2001.
- [McClelland] McClelland, W.A., The Process of Effecting Change, Presidential address to the Division of Military Psychology, American Psychological Association. (Unpublished).
- [Merton56] Merton, T. *The Living Bread*, New York, 1956.

- [Messmer00] Messmer, M., *Managing Your Career for Dummies*, Hungry Minds, Inc., 2000.
- [Meszaros+98] Meszaros, G. and J. Doble, "A Pattern Language for Pattern Writing," R. Martin, D. Riehle, F. Buschmann, *Pattern Languages of Program Design 3*, Addison-Wesley, 1998, 529-574.
- [Mills00] Mills, H., *Artful Persuasion*, Amacom, 2000.
- [Milne26] Milne, A.A., *Winnie-the-Pooh*, Puffin Books, 1926.
- [Moore99] Moore, G.A., *Crossing the Chasm*, HarperCollins Publishers, Inc., 1999.
- [Norman99] Norman, D.A., *The Invisible Computer*, The MIT Press, 1999.
- [O'Keefe02] O'Keefe, B., *Teamwork Module: Problem Solving*  
<http://www.vta.spcomm.uiuc.edu/PSG/psgl3-ov.html>
- [Oldenberg89] Oldenburg, R., *The Great Good Place*, Paragon House, 1989.
- [Olson02] Olson, D., personal communication, 2002.
- [Olson98a] Olson, D., "HandsInView," Rising, L., ed., *The Patterns Handbook*, Cambridge University Press, 1998, 139-140.
- [Olson98b] Olson, D., "TrainHardFightEasy," Rising, L. ed., *The Patterns Handbook*, Cambridge University Press, 1998, 145-147.
- [Pascale+00] Pascale, R.T., M. Millemann and L. Gioja, *Surfing the Edge of Chaos*, Crown Business, 2000.
- [Paulk95] Paulk, M.C. *Proceedings of the First World Congress for Software Quality*, San Francisco, CA, June 1995, 20-22.
- [Prevention03] *Prevention*, February 2003, "Caught in the Happiness Trap," 132-139.
- [PriceWaterhouse95] Price Waterhouse, *Better Change: Best Practices for Transforming Your Organization*, Price Waterhouse, 1995.
- [Pink02] Pink, D.H., "Are You on the Bus?" *Fast Company*, February 2002, 48.
- [Radle+01] Radle, K. and S. Young, "Partnering Usability with Development: How Three Organizations Succeeded," *IEEE Software*, January-February 2001, 38-45.
- [Reingold01] Reingold, J., "Teacher in Chief," *Fast Company*, September 2001, 66-68.
- [Rising98] Rising, L., ed., *The Patterns Handbook*, Cambridge University Press, 1998.
- [Rising+98] Rising, L. and J. Watson, "Improving Quality and Productivity in Training: A New Model for the High-Tech Learning Environment," *Bell Labs Technical Journal*, January-March 1998, 134-143.  
<http://192.11.229.2/minds/techjournal/janmar1998/pdf/paper10.pdf>

- [Rising02] Rising, L., "Agile Meetings," *STQE*, May/June 2002, 42-46.  
<http://members.cox.net/rising1/articles/STQE.pdf>
- [Roberts00] Roberts, L.J., "Join the Revolution," *Software Development*, November 2000, 68-70,  
<http://www.sdmagazine.com/articles/2000>.
- [Rogers95] Rogers, E.M., *Diffusion of Innovations*, 4<sup>th</sup> Edition, The Free Press, 1995.
- [Rogers+71] Rogers, E.M. and F.F. Shoemaker, *Communication of Innovations*, New York: Free Press, 1971.
- [Sagan87] Sagan, Carl, "The Burden of Skepticism," in Shermer, M. *Why People Believe Weird Things*, W.H. Freeman & Company, 1997.
- [Sanders02] Sanders, T., "Love Is the Killer App," *Fast Company*, February 2002, page 64-70.
- [Schaffer88] Schaffer, R.H., *The Breakthrough Strategy*, Harper Business, 1988.
- [Schein96] Schein, E.H., "Three Cultures of Management: The Key to Organizational Learning," *Sloan Management Review*, Fall 1996, 9-20.
- [Senge90] Senge, P., *The Fifth Discipline*, Doubleday/Currency, 1990.
- [Senge96] Senge, P., *The Leader of the Future*, Jossey-Bass, 1996.
- [Senge+94] Senge, P. et al, *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*, Doubleday, 1994.
- [Senge+99] Senge, P., A. Kleiner, C. Roberts, R. Ross, G. Roth, B. Smith, *The Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations*, Doubleday, 1999.
- [Souder90] Souder, W.E., Nashar, A.S., Padmanabban, V., "A Guide to the Best Technology Transfer Practices," *Technology Transfer*, Winter-Spring, 1990.
- [Steinbeck42] Steinbeck, J., *The Moon is Down*, Penguin Books, 1942.
- [Taylor00] Taylor, P., "Capable, Productive, and Satisfied: Some Organizational Patterns for Protecting Productive People" in Harrison, Føte, Rohnert: *Pattern Languages of Program Design 4*, Addison-Wesley, 2000.
- [Trubo01] Trubo, R., *Courage*, Ivan R. Dee, 2001.
- [Tveito+02] Tveito, A. and P. Hasvole, "Requirements in the Medical Domain: Experiences and Prescriptions," *IEEE Software*, November/December 2002, 66-69.
- [Vaughen00] Vaughen, Sheila J., "The Sweet Smell of Success,"  
<http://japanupdate.com/previous/00/12/21/story14.shtml>
- [Waugh01] Waugh, B. and M.S. Forrest, *Soul in the Computer*, Inner Ocean, 2001.

[Webster95] Webster, B.F., *Pitfalls of Object Oriented Development*, MIS Press, Inc., 1995.

[Weeks+01] Weeks, J. and C. Galunic, A Cultural Evolution in Business Thinking *Financial Times*, October 29, 2001, 2-3.

[Weinberg85] Weinberg, G.M., *The Secrets of Consulting*, Dorset House, 1985.

[Weinberg+99] Weinberg, D. and G. M., "Learning by Design: Constructing Experiential Learning Programs," *Readings for Problem Solving Leadership*, Weinberg and Weinberg, 1999.

[Wheatley99] Wheatley, M.J., *Leadership and the New Science: Discovering Order in a Chaotic World* 2nd ed., Berrett-Koehler Publishers, 1999.

[Whyte94] Whyte, D., *The Heart Aroused: Poetry and the Preservation of the Soul in Corporate America* Currency Doubleday, 1994.

[Woolf98] Woolf, B., "The Null Object" in Martin, R., D. Riehle, and F. Buschmann *Pattern Languages of Program Design 3*, Addison-Wesley, 1998.

[Young97] Young, A., "Setting Things Straight," *Object Magazine*, May 1997, 16-17.