PARADIGM PRINCIPLES

WITH

JOEL BARKER

DISCOVERING THE FUTURE SERIES
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INTRODUCTION

Paradigm Principles

Paradigm Principles builds a framework for understanding paradigm shifts—the kind of change that can topple business empires and spawn new powerhouses. How you deal with profound change—when a new idea overthrows the rules—will determine your long-term ability to be successful. By showing you how to anticipate, recognize and embrace change, Paradigm Principles can improve your ability to shape your future.

Paradigm Principles and the facilitator’s guide will help you:

• Build a framework for understanding—four principles explain paradigm shifts and how to take action.
• Train at your own pace—this program is designed so you have the option to view and discuss the points you choose.
• Look for new paradigms—learn how to plot the life span of the paradigms in your organization.
• Challenge your organization’s paradigms—pose questions everyone can ask and answer.
• Communicate the power of paradigm shifts—unforgettable stories inspire action.

Joel Barker’s Paradigm Principles help us understand when to look for change, who brings change, how to recognize change and how to benefit from change. Understanding and practicing the concepts of this program will help your organization act on the opportunities that come with change.

For information on bev doolittle’s art, as seen in paradigm principles, and for information on limited-edition fine-art prints, call 1-800-243-4246.
Joel Barker Video Programs

“DISCOVERING THE FUTURE” SERIES
The Business of Paradigms. This best-selling video introduces the concept of paradigms—our unwritten rules that dictate how we do things. These rules are so deeply rooted and unquestioned that they keep us from seeing new ways, new opportunities. Unforgettable examples help us understand the way we view the world and give us a common language to talk about change.

Paradigm Principles. Four principles help us fully understand the dynamics of a paradigm shift and how to take action in our organization. The video builds and expands on the concepts presented in The Business of Paradigms. By practicing Paradigm Principles, your organization will learn when to look for new paradigms, who will bring them, how to gain the advantages of a paradigm shift, how to recognize change and how to start talking about paradigms.

Paradigm Pioneers. Not all of us can create a paradigm shift, but we can all benefit greatly from change, says Joel Barker. Learning to pioneer a new idea is key to success. Whether your organization is developing new products, encouraging innovation or simply planning for the future, Paradigm Pioneers inspire you to make the most of your new territory. This video expands on the pioneering principle introduced in Paradigm Principles.

The Power of Vision. Create an environment in your organization where people can embrace change and the opportunities that come with it. This video program helps you understand the powerful role vision can play in your organization and your life—how a positive vision of the future is crucial to the success of any individual or organization.
CHANGE MANAGEMENT TOOLS
The Implications Wheel. A decision-enhancing tool that helps groups identify and evaluate the possible implications of innovations, trends, events or other issues that could affect your organization’s future. It forces you to challenge your paradigms, which often ignore the realm of possibilities and opportunities that are part of any decision-making process. The Implications Wheel helps you save time and resources that can be wasted when you jump to the “obvious” decision.

The Paradigm Prism. A video workshop designed to help you examine the critical relationship between your organization’s paradigms and its future success. Our paradigms and the rules that make up our paradigms are often invisible to us. The Paradigm Prism helps make these rules visible so they can be changed by choice rather than by crisis.

Joel Barker

Author and host of the all-time best-selling video series, “Discovering the Future,” Joel Barker is one of the world’s most influential speakers on the subject of change. Following a career in teaching, Barker was the director of the future studies department at the Science Museum of Minnesota. In 1979, Barker founded his consulting company Infinity Limited Inc. to help organizations gain advantage by improving their ability to explore the future for new ideas and innovations. Since then, he has lectured on issues concerning the future to more than 800,000 people around the world. Barker’s clients include many Fortune 500 corporations. In 1993, Barker was named International Educator of the Year by Pi Lambda Theta, the International Honorary and Professional Association in Education.

The author of Paradigms: The Business of Discovering the Future and Future Edges: Discovering the New Paradigms of Success, Barker has made the concept of paradigms a vital part of the language of business and change. He has transformed his studies into powerful, understandable video programs that have helped thousands of organizations shape their future.
ChartHouse International Learning Corporation

ChartHouse International Learning Corp. produces and distributes broad-based learning tools that stimulate thinking and inspire change in individuals and organizations. The craftsmanship and research that are the hallmark of ChartHouse videos and facilitator’s guides consistently define the industry standard.

ChartHouse’s growing line of quality video programs help you and your organization provide a foundation to enhance any initiative—quality, service, vision, innovation, team building, leadership, learning organizations.

ChartHouse protects your training investment with a money-back guarantee and a warranty against breakage. We take pride in supporting a community that stretches business boundaries to provide what clients call “exceptional service.”

ChartHouse, located in Minneapolis, Minn., can produce translations, special edits, closed captioning, video formats and other special services. Call 1-800-328-3789 for more information.

About the Facilitator’s Guide

This facilitator’s guide is designed to help you introduce and apply the concept of paradigm shifts to your organization. Each option is self-contained and helps you conduct a professional program. The introduction to each option includes facilitating tips and techniques. A section in the guide provides participant worksheets and overheads for your convenience.

- Discussion Option 1—Requires 1.5 hours to view the video and hold a discussion on one topic. You can choose the one most appropriate to your organization from among four discussion topics.
- Discussion Option 2—Requires 3-4 hours to view the video and discuss four topics. Each topic builds on the discussion of the previous topic.
- Discussion Option 3—Requires a full day to view the video and discuss nine topics.
DISCUSSION OPTION 1 (1.5 Hours)

For The Facilitator

Option 1 for viewing and discussing Paradigm Principles requires 1.5 hours. The following introductory material can help you facilitate your session. Some preparation—reviewing the video and working through the activities—will greatly enhance your presentation and the participants’ discussion experience.

OVERVIEW OF VIEWING AND DISCUSSION SESSION
The session is designed so participants can view the 37-minute video and spend between 30 and 45 minutes discussing a topic that can give them some insight into the way they think about change.

INTRODUCE PARADIGM PRINCIPLES
The video begins with an exemplar, a timeless story about change that captures the fundamental messages of Paradigm Principles. All you need to provide is a short introductory statement. The best possible opening is personal and meaningful to your audience. The following sample opening will help you think about your own style and the participants’ needs.

Sample introductory statement:
We all know that we are experiencing fundamental change in our industry, which is causing us and our competition to re-examine how we do business. To help us focus on our attitudes toward change and how we can remain competitive, we want to share a thought-provoking video with you.

We are passing out a discussion journal. Take a moment to review the list of things to look for in the video. You may want to take some notes. Following the video, we will give you a few minutes to reflect on what you saw. Then we’ll take time to share our different perspectives.

How do we view change? New ideas, new ways of doing things? Never has then? been a more important time to think about how we see the world.
SHOW THE VIDEO
As the facilitator, you should watch the video with your audience, even if you’ve seen it before. You might see something you missed. And your actions will speak louder than any words—that watching the video and being engaged is important. You are the role model.

WHEN THE VIDEO IS OVER
When Paradigm Principles is over, sit quietly for a few seconds before you turn on the lights. This will give the participants time to make the transition to a discussion. Invite the participants to take about five minutes to reflect on what they saw in the video and write down some of their thoughts in their discussion journal.

LEAD A MEANINGFUL DISCUSSION
The objective of the discussion is to have each participant leave with some insight they can apply to their lives and work. A few important facilitation basics will help your discussion have meaning and insight for everyone:

1. Personally welcome as many people as possible before the program.
2. Talk with people, not to them. When they speak, listen. People can tell if you are engaged.
3. If you ask a question, allow time for someone to answer. If you are patient and welcoming, someone will respond.
4. Involve the audience as much as possible when answering questions that come up during the discussion. Hold your answers and stories as a backup.
5. Remain open and flexible. The discussion may take an exciting turn you had not considered.
6. Let the participants decide for themselves what is important about the video. Save your personal insights for emphasizing, validating, clarifying and summarizing.
7. Make a mental note of important points. Look for opportunities to relate back to those points as the discussion progresses. Credit the person for the insight.
8. Learn with your audience. Come with a “beginner’s mind,” open to new possibilities.

9. Come with a “ready ear.” Nothing keeps a discussion moving better than when people are being heard and they sense your genuine interest in what they are saying.

10. Guide any side discussions that arise directly back to the topic being discussed. Brief side discussions can stimulate thinking; long ones can destroy the continuity of a group discussion.

11. Avoid heated debate. Paradigm Principles offers opportunities for interesting debates on many topics. Although such debates may seem urgent to the few people involved, unless everyone can participate, they seldom have wide appeal to a large group.

**LARGE GROUP DISCUSSIONS**

If you have a larger group (50-100), you may want to break the audience into smaller groups for some preliminary discussion. Then bring the groups together to share perspectives. Have each group select a spokesperson. This approach allows everyone to be involved, and it helps move the discussion along.

ChartHouse would like to thank Debbe Kennedy for her suggestions and tips for the facilitator.
WORKSHEETS AND OVERHEADS
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OPTION 1 WORKSHEETS:
Discussion Journal

Topic 1 — What are paradigms?
Paradigms affect how we view the world.

Topic 2 — The Paradigm Curve
What is the life span of our paradigm?

Topic 3 — Going Back to Zero
Our old strengths offer little protection against the new world.

Topic 4 — The Impossibility Question
Search for new paradigms in our organization.
HOW TO USE THE TOPIC OUTLINE

1. Why this is important. Let participants know up front what the topic is and why it is important. People usually are more receptive to a discussion and willing to share insights and experiences if they understand the basic message and point of the activity.

2. Background. Reviewing the background material (most of the information is taken directly from the video) can help you facilitate the activity. It reviews and highlights the paradigm concepts that the activity is built on.

3. Story from video. A brief story from the video brings the concepts to life for the participants. You can review the story as a warm-up to the discussion. It’s a nonthreatening, inspirational way to get participants thinking and talking about the concept.

4. Activity. By this point, participants should have some insights they can apply to their lives and workplace. The activities are designed to get people talking about their industry, their organization, their departments and themselves.
Topic 1: What Are Paradigms?

Paradigms affect how we view the world

WHY THIS IS IMPORTANT
Paradigms affect us in nearly every aspect of our lives. By understanding the concept of paradigms, we can better understand our boundaries and the rules of how we do things and how we view the world.

Overhead: Paradigms affect how we view the world.

BACKGROUND
Paradigm comes from the Greek word paradeigma, which simply means a model or pattern. The following are examples of words for paradigms:

- Theory Model
- Routines
- Pattern
- Customs Rituals

They range from “theory,” which is very challengeable, to “ritual,” which is very unchallengeable. Take the word “routine,” for example. A routine, like taking a shower every morning after you wake up, is something you do every day, but could be challenged if you are late for work. (For more words for paradigms, see Paradigms: The Business of Discovering the Future ov Future Edge: Discovering the New Paradigms of Success by Joel Barker.)

Joel Barker defines a paradigm as a set of rules and regulations (written or unwritten) that does two things:

1. Some of the rules establish the edges or boundaries of a territory.
2. The rest of the rules tell us how to act within those boundaries to achieve some measure of success. For example, when we say, “Let me show you how we do things around here,” we are giving rules that tell us how to act.
STORY FROM VIDEO
“The Swiss had dominated the watchmaking industry in the 20th century. Best estimates were that they captured close to 90 percent of the profits. Then in 1968 they were shown a revolutionary new watch. It was 1,000 times more accurate than a mechanical watch. But that accuracy was the result of the real revolution. Inside the watch was just one moving part, a small electronic step motor to drive the hands around the face. It was the first electronic quartz watch in the world.

“So how did the Swiss watchmakers respond to this marvelous invention? They were concerned over some key parts that were missing. For instance, where were all the gears? Where were all the bearings? Where was the main spring? The watch had nothing that those manufacturers were great at making. This couldn’t possibly be the future of watches.” So they rejected the idea because it didn’t fit their rules of what a watch was all about. And with that decision, they gave away almost their entire industry.

ACTIVITY
Divide the participants into small groups of people with similar areas of expertise (technical, managerial, service, sales, administration, for example).

Hand out worksheet: What are paradigms?

“Businesses are a forest of paradigms. They have sales paradigms, marketing paradigms, R&D paradigms, management paradigms and so on, each with their own boundaries and each with their own rules for success.”

1. In each group, describe the boundaries in your field of expertise.

Example:
Let’s look at some of the boundaries in a certain type of sales department.
This is how this particular department chooses to operate:

- Most of their sales leads come from direct mail.
- They rely on the telephone to discuss their programs with customers.
- Customers can sample the product before choosing to buy.
2. What are the rules that can help increase the likelihood of success in your group's field of expertise. Rules can be formal (written down) and informal (unspoken or implied). How do these rules help you solve problems?

Example:
- Polite, courteous behavior
- Send out order promptly
- Offer lifetime replacement of product

For more information on what a paradigm is, see the business of paradigms, a video program with Joel Barker. Call ChartHouse int'l learning at 1-800-338-4780.

Topic 2: The Paradigm Curve

What is the life span of our paradigm?

\textbf{WHY THIS IS IMPORTANT}

The paradigm curve describes the life span of a paradigm. We can use it to chart the prevailing paradigm in our industry. Knowing our location on the curve helps us think about our future and gives us important indicators for anticipating the future.

Overhead: What is the life span of our paradigm?

\textbf{BACKGROUND}

Let's look at the paradigm curve worksheet and review the life span of a paradigm:

A phase: “The area on the curve when we figure out what the new rules are, so not many problems can be solved during this time. It's the rule clarification phase.”

B phase: “Where problem solving really takes off because you know enough of the rules to be effective and you get better as you solve more problems. This is where we should begin to look for new paradigms, because it's when we are the most successful at the prevailing paradigm.”
C Phase: “Problem solving slows down because as we are working up the B phase we are always putting off the more difficult problems. When we get to the C phase, we have run out of the easy ones, so only the toughest problems remain. Usually we are willing to listen to a new paradigm only in the C phase and often only when we are in crisis.”

STORY FROM VIDEO
The last half century of Swiss watchmaking can be plotted on the A, B and C phases of the paradigm curve.

A Phase. Quartz watch technology was in the A phase from the time a Swiss research lab developed the first quartz watch in 1968 until it was commercialized by Seiko, a Japanese company. The Swiss watchmakers were not interested because the quartz technology didn’t fit their well-established rules for watchmaking.

B Phase. The Swiss watchmaking industry was in the middle to late B phase of the mechanical watch when the quartz watch was introduced by its researchers. The Swiss dominated the mechanical watch industry at the time. Sixty-five percent of all watches sold in the world were manufactured in Switzerland. They had constantly improved the mechanical watch by adding things like sweep second hands, automatic rewind and waterproofing technology.

C Phase. Today, the mechanical watch is still being made in Switzerland, but it is in the C Phase. Mechanical watches today have less to do with keeping time and more to do with high fashion. The time-keeping problems still on the shelf for mechanical watches are difficult and complicated to solve with the old technology.

ACTIVITY
Divide the participants into small groups according to department or area of expertise.

Hand out worksheet: The Paradigm Curve

1. Where is our industry’s prevailing paradigm on the paradigm curve? Is someone challenging the current rules? Does anyone think they see a paradigm shift coming?

Example: Are we just starting to develop a new way of solving problems? Then we are in the A phase. If we are solving problems with efficiency and effectiveness, then
we are in the B phase. I four problems are very sophisticated and subtle, expensive and extensive, we are in the C phase.

2. Discuss your department’s paradigm and plot its location on the paradigm curve.

3. Let’s plot all of the paradigms for each department on a master paradigm curve. Are all the paradigms in one phase of the curve or are they spread out in all three phases? What does that mean for our organization?

4. In your personal field of expertise, where are you on the paradigm curve?

**Topic 3: Going Back to Zero**

“Our old strengths offer little protection against the new world”

**WHY THIS IS IMPORTANT**

“When a paradigm shifts, everyone goes back to zero,” says Joel Barker. That means our strengths and what we’re good at mean little or nothing when a paradigm shifts.

Overhead: “Our old strengths offer little protection against the new world”

**BACKGROUND**

Regardless of what your position was with the old paradigm—No. 1 in market share, technology leader, best reputation—you are back at the starting line with the new paradigm. It suggests that no one can stay on top forever.

“Just ask GM, who thought total quality wasn’t for them. Or IBM, who considered the personal computer as little more than a toy. Or Sears, who certainly wasn’t afraid of a guy named Sam.”
**STORY FROM VIDEO**
“Rachel Carson’s book, *Silent Spring*, catalogued the damage that was then being done to the natural ecosystems—from tidal pools to grasslands, to mountain forests. Within 10 years, century-old ways of doing things came to a screeching halt. Everyone was put back to zero.”

Her ideas affected the largest car manufacturer, the leader in chemical technology, the oldest paper mills, the most productive farms. It didn’t matter what their strengths were at the time.

**ACTIVITY**
Divide participants into small groups. Hand out worksheet: Going back to zero

1. Identify the most recent paradigm shift in our industry. What were our industry’s strengths that were made irrelevant when the paradigm shifted?

   Example: In the mainframe computer industry, the personal computer was a paradigm shift that made IBM’s strengths irrelevant. At the time the Apple II personal computer was being developed in 1977, IBM held more than 60 percent share of the world computer market; one of its main strengths. IBM also wrote its own software and used its own sales force, which was the best in the business.

2. Today, what are our industry’s main strengths? What are we really good at? Does anyone see a paradigm shift on the horizon coming our way that could render today’s strengths irrelevant?

**Topic 4: The Impossibility Question**

Search for new paradigms in our organization

**WHY THIS IS IMPORTANT**
“Asking the impossibility question is the quickest way to begin talking about paradigm shifts in our organization. It can generate a surprisingly powerful set of answers to help us in our search for new paradigms.” By going outside our
boundaries of what is possible and thinking at a level of fundamental change, we are talking about paradigm shifts.

Overhead: Search for new paradigms in our organization.

**BACKGROUND**
The impossibility question is phrased like this: What is impossible to do today, but if it could be done, would fundamentally change our organization for the better?

Overhead: “What is impossible to do today, hit if it could be done, would fundamentally change our organization for the better?”

There are two key words in that question. When you ask what is “impossible,” the only place to get an answer is outside your boundary. That’s where new paradigms develop. The second keyword is “fundamentally” change, not trivially change. It should improve our organization in a significant way.

**STORY FROM VIDEO**
In the video, Joel Barker points to an example from the past. “It is impossible to stop our production lines to fix defective products,” he says. “Of course, this impossibility was before total quality and continuous improvement. We really thought it was impossible to stop the line and fix the product. Now we look back and laugh at what we thought was impossible in manufacturing.”

**ACTIVITY**
Divide participants into small groups representing different departments.

1. List “impossibilities” that could fundamentally change your organization or department for the better. Remember, “fundamental” means “not trivial.”

An “impossible” example from the recent past: a machine that you could just put the raw materials into—flour, oil, sugar, salt, yeast, whatever—and dial the food to be produced. The automatic bread machine is the result of asking this “impossibility” question
DISCUSSION OPTION 2 (3-4 Hours)

For the Facilitator

Option 2 for viewing and discussing Paradigm Principles requires three to four hours. The following introductory material can help you facilitate your session. Some preparation—reviewing the video and working through the activities—will greatly enhance your presentation and the participants’ discussion experience.

OVERVIEW OF VIEWING AND DISCUSSION SESSION

The session is designed so participants can view the 37-minute video and have time to spend between 30 and 45 minutes on four discussion topics. Each topic builds on the insight gained in the discussion of the previous topic. By the time you finish, the participants will have an understanding of the concept of paradigms, the life span of their industry’s paradigm and their own paradigms, what happens when a paradigm shifts, and how to look for new paradigms in their organization.

INTRODUCE PARADIGM PRINCIPLES

The video begins with an exemplar, a timeless story about change that captures the fundamental messages of Paradigm Principles. All you need to provide is a short introductory statement. The best possible opening is personal and meaningful to your audience. The following sample opening will help you think about your own style and the participants’ needs.

Sample introductory statement:

We all know that we are experiencing fundamental change in our industry, which is causing us and our competition to re-examine how we do business. To help us focus on our attitudes toward change and how we can remain competitive, we want to share a thought-provoking video with you.

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How do we view change? New ideas, new ways of doing things? Never has there been a more important time to think about how we see the world.
SHOW THE VIDEO
As the facilitator you should watch the video with your audience, even if you’ve seen it before. You might see something you missed. And your actions will speak louder than any words—that watching the video and being engaged is important. You are the role model.

WHEN THE VIDEO IS OVER
When Paradigm Principles is over, sit quietly for a few seconds before you turn on the lights. This will give the participants time to make the transition to a discussion. Invite the participants to take about five minutes to reflect on what they saw in the video and write down some of their thoughts in their discussion journal.

LEAD A MEANINGFUL DISCUSSION
The objective of the discussion is to have each participant leave with some insight they can apply to their lives and work. A few important facilitation basics will help your discussion have meaning and insight for everyone:

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3. If you ask a question, allow time for someone to answer. If you are patient and welcoming, someone will respond.
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5. Remain open and flexible. The discussion may take an exciting turn you had not considered.
6. Let the participants decide for themselves what is important about the video. Save your personal insights for emphasizing, validating, clarifying and summarizing.
7. Make a mental note of important points. Look for opportunities to relate back to those points as the discussion progresses. Credit the person for the insight.
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11. Avoid heated debate. Paradigm Principles offers opportunities for interesting debates on many topics. Although such debates may seem urgent to the few people involved, unless everyone can participate, they seldom have wide appeal to a large group.

**LARGE GROUP DISCUSSIONS**

If you have a larger group (50-100), you may want to break the audience into smaller groups for some preliminary discussion. Then bring the groups together to share perspectives. Have each group select a spokesperson. This approach allows everyone to be involved, and it helps move the discussion along.

**WORKSHEETS AND OVERHEADS**

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**OPTION 3 WORKSHEETS:**

- Discussion Journal
- **Topic 1**—What are paradigms?
- **Topic 2**—The Paradigm Curve
- **Topic 3**—Going Back to Zero
- **Topic 4**—The Impossibility Question

**DISCUSSION TOPICS**

The four topics in Option 2 require 30 to 45 minutes per topic. By discussing them in order, you can lead a discussion that builds on the insights gained discussing the previous topic.

**Topic 1:** What are paradigms? Paradigms affect how we view the world.

**Topic 2:** The Paradigm Curve What is the life span of our paradigm?

**Topic 3:** Going Back to Zero Our old strengths offer little protection against the new world.

**Topic 4:** The Impossibility Question Search for new paradigms in our organization.

*ChartHouse Int’l learning would like to thank Debbe Kennedy for her suggestions and tips for the facilitator.*
HOW TO USE THE TOPIC OUTLINE

1. **Why this is important.** Let participants know up front what the topic is and why it is important. People usually are more receptive to a discussion and willing to share their insights and experiences if they understand the basic message and point of the activity.

2. **Background.** Reviewing the background material (most of the information is taken directly from the video) can help you facilitate the activity. It reviews and highlights the paradigm concepts that the activity is built on.

3. **Story from video.** A brief story from the video brings the concepts to life for the participants. You can review the story as a warm-up to the discussion. It's a nonthreatening, inspirational way to get participants thinking and talking about the concept.

4. **Activity.** By this point, participants should have some insights they can apply to their lives and workplace. The activities are designed to get people talking about their industry, their organization, their departments and themselves.
**Topic 1: What Are Paradigms?**

Paradigms affect how we view the world

**WHY THIS IS IMPORTANT**

Paradigms affect us in nearly every aspect of our lives. By understanding the concept of paradigms, we can better understand our boundaries and the rules of how we do things and how we view the world.

Overhead: Paradigms affect how we view the world

**BACKGROUND**

Paradigm comes from the Greek word paradeigma, which simply means a model or pattern. The following are examples of words for paradigms:

- Theory
- Model
- Routines
- Pattern
- Customs
- Rituals

They range from “theory,” which is very challengeable, to “ritual,” which is very unchallengeable. Take the word “routine” for example. A routine, like taking a shower every morning after you wake up, is something you do every day, but could be challenged on occasion if you are late for work. (For more words for paradigms, see Paradigms: The Business of Discovering the Future or Future Edge: Discovering the New Paradigms of Success by Joel Barker.)

Joel Barker defines a paradigm as a set of rules and regulations (written or unwritten) that does two things:

1. Some of the rules establish the edges or boundaries of a territory.

2. The rest of the rules tell us how to act within those boundaries to achieve some measure of success. For example, when we say, “Let me show you how we do things around here,” we are giving rules that tell us how to act.
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“The Swiss had dominated the watchmaking industry in the 20th century. Best estimates were that they captured close to 90 percent of the profits. Then in 1968 they were shown a revolutionary new watch. It was 1,000 times more accurate than a mechanical watch. But that accuracy was the result of the real revolution. Inside the watch was just one moving part, a small electronic step motor to drive the hands around the face. It was the first electronic quartz watch in the world.

“So how did the Swiss watchmakers respond to this marvelous invention? They were concerned over some key parts that were missing. For instance, where were all the gears? Where were all the bearings? Where was the main spring? The watch had nothing that those manufacturers were great at making. This couldn’t possibly be the future of watches. So they rejected the idea because it didn’t fit their rules of what a watch was all about. And with that decision, they gave away almost their entire industry.”

ACTIVITY
Divide the participants into small groups of people with similar areas of expertise (technical, managerial, service, sales, administration, for example).

Hand out worksheet: What are paradigms?

“Businesses are a forest of paradigms. They have sales paradigms, marketing paradigms, R&D paradigms, management paradigms and so on, each with their own boundaries and each with their own rules for success.”

1. Describe the boundaries in your field of expertise.

Examples: Let’s look at some of the boundaries in a certain type of sales department. This is how this department chooses to operate:

   - Most of their sales leads come from direct mail.
   - They rely on the telephone to discuss their programs with customers.
   - Customers can sample the product before choosing to buy.
2. What are the rules that can help increase the likelihood of success in your group’s field of expertise. Rules can be formal (written down) and informal (unspoken or implied). How do these rules help you solve problems?

Example:
- Polite, courteous behavior
- Send out order promptly
- Offer lifetime replacement of product

3. Now, let’s see what other people think your rules are. Divide into groups of people from different departments. Each person in the group should have two or three people outside your department tell you what they think your rules are. Are there rules you didn’t even realize existed? How does that affect the way you see the world?

For more information on what a paradigm is, see the business of paradigms, a video program with Joel Barker. Call Charthquse Int’l Learning at 1-800-328-3789
Topic 2: The Paradigm Curve

What is the life span of our paradigm?

WHY THIS IS IMPORTANT
The paradigm curve describes the life span of a paradigm. We can use it to chart the prevailing paradigm in our industry. Knowing our location on the curve helps us think about our future and gives us important indicators for anticipating the future.

Overhead: What is the life span of our paradigm?

BACKGROUND
Let’s look at the paradigm curve worksheet and review the life span of a paradigm:

A phase: “The area on the curve when we figure out what the new rules are, so not many problems can be solved during this time. It’s the rule clarification phase.”

B phase: “Where problem solving really takes off because you know enough of the rules to be effective and you get better as you solve more problems. This is when we should begin to look for new paradigms, because it’s when we are the most successful at the prevailing paradigm.”

C phase: “Problem solving slows down because as we are working up the B phase we are always putting off the more difficult problems. When we get to the C phase, we have run out of the easy ones, so only the toughest problems remain. Usually we are willing to listen to a new paradigm only in the C phase and often only when we are in crisis.”

STORY FROM VIDEO
The last half century of Swiss watchmaking can be plotted on the A, B and C phases of the paradigm curve.

A phase. Quartz watch technology was in the A phase from the time a Swiss research lab developed the first quartz watch in 1968 until it was commercialized by Seiko, a Japanese company. The Swiss watchmakers were not interested because the quartz technology didn’t fit their well-established rules for watchmaking.
**B Phase**. The Swiss watchmaking industry was in the middle to late B phase of the mechanical watch when the quartz watch was introduced by its researchers. The Swiss dominated the mechanical watch industry at the time. Sixty-five percent of all watches sold in the world were manufactured in Switzerland. They had constantly improved the mechanical watch by adding things like sweep second hands, auto rewind and waterproofing technology.

**C Phase**. Today, the mechanical watch is still being made in Switzerland, but it is in the C Phase. Mechanical watches today have less to do with keeping time and more to do with high fashion. The time-keeping problems still on the shelf for mechanical watches are difficult and complicated to solve with the old technology.

**ACTIVITY**

Divide the participants into small groups according to department or area of expertise.

Hand out worksheet: The Paradigm Curve

1. Where is our industry’s prevailing paradigm on the paradigm curve? Is someone challenging the current rules? Does anyone think they see a paradigm shift coming?

Example: Are we just starting to develop a new way of solving problems? Then we are in the A phase. If we are solving problems with efficiency and effectiveness, then we are in the B phase. If our problems are very sophisticated and subtle, expensive and extensive, we are in the C phase.

2. Discuss your department’s paradigm and plot its location on the paradigm curve.

3. Let’s plot all of the paradigms for each department on a master paradigm curve. Are all the paradigms in one phase of the curve or are they spread out in all three phases? What does that mean for our organization?

4. In your personal field of expertise, where are you on the paradigm curve?
TOPIC 3: Going Back to Zero

“Our old strengths offer little protection against the new world.”

WHY THIS IS IMPORTANT

“When a paradigm shifts, everyone goes back to zero,” says Joel Barker. That means our strengths and what we’re good at mean little or nothing when a paradigm shifts.

Overhead: “Our old strengths offer little protection against the new world.”

BACKGROUND

Regardless of what your position was with the old paradigm—No. 1 in market share, technology leader, best reputation—you are back at the starting line with the new paradigm. It suggests that no one can stay on top forever.

“Just ask GM, who thought total quality wasn’t for them. Or IBM, who considered the personal computer as little more than a toy. Or Sears, who certainly wasn’t afraid of a guy named Sam.”

STORY FROM VIDEO

“Rachel Carson’s book, Silent Spring, catalogued the damage that was then being done to the natural ecosystems—from tidal pools to grasslands, to mountain forests. Within 10 years, century-old ways of doing things came to a screeching halt. Everyone was put back to zero.”

Her ideas affected the largest car manufacturer, the leader in chemical technology, the oldest paper mills, the most productive farms. It didn’t matter what their strengths were at the time.

ACTIVITY

Divide participants into small groups. Hand out the worksheet: Going back to zero.

1. Identify the most recent paradigm shift in our industry. What were our industry’s strengths that were made irrelevant when the paradigm shifted?

Example, in the mainframe computer industry, the personal computer was a paradigm shift that made IBM’s strengths irrelevant. At the time the Apple
Ilpersonal computer was being developed in 1977, IBM held more than 60 percent share of the world computer market, one of its main strengths. IBM also wrote its own software and used its own sales force, which was the best in the business.

2. Today, what are our industry’s main strengths? What we are really good at? Does anyone see a paradigm shift on the horizon coming our way that could render today’s strengths irrelevant?

3. What are your strengths in your area of expertise that would be rendered irrelevant if your current paradigm shifted?

**Topic 4: The Impossibility Question**

Search for new paradigms in our organization

**WHY THIS IS IMPORTANT**

“Asking the impossibility question is the quickest way to begin talking about paradigm shifts in our organization. It can generate a surprisingly powerful set of answers to help us in our search for new paradigms.” By going outside our boundaries of what is possible and thinking at a level of fundamental change, we are talking about paradigm shifts.

Overhead: Search for new paradigms in our organization.

**BACKGROUND**

The impossibility question is phrased like this: What is impossible to do today, but if it could be done, would fundamentally change our organization for the better?

Overhead: “What is impossible to do today, but if it could be done, ‘would fundamentally change our organization for the better?’

There are two key words in that question. When you ask what is “impossible,” the only place to get an answer is outside your boundary. That’s where new paradigms develop. The second keyword is “fundamentally” change, not trivially change. It should improve our organization in a significant way.
**STORY FROM VIDEO**

In the video, Joel Barker points to an example from the past. “It is impossible to stop our production lines to fix defective products,” he says. “Of course, this impossibility was before total quality and continuous improvement. We really thought it was impossible to stop the line and fix the product. Now we look back and laugh at what we thought was impossible in manufacturing.”

**ACTIVITY**

Divide participants into small groups representing different departments.

1. List “impossibilities” that could fundamentally change your organization or department for the better. Remember, “fundamental” means “not trivial.”

An “impossible” example from the recent past: a machine that you could just put the raw materials into—flour, oil, sugar, salt, yeast, whatever—and dial the food to be produced. The automatic bread machine is the result of asking this “impossibility” question.

2. List “impossibilities” that could fundamentally change your career for the better.

Example: Remember this impossibility—sending and receiving messages electronically without leaving your office?
DISCUSSION OPTION 3 (Full-day)

For the Facilitator

Option 3 for viewing and discussing Paradigm Principles requires a full day. The following introductory material can help you facilitate your session. Some preparation—reviewing the video and working through the activities—will greatly enhance your presentation and the participants’ discussion experience.

You have the option of customizing your training by showing a segment of the video and then discussing the segment before moving on. A black screen with a description of a paradigm principle is placed at the end of each segment.

OVERVIEW OF VIEWING AND DISCUSSION SESSION

The session is designed so participants can view the 37-minute video and have time to spend between 30 and 45 minutes on each of the nine discussion topics. Each topic builds on the insight gained in the discussion of the previous topic. By the time you finish, the participants will have an understanding of the concept of paradigms, the life span of their industry’s paradigms and their own paradigms, what happens when a paradigm shifts, and how to look for new paradigms in their organization.

A discussion of the four principles builds a framework so you can help your organization better understand the dynamics of a paradigm shift by answering four questions:

- When do new paradigms appear? Who brings new paradigms?
- How can we benefit from paradigm shifts?
- What happens to us when a paradigm shifts?

INTRODUCE PARADIGM PRINCIPLES

The video begins with an exemplar, a timeless story about change that captures the fundamental messages of Paradigm Principles. All you need to provide is a short introductory statement. The best possible opening is personal and meaningful to your audience. The following sample opening will help you think about your own style and the participants’ needs.
Sample introductory statement:
We all know that we are experiencing fundamental change in our industry, which is causing us and our competition to re-examine how we do business. To help us focus on our attitudes toward change and how we can remain competitive, we want to share a thought-provoking video with you.

We are passing out a discussion journal. Take a moment to review the list of things to look for in the video. You may want to take some notes. Following the video, we will give you a few minutes to reflect on what you saw. Then we’ll take time to share our different perspectives.

How do we view change? New ideas, new ways of doing things? Never has there been a more important time to think about how we see the world.

SHOW THE VIDEO
As the facilitator you should watch the video with your audience, even if you’ve seen it before. You might see something you missed. And your actions will speak louder than any words—that watching the video and being engaged is important. You are the role model.

WHEN THE VIDEO IS OVER
When Paradigm Principles is over, sit quietly for a few seconds before you turn on the lights. This will give the participants time to make the transition to a discussion. Invite the participants to take about five minutes to reflect on what they saw in the video and write down some of their thoughts in their discussion journal.

LEAD A MEANINGFUL DISCUSSION
The objective of the discussion is to have each participant leave with some insight that they can apply to their lives and work. A few important facilitation basics will help your discussion have meaning and insight for everyone:

1. Personally welcome as many people as possible before the program.
2. Talk with people, not to them. When they speak, listen. People can tell if you are engaged.
3. If you ask a question, allow time for someone to answer. If you are patient and welcoming, someone will respond.
4. Involve the audience as much as possible when answering questions that come up during the discussion. Hold your answers and stories as a backup.

5. Remain open and flexible. The discussion may take an exciting turn you had not considered.

6. Let the participants decide for themselves what is important about the video. Save your personal insights for emphasizing, validating, clarifying and summarizing.

7. Make a mental note of important points. Look for opportunities to relate back to those points as the discussion progresses with others. Credit the person for the insight.

8. Learn with your audience. Come with a “beginner’s mind,” open to new possibilities.

9. Come with a “ready ear.” Nothing keeps a discussion moving better than when people are being heard and they sense your genuine interest in what they are saying.

10. Guide any side discussions that arise directly back to the topic being discussed. Brief side discussions can stimulate thinking; long ones can destroy the continuity of a group discussion.

11. Avoid heated debate. Paradigm Principles offers opportunities for interesting debates on many topics. Although such debates may seem urgent to the few people involved, unless everyone can participate, they seldom have wide appeal to a large group.

**LARGE GROUP DISCUSSIONS**

If you have a larger group (50-100), you may want to break the audience into smaller groups for some preliminary discussion. Then bring the groups together to share perspectives. Have each group select a spokesperson. This approach allows everyone to be involved, and it helps move the discussion along.

ChartHouse int’l learning would like to thank Debbe Kennedy for her suggestions and tips for the facilitator.
WORKSHEETS AND OVERHEADS
Masters for copying are included in the Worksheet and Overhead Masters section. If you would like a free computer disk of 8.5 x 11 worksheets and overheads, please call ChartHouse at 1-800-328-3789 and we’ll send you a disk.

OPTION 3 WORKSHEETS:
Discussion Journal
Topic 1 — What are paradigms?
Topic 2 — The Paradigm Curve
Topic 3 — Going Back to Zero
Topic 4 — The Impossibility Question
Topic 5 — Paradigm Flexibility
Topic 6 — New Paradigms
Topic 7 — The Outsider
Topic 8 — Paradigm Pioneering
Topic 9 — See the World Anew

DISCUSSION TOPICS
The nine topics in Option 3 require 30 to 45 minutes per topic. By discussing them in order, you can lead a discussion that builds on the insights of the previous topic.

**Topic 1: What are Paradigms?** Paradigms affect how we view the world.

**Topic 2: The Paradigm Curve** What is the life span of our paradigm?

**Topic 3: Going Back to Zero** Our old strengths offer little protection against the new world.

**Topic 4: The Impossibility Question** Search for new paradigms in our organization.

**Topic 5: Paradigm Flexibility** The purposeful and regular questioning of our paradigms.

**Topic 6: New Paradigms** Principle 1; New paradigms show up sooner than they are wanted or needed.

**Topic 7: The Outsider** Principle 2; The person who is most likely to shift your paradigm will be an outsider.

**Topic 8: Paradigm Pioneering** Principle 3; You don’t have to be the paradigm shifter to get all the advantages.

**Topic 9: See the World Anew** Principle 4; Our old paradigms keep us from seeing new paradigms.
HOW TO USE THE TOPIC OUTLINE

1. **Why this is important.** Let participants know up front what the topic is and why it is important. People usually are more receptive to a discussion and willing to share stories if they understand the basic message and point of the activity.

2. **Background.** Reviewing the background material (most of the information is taken directly from the video) can help you facilitate the activity. It reviews and highlights the paradigm concepts that the activity is built on.

3. **Story from video.** A brief story from the video brings the concepts to life for the participants. You can review the story as a warm-up to the discussion. It's a nonthreatening, inspirational way to get participants thinking and talking about the concept.

4. **Activity.** By this point, participants should have some insights they can apply to paradigms in their lives and workplace. The activities are designed to get people talking about their industry, their organization, their department and themselves.

5. **One reason people resist.** Discussion topics for each principle end with a reason people resist new paradigms. Help participants understand that these are “logical” reasons to ignore the new paradigm. Yet, if they do, they’ll be ignoring their future.
Topic 1: What Are Paradigms?

Paradigms affect how we view the world

**WHY THIS IS IMPORTANT**
Paradigms affect us in nearly every aspect of our lives. By understanding the concept of paradigms, we can better understand our boundaries and the rules of how we do things and how we view the world.

Overhead: Paradigms affect how we view the world

**BACKGROUND**
Paradigm comes from the Greek word paradeigma, which simply means a model or pattern. The following are examples of words for paradigms:

- Theory
- Model
- Routines
- Pattern
- Customs
- Rituals

They range from "theory," which is very challengeable, to "ritual," which is very unchallengeable. Take the word "routine" for example. A routine, like taking a shower every morning after you wake up, is something you do every day, but could be challenged if you are late for work. (For more words for paradigms, see Paradigms: The Business of Discovering the Future or Future Edge: Discovering the New Paradigms of Success, by Joel Barker.)

Joel Barker defines a paradigm as a set of rules and regulations (written or unwritten) that does two things:

1. Some of the rules establish the edges or boundaries of a territory.

2. The rest of the rules tell us how to act within those boundaries to achieve some measure of success. For example, when we say, "Let me show you how we do things around here," we are giving rules that tell us how to act.
STORY FROM VIDEO
“The Swiss had dominated the watchmaking industry in the 20th century. Best estimates were that they captured close to 90 percent of the profits. Then in 1968 they were shown a revolutionary new watch. It was 1,000 times more accurate than a mechanical watch. But that accuracy was the result of the real revolution. Inside the watch was just one moving part, a small electronic step motor to drive the hands around the face. It was the first electronic quartz watch in the world.

“So how did the Swiss watchmakers respond to this marvelous invention? They were concerned over some key parts that were missing. For instance, where were all the gears? Where were all the bearings? Where was the main spring? The watch had nothing that those manufacturers were great at making. This couldn’t possibly be the future of watches.” So they rejected the idea because it didn’t fit their rules of what a watch was all about. And with that decision, they gave away almost their entire industry.

ACTIVITY
Divide the participants into small groups of people with similar areas of expertise (technical, managerial, service, sales, administration, for example).

Hand out worksheet: What are paradigms?

“Businesses are a forest of paradigms. They have sales paradigms, marketing paradigms, R&D paradigms, management paradigms and so on, each with their own boundaries and each with their own rules for success.”

1. Describe the boundaries in your field of expertise.

Example: Let’s look at some of the boundaries in a certain type of sales department. This is how this department chooses to operate:

- Most of their sales leads come from direct mail.
- They rely on the telephone to discuss their programs with customers.
- Customers can sample the product before choosing to buy.
2. What are the rules that can help increase the likelihood of success in your group’s field of expertise. Rules can be formal (written down) and informal (unspoken or implied). How do these rules help you solve problems?

Example:
- Polite, courteous behavior
- Send out order promptly
- Offer lifetime replacement of product

3. Now, let’s see what other people think your rules are. Divide into groups of people from different departments. Each person in the group should have two or three people outside your department tell you what they think your rules are. Are there rules you didn’t even realize existed? How does that affect the way you see the world?

**Topic 2: The Paradigm Curve**

What is the life span of our paradigm?

**WHY THIS IS IMPORTANT**
The paradigm curve describes the life span of a paradigm. We can use it to chart the prevailing paradigm in our industry. Knowing our location on the curve helps us think about our future and gives us important indicators for anticipating the future.

Overhead: What is the life span of our paradigm?

**BACKGROUND**
Let’s look at the paradigm curve worksheet and review the life span of a paradigm:

**A phase:** “The area on the curve when we figure out what the new rules are, so not many problems can be solved during this time. It’s the rule clarification phase.”

**B phase:** “Where problem solving really takes off because you know enough of the rules to be effective and you get better as you solve more problems. This is where we should begin to look for new paradigms, because it’s when we are the most successful at the prevailing paradigm.”
C phase: “Problem solving slows down because as we are working up the B phase, we are always putting off the more difficult problems. When we get to the C phase, we have run out of the easy ones, so only the toughest problems remain. Usually we are willing to listen to a new paradigm only in the C phase and often only when we are in crisis.”

STORY FROM VIDEO
The last half century of Swiss watchmaking can be plotted on the A, B and C phases of the paradigm curve.

A Phase. Quartz watch technology was in the A phase from the time a Swiss research lab developed the First quartz watch in 1968 until it was commercialized by Seiko, a Japanese company. The Swiss watchmakers were not interested because the quartz technology didn’t fit their well-established rules for watchmaking.

B Phase. The Swiss watchmaking industry was in the middle to late B phase of the mechanical watch when the quartz watch was introduced by its researchers. The Swiss dominated the mechanical watch industry at the time. Sixty-five percent of all watches sold in the world were manufactured in Switzerland. They had constantly improved the mechanical watch by adding things like sweep second hands, auto-rewind and waterproofing technology.

C Phase. Today, the mechanical watch is still being made in Switzerland, but it is in the C Phase. Mechanical watches today have less to do with keeping time and more to do with high fashion. The time-keeping problems still on the shelf for mechanical watches are difficult and complicated to solve with the old technology.

ACTIVITY
Divide the participants into small groups according to department or area of expertise.

Hand out worksheet: The Paradigm Curve

1. Where is our industry’s prevailing paradigm on the paradigm curve? Is someone challenging the current rules? Does anyone think they see a paradigm shift coming?

Example: Are we just starting to develop anew way of solving problems? Then we are in the A phase. If we are solving problems with efficiency and effectiveness, then we
are in the B phase. If our problems are very sophisticated and subtle, expensive and extensive, we are in the C phase.

2. Discuss your department’s paradigm and plot its location on the paradigm curve.

3. Let’s plot all of the paradigms for each department on a master paradigm curve. Are all the paradigms in one phase of the curve or are they spread out in all three phases? What does that mean for our organization?

4. In your personal field of expertise, where are you on the paradigm curve?

Topic 3: Going back to Zero

“Our old strengths offer little protection against the new world”

WHY THIS IS IMPORTANT
“When a paradigm shifts, everyone goes back to zero,” says Joel Barker. That means our strengths and what we’re good at mean little or nothing when a paradigm shifts.

Overhead: “Our old strengths offer little protection against the new world.”

BACKGROUND
Regardless of what your position was with the old paradigm—No. 1 in market share, technology leader, best reputation—you are back at the starting line with the new paradigm. It suggests that no one can stay on top forever.

“Just ask GM, who thought total quality wasn’t for them. Or IBM, who considered the personal computer as little more than a toy. Or Sears, who certainly wasn’t afraid of a guy named Sam.”

STORY FROM VIDEO
Rachel Carson’s book, Silent Spring, catalogued the damage that was then being done to the natural ecosystems—from tidal pools to grasslands, to mountain forests. Within 10 years, century-old ways of doing things came to a screeching halt.
Everyone was put back to zero.

Her ideas affected the largest car manufacturer, the leader in chemical technology, the oldest paper mills, the most productive farms. It didn’t matter what their strengths were at the time.

**ACTIVITY**

Divide participants into small groups. Hand out worksheet: Going back to zero

1. Identify the most recent paradigm shift in our industry. What were our industry’s strengths that were made irrelevant when the paradigm shifted?

Example: In the mainframe computer industry, the personal computer was a paradigm shift that made IBM’s strengths irrelevant. At the time the Apple II personal computer was being developed in 1977, IBM held more than 60 percent share of the world computer market, one of its main strengths. IBM also wrote its own software and used its own sales force, which was the best in the business.

2. Today, what are our industry’s main strengths? What we are really good at? Does anyone see a paradigm shift on the horizon coming our way that could render today’s strengths irrelevant?

3. What are your strengths in your area of expertise that would be rendered irrelevant if your current paradigm shifted?

**Topic 4: The Impossibility Question**

Search for new paradigms in our organization

**WHY THIS IS IMPORTANT**

“ Asking the impossibility question is the quickest way to begin talking about paradigm shifts in our organization. It can generate a surprisingly powerful set of answers to help us in our search for new paradigms.” By going outside of our boundaries of what is possible and thinking at a level of fundamental change, we are talking about paradigm shifts.
Overhead: Search for new paradigms in our organization.

**BACKGROUND**
The impossibility question is phrased like this: What is impossible to do today, but if it could be done, would fundamentally change our organization for the better?

Overhead: “What is impossible to do today, but if it could be done, would fundamentally change our organization for the better?”

There are two key words in that question. When you ask what is “impossible,” the only place to get an answer is outside your boundary. That’s where new paradigms develop. The second keyword is “fundamentally” change, not trivially change. It should improve our organization in a significant way.

**STORY FROM VIDEO**
In the video, Joel Barker points to an example from the past. “It is impossible to stop our production lines to fix defective products,” he says. “Of course, this impossibility was before total quality and continuous improvement. We really thought it was impossible to stop the line and fix the product. Now we look back and laugh at what we thought was impossible in manufacturing.”

**ACTIVITY**
Divide participants into small groups representing different departments.

1. List “impossibilities” that could fundamentally change your organization or department for the better. Remember, “fundamental” means “not trivial.”

   An ‘impossible’ example from the recent past: a machine that you could just put the raw materials into—flour, oil, sugar, salt, yeast, whatever—and dial the food to be produced. The automatic bread machine is the result of asking this “impossibility” question.

2. List “impossibilities” that could fundamentally change your career for the better.

   Example: Remember this impossibility—sending and receiving messages electronically without leaving your office?
Topic 5: Paradigm Flexibility

Question our paradigms purposefully and regularly

WHY THIS IS IMPORTANT

“Paradigm paralysis is a terminal disease of certainty,” says Joel Barker.

“Our way is the only way. ‘That’s not how we do things around here.’ This kind of attitude can kill the biggest organization,” he says.

Overhead: Question our paradigms purposefully and regularly.

BACKGROUND

“Develop paradigm flexibility—the purposeful and regular questioning of your paradigms. Paradigm flexibility is really all about openness and humility: openness to people who see the world differently than you and I do, and humility based on the fact that no one knows everything. All of us need to keep on learning what’s happening outside our paradigms.”

STORY FROM THE VIDEO

The Swiss watchmaking industry has been practicing paradigm pliancy with surprising results. The surprise is the “Swatchmobile,” a small electric car for the new millennium. Working with a partner, they’re applying their skills of miniaturization and electronic controls. Their partner in this project is Mercedes-Benz.

ACTIVITY

Break into small groups representing departments or areas of expertise. Hand out worksheets: Paradigm Flexibility

1. Let’s think about our organization. List three times when we didn’t listen to an opportunity and it hurt us in our industry—when we were late or missed an opportunity all together.

Example: The greening of industry. Instead of resisting recycling it is more profitable to do the opposite.
2. What rules were we following that kept us from seeing or taking advantage of those opportunities?

Example. A company that initially resisted using recycled paper in its packaging believed that recycled paper didn't look as good as nonrecycled paper and was probably more expensive. Therefore it was undesirable.

3. What changes can we make in our organization to increase paradigm flexibility?

Example: When someone goes against your paradigm, say "Tell me more." Listen to each other—you'll hear lots of good ideas. When you hear something crazy about your field of expertise, follow up on it.

Topic 6: New Paradigms

PRINCIPLE 1
New paradigms show up sooner than they are needed or wanted

WHY THIS IS IMPORTANT
If we can know when the new rules are going to show up, then we can anticipate our future with much greater accuracy. Usually we are not willing to listen to a new paradigm until we are in crisis. But that's way too late if we want to be in a leadership position and shape our own future.

Overhead: Principle 1. New paradigms show up sooner than they are needed or wanted.

BACKGROUND
Hand out worksheet: When Do New Paradigms Show Up?

Let's look at the worksheet. The first thing we notice is that the life span of the prevailing paradigm starts not at 0/0, but up a little on the problem-solving axis. This indicates that a few problems have been solved using the new paradigm, which also suggests that there may be a way to solve even more problems.
“Now, where on the curve would you guess that the most likely place is for the next paradigm to show up? The logical answer is somewhere in the C phase. The need is there, it seems the right time, but the correct answer is middle-to-late B, long before it is needed, long before the need is perceived, and since it is long before it is needed, it surely isn’t wanted by those practicing the prevailing paradigm.”

**STORY FROM VIDEO**
Dr. Charles Taylor, head of Kenaf International, has been experimenting with the “forest of the future” since 1980. He has been seeking out the new rules and regulations that will launch the kenaf revolution—the use of kenaf to replace trees as the primary raw material for paper. Where is Dr. Taylor on the paradigm curve? Middle to late A. He knows a lot of rules about kenaf, but he is still figuring out the best way to commercialize it. When he does that he will move out of the A phase and into the B phase.

**ACTIVITY**
Divide into small groups.

1. What was the last new paradigm that transformed our industry or organization? At that time, what was the prevailing paradigm? Plot the prevailing paradigm on the paradigm curve. Where on the curve did the new paradigm first show up? Why wasn’t it needed or wanted when it showed up?

2. Plot your industry’s current paradigm on the paradigm curve. Let’s talk about where the new paradigm will show up on the curve.

3. Plot a supplier’s or a customer’s prevailing paradigm on the paradigm curve. Where will the new paradigm show up on the curve?

**ONE REASON WHY PEOPLE RESIST NEW PARADIGMS**
Since the new paradigm shows up sooner than I need it, I have no reason to look at it or adapt it.
Topic 7: The Outsider

**PRINCIPLE 2**
The person most likely to shift your paradigm will be an outsider

**WHY THIS IS IMPORTANT**
You cannot know who is going to bring you your future. You cannot qualify them in advance by looking at education, experience, gender or race. Unless you know what to listen for and who to listen to, all your rationality will tell you to reject the person and the idea.

Overhead: Principle 2. The person most likely to shift your paradigm will be an outsider.

**BACKGROUND**
Practitioners of the dominant paradigm have tied their time and their reputation and their success in life to the old paradigm. So, of course, they feel they have everything to lose and almost nothing to gain by shifting paradigms. That is their fundamental weakness. No wonder the outsider has a natural advantage.

“Remember, paradigm shifters have nothing to lose and everything to gain by changing the paradigm because they are not invested in the present paradigm. That is their fundamental strength.”

Let's take a look at four categories of outsiders:

- Category 1 — A young person fresh out of training
- Category 2 — An older person shifting fields
- Category 3 — Maverick rule-breakers who are always asking questions
- Category 4 — Someone who is tinkering with the rules

**STORY FROM VIDEO**
In the early 1980s, Dr. Barry Marshall was doing his residency at the Royal Perth hospital in gastroenterology, a field which he knew little about. He asked if he could do some research and was directed to Dr. Robin Warren, a pathologist, who had found some bacteria where they weren’t supposed to be—in the stomach. So Barry Marshall did some research on those bacteria. His research broke the two dominant...
rules in the old ulcer paradigm—that nothing could live in the stomach because of the extreme acid environment and that ulcers are caused by stress.

“In 1984 Dr. Marshall began going to medical meetings to tell experts in the field that their paradigm was plain wrong, and that based on the evidence of 200 cases, they could effect permanent cures with simple medicines. And he was ignored. It wasn’t until a full 10 years later that he received endorsement from a major health association.

“Why? Because Dr. Marshall was not trained in the field he was revolutionizing. As a result he had no credibility. He was an outsider.”

**ACTIVITY**

Divide into small groups. Hand out worksheet: "The Outsider".

1. Discuss examples where an outsider had an impact on our industry.
   Example: The electronic spreadsheet was invented not by an accountant or a business-school guru. It was developed by a computer programmer on his Apple computer. He relied on an accounting textbook to make sure he was doing it right.

2. Discuss rules for treating outsiders. Who has the right to have new ideas in our organization? What are the characteristics of these people?
   Example: At one Fortune 500 company, you had to have a Ph. D. before anyone took you seriously. In many organizations, you can’t have a good new idea unless you’ve been there at least three years. Some companies accept ideas from people or departments labeled as “creative.” It’s important to note that these rules are not written down.

3. Of course, none of this has happened to anyone here—right? Has anyone here ever had an idea rejected because you were an outsider? What kind of outsider were you? A young person out of training? A maverick? Which role did you play? Has anyone here rejected an idea because it came from an outsider?

4. Let’s write new rules for how we should treat outsiders and their ideas.
   Example: Invite opinions outside our department, hire people with outside experience, read outside our field of expertise.
ONE REASON WHY PEOPLE RESIST OUTSIDERS
Since the outsider doesn’t know anything about my paradigm, why should I listen? They have no credibility.

Topic 8: Paradigm Pioneering

PRINCIPLE 3
You don’t have to create a paradigm shift to gain its benefits

WHY THIS IS IMPORTANT
Paradigm pioneering is about bringing a new idea, innovation, discovery paradigm shift—into reality. Even though paradigm shifters make the discovery, they almost always need more help to make it successful. If we can help pioneer the paradigm shift, we can get all the advantages.

Overview: Principle 3. You don’t have to create a paradigm shift to gain its benefits

BACKGROUND
Paradigm pioneers are the ones who join early in the development—Phase A—of a paradigm and bring the critical mass of brains, money and energy to drive the paradigm into Phase B.

You can recognize paradigm pioneers by three attributes:

• Courage—to be able to stand up to the pressure their peers are going to put on them to keep them from deserting the prevailing paradigm.

• Intuitive judgment—the ability to make a decision with incomplete information. “I’m going to do this because it feels right.”

• Commitment to the long term—pioneers are comfortable knowing that the shift may take from five to 10 years.

Paradigm pioneering is the least expensive, most accessible route to revolutionary change.
STORY FROM VIDEO
“How about privatizing the social security system by creating a pension fund that would invest retirement money in the stock market? Then as the market grows, so does the value of the pension. Clearly this is a paradigm shift. But, like many other paradigm-shifting ideas, this one sat on the shelf for decades. Then a group of young economists from Chile went to the University of Chicago and began implementing the idea in Chile in 1981. As of the middle of 1995, pension funds had $22 billion and were pouring $750 million per month into the Chilean economy. Is it fail-safe? Of course not. If it were safe it wouldn’t be pioneering.”

ACTIVITY
Divide participants into small groups. Hand out worksheet: Paradigm Pioneering

1. Have we pioneered any ideas from outside our organization? If so, what have we done to enable us to respond to these new ideas?
Example: Seiko, a Japanese company, pioneered the quartz watch, a technology invented by the Swiss. Seiko was courageous enough to market a new product with little market information to go on.

2. If we haven’t pioneered any new ideas from outside our organization, why not? What keeps us from responding to these ideas?
Example: We require a lot of data before we make decisions.

3. What can our organization do to become better at pioneering?
Example: Trust intuition, have courage, be committed to the long-term.

ONE REASON WHY PEOPLE RESIST PIONEERING
Because pioneers use intuition to make decisions, there is no factual proof that they are doing the right thing. I’ll just wait until the facts are in because it’s safer.
**Topic 9: See The World Anew**

**PRINCIPLE 4**
Your old paradigms make it difficult for you to see new paradigms

**WHY THIS IS IMPORTANT**
When you can see a new paradigm, you get tremendous leverage because “the first problems you solve with the new paradigm are the problems you couldn’t solve with the old paradigm.” Imagine your advantage in your industry.

Overhead: Principle 4. Your old paradigms make it difficult for you to see new paradigms.

Overhead: The first problems you solve with the new paradigm are the problems you couldn’t solve with the old paradigm.

**BACKGROUND**
“What is perfectly obvious to a person with one paradigm may be totally imperceptible to someone with a different paradigm. It’s easy to miss important information if you don’t have a paradigm for seeing it.

“We need to understand that all paradigms act as perceptual filters through which we view the world. The role of a filter is to sort, to select. So any data that doesn’t fit the rules of our paradigm has a hard time getting through our filters. In fact, sometimes we don’t perceive it at all. Data that does fit our paradigms comes through our filters with great detail and refinement.

“This often explains how fair-minded people with different paradigms can have such profound disagreements. When you shift your paradigms, you quite literally see the world anew.”

**STORY FROM VIDEO**
“In Bev Doolittle’s painting “On Sacred Ground,” we saw a rider galloping through a forest of birch trees. What is the man fleeing from? Doolittle has given us the answer if we can only see it. When we outline the images, we can see eagles and the man in the trees. We can still see the images even when we remove the help lines. In fact, we’ll never not see the images again.”
ACTIVITY
Divide into small groups. Hand out worksheet: 'Seeing the World Anew'

1. Let’s talk about times when our organization said, “It can’t be done,” and someone else did it.

2. Or was there a time when we were the paradigm shifter and were able to take advantage of seeing the new paradigm despite our old paradigm?

3. Who has experienced a paradigm shift? Is it true that the first problems you solved were the problems you couldn’t solve with the old paradigm? Can you share an example?

4. Let’s talk about levels of tolerance. Has anyone here experienced a paradigm debate—where you saw an issue through your paradigm filter and the person you were arguing with was looking through their paradigm filter? Where you said, “You just don’t understand” or “I can’t see what you’re talking about.”

ONE REASON WHY PEOPLE RESIST SEEING NEW PARADIGMS
I really can’t see what you’re talking about, so why should I believe you?

For information on Bev Doolittle’s art, as seen in Paradigm Principles, and for information on limited-edition fine-art prints, call 1-800-243-4246.
BACKGROUND STORIES

Background On Watchmakers

Time marches on

When Swiss watchmakers ignored the quartz watch, they ignored their future.

In 1967, the Swiss dominated the watch industry. Sixty-five percent of all watches sold in the world were made in Switzerland, and close to 90 percent of industry profits belonged to the Swiss watchmakers.

The Swiss earned their success through outstanding quality and constant improvement. The Swiss were constant innovators, yet they failed to see the significance of their greatest invention. They failed to see the future of watchmaking.

Swiss researchers redefined time pieces in the electronic quartz watch. In contrast to the mechanical watch, the quartz watch has just one moving part, an electric step motor to drive the hands around the face. The mainspring, gears and bearings were replaced by a battery, integrated chip and a piece of quartz that was precisely cut and ground.

The new watch eliminated winding. It was 1,000 times more accurate than a mechanical watch. But the new watch didn’t fit the Swiss definition of a watch. The leaders of the Swiss watch industry felt so certain that the quartz watch had no future that they didn’t bother to patent the technology. And they exhibited it as a novelty at the World Watch Congress. There representatives of Seiko, a Japanese company, and Texas Instruments, a U.S. company, recognized that the new watch had potential to revolutionize the industry.

In 1968, both Seiko and Texas Instruments produced quartz watches. Within 10 years, the Swiss empire had collapsed. Their market share plummeted to less than 10 percent. They laid off more than 50,000 of their 65,000 watchmakers—an economic catastrophe for a country the size of Switzerland. By 1977 Japan had became the No. 1 watchmaker with more than 30 percent of worldwide watch sales.
Background On Kenaf

Stalking a new paradigm for paper

A fast-growing plant could become the primary fiber source for the paper industry.

In the years following World War II, the U.S. Department of Agriculture looked for an alternative to trees as an industrial fiber source—one that farmers could grow as a cash crop. After testing nearly 500 different kinds of plants, they identified kenaf, an African tropical plant, as the best choice.

Related to cotton and resembling sugar cane, kenaf grows to as much as 15 feet in one season. It is grown around the world, from Italy to China to the southern United States.

Kenaf’s advantages:

• Fast growth. Kenaf grows from a seed to a mature stalk ready for harvest in 150 days. A pine tree takes seven to 20 years.

• High yields. Kenaf produces about seven to 10 tons of pulp per acre each year, compared to a similar yield for pine trees once every seven to 20 years.

• Forest preservation. Today, more than 60 percent of all wood harvested in the United States is made into pulp and paper products. Kenaf could slow deforestation by sparing trees.

• Environmentally friendly. Growers don’t need to use herbicides and pesticides because weeds can’t compete with kenaf’s fast growth, and because insects have difficulty penetrating its tough bark. Processing requires fewer chemicals, produces less pollution and uses less energy.

The USDA predicts that kenaf may be the main paper fiber within 20 years. Converting pulp and paper mills would be easy but timber and paper companies don’t want to abandon their investments. Mills won’t make the transition without a reliable source of kenaf, meaning that growers must commit to growing kenaf.
Background On Ulcers

Outsiders from down under

No one was ready for two Australians to change the rules on ulcers.

Dr. Barry Marshall was serving his residency in gastroenterology at Royal Perth Hospital in Australia when he met Dr. Robin Warren. A pathologist, Warren had detected a form of bacteria in the stomach lining. This was a curious discovery because doctors long had been certain that nothing could live in the stomach’s acid environment.

Marshall and Warren explored further. They eventually found that 90 percent of patients with the bacteria in their stomach lining also had ulcers. The results prompted them to question another long-standing premise—that ulcers are caused by stress.

All the experts agreed that stress produces acid that eventually causes ulcers. But Marshall proposed that the body releases more acid to flush away the bacteria. To treat the bacteria, he prescribed a combination of antibiotics and bismuth, the active ingredient in Pepto Bismol. The treatment cured more than 80 percent of stomach and duodenal ulcers in less than four weeks at a cost of less than $100.

In 1984, Marshall and Warren presented their findings at international meetings—and the medical world scoffed. “I was a nobody,” Marshall said. “If you have something out of the blue, you have to promote it.”

Their research has been confirmed by more than a dozen studies. But it wasn’t until 1994—a decade after Marshall and Warren released their findings—that his treatment was endorsed by a major health organization, the U.S. National Institute of Health. The same year, Marshall and Warren received the Warren Alpert Foundation Prize from Harvard Medical School for research that has led to improved understanding and treatment of a specific disease.
Background On Chile

Retiring a paradigm

Chile is pioneering a social security system that is turning heads around the world.

In 1981, Chile was teetering on the brink of economic ruin. In a dramatic transformation, the military dictatorship ousted government controls and converted to a market economy. As part of the economic reform, Chile became the first nation to privatize its social security system.

Chile’s original social security system was based on the American model, which requires workers to make payments to the government for investment in government bonds. The system was faltering, with the country facing a choice of fewer benefits or higher taxes. But after a group of young economists returned from the University of Chicago, where they had learned about a new idea, Chile committed to pioneering the privatization of social security.

Everyone is required to contribute 12 percent of monthly gross earnings to a private pension fund. The money is deposited in the worker’s choice of 24 mutual funds invested in Chilean companies. The individual receives a statement every four months and can switch funds.

At retirement, the individual schedules payments from the mutual fund or converts the savings to an annuity, which pays a set annual income for life. The government supplements the pensions of low-wage earners.

Compared to the old system, individuals contribute less and benefits have increased 40 percent. “It has changed the culture,” says the Chilean labor minister who implemented the plan in 1981. “It gives people an incentive to think about the future, to work harder, to be more involved.”

Argentina, Australia and Sweden are among the countries studying Chile’s model.
Background On Carson

Countdown to zero

Rachel Carson delivered a wake-up call that changed the way people thought about the environment.

Published in 1962, Silent Spring represented Carson’s view that people were poisoning the earth. She predicted that our society’s irresponsible use of chemicals eventually would wipe out species of animals and part of the human population. In particular, she exposed the ecological and health hazards of DDT.

Carson introduced the idea that our welfare depends on the health of the environment. She explained that herbicides and insecticides diffused in the soil are carried by ground and surface water to distant areas where they accumulate in the food chain. She contended that chemical use led to a spiraling development of stronger pesticides because insects that attack crops were developing genetic resistance to pesticides.

The chemical industry, agribusiness and parts of the food industry responded to Silent Spring by attacking Carson’s character and credentials. They ridiculed her writing as unscientific and emotional. They threatened lawsuits. A marine biologist by training, Carson had done extensive research. And in 16 years as an editorial chief with the U.S. Fish and Wildlife Service, Carson had become an authority on the environment.

A best-seller, Silent Spring sparked widespread public support for federal regulation on the use of agricultural chemicals. President John F. Kennedy appointed a commission to study Carson’s conclusion. Her ideas inspired fundamental changes: The U.S. government has banned DDT and other chemicals; required new pesticides be demonstrated to be safe before they can be sold; established the U.S. Environmental Protection Agency; passed the Endangered Species Act and laws to control air and water pollution.
Background On Smart Car

Shifting Gears

A Swiss watch company and a luxury car maker team up to create the ultimate urban car.

Headquartered in Biel, the Swiss watchmaking center, is a joint venture that promises to change the way we think about the hassles of city driving. Swatch, the maker of fashion watches, and Mercedes-Benz, the German luxury-car titan, are moving down an unmapped road they hope leads to a brand new market in transportation.

On May 17, 1995, Swatch and Mercedes-Benz announced their “smart-watch car” concept—a micro compact car that is specially designed for tomorrow’s super-congested urban areas.

This new car concept builds on the respective values of the two world-class companies. Swatch believes in providing a good relationship between price and performance, constant innovation and excellence in microelectronics and fine mechanics. Mercedes-Benz is dedicated to safety, comfort, quality and excellence in automobile manufacturing.

The first micro compact cars will be built in France and are scheduled to be completed in 1997.

“We are pleased by the appearance of the two concept vehicles and feel that we are on the right path, and we intend to do everything we can to be the first to occupy this new market,” says Hans Jurg Schar, MCC managing director marketing/distribution.

The two-seat micro cars are not meant to compete with the four-seat car, but instead represent a true alternative. They are designed to meet the requirements of large urban centers of the future. One micro car will be equipped with an ultra-economical combustion engine; the other will be powered by an electro-hybrid motor.