The Role of the Project Leader

Dr. Alexander Laufer

Director, Consortium for Project Leadership
University of Wisconsin-Madison

Mastering the Leadership Role in Project Management

Madison, April 2013
Do Successful Project Managers Behave

Like Firefighters?

Like Firelighters?

Or Like Both?

Laufer, 2013
The Pace of Change

ONE single DAY in 2001 EQUALS

- A YEAR of world’s trade in 1949
- A YEAR of foreign exchange in 1979
- A YEAR of world’s phone calls in 1984

Charles Handy, *The Elephant and the Flea*, 2002
“Modern project management... emerged... in a period that was MORE INFLEXIBLE & LESS COMPLEX where events CHANGED LESS RADPIDLY than today...

It is in many respects still STUCK IN A 1960s time warp.”

Examples of Recent Research Publications on the Need for Changing the Project Management Paradigm

✓ “The need for new paradigms for complex projects” (1999)
✓ “The underlying theory of project management is obsolete” (2002)
✓ “Killing the false gods of project management” (2002)
✓ “Rethinking project management: researching the actuality of projects” (2006)
✓ “The changing paradigms of project management” (2007)
✓ “Rethinking project management” (2008)
✓ "Project Management Behind the Façade" (2009)
Why practitioners should care about theory?

It is the theory that describes what we can observe.

Albert Einstein

Your beliefs control what you see.

Karl Weick
Since theories affect what we see, they will also affect what we do!

“Bad management theories are destroying good management practices.”

Sumantra Ghoshal
Examples from product development projects:

• At least half of all product launches fail to live up to companies’ expectations.*

• For every four projects that enter development, only one makes it to market.*

• About 70% of the resources spent on new launches are allocated to products that are not successful in the market.**

---

*A study by Georgetown University’s McDonough School of Business
**A study by Booz & Company
The Poor Statistics of Project Results (b)

Examples from software projects:

- 53% of the projects, cost almost double their original estimate. (The Standish Group, 1995)

- “Only one in eight information technology projects can be considered truly successful.” (McManus and Wood-Harper, 2007)

- “On average, large IT projects (initial price tags exceeding $15 million) run 45% over budget… while delivering 56% less value than predicted.” (Mckinsey Quarterly, 2012)
Examples from **Large Infrastructure** projects:

- The average capital **cost overrun** of ten US rail transit projects was **61%**. (Flyvbjerg et al. 2003)

- The average capital **cost overrun** for eight Swedish road projects was **86%**. (Flyvbjerg et al. 2003)
Developing a "Theory of Practice": My Research Approach

- Field studies using **structured research tools** (observations and interviews).

- **Case studies** and stories collected from more than 150 project managers from over twenty organizations.

- **Consulting** work to test interim findings.

Studies were performed in “advanced” organizations and focused on the “best” practitioners

Laufer, 2013
Affiliation of the Project Managers

AeroVironment Design Development Center
Brown & Root
California Institute of Technology
Du Pont
Exxon
General Motors
Hensel Phelps
IBM
Jacobs Engineering
J.A. Jones
John Hopkins Applied Physics Laboratory
Lockheed Martin
Mobile
Morrison Knudsen

Motorola
Pepco
NASA,
Parson Brinckerhoff
Pennsylvania Power & Light
Procter & Gamble
Raytheon
Skanska,
Stone & Webster
Texaco
Turner
The US Department of Commerce
The US Department of Defense
### The Project Manager vs. the Project Leader-Manager: The Different Assumptions About Reality

<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th>Leader-Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of “order”</td>
<td>Primarily “geometric order”</td>
<td>Primarily “living order”</td>
</tr>
</tbody>
</table>

Laufer, 2013
“Living Order,” Why?

Dynamic environment,
While project borders are permeable

Unique and interdependent tasks,
often innovative

Temporary and evolving project organization
with heterogeneous units

Laufer, 2013
Need for Adaptation

Metaphor for Task Related Need for Adaptation
Environment

Dynamic

Stable

Metaphor for Environment Related Need for Adaptation

Laufer, 2013
Task & Environment

High Need for Adaptation

Metaphor for Task & Environment Related Need for Adaptation

Low Need for Adaptation

Laufer, 2013
# The Project Manager vs. the Project Leader-Manager: The Different Assumptions About Reality

<table>
<thead>
<tr>
<th>Type of “order”</th>
<th>Manager</th>
<th>Leader-Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primarily “geometric order”</td>
<td>Primarily “living order”</td>
</tr>
<tr>
<td>Unexpected events</td>
<td>Effective planning &amp; control can minimize unexpected events</td>
<td>Many constraints remain hidden in the planning state; The project environment is too dynamic; Unexpected events are inevitable</td>
</tr>
<tr>
<td>The nature of the problems</td>
<td>Technical</td>
<td>Mostly technical, but also adaptive</td>
</tr>
</tbody>
</table>
Classification of Problems

(Ronald Heifetz)

- **Technical problems**: Can be solved with knowledge and procedures already at hand, can be fixed by following a known series of steps.

- **Adaptive problems**: Not well-defined, do not have clear solutions, often require new learning, innovation, and changes in patterns of behavior.
# The Project Manager vs. the Project Leader-Manager: The Different Assumptions About Reality

<table>
<thead>
<tr>
<th></th>
<th><strong>Manager</strong></th>
<th><strong>Leader-Manager</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of “order”</strong></td>
<td>Primarily “geometric order”</td>
<td>Primarily “living order”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unexpected events</strong></td>
<td>Effective planning &amp; control can minimize unexpected events</td>
<td>Many constraints remain hidden in the planning state; The project environment is too dynamic; Unexpected events are inevitable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The nature of the problems</strong></td>
<td>Technical</td>
<td>Mostly technical, but also adaptive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impact of the unique project context</strong></td>
<td>“one best way”</td>
<td>“context is the key”</td>
</tr>
</tbody>
</table>
Figure 1. Results-Focused Leadership: Essence of the Principles

Alexander Laufer ©
May 2004

Laufer, 2013
Figure 2. Results-Focused Leadership: The Human Metaphor

Alexander Laufer ©
May 2004
The Five Principles of Managing Projects in a Dynamic Environment: Color Codes

- **Growth:** Plan & Control to Embrace Change
- **Earth:** Create a Results-Oriented Focus
- **Sunshine & Optimism:** Develop a Will to Win
- **Heart:** Collaborate through Interdependence & Trust
- **Drab:** Update & Connect through Intensive Communication

Laufer, 2013
The Five Principles of Managing Projects in a Dynamic Environment: Color Codes

- **Heart:** Collaborate through Interdependence & Trust

Laufer, 2013
<table>
<thead>
<tr>
<th>Focus</th>
<th>Primary Objective</th>
<th>Role</th>
<th>Primary Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project culture</td>
<td>Develop capacity for flexibility &amp; stability</td>
<td>Shaping the way people work &amp; interact</td>
<td>Integrating people</td>
</tr>
</tbody>
</table>

Laufer, 2013
The Five Principles of Managing Projects in a Dynamic Environment: Color Codes

- **Growth:** *Plan & Control to Embrace Change*
Traditional Planning Rules

• Construction plans should be prepared before onset of construction and as early as possible.

• Horizon of plan should be maximal.

• The plan should be comprehensive, complete, and detailed.
Management by Planning

Laufer, 2013
Management by Learning
### Deliberate Planning and Deliberate Learning

<table>
<thead>
<tr>
<th>Action Plan</th>
<th>Look Ahead Plan</th>
<th>Master Plan</th>
</tr>
</thead>
</table>

Planning Horizon
Vase?

Faces?

Or Both?

(a)  
(b)  
(c)  

Laufer, 2013
An admiral in the United States Navy stood on the bridge of his flagship. Suddenly a little blip appeared on the radar screen. He turned to the ensign and said, “Tell that ship to change course 15 degrees.”

The radio responded, “You change your course 15 degrees.”
The admiral bellowed in anger, “Tell that ship that we are the U.S. Navy and to change its course 15 degrees, immediately.”

“You change your course 15 degrees,” the radio repeated.

The admiral, himself, then got on the radio, “I am an admiral in the U.S. Navy. I order you to change your course 15 degrees.”

“You may be an admiral in the U.S. Navy,” came the response. “But I am a lighthouse.”
Possible Responses to Deviations from a Plan

(a) Adherence to plan

(b) Adherence to original objectives

(c) Adjusting objectives and plan to circumstances
The Role of “Control”

- When uncertainty is low, control is best implemented by measuring performance and then by taking corrective steps to adjust performance to the plan.

- As project uncertainty increases, control is less of a "governor" of execution, and more of a data collection function for continuous planning.

- In uncertain conditions, "control" should provide feedback for planning, and thus its emphasis should be first on looking ahead with anticipation and only then on looking back with justification.

Laufer, 2013
## The Roles of the Project Manager

<table>
<thead>
<tr>
<th>Focus</th>
<th>Primary Objective</th>
<th>Role</th>
<th>Primary Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project culture</td>
<td>Develop capacity</td>
<td>Shaping the way people work &amp; interact</td>
<td>Integrating people</td>
</tr>
<tr>
<td></td>
<td>for flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; stability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project planning &amp; control</td>
<td>Facilitate ongoing</td>
<td>Integrating planning &amp; learning</td>
<td>Integrating information</td>
</tr>
<tr>
<td></td>
<td>flexibility &amp;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>stability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Laufer, 2013
The Five Principles of Managing Projects in a Dynamic Environment: Color Codes

- **Sunshine & Optimism: Develop a Will to Win**
Laufer, 2013
# The Roles of the Project Manager

<table>
<thead>
<tr>
<th>Focus</th>
<th>Primary Objective</th>
<th>Role</th>
<th>Primary Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project culture</td>
<td>Develop capacity for flexibility &amp; stability</td>
<td>Shaping the way people work &amp; interact</td>
<td>Integrating people</td>
</tr>
<tr>
<td>Project planning &amp; control</td>
<td>Facilitate ongoing flexibility &amp; stability</td>
<td>Integrating planning &amp; learning</td>
<td>Integrating information</td>
</tr>
<tr>
<td>Project shielding</td>
<td>Continue project progress</td>
<td>Coping proactively with major threats</td>
<td>Anticipating &amp; taking action</td>
</tr>
</tbody>
</table>
The Five Principles of Managing Projects in a Dynamic Environment: Color Codes

- **Earth:** Create a Results-Oriented Focus

- **Drab:** Update & Connect through Intensive Communication
Dynamics of Managing

**Folklore:** The manager is a reflective, systematic planner.

**Facts:** Study after study has shown that:
(a) managers work at an *unrelenting pace*;

(b) their activities are typically characterized by *brevity, variety, fragmentation, and discontinuity*; and

(c) they are strongly *oriented to action*.

*Managing*, Henry Mintzberg, 2009
In recent years, project managers at P&G have had the number of procedures markedly reduced from 18 technical standards and 32 standard operating procedures to only four of each. Scott Cameron, the Global Process Owner of Project Management at Procter & Gamble: “The project management community was delighted with these reductions and felt empowered by them. It gave them more flexibility to manage their projects…”
Study of 10 excellent on-site construction project managers (Israel)

Method

Structured observations at each site for a week

Telem, Laufer, Shapira. (2006) Only Dynamics Can Absorb Dynamics
The dynamic nature of the work of the project manager

Activities per day:
42 meetings; 28 phone calls; 17 tours to the site production areas; 17 activities of paper and computer work

Average duration of each activity 5 min.
90% of the activities last less than 10 min.

Mintzberg’s study of senior managers (1973): About half of their activities were completed within less than 9 min and about 10% of their activities lasted over 60 min.
The Dynamic Behavior of On-Site Construction Project Managers

11.2 Activities

- Changing focus - 8.3
- Taking initiative - 8.0
- Changing locations - 4.1
- Solving problems - 4.2
- Moving on site - 12.2 (min)

Only Dynamics Can Absorb Dynamics
Telem, Laufer, and Shapira, 2006

Laufer, 2013
Managerial Dynamics Exhibited by Ten Project Managers

Laufer, 2013
Examples of typical problems

In a study of construction projects: project managers dealt with an average of 20 different problems each day

Typical problems

- A leaky water pipe
- The absence of workers from the site
- Overruns in the monthly budget
- A design error

Laufer, 2013
Enabling Project Progress by Quick Response

- 96% of problems addressed (not necessarily solved) during first 7 minutes following problem identification
- 50% solved immediately
- 64% solved during the first iteration
- 92% solved during the first three iterations
- Only 19% were not resolved on the same day

Laufer, 2013
"Thinking well is wise; Planning well, wiser; Doing well, wisest and best of all."

A Persian proverb

Laufer, 2013
In today’s dynamic environment, successful project management is about:

- **Changing** the way people work and interact
- Coping periodically and formally with **technical changes**
- Coping infrequently and proactively with **adaptive changes**
- Coping frequently and quickly with **technical changes**
- **Fostering followers’ ownership** of the project
# The Roles of the Project Manager

<table>
<thead>
<tr>
<th>Focus</th>
<th>Primary Objective</th>
<th>Role</th>
<th>Primary Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project culture</td>
<td>Develop capacity for flexibility &amp; stability</td>
<td>Shaping the way people work &amp; interact</td>
<td>Integrating people</td>
</tr>
<tr>
<td>Project planning &amp; control</td>
<td>Facilitate ongoing flexibility &amp; stability</td>
<td>Integrating planning &amp; learning</td>
<td>Integrating information</td>
</tr>
<tr>
<td>Project shielding</td>
<td>Continue project progress</td>
<td>Coping proactively with major threats</td>
<td>Anticipating &amp; taking action</td>
</tr>
<tr>
<td>Project implementation</td>
<td>Facilitate project progress</td>
<td>Maintaining momentum &amp; fostering commitment</td>
<td>Integrating people &amp; information; walking about; handling disturbances</td>
</tr>
</tbody>
</table>

Laufer, 2013
# Evolutions of models of project management

<table>
<thead>
<tr>
<th>Central concept</th>
<th>Era</th>
<th>Dominant project characteristics</th>
<th>Metaphor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling</td>
<td>1960s</td>
<td><em>Simple, certain</em></td>
<td>Scheduling regional flights in an airline</td>
</tr>
</tbody>
</table>

Laufer, 2013
# Evolutions of models of project management

<table>
<thead>
<tr>
<th>Central concept</th>
<th>Era</th>
<th>Dominant project characteristics</th>
<th>Metaphor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling</td>
<td>1960s</td>
<td><em>Simple, certain</em></td>
<td>Scheduling regional flights in an airline</td>
</tr>
<tr>
<td>Teamwork</td>
<td>1970s</td>
<td><em>Complex, certain</em></td>
<td>Conducting a symphony orchestra</td>
</tr>
</tbody>
</table>
### Evolutions of models of project management

<table>
<thead>
<tr>
<th>Central concept</th>
<th>Era</th>
<th>Dominant project characteristics</th>
<th>Metaphor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling</td>
<td>1960s</td>
<td><em>Simple, certain</em></td>
<td>Scheduling regional flights in an airline</td>
</tr>
<tr>
<td>Teamwork</td>
<td>1970s</td>
<td><em>Complex, certain</em></td>
<td>Conducting a symphony orchestra</td>
</tr>
<tr>
<td>Risk management</td>
<td>1980s</td>
<td><em>Complex, uncertain</em></td>
<td>Exploring an unknown country</td>
</tr>
</tbody>
</table>

Laufer, 2013
<table>
<thead>
<tr>
<th>Central concept</th>
<th>Era</th>
<th>Dominant project characteristics</th>
<th>Metaphor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling</td>
<td>1960s</td>
<td>Simple, certain</td>
<td>Scheduling regional flights in an airline</td>
</tr>
<tr>
<td>Teamwork</td>
<td>1970s</td>
<td>Complex, certain</td>
<td>Conducting a symphony orchestra</td>
</tr>
<tr>
<td>Risk management</td>
<td>1980s</td>
<td>Complex, uncertain</td>
<td>Exploring an unknown country</td>
</tr>
<tr>
<td>Simultaneity</td>
<td>1990s</td>
<td>Complex, uncertain, quick</td>
<td>Directing a three-ring circus, continuously switching acts base on the crowd's response</td>
</tr>
<tr>
<td>Central concept</td>
<td>Era</td>
<td>Dominant project characteristics</td>
<td>Metaphor</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Scheduling</td>
<td>1960s</td>
<td>Simple, certain</td>
<td>Scheduling regional flights in an airline</td>
</tr>
<tr>
<td>Teamwork</td>
<td>1970s</td>
<td>Complex, certain</td>
<td>Conducting a symphony orchestra</td>
</tr>
<tr>
<td>Risk management</td>
<td>1980s</td>
<td>Complex, uncertain</td>
<td>Exploring an unknown country</td>
</tr>
<tr>
<td>Simultaneity</td>
<td>1990s</td>
<td>Complex, uncertain, quick</td>
<td>Directing a three-ring circus, continuously switching acts base on the crowd's response</td>
</tr>
<tr>
<td>Leadership &amp; management</td>
<td>2000s</td>
<td>Complex, uncertain, quick, a world of permanent white water</td>
<td>A firefighter &amp; a firefighter</td>
</tr>
<tr>
<td>(flexibility &amp; stability)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Laufer et al, 1996 (first 4 rows)
Thank You!!!