

Principles of management

Week 6

Innovation

- Conceptualization
- S-Curve pattern
- Streams
- Management
 - Creative work environment
 - Use experiential approach
 - Use compression approach
- Change resistance
- Pitfalls
- Development steps



Innovation Conceptualization

The act or process of substituting one single item by another

Examples:

- the use of digital technology instead of analog
- the use of cars rather than horses



The continuous set of alterations in the same thing

Examples:

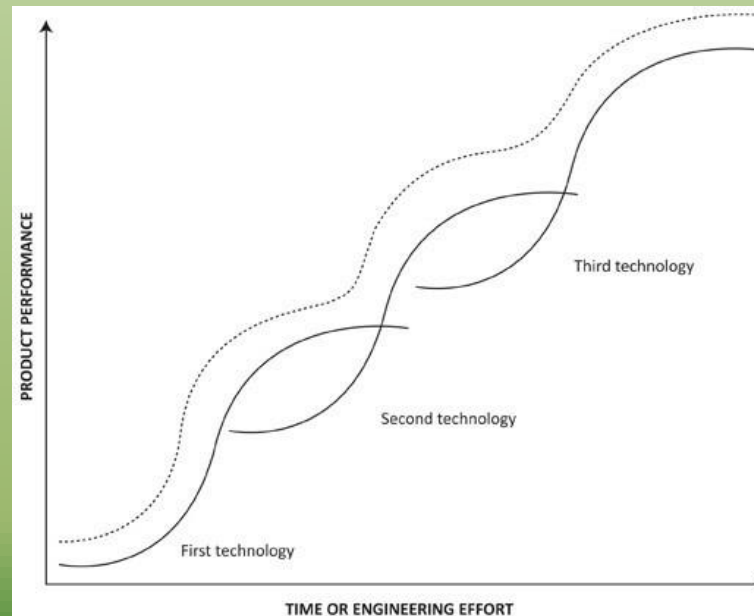
- transformation of raw materials to finished products
- the growth of a company such as Apple



Innovation S-curve pattern

Characterized by slow initial progress, followed by rapid progress, and then slow progress again

Slow progress results when a technology matures and reaches its limits

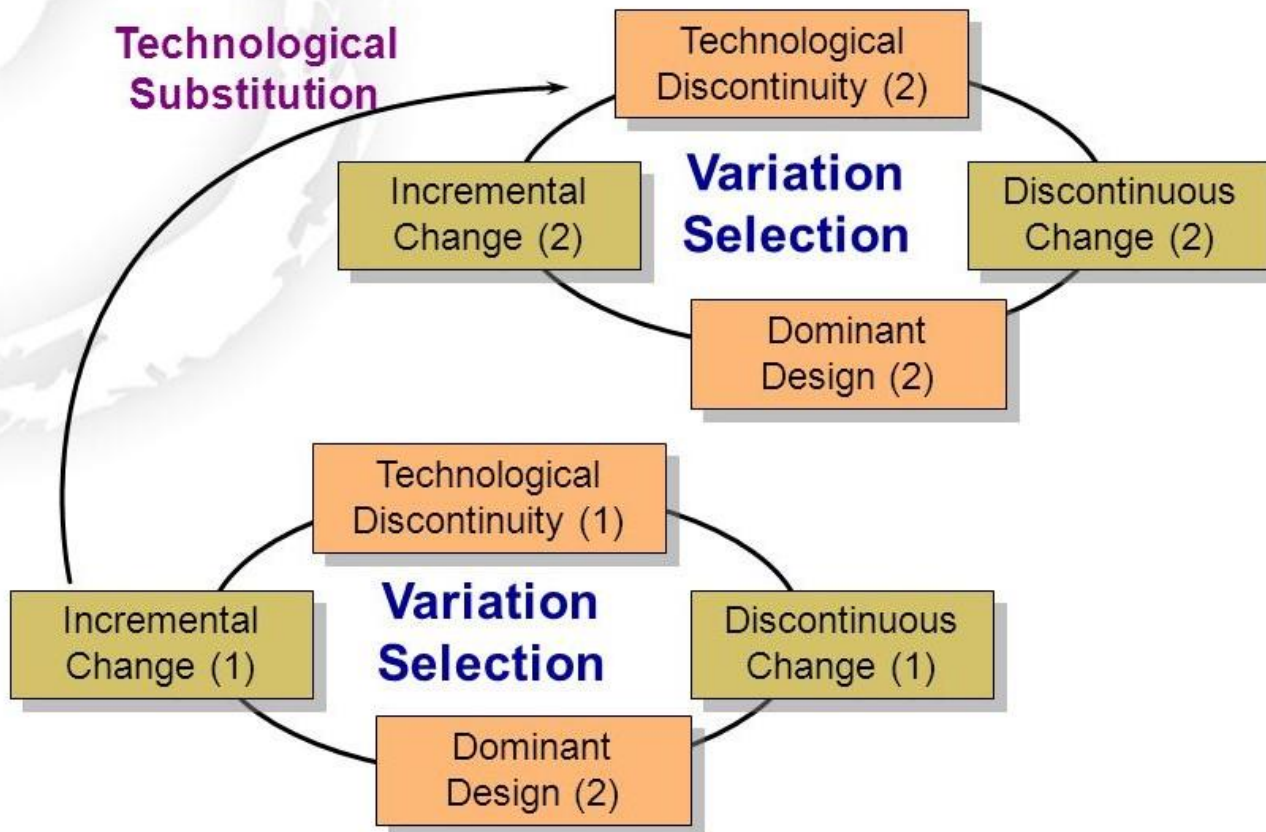


Innovation Streams

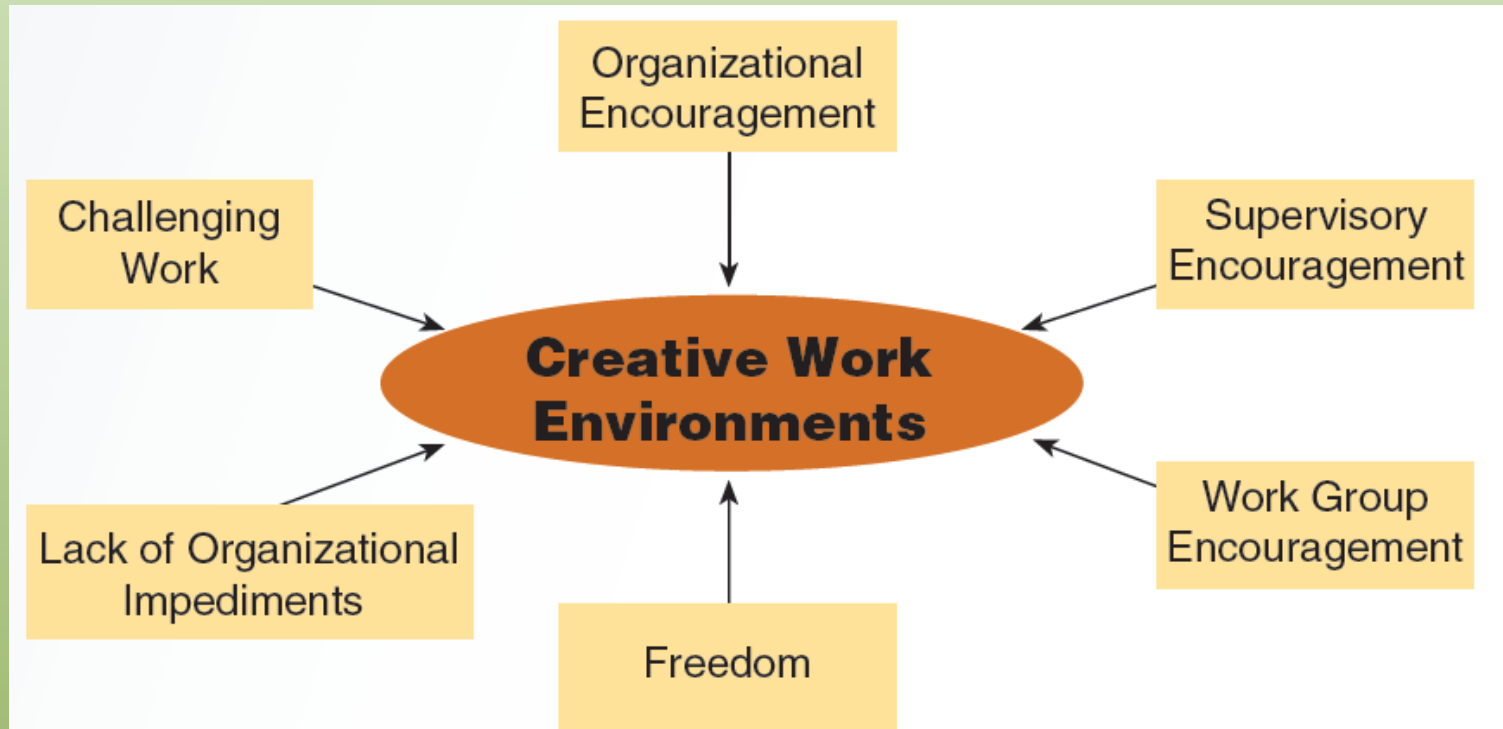
- Patterns of innovation over time that can create sustainable competitive advantage
- Phases
 - **Technological discontinuity:** Unique combination of existing technologies creates a significant breakthrough in performance
 - **Discontinuous change:** Characterized by design competition and technological substitution
 - **Dominant design:** New technological design/process that becomes the accepted market standard

Innovation Streams

Innovation Streams: Technology Cycles over Time



Innovation
Management
Creative work environment



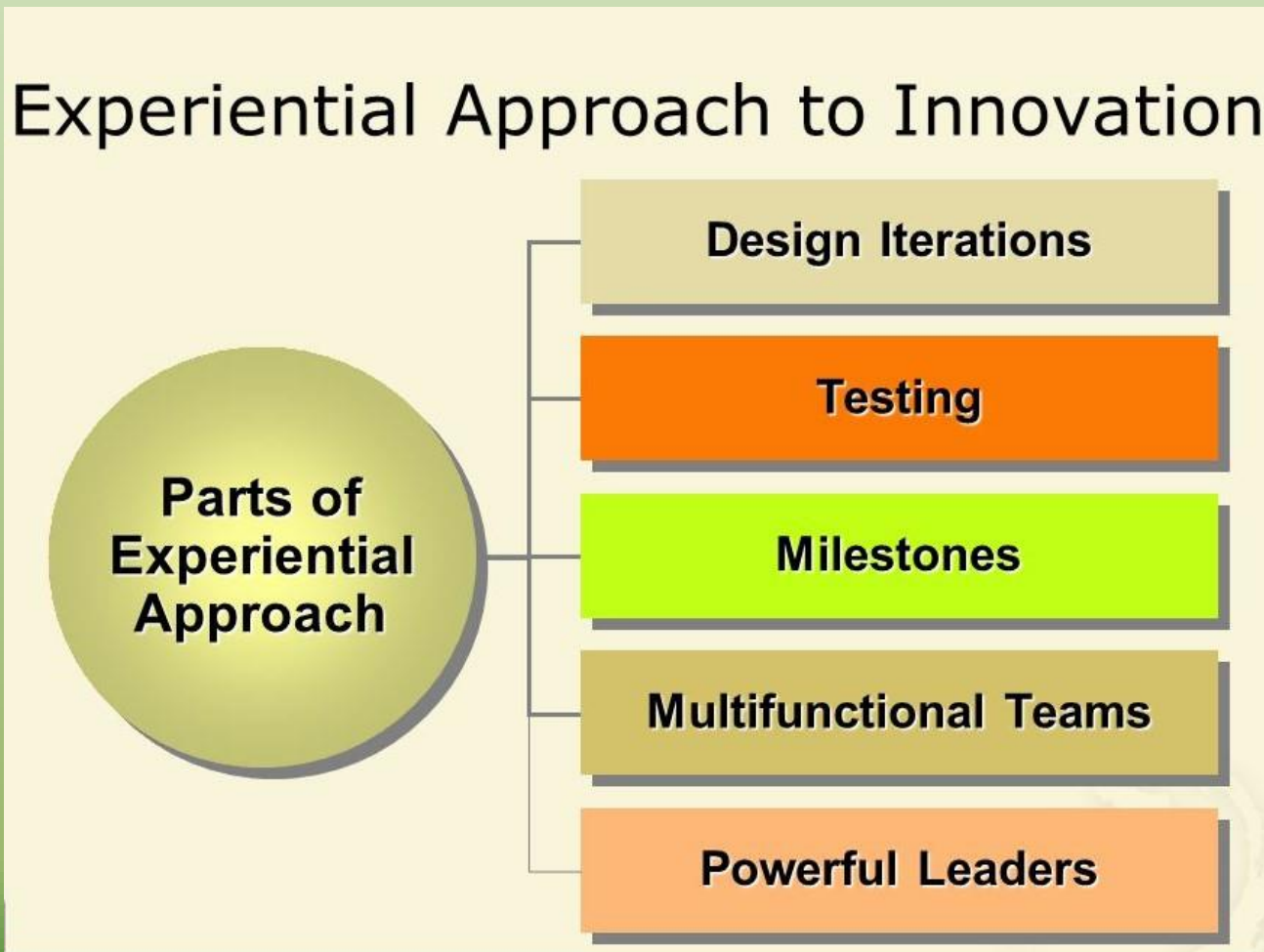
Source: T. M. Amabile, R. Conti, H. Coon, J. Lazenby, and M. Herron, "Assessing the Work Environment for Creativity," *Academy of Management Journal* 39 (1996): 1154–1184.

Innovation
Management
Use experiential approach

- Assumes innovation occurs within a highly uncertain environment
- Uses intuition, flexible options, and hands-on experience to help reduce uncertainty and accelerate learning and understanding
- Aspects
 - Design iterations, testing, milestones, multifunctional teams, and powerful leaders

Innovation
Management
Use experiential approach

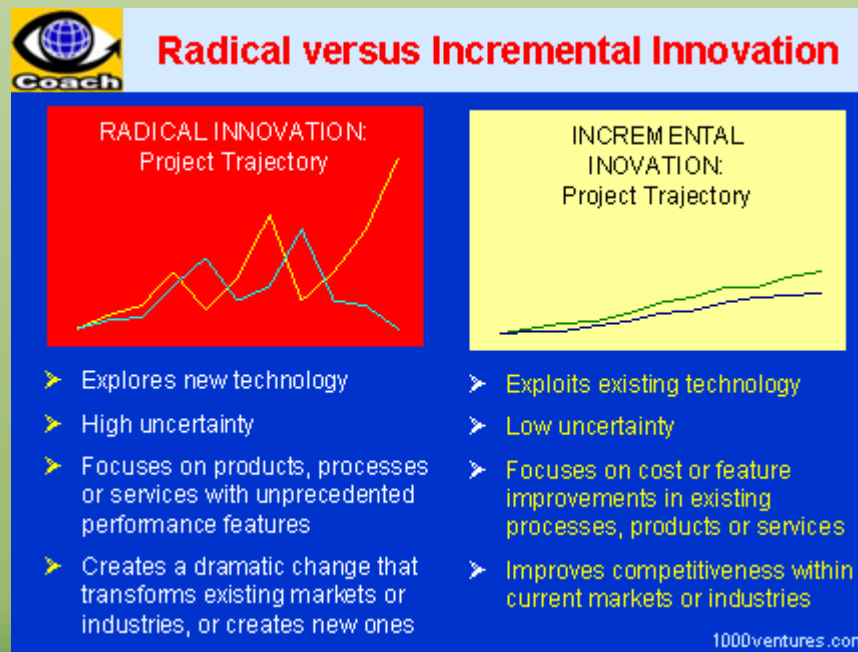
- Aspects



Innovation Management

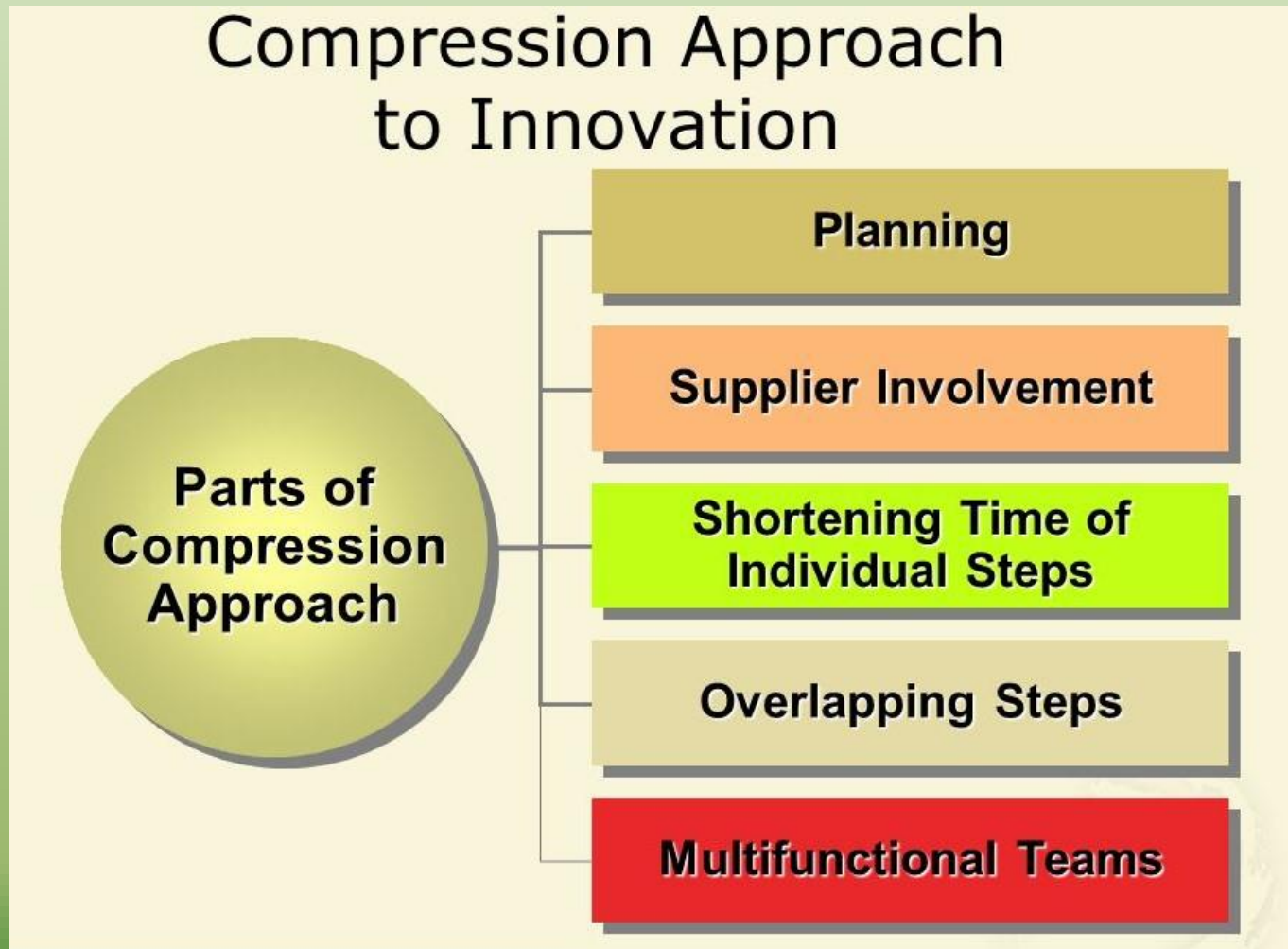
Use compression approach

- Unlike the radical approach, the compression approach assumes that incremental innovation can be planned using a series of steps
- Compressing the steps can speed innovation



Innovation
Management
Use compression approach

- Aspects



Innovation Management Resistance

- Resistance to change

Results from self-interest, misunderstanding and distrust, and a general intolerance for change

- Types of forces

Change forces: Produce differences in the form, quality, or condition of a firm over time

Resistance forces: Support the existing conditions in organizations

Innovation Management Resistance



Innovation Management Pitfalls

Unfreezing phase

- *Not establishing a great sense of urgency*
- *Not creating a powerful enough coalition*

Change phase

- *Lack of a vision*
- *Undercommunicating the vision by a factor of ten*
- *Not removing obstacles to the new vision*
- *Not systematically planning for and creating short-term wins*

Refreezing phase

- *Declaring victory too soon*
- *Not anchoring changes in the corporation's culture*

Innovation Management Development steps

1. Set measurable, short-term goals to improve performance.
2. Make sure your action steps are likely to improve measured performance.
3. Stress the importance of immediate improvements.
4. Solicit help from consultants and staffers to achieve quick improvements in performance.
5. Test action steps to see if they actually yield improvements. If they don't, discard them and establish new ones.
6. Use resources you have or that can be easily acquired. It doesn't take much.

Source: R. H. Schaffer and H. A. Thomson, "Successful Change Programs Begin with Results," *Harvard Business Review on Change* (Boston: Harvard Business School Press, 1998), 189–213.


Innovation Management Development steps

1. Entry	A problem is discovered, and the need for change becomes apparent. A search begins for someone to deal with the problem and facilitate change.
2. Startup	A change agent enters the picture and works to clarify the problem and gain commitment to a change effort.
3. Assessment & feedback	The change agent gathers information about the problem and provides feedback about it to decision makers and those affected by it.
4. Action planning	The change agent works with decision makers to develop an action plan.

Source: W. J. Rothwell, R. Sullivan, and G. M. McLean, *Practicing Organizational Development: A Guide for Consultants* (San Diego: Pfeiffer & Co., 1995).

Innovation Management Development steps

5. Intervention	The action plan, or organizational development intervention, is carried out.
6. Evaluation	The change agent helps decision makers assess the effectiveness of the intervention.
7. Adoption	Organizational members accept ownership and responsibility for the change, which is then carried out through the entire organization.
8. Separation	The change agent leaves the organization after first ensuring that the change intervention will continue to work.



Source: W. J. Rothwell, R. Sullivan, and G. M. McLean, *Practicing Organizational Development: A Guide for Consultants* (San Diego: Pfeiffer & Co., 1995).