

Adoption of Innovations



Consumer Perceptions and the Public's Adoption or Rejection of Complex and Controversial New Technologies

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“If a man has good corn or wood, or boards, or pigs, to sell, or can make better chairs or knives, crucibles or church organs, than anybody else, you will find a broad hard-beaten road to his house, though it be in the woods.”

—Ralph Waldo Emerson

[“If you build a better mouse trap the world will beat a path to your door”]

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“Electricity from wind generation is poised to become a leading source of renewable energy in the years to come. So why do so many people not want it? Is it simply a fear of the unknown and not based on facts? There are studies for both sides of the argument that “prove” property values will or will not go down, that wind farms do or do not cause health issues, and that birds are in more or less danger from wind farms.” Wayne M. Kovach

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Science and Society

1. Society has a vested interest in adopting as quickly as possible new technologies that provide an overall benefit to society.
2. Barriers to change:
 - a. Science is flawed and socially constructed.
 - b. Society is slower than science.

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Society is Slower Than Science Because:

1. We are ignorant (not stupid).
2. We are untrusting (not irresponsible).
3. We are skeptical (not irrational).

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How Can Scientists Communicate with Consumers?

1. The Scientist's Dilemma
2. The Consumer's Dilemma
3. The Role of the Media
4. Trust is Fragile (and Once Broken Cannot Be Regained?)

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Risk Communication: Outrage Factors

1. Trust.
2. Control.
3. Voluntary.
4. Full Knowledge.

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How to Gain Adoption?

1. Political Solution.
2. Economic Solution.
3. Cultural Solution.
4. Sociological Solution.

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The Stages of Adoption

1. Education.
2. Persuasion.
3. Decision
4. Implementation
5. Confirmation.

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The Role of Education

1. All technologies are flawed and all technologies have negative consequences for some segments of the population.
2. Negative information carries disproportionate weight in decision making.
3. “Education” alone always will fail to convince.

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The Nature of Persuasion

1. Facts.
2. Social Comparison.
3. Choice Shift.

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The Nature of Decision

1. Opinion Leaders
2. The Diffusion Effect
 - a. "OK"
 - b. Peer Pressure

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Risk Communication

Q: How do you gain adoption of complex and controversial technologies?

A: **You** don't. (You rely upon the diffusion effect to do it for you.)

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Thank you!