Diffusion of Innovation Theory
Diffusion of Innovations by Everett Rogers

Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system.

Innovation is any new idea, new behavior, new product, new message i.e., a new thing that one brings to you for your adoption.
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>Knowledge</td>
<td>Person becomes aware of an innovation and has some idea of how it functions</td>
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<tr>
<td>Persuasion</td>
<td>Person forms a favorable or unfavorable attitude toward the innovation</td>
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<tr>
<td>Decision</td>
<td>Person engages in activities that lead to a choice to adopt or reject the innovation</td>
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<tr>
<td>Implementation</td>
<td>Person puts an innovation into use</td>
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<tr>
<td>Confirmation</td>
<td>Person evaluates the results of an innovation-decision already made</td>
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Five Stages in the Decision Innovation Process

Knowledge
Exposed, not inspired to find more information

Persuasion
Seek information, details about innovation

Decision
Reject

Implementation
Accept

Confirmation
Basic on advant./disadv.
Innovations do not spread equally over different society segments (social groups) but through 5 stages with particular profile of reaction.
5 particular profile

- Innovators: Adopt new ideas (technologies, concepts, and behaviors in early stages)
- Early Adopters: Still have some traits of innovation (risk concern)
- Early Majority: First sign of diffusion
- Late Majority: Delay its adoption, must be clearly its advantages
- Laggards: Mature implementation and risks involved are smaller
Affecting the diffusion of an innovation

Powerful way for change agents to affect the diffusion of an innovation is to affect opinion leader attitudes.

Persuading opinion leaders is the easiest way to foment positive attitudes toward an innovation.

Leaders have the knowledge and the social skill to start word-of-mouth epidemics.
Regardless the “experts” opinion, individual before making a decision takes into account the function that indicates how much he can lose with that decision.

There is a huge range of different behaviors between each profile described (continuous model).
ADOPTER TYPES

1. INOVATORS
2. EARLY ADOPTERS
3. EARLY MAJORITY
4. LATE MAJORITY
5. LAGGARDS
Innovation processes follow a normal distribution curve.

**MAJORITY**

**INNOVATORS**

**POOR**

**CONTINUOUS PROCESS**

**LAGGARDS**

**PERFORMANCE**

**OPTIMAL**
5 critical factors influencing innovation diffusion

<table>
<thead>
<tr>
<th>Factor</th>
<th>Effect</th>
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<tr>
<td>Relative advantage</td>
<td>Adoption probability grows if innovation has clear advantages for product, service or current behavior</td>
</tr>
<tr>
<td>Compatibility</td>
<td>The more innovation is consistent with pre-existing higher the adoption probability</td>
</tr>
<tr>
<td>Complexity of transition</td>
<td>Complex changes involved in innovation, reduce adoption likelihood</td>
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<tr>
<td>Possibility of testing</td>
<td>A chance to try an innovation before making a final decision increase adoption likelihood</td>
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<tr>
<td>Visibility of benefits</td>
<td>The more obvious innovation benefits the greater adoption likelihood</td>
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The Process of Diffusion Innovation

Antecedents

- Receiver variable
  1. Personality characteristics (e.g., general attitude toward change)
  2. Social characteristics (e.g., cosmopolitanism)
  3. Perceived need for the innovation
  4. Etc.

Social system variables
  1. Social system norms
  2. Tolerance of deviancy
  3. Communication integration
  4. Etc.

Perceived characteristics of innovations
  1. Relative advantage
  2. Compatibility
  3. Complexity
  4. Triability
  5. Observability

Process

- Knowledge
- Persuasion
- Decision
- Confirmation

Communication sources (Channels)

- Adoption
  - Continued adoption
  - Discontinuance
    1. Replacement
    2. Disenchantment
- Rejection
  - Later adoption
  - Continued rejection

Time
Stage of Adoption by Rogers’ (1995)

1. **Awareness** - the individual is exposed to the innovation but lacks complete information about it

2. **Interest** - the individual becomes interested in the new idea and seeks additional information about it

3. **Evaluation** - individual mentally applies the innovation to his present and anticipated future situation, and then decides whether or not to try it

4. **Trial** - the individual makes full use of the innovation

5. **Adoption** - the individual decides to continue the full use of the innovation
Factors affecting diffusion

1. Innovation characteristics
2. Individual characteristics
3. Social network characteristics
4. Others...
# Innovation characteristics

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<th>Characteristics</th>
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<td><strong>Observability</strong></td>
<td>The degree to which the results of an innovation are visible to potential adopters</td>
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<tr>
<td><strong>Relative Advantage</strong></td>
<td>The degree to which the innovation is perceived to be superior to current practice</td>
</tr>
<tr>
<td><strong>Compatibility</strong></td>
<td>The degree to which the innovation is perceived to be consistent with socio-cultural values, previous ideas, and/or perceived needs</td>
</tr>
<tr>
<td><strong>Trialability</strong></td>
<td>The degree to which the innovation can be experienced on a limited basis</td>
</tr>
<tr>
<td><strong>Complexity</strong></td>
<td>The degree to which an innovation is difficult to use or understand.</td>
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Individual characteristics

- Innovativeness
  - Originally defined by Rogers: *the degree to which an individual is relatively earlier in adopting an innovation than other members of his social system*
  
  - Modified & extended by Hirschman (1980):
    - Inherent / actualized novelty seeking
    - Creative consumer
    - Adoptive / vicarious innovativeness
Other individual characteristics

• Reliance on others as source of information (Midgley & Dowling)

• Adopter threshold (e.g. Valente)

• Need-for-change / Need-for-cognition (Wood & Swait, 2002)
Network characteristics

- Opinion leadership: number of nominations as source of information
- Number of contacts within each adopter category
- Complex structure
Other possible factors:

• Lyytinen & Damsgaard (2001)
  
  – Social environment of diffusion of innovation
  
  – Marketing strategies employed
  
  – Institutional structures (e.g., government)
SUCCESS FACTORS AFFECTING THE AGENT:

- vigorous promotion
- Client Oriented
- Partnership with Community Leader
- Credibility of the agent
Make the Application of Diffusion Innovation on your own case!