Consequences of Innovations

Diffusion of Innovations
Chapter 11
Consequences are the changes that occur an individual or a social system as a result of the adoption or rejection of an innovation.

Invention and diffusion are but means to an ultimate end: the consequences that result from adoption of an innovation.

The unpredictability of an innovation’s consequences is one of important type of uncertainty in the diffusion process.
Why have there been so few studies of consequences

1. Change agents overemphasize adoption per se, tacitly assuming that the consequences of innovation-decision will be positive.
2. The usual survey research methods are less appropriate for the investigation of innovation consequences than for studying innovativeness.
3. Consequences are difficult to measure.
Classification of consequences

- Desirable versus undesirable
- Direct versus indirect
- Anticipated versus unanticipated
Desirable versus undesirable consequences

- Desirable consequences are the functional effects of an innovation for an individual or for a social system.

- Undesirable consequences are the dysfunctional effects of an innovation for an individual or for a social system.

- The determination that whether consequences are functional or dysfunctional depends on how the innovation affects the adopters.
Desirable versus undesirable consequences

- Certain innovations have undesirable impacts for almost everyone in a social system.

- Every social system has certain qualities that should not be destroyed if the system is to be maintained. These might include family bonds, respect for human life and property, maintenance of individual respect and dignity, and appreciation for others, including appreciation for contribution made by ancestors.
Desirable versus undesirable consequences

- An innovation may be functional for a system but not functional for certain individuals in the system.
- Whether the consequences are desirable or undesirable depends on whether one takes certain individuals, or the entire system, as a point of reference.
Windfall Profits

• Positive consequences of an innovation may occur for certain members of a system at the expense of others.

• Windfall profits are a special advantage earned by the first adopters of a new idea in a system.

• Adoption of a noneconomic or unsuccessful innovation can result in “windfall losses” for the first individuals to adopt. (pocket calculator)

• Usually new ideas make the rich richer and the poor poorer, widening the socioeconomic gap between the earlier and later adopters of a new idea.
Separation of desirable and undesirable consequences

Most innovations cause both desirable and undesirable consequences.

**Generalization 11-1**: The effects of an innovation usually cannot be managed so as to separate the desirable from the undesirable consequences.
Direct versus indirect consequences

1. Direct consequences are the changes to an individual or a social system that occur in immediate response to adoption of an innovation.

2. Indirect consequences are the changes to an individual or a social system that occur as a result of the direct consequence of an innovation. (ORT)
Anticipated versus unanticipated consequences

- Anticipated consequences are changes due to an innovation that are recognized and intended by the members of a social system.
- Unanticipated consequences represent a lack of understanding of how an innovation functions, and of the internal and external forces at work in a social system. (Steel Axes for stone-age Aborigines)
- Uncertainty about an innovation’s consequences can never be completely removed.
- **Generalization 11-2**: The undesirable, indirect, and unanticipated consequences of an innovation usually go together, as do the desirable, direct, and anticipated consequences.
Form, Function and Meaning of an innovation

1. **Form** is the directly observable physical appearance and substance of an innovation.

2. **Function** is the contribution made by an innovation to the way of life of members of a social system.

3. **Meaning** is the subjective and frequently unconscious perception of an innovation by members of a social system.

**Generalization 11-3**: Change agents more easily anticipate the form and function of an innovation for their clients than its meaning.
Achieving a dynamic equilibrium

• **Stable equilibrium**, which occurs when there is almost no change in the structure or functioning of a social system. (e.g. completely isolated and traditional system)

• **Dynamic equilibrium**, which occurs when the rate of change in a social system occurs at a rate that is commensurate with the system’s ability to cope with it.

• **Disequilibrium**, which occurs when the rate of change is too rapid to permit a social system to adjust.
Equality in the consequences of innovations

usually change agents have most contact with the better-educated, higher-status individuals in a system, and thus tend to widen socioeconomic gaps.

One must classify consequences as to whether they increase or decrease equality among the members of a social system.
Gap-Widening consequences of the diffusion of innovations

Generalization 11-4: The consequences of the diffusion of innovations usually widen the socioeconomic gap between the earlier and later adopting categories in a system.

Generalization 11-5: The consequences of the diffusion of innovation usually widen the socioeconomic gap between the audience segments previously high and low in socioeconomic status.
Social structure and the equality of consequences

How an innovation is introduced determines, in part, the degree to which it causes unequal consequences.

Generalization 11-6: A system’s social structure partly determines the equality versus inequality of an innovation’s consequences.
Strategies for Narrowing the Gaps

- “Ups” have greater access to information, creating awareness of innovations, than do “Downs”.

1. **Messages** that are redundant or that are of less interest and/or benefit to the higher socioeconomic subaudience should be provided.
2. Communication messages should be **tailored** especially for the lower-socioeconomic subaudience.
3. **Communication channels** that get through to “downs” should be utilized.
4. “Downs” should be organized into **small groups** in which they can learn about innovations and discuss them.
5. **Change agent contact** should be shifted from the innovators and early adopters to the late majority and laggards.
Strategies for Narrowing the Gaps

“Ups” have greater access to innovation evaluation information from peers than do “Downs”.

Trickle-down theory suggests that “downs” rapidly learn of the “ups” personal experience with an innovation and follow suit. In many systems “ups” talk primarily to “ups”, and “downs” to “downs”. How can this problem be overcome?

1. **Opinion leaders** among the disadvantaged individuals in a system should be identified and change agent contact should be connected on them, to active their peer networks about an innovation.

2. Change agent aids should be selected from among the “downs”, who can contact their homophilous peers about innovations.

3. Groups should be formed among the “downs” to provide them with leadership and social reinforcement in their innovation decision making.
Strategies for Narrowing the Gaps

• “Ups” possess greater slack resources for adopting innovations than “Downs”.

“Ups” can usually adopt innovations much more easily than “downs”, particularly if these new ideas are expensive and technologically complex. How can this problem be overcome?

1. Appropriate innovations for “downs” should be recommended.

2. A social organization should be created to allow “downs” to command the resources needed to adopt certain high-cost innovations.

3. A means through which “downs” can participate in the planning and execution of diffusion programs should be provided.

4. Special diffusion agencies should be established to work only with “downs”.
Wider gaps are not inevitable

**Generalization 11-7:** when especial efforts are made by a diffusion agency, it is possible to narrow, or at least not to widen, socioeconomic gaps in a social system.
Thank You