

Diffusion of Innovations



Review of Chapter 1 – E. M. Rogers

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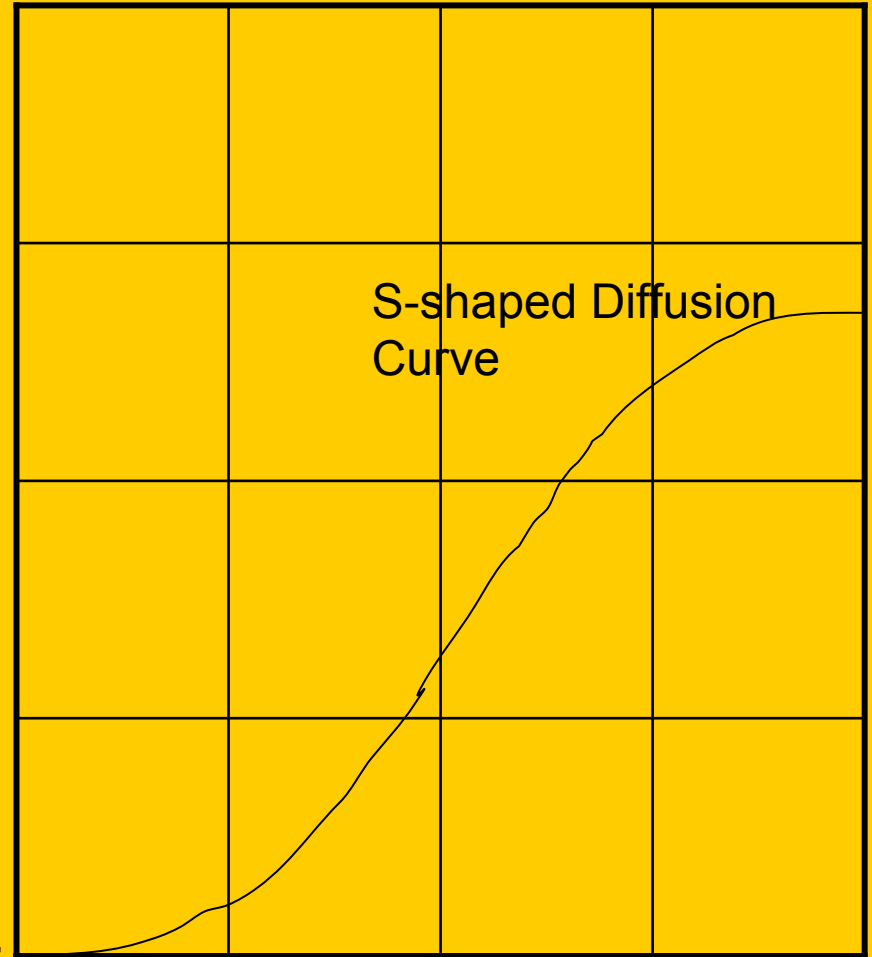
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Where Does our Work Fit In?

Research and Development
Activities to Produce an Innovation

Time ----->



Time ----->

Diffusion (Rogers Definition)

- **Diffusion** is the process in which (1) an **innovation** (2) is **communicated** through certain **channels** (3) **over time** (4) among members of a **social system**.
- It is a special type of communication, in that the messages are concerned with new ideas.

Diffusion vs. Dissemination

- Diffusion
 - Unplanned & spontaneous spread of new ideas
- Dissemination
 - Planned & managed spread of new ideas

Diffusionists vs Disseminationists

- Diffusionists assume
 - Spontaneous acceptance
 - Of new technologies
 - By potential end users
- Disseminationists assume
 - Only by top down, managed control
 - By developers
 - Will new technologies be accepted
 - By potential end users

Diffusionists vs Disseminationists

- Diffusionists
 - Assume the potential end user
 - Has necessary scientific (rational) critical acumen
 - To perceive worth of innovation
- Disseminationists
 - Assume only the developer
 - Has necessary critical acumen
 - To perceive worth of innovation
 - And so the developer must manage its spread

Diffusionists vs Disseminationists

- The difficulty with contrasting these two approaches is this:
- Diffusionists look to the end user and the information base (social system and the software)
- Disseminationists look to the developer of the technology (hardware)
- They separate the dynamic interaction of
 - The developer and the end user
 - Hardware from software
 - Technology from the social system and its use of the information base.
- This may be why Rogers uses only one term “diffusion” for both concepts.

4 Main Elements of Diffusion

1. An innovation
2. Communicated through certain channels
3. Over time
4. Among members of a social system

An Innovation, A Technology

- Are these synonyms?
- An **innovation** is an idea, practice, or object that is perceived as new by an individual or other unit of adoption.
- A **technology** is “a design for instrumental action that reduces the uncertainty of the cause-effect relationships involved in achieving a certain outcome.”

A technology
usually has
2 components

which are...???

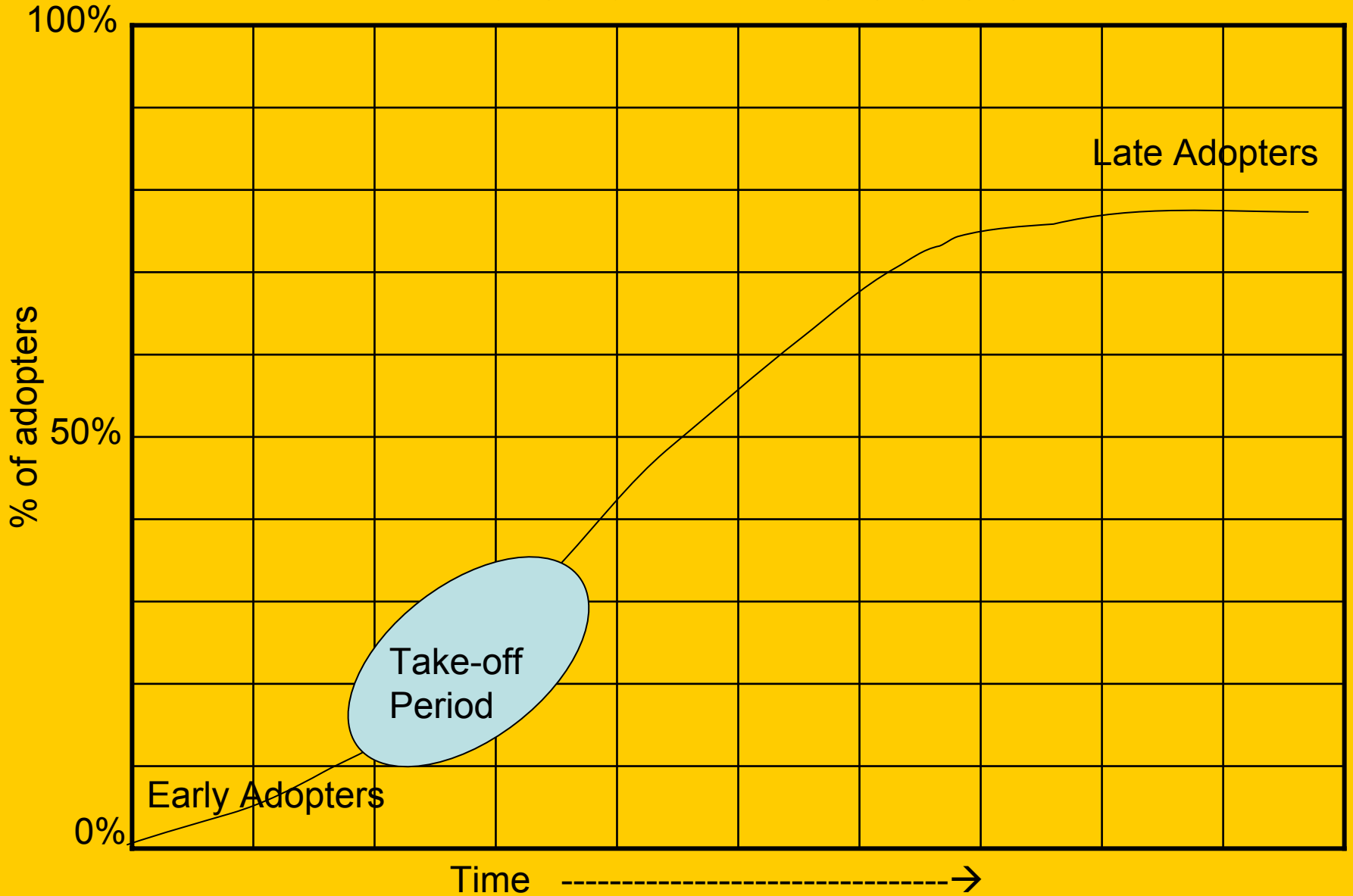
Hardware and Software

- Hardware – the tool that embodies the technology as a material or physical object
- Software – the information base for the tool

Diffusion Process

- Diffusion in its most elementary form is a process that involves:
 - (i) an innovation
 - (ii) an individual or other unit that has knowledge/ experience using the innovation
 - (iii) another individual or unit that does **not** yet have knowledge / experience of the innovation
 - (iv) a communication channel connecting the two units.
- The communication channel is the means by which messages get from one individual to another.
- Mass Media
- Interpersonal

Diffusion Process



Diffusion of Innovation in the Industrialized World Research Findings

- Early adopters and innovators rely on scientific data
- However, most end users do not evaluate an innovation on the basis of scientific data
- Most end users rely on experiential evaluations communicated by peers – individuals like themselves.
- Diffusion of innovation is the product of a complex of interpersonal and mass media communications within a pre-existing social system.

Diffusion in Developing Countries

- Local channels of communication
 - can be crucial on the household, village or tribal level
 - a local head person may have responsibility for well-being of the people.
- The social system (non-local) defines the broader
 - ethnic culture, religion and values of the people
 - This is also crucial for acceptance of a technology

Social System

- What does diffusion research say about social systems???

Social System

- Diffusion research shows that most people rely on **SUBJECTIVE EVALUATIONS** conveyed from near-peers – individuals like themselves.
- The heart of the diffusion process is a **SOCIAL PROCESS** that involves **INTERPERSONAL COMMUNICATION RELATIONSHIPS**.

What are the
5 characteristics of innovations
that explain their different
rates of adoption?

5 characteristics of innovations that explain their different rates of adoption

1. Relative advantage
2. Compatibility
3. Complexity
4. Trialability
5. Observability

What are the
5 adopter categories?

Adopter Categories

1. Innovators
2. Early adopters
3. Early majority adopters
4. Late majority adopters
5. Laggards

Rate of Adoption

- A measure of the length of time required for a certain % of the members of a system to adopt an innovation.

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