

IMPLEMENTASI INOVASI TI PADA PERGURUAN TINGGI: TANTANGAN & PELUANG

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Workshop Implementasi Inovasi TI pada Perguruan Tinggi

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FKIK UIN Syarif Hidayatullah Jakarta



Perkenalan

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- **Dekan Fakultas Teknik Univ Islam Attahiriyah (UNIAT) Jakarta (1999 – 2003)**
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Certification:

- **Sertifikat Pendidik**
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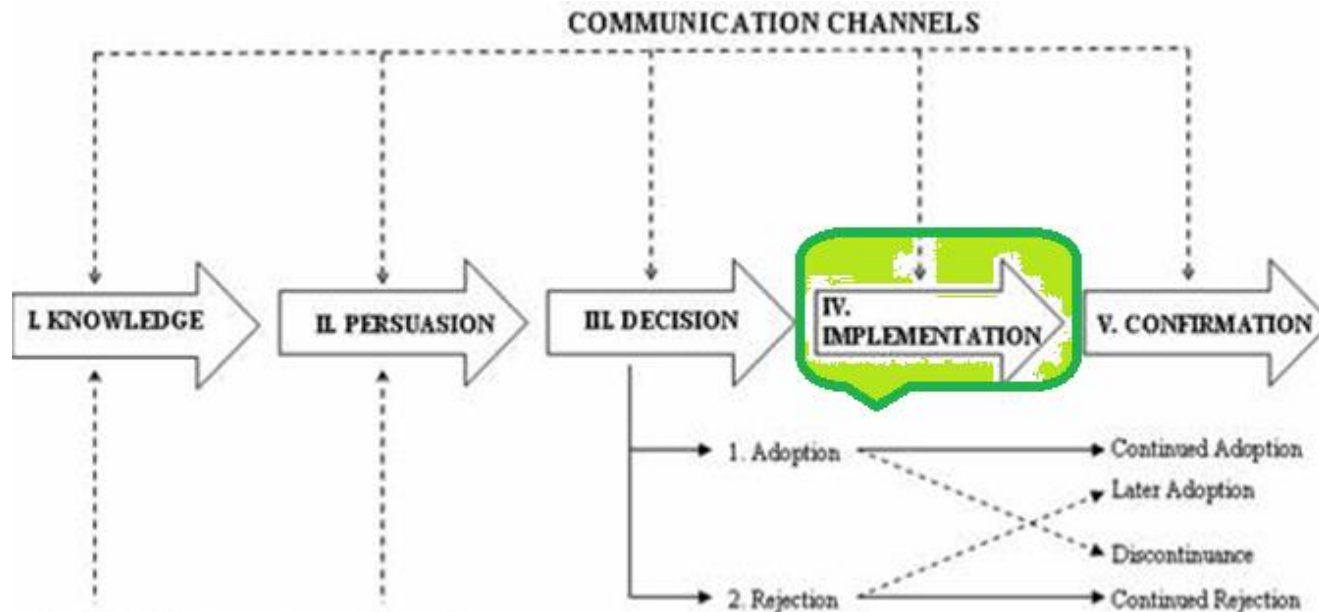


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ADOPTION VS IMPLEMENTATION

Implementasi TI adalah: tindakan, kegiatan, aktifitas dan perilaku yang perlu dilakukan setelah organisasi mengadopsi inovasi TI.



Diffusion of Innovation Model (Rogers, 2003)

- *IT Innovation adoption* is the decision to use a technology innovation → **adoption stage**
- *Innovation implementation* is the transition period during which individuals ideally become increasingly skillful, consistent, and committed to the use of an innovation → **post-adoption**

IT Implementation Problems



- Implementasi TI → tahap *post-adoption* dari proses difusi inovasi
- Tahap ini dimulai pada *decision stage* dari DOI Model (Roger, 1995).
- Decision stage is actually only the beginning of an innovation process.
- After decision made by individual or organizational to adopt an innovation – **it was called by initial adoption** - the process of introducing IT innovation may lead to some resistance by organizational members.
- Resistance may occur at the organizational, group or personal level.
- After an organization adopts a technology innovation, the following activities on post-adoption behavior considered many more challenging due to it has been involved many aspect of innovation implementation process such as **people, technology** and **environment**.
- During **IT implementation** process the organization must optimize the effort directed toward the diffusion of appropriate IT implementation.
- That is why, this stage often face **multi implementation problems**.

DEFINISI INOVASI TI

Innovation Definition	Authors (year)
IT innovation refers to the introduction of new IT initiatives to an organization	Somekh (1998)
Innovation is an idea, practice or object that is perceived as new by the members of a social system	Roger & Scott (1997)
An innovation is a technology or practice that an organization is using for the first time, regardless of whether other organizations have previously used the technology or practices	Klein et al., (2001)
Innovation as a broad conceptualization ranging from new ideas, technologies, systems, products, processes, policies or services that is new to the innovating organization	Sawang (2008)

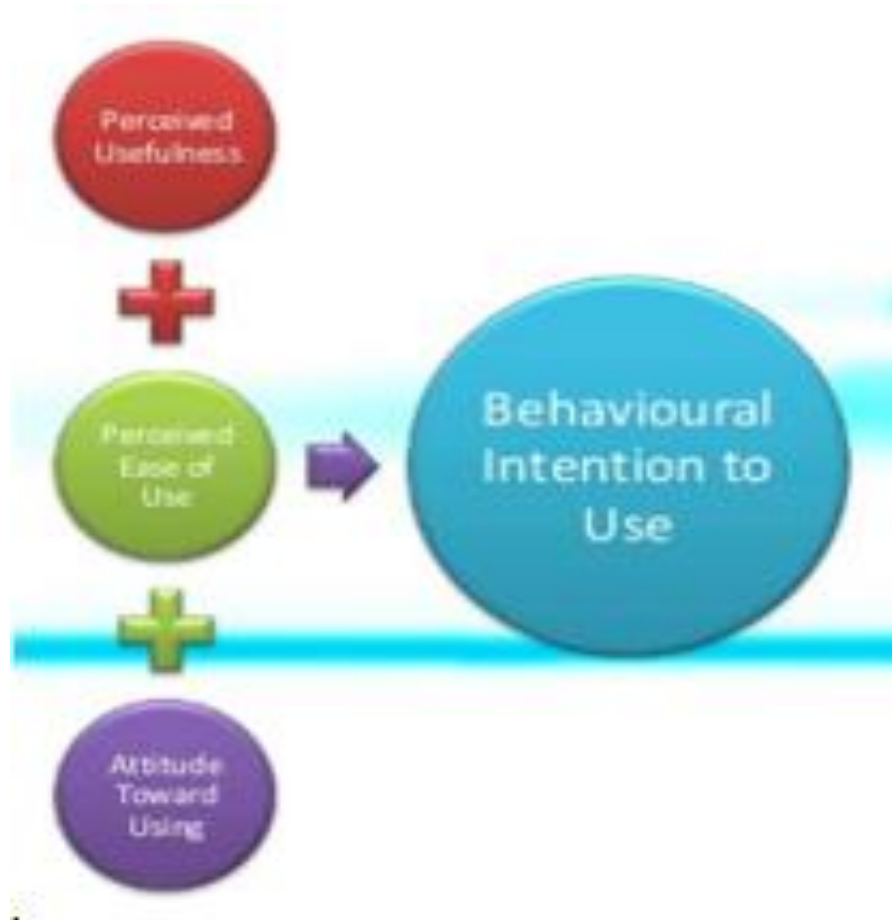
MULTIDIMENSION OF INNOVATION

- The study of **organizational innovation** need to take a **multidimensional approach** when classifying innovations (Cooper, 1998)
- To measure the organizational innovation need to take multidimensional aspects of innovation

Aspects of innovation and their dimensions as measured in the study.

Aspect of Innovation	Dimension
Types of Innovation	Product/Service
	Way of Working (Process)
Attributes of Innovation	Absolute Novelty (Radicalness)
	Relative Novelty (Radicalness)
	Risk (Radicalness)
	Investment (Scale)
	Pervasiveness (Scale)
	Magnitude (Scale)
Consequences of Innovation	Financial
	Employee Relations
	Quality of Life
	Customer
	Overall

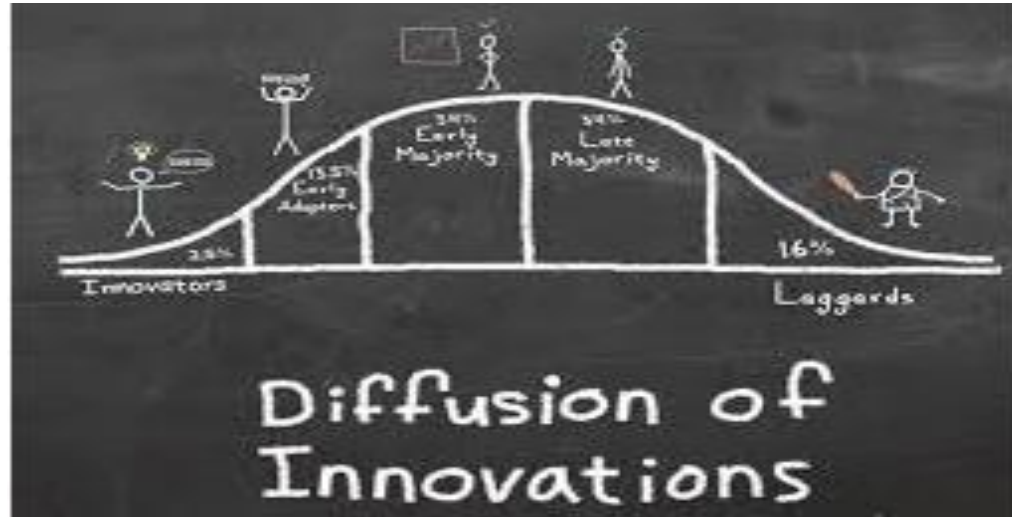
Niat Untuk Mengadopsi TI



FAKTOR2 YG MEMPENGARUHI
NIAT SESEORANG/ORGANISASI
MAU MENGADOPSI
TEKNOLOGI:

1. Asas manfaat (*usefulness*)
2. Mudah digunakan (*ease of use*)
3. Apa kelebihan dari system /teknologi sebelumnya?

Types of Adopters Classified by Innovativeness



2,5%

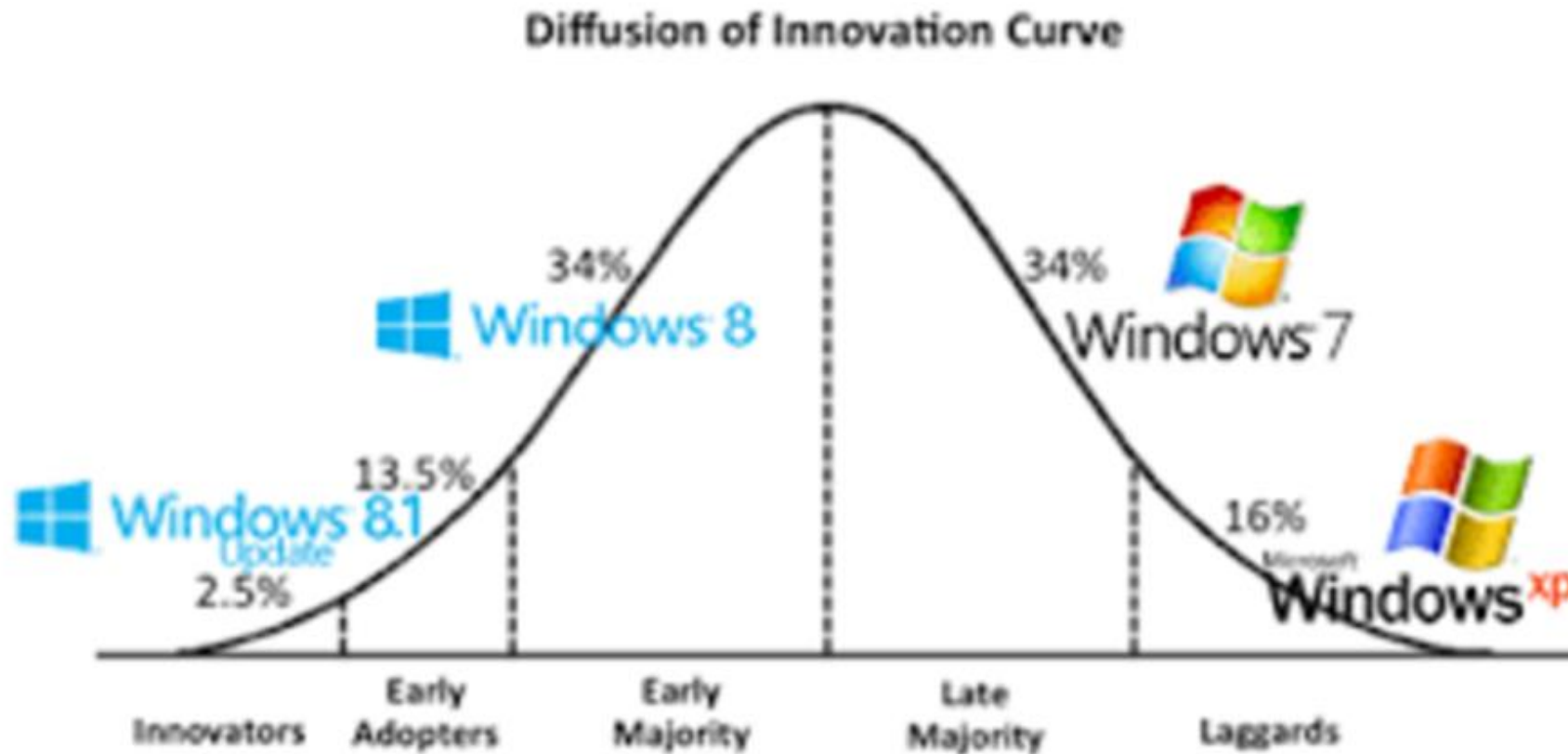
13,5%

34%

34%

16%

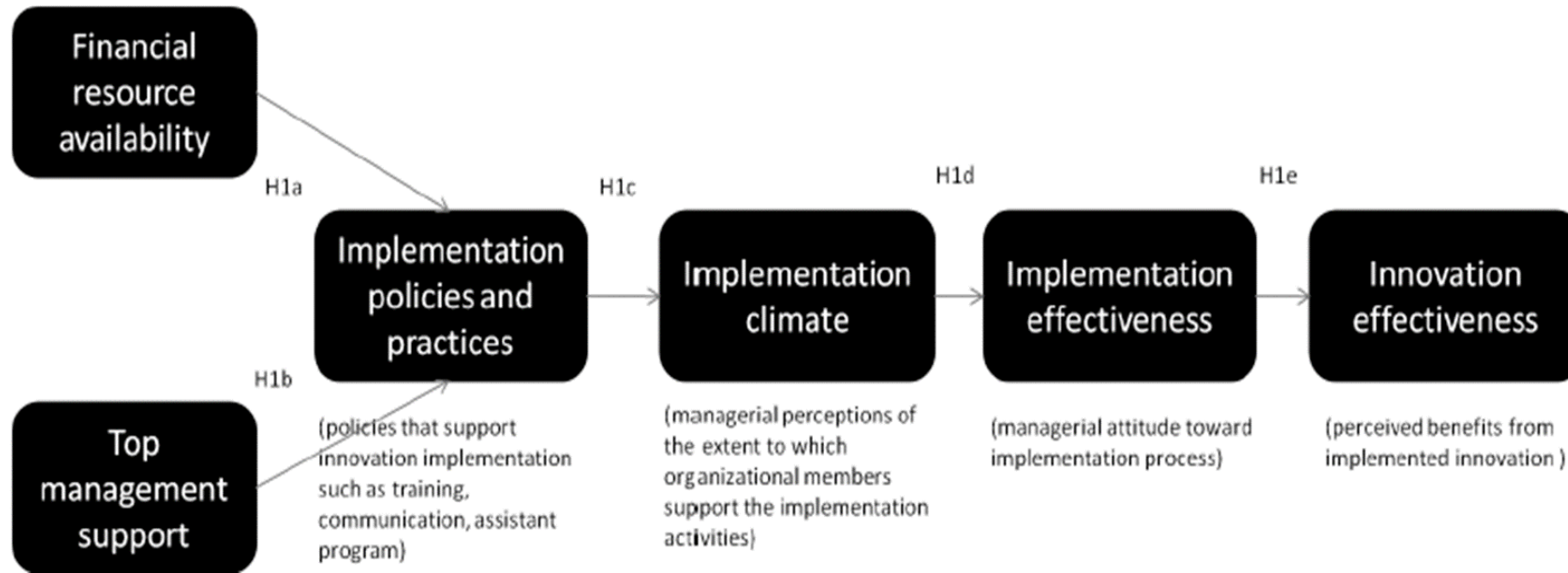
ADOPSI INOVASI TI



IT INNOVATION EFFECTIVENESS

- The findings of the study revealed that 63% of the variance in implementation effectiveness were caused by:
 - incentives
 - skills
 - commitment
 - absence of obstacles
- The study also revealed that a high level of **IT implementation effectiveness** was achieved only when **implementation climate** and **innovation-values fit** were strong

IT IMPLEMENTATION EFFECTIVENESS



- The distinction between **implementation effectiveness** and **innovation effectiveness**
- It cannot be assumed that an organization that successfully implemented an innovation will always gain the intended benefits from the implemented innovation
- Implementation effectiveness is significantly related to organizational support, financial resource availability, policies and practices, and climate.

STUDI KASUS DI UIN JAKARTA

Barriers to ICT implementation

- One of the challenges of ICT adoption process within UIN Jakarta is concerning the cultural issue, for most employees and students are still feeling „lack of trust“ towards ICT usage.

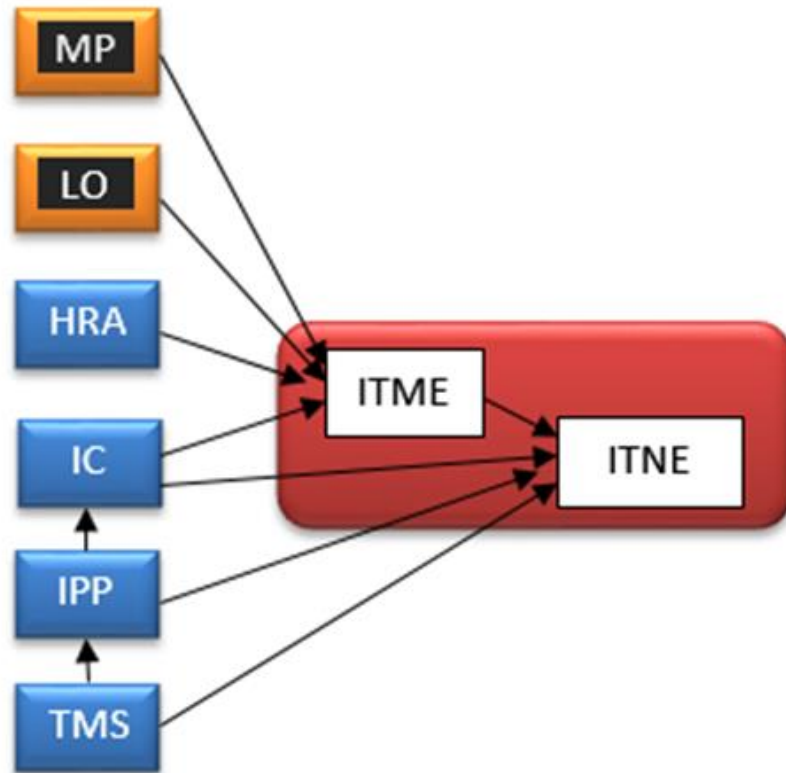
Status and future plan of ICT Implementation at UIN Jakarta

- The top management, particularly, is very optimistic and considers ICT as an added value to the institution with proper planning and use

ICT IMPLEMENTATION BARRIERS AND ORGANIZATIONAL ISSUES IN UIN JAKARTA BASED ON TOP MANAGEMENT PERSPECTIVES

Category	Literature	VR 1 (Vice Rector I)	VR 4 (Vice Rector IV)
Technological Factor	<ul style="list-style-type: none"> ICT facilities, high cost of IT, system incompatibility, quantity and quality of IT infrastructure 	<ul style="list-style-type: none"> Selection ICT product / vendor problems Incompatibility of hardware and software 	<ul style="list-style-type: none"> High cost ICT infrastructure
Management/ Organizational	<ul style="list-style-type: none"> low level of IT awareness, lack of leadership, cost driven strategy, and client lack knowledge of IT benefit, high work load of activity, pressure of work, lack of organizational support, not enough training, lack of share vision, senior management resistance, lack of planning and communication (only focus on short term goal), organizational fit, corporate culture, strategic impact, implementer and researcher perspective, motivation 	<ul style="list-style-type: none"> Lack of IT Culture to most of faculty member Financial supporting : Lack of financial support from policy maker that give less appreciation of the ICT development Failure communication among level of management Hierarchical of organizational structure typical (traditional organizational model) Lack of strategic planning 	<ul style="list-style-type: none"> Shortage of trained and skilled personnel Lack of IT vision of top management level Not enough training
Individual/Social	<ul style="list-style-type: none"> lack of IT skill, computer literacy, language barriers, user resistance, training of users, over expectation of IT functionality, range of user behavior (pragmatist and innovators), lack of user involvement, different users' attitude skills, low user satisfaction and perceived benefit of use, user reluctance, lack of project partner commitment, characteristics of key individual, internal culture, social uncertainty, resistance to change. 	<ul style="list-style-type: none"> User resistance Language barriers Lack of user involvement 	<ul style="list-style-type: none"> Lack of user involvement Resistance to change because of increase workload in their activity and pressure of work Most of staff inadequate and lack of computer literacy
Others : Government policy	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Government Policy maker still not relevance to actual expectation of stakeholder 	<ul style="list-style-type: none"> Rule of organizational structure still in pure of hierarchical model

MODEL EVALUASI IMPLEMENTASI TI



- Managerial Patience (MP)
- Learning Orientation (LO)
- Human Resources Availability (HRA)
- Organizational Climate (IC)
- Top Management Support (TMS)

Thank you

- Q&A