Chapter 4
Digital Systems and the
Design of Work

INTRODUCTION
• Chapter 3 explored how IT influences the
design on organizational level issues, and
manager’s issues both physically and virtually.
• Chapter 4 looks at the impact of IS on the
way work is done by individual workers.
• It explores:
  – the changing nature and design of work,
  – IT’s impact on different types of workers, and
  – the rise of new work environments

MEASURES OF IS SUCCESS
1. HIGH LEVELS OF USE
2. USER ______________
3. FAVORABLE ____________
4. ACHIEVED ______________
5. __________       PAYOFF

Two Important Models
• Framework for work design impact
  (Figure 4.1)
• TAM (Figure 4.9)
  – Technology Acceptance Model (Figure 4.9)
  – CUSTOMER PERCEIVED VALUE
  – Gaining acceptance for IT-induced Change

Figure 4.1 Framework for work design

Figure 4.1 (Revised) Framework for work design
**CUSTOMER PERCEIVED VALUE**

Customer Perceived Value of Products or Services

Customer perceived (tangible & intangible)

CUSTOMER experiences in consuming the product/service

Customer value could be defined by the benefits and costs that customer experiences in consuming the product.

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**Technology Acceptance Model (TAM) and Its Variants: Gaining acceptance for IT-induced Change**

- To avoid resistance to change, system implementers and managers must actively manage the change process
- The Technology Acceptance Model (TAM) was developed by Fred Davis and his colleagues (Figure 4.9).
- TAM suggests that managers cannot get employees to use a system until they ______ to use it.
- Employee attitudes may change if:
  - they believe the system will allow them to do ______ or ______ work for the same amount of effort (perceived usefulness).
  - they believe the system is ______ to use (perceived ease of use).

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**Figure 4.9 (Revised) Technology Acceptance Model (TAM)**

- Individual Difference
- System Characteristics
- Social Influence
- Facilitating Conditions

External Variables

Perceived Usefulness

Attitude Toward Using

Behavioral (Belief) Intention to Use

Actual System Use (Use Behavior)

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**The new technology adoption curve**

<table>
<thead>
<tr>
<th>Readiness</th>
<th>Intensification</th>
<th>Impact/Mature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Activity</td>
<td>Time</td>
<td>Which stage is the current e-business?</td>
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</tbody>
</table>

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**Summary**

- Technology has played a major role in transforming the way work is done.
- Virtual organizations permit workers to work from anywhere.
- Communication and collaboration is becoming increasingly important in today's work.
- IT affects work by creating new work, and more.
- Hiring and supervising employees is being driven more and more by technology.
- Companies must support and encourage telecommuting to attract and retain employees.
- Virtual teams are becoming more common.