

# Being Mindful in Digital Initiatives

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# Agenda

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- A Mindful Digital Strategy Delivers Economic Value
- Understanding the Economic Value of Digitization
- Caveats of Digitization
- Sociotechnical Assessment: Identifying if People Are Ready for Digital Products and Services
- Strategic Assessment: Identifying When Digitization Is Not Right for the Firm
- Risk Assessment: Identifying When Digitization May Benefit Competitors
- Guidelines for Managers
- Concluding Comments

# A Mindful Digital Strategy Delivers Economic Value

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- Digitization has created vast opportunities for firms to redesign existing products and develop new offerings
- Digital strategies can transform the basis of competition
- Managers must be alert to threats from digitization
- Mindfulness:
  - Ability of managers to be aware of more than one perspective
  - Be open to new information
  - Create new categories for formulating strategies

# Understanding the Economic Value of Digitization

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- Digitization projects should lead to:
- An increase in Reservation Price (R)
- A decrease in Marginal Cost (MC)
- Economic Value (EV) is divided in three ways
  - Consumers
  - The firm
  - Labor market

# Economic Value Created by a Firm

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Assume that a firm sells products and services to a consumer. The consumer values the products and services at his/her Reservation Price (R). The firm has a Marginal Cost (MC) for each unit of product or service sold. The Market Price (MP) at which the firm can sell products and services depends on the competitive and economic environment. So,

***Economic Value (EV) created by a firm = Reservation Price (R) – Marginal Cost (MC)***

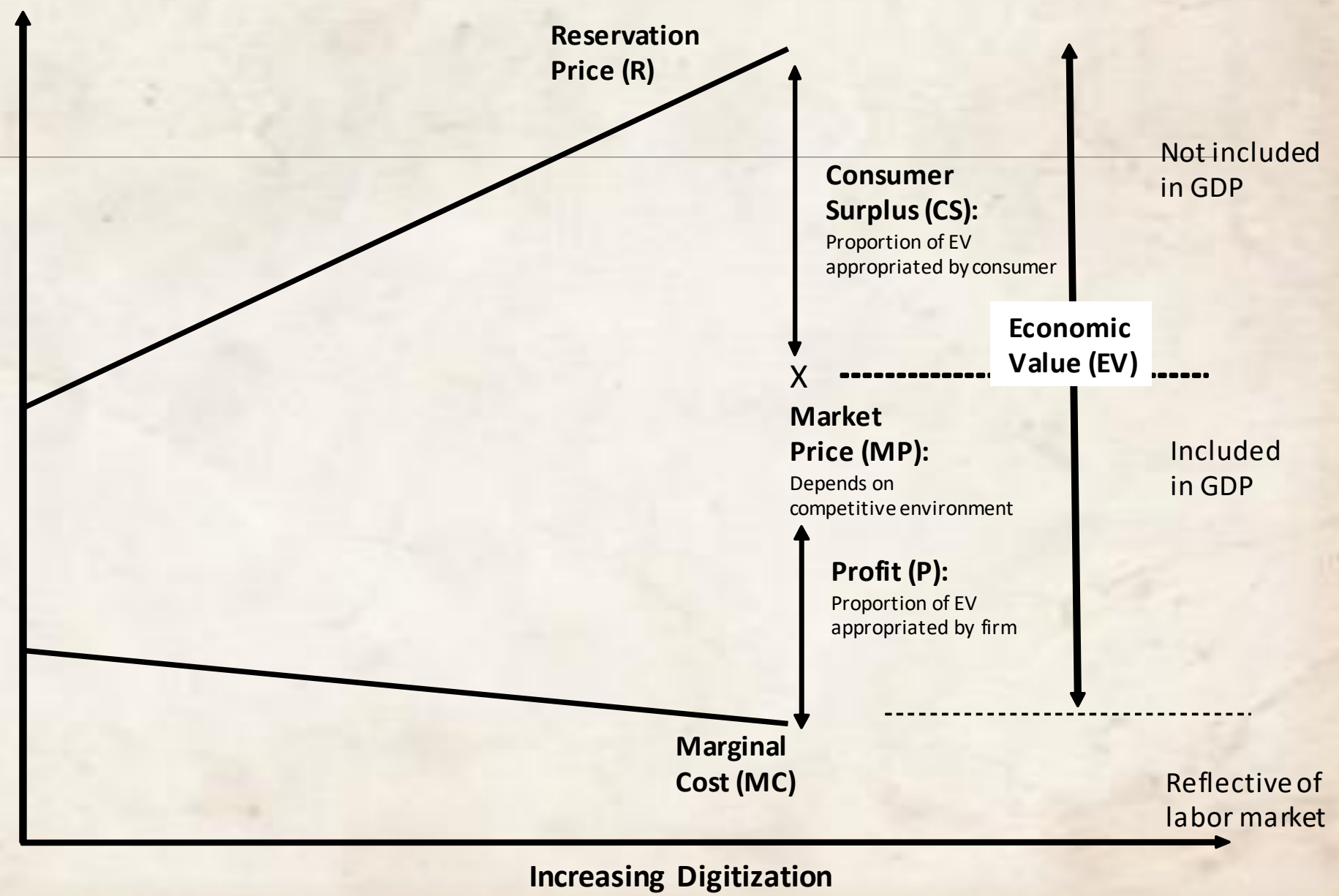
This value is appropriated in two parts:

***Value appropriated to consumers called Consumer Surplus (CS) =  
Reservation Price (R) – Market Price (MP).....(1)***

***Value appropriated to firm (i.e., profit (P)) =  
Market Price (MP) – Marginal Cost (MC)..... (2)***

Although total EV is represented by (1) and (2) together, it is interesting to note that macroeconomic indicators such as aggregate growth and GDP capture only the value represented in (2). This is because Consumer Surplus (1) is largely invisible in financial statements, yet it is recognized and paid for by the consumers in their selection of products and services.

Figure 1:  
Economic  
Value of  
Digitization



# Caveats of Digitization

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- At least two conditions where digitization can result in lower value for a firm
- Occurs before or after digitization initiative launch
- Limits to optimizing value through digitization
- Condition 1 is when digitization decreases Reservation Price (R) rather than increasing it
- Condition 2 is when increasing digitization lowers the probability of value appropriation by the firm

# Figure 2: Two Caveats of Digitization

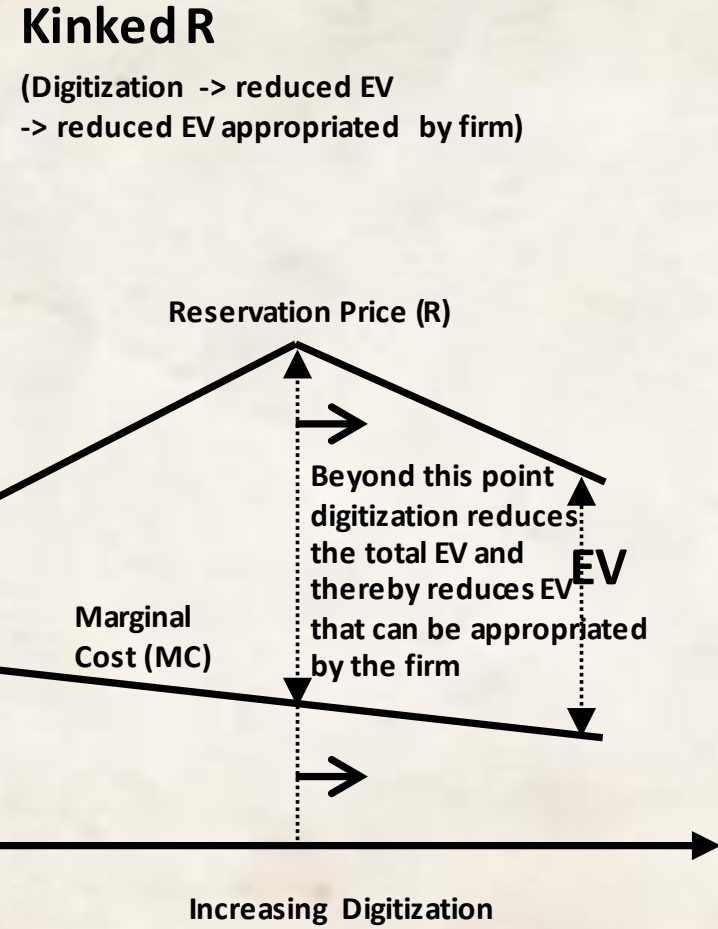


Figure 2a

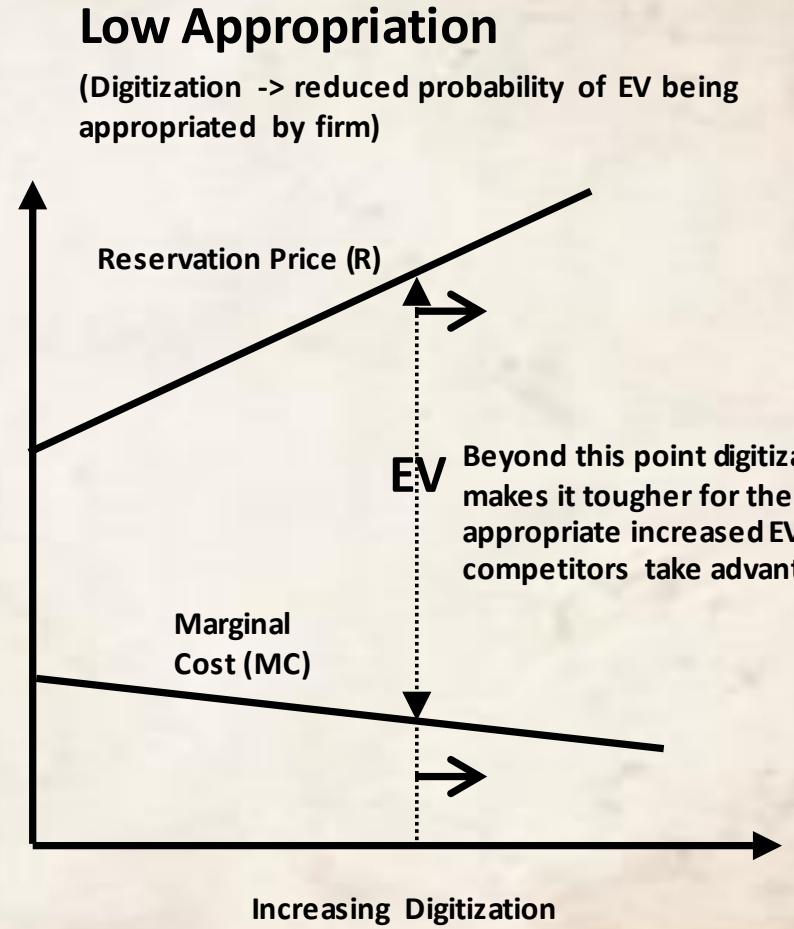


Figure 2b



# Sociotechnical Assessment: Identifying if People Are Ready for Digital Products and Services

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- Consumer Sophistication
- Macro-infrastructure
- Social Norms and Cultural Reservations
- Superordinate Concerns
- Over-automation Concerns

# Addressing People and Technology Concerns

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Digitization initiatives should:

- Consider the prevailing culture and social norms when designing customer experiences.
- Carefully match the sophistication and culture of the technology and the consumer base to realize value.
- Carefully consider the distribution and trajectory of the infrastructure required to leverage digitization.
- Critically analyze superordinate concerns relating to the digital initiative's ecosystem, such as security and privacy, from a consumer standpoint.
- Carefully examine the tradeoffs between automation and reduced flexibility (and other adverse reactions) when pushing automation initiatives.

# Strategic Assessment: Identifying When Digitization Is Not Right for the Firm

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- Firms assume that an online presence and working to expand it is beneficial
- Digitization does not help all firms in the same way
- Economic Value (EV), particularly of physical products, is often driven by the total value proposition that includes both physical value and digital value
- Firms that focus solely on digitization will likely see a downward kink in Reservation Price (R) (Kinked R)
- Value proposition isn't just digital value; also includes physical value and synergy value

# Addressing Concerns about the Firm's Positioning

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Digitization initiatives should:

- Aim to maximize the total value for the firm by seeking synergies between physical and digital assets.
- Assess how the customer base sees the firm's image, and the importance of physical rather than digital investments.

# Risk Assessment: Identifying When Digitization May Benefit Competitors

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- Digitization is Visible to Competitors
- Limited Platform Scope
- Digital strategies should not only consider consumer value but also whether the firm can continue to appropriate value from its digitization investments

# Addressing Competitive Concerns

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Digitization initiatives should:

- Consider the tradeoff between value appropriation and visibility. Is the firm creating a public good that can benefit competitors?
- Consider the scope of the platform and the possibility of competitors replicating the customer experience on general-purpose platforms—regardless of established network effects.

# Guidelines for Managers

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- Use caution
- Consider market-based conditions
- Remember caveats
- Carry out a strategic assessment to determine what level of digitization is right for the firm and if the initiative will reflect the image of the firm in the eyes of the consumer
- Conduct a risk assessment

# Table 1: Summary of Mindful Digitization and Value Analysis

Type of Assessment Prior to Launch	Actions When Evaluating Digital Initiatives
<p><b>Sociotechnical</b></p> <p><b>Issue: Mismatch of Digitization with Customer-Base</b></p> <p><b>Economic Outcome: Kinked Reservation Price</b></p>	<ul style="list-style-type: none"> <li>•Consider the prevailing culture and social norms when designing customer experiences.</li> <li>•Carefully match the sophistication and culture of the technology and the consumer base.</li> <li>•Carefully consider the distribution and trajectory of the infrastructure required to leverage digitization.</li> <li>•Critically analyze superordinate concerns like security and privacy from the standpoint of consumers and the ecosystem.</li> <li>•Carefully examine the tradeoffs between automation and reduced flexibility (and other adverse reactions) in pushing automation initiatives.</li> </ul>
<p><b>Strategic</b></p> <p><b>Issue: Physical Investments Valued (non-substitutable)</b></p> <p><b>Economic Outcome: Kinked Reservation Price</b></p>	<ul style="list-style-type: none"> <li>•Seek synergies between physical and digital assets to maximize the total value for the firm.</li> <li>•Assess how the customer base sees the firm’s image, and the importance of physical over digital investments</li> </ul>
<p><b>Risk Analysis</b></p> <p><b>Issue: High visibility or low scope of initiative</b></p> <p><b>Economic Outcome: Low Appropriation</b></p>	<ul style="list-style-type: none"> <li>•Consider the tradeoff between value appropriation and visibility. Is a public good being created that that can benefit competitors?</li> <li>•Consider the scope of the platform and the possibility of competitors replicating the customer experience on general-purpose platforms—regardless of established network effects.</li> </ul>



# Concluding Comments

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- Digitization offers promise for firms and higher value for consumers
- Conditions when digitization fails to create economic value
- Need careful assessment of these conditions
- Remember caveats
- Undertake mindful digital initiatives
- Conduct sociotechnical, strategic and risk assessments