IBM Case Study - Topic Mapping & Analysis

# Relevant Course Topics and Their Connection to the IBM Case Study

The following table summarizes how the IBM Digital Transformation case study aligns with key topics from the Information Systems course:

|  |  |
| --- | --- |
| Course Topic | Relation to IBM Case |
| Digital Transformation | ⭐⭐⭐⭐⭐ (Primary) |
| Disruptive Technologies | ⭐⭐⭐⭐ |
| Business Models & Internet | ⭐⭐⭐⭐ |
| Systems Thinking & Strategy | ⭐⭐⭐⭐ |
| Decision Making & Support Systems | ⭐⭐⭐ |

# Topic-wise Explanation

## Digital Transformation

Directly aligned with: 08\_IS\_Digital Transformation Mastercard.pdf  
  
IBM’s transformation from a hardware-centric model to a hybrid-cloud and AI-first company is a textbook example of digital transformation. It invested in cloud, AI (Watson), and blockchain technologies, reorganized its structure, reskilled its workforce, and built agile innovation platforms like IBM Garage.

## Disruptive Technologies

Connected to: 05\_IS\_Disruptive Technologies and the Internet.pdf  
  
IBM faced disruption from cloud-native players like AWS and had to transition away from on-premise hardware to stay competitive. This aligns with the concept of disruptive innovation.

## Business Models and the Internet

Related through: 06\_IS\_Business Models and the Internet.pdf  
  
IBM changed its revenue model, divested from hardware (e.g., selling ThinkPad to Lenovo), and adopted platform-based cloud and AI services, which is consistent with new-age digital business models.

## Systems Thinking and Strategy

Related via: EPGP\_IS\_Session\_34\_Systems\_Thinking\_Strategy.pdf  
  
IBM adopted a systemic approach by decentralizing decision-making, breaking departmental silos, and using agile methodologies to improve responsiveness.

## Decision Making & Support Systems

Partially related to: 04\_IS\_Decision Making & Types of Information Systems.pdf  
  
IBM leveraged AI-driven tools like Watson and Cognos to enhance data-driven decision-making for itself and its customers.

# Porter’s Five Forces Analysis: IBM’s Digital Transformation Context

## 1. Competitive Rivalry

High – Intense competition from cloud leaders like AWS, Azure, and Google Cloud. IBM needed to differentiate through hybrid strategies and cognitive computing.

## 2. Threat of New Entrants

Moderate – Cloud platforms reduce entry barriers, but IBM's brand, enterprise trust, and infrastructure form significant barriers.

## 3. Threat of Substitutes

Moderate to High – SaaS solutions and open-source tools can replace IBM’s traditional offerings unless continuous innovation is maintained.

## 4. Bargaining Power of Buyers

High – Customers have more choices in the cloud and AI service markets, requiring IBM to focus on integrated and value-driven offerings.

## 5. Bargaining Power of Suppliers

Low to Moderate – While suppliers of software/hardware matter, IBM’s scale and investments (e.g., Red Hat acquisition) reduce dependency.