

The background features a complex network of thin, light blue lines resembling circuit traces or data paths. Scattered throughout are numerous 3D blue cubes of varying sizes and orientations, some appearing to float or be connected by the lines. The overall color palette is a mix of light and dark blues, creating a futuristic and digital atmosphere.

# BUSINESS DISRUPTION & DIGITAL INNOVATION

DTSL EEP: DIGITAL TRANSFORMATION

NEENA PANDEY, IIMV

## SESSION OBJECTIVE

- IT-Driven Competition
- Disruptive Innovation
- Business Model Theory of disruptive innovation
  - Role of DTs
- Gartner's Hype Cycle

# WAVES OF IT-DRIVEN COMPETITION

## First Wave (1960s-1970s)

- Automation of individual activities – order processing, bill paying, resource planning
- Increase in Productivity, Standardized Processes

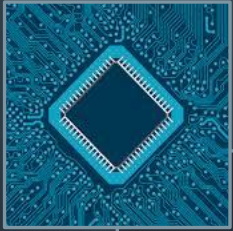
## Second Wave (1980s-1990s)

- Rise of the Internet – Coordination & Integration (ERP, CRM, SCM etc.)
- Globally integrated supply chains – Productivity gains, Transformed value chain

## Third Wave

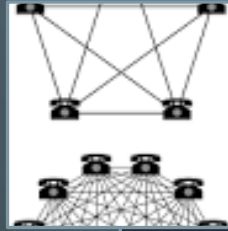
- Newer use cases of existing/upcoming technologies – Social media, Cloud, AI etc.
- IT an integral part of product itself, IoTs/IloTs, Industry 4.0 tech
- Product-as-a service

# PARADIGM CHANGE: THE THREE LAWS OF TECHNOLOGY



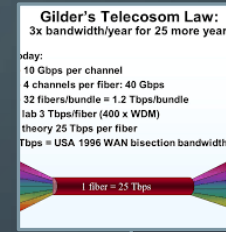
## Moore's Law

- Exponential increase in computing power at lower and lower cost



## Metcalfe's Law

- Effect/Value of network is proportional to the square of the network size (nodes)



## Gilder's Law

- Bandwidth grows at least 3 times faster than computing power –Data Reliability

# FIRMS CLASSIFICATION: OUR FOCUS

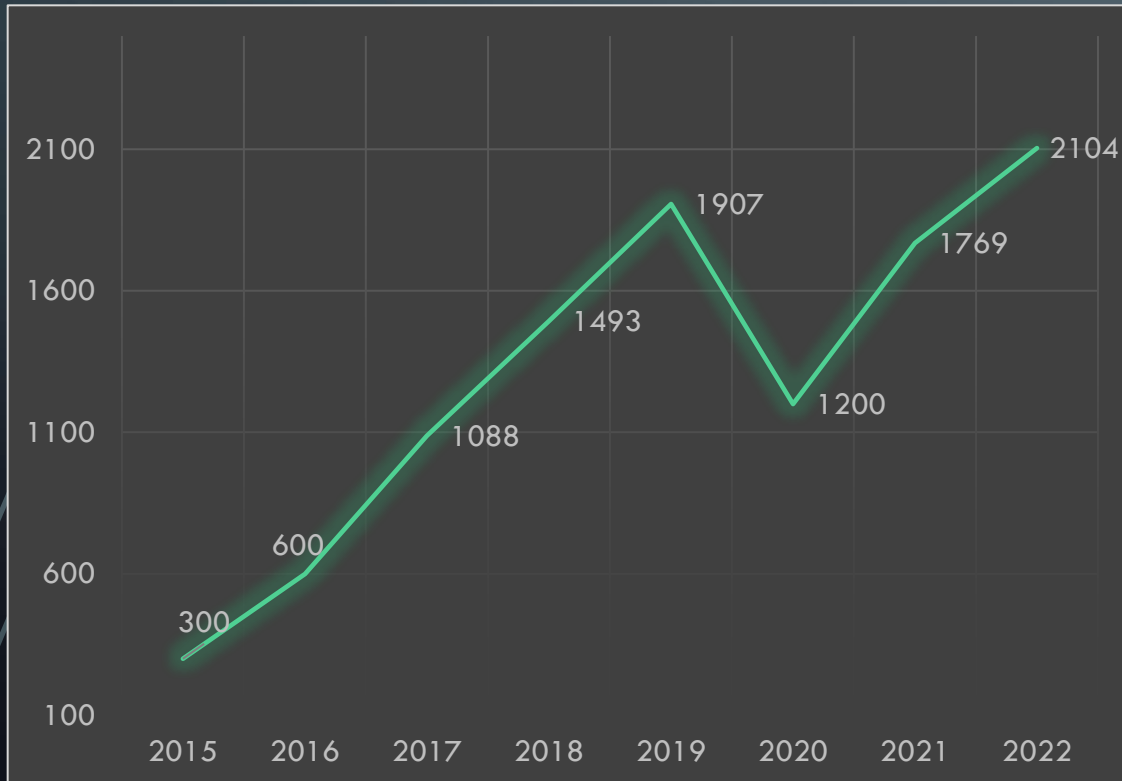
Industry Incumbents

Tech Entrepreneurs

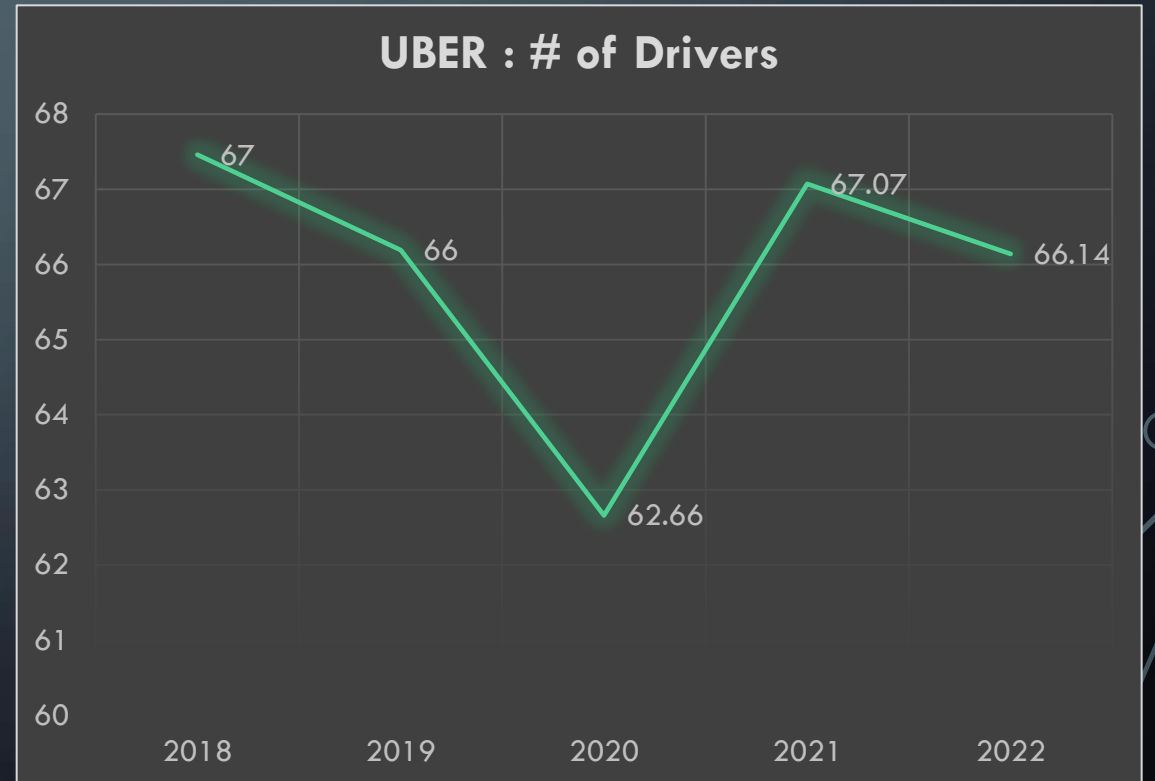
Digital Giants

# DIGITAL GIANTS: SCALE

## UBER: # OF RIDES (BILLION)

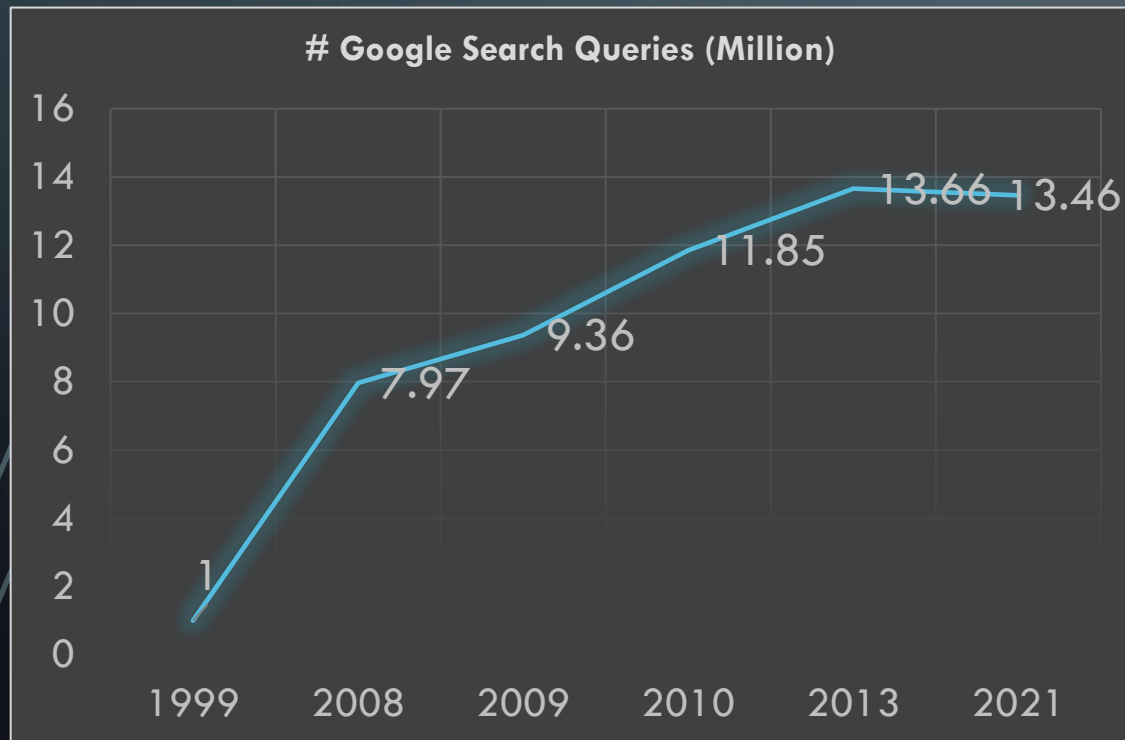


## UBER : RIDESHARE BOOKINGS (IN %)

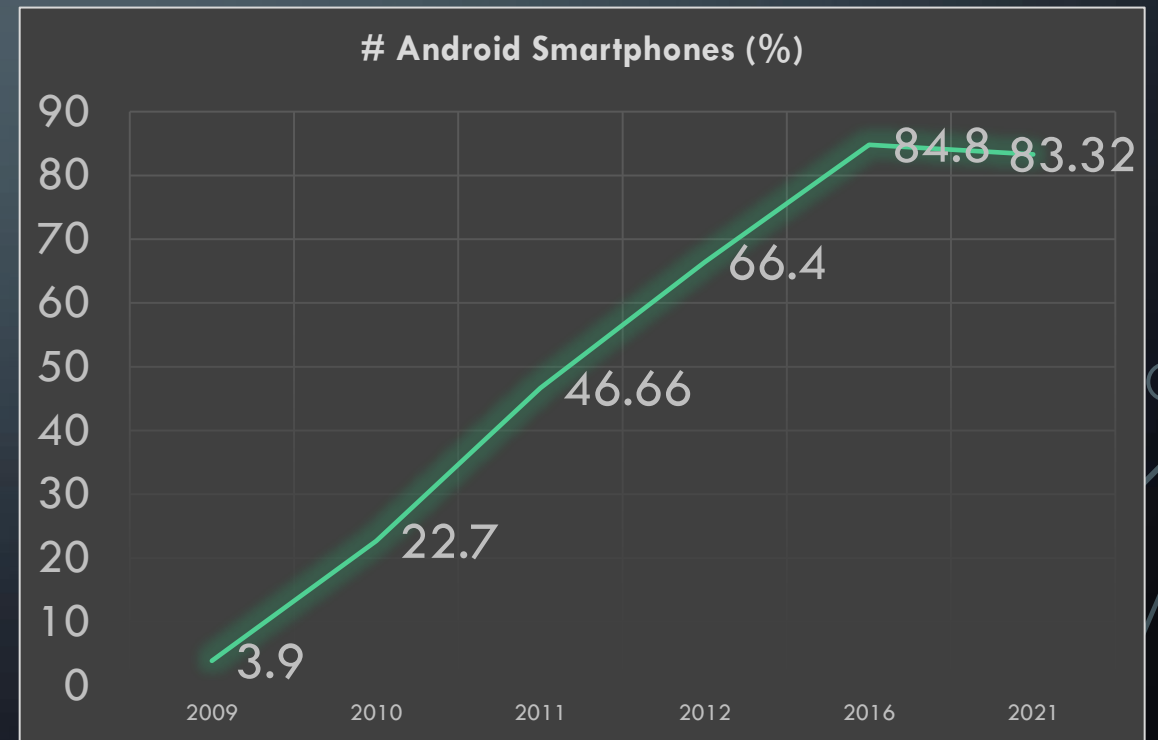


# DIGITAL GIANTS: SCALE

## GOOGLE SEARCH QUERIES



## SMARTPHONES



# DIGITAL GIANTS

## RANKING OF FIRMS



# TRADITIONAL VS. DIGITAL: SCALE-BASED GROWTH

## Traditional

- Linear Market-share growth
- Depends upon firm's capital
- E.g., Walmart, Marriott

## Digital

- Non-linear, exponential expansion
- Incumbents vs. Digital Giants
  - Walmart/Amazon; Marriott/Airbnb

Scale Disadvantage: Only with respect to direct competitors – no. of products produced/sold

# TRADITIONAL VS. DIGITAL: SCOPE-BASED GROWTH

## Traditional

- In Near-by businesses
- Incremental and methodical
- E.g., Bajaj, Honda

## Digital

- Apple
- Google
- Amazon

Scope Disadvantage: Extending Reach/Vulnerable Only to/from adjacent Industries

# INNOVATION

- Innovation is a process of **successfully** creating something **new** that has significant **value** to the relevant unit of adoption
- It can be for a service, product, or a process

# INNOVATION TYPES

## Sustaining (Incremental)

- Remodeling functionality
- Within the boundaries of existing market and technology or processes of an organization
- Carries lower financial and market-acceptance risks

## Disruptive (Radical)

- Breakthrough, Paradigm shift
- Change the game
- The more radical, the more difficult it is to estimate its potential and market acceptance

# DISRUPTIVE INNOVATION

- **Definition:** A disruptive innovation is a **product, process or service** with either **unprecedented performance features** or familiar features that offers **significant improvements in performance or cost that transform existing markets or create new ones**

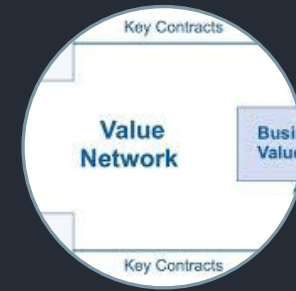
# WHAT IS BUSINESS DISRUPTION?

- **Business disruption** happens when an **existing industry/firm** faces a challenger that **offers far greater value** to the customer in a way that existing firms **cannot compete with directly**.

# BUSINESS MODEL THEORY OF DISRUPTION



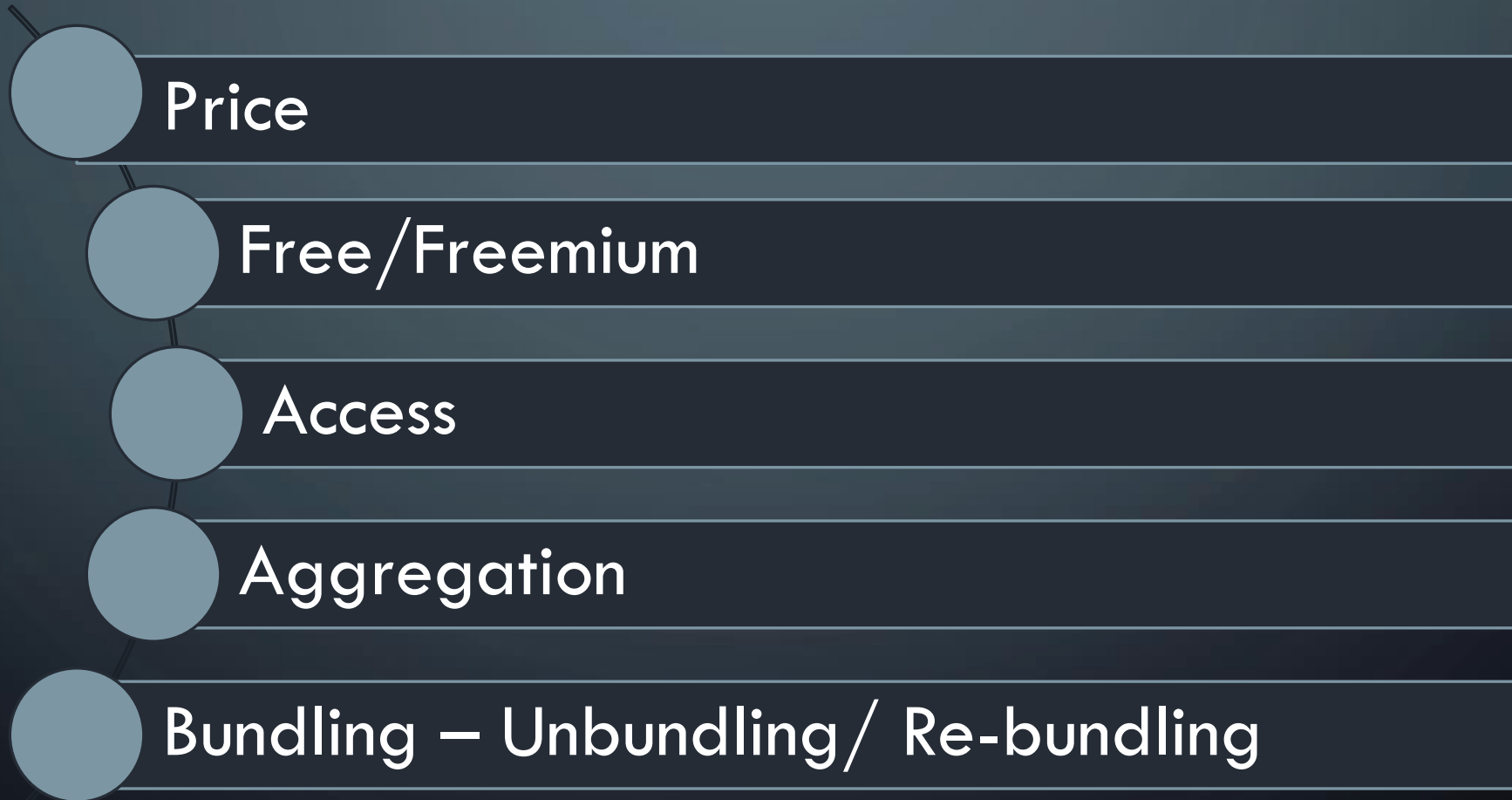
**Value Proposition  
Differential**



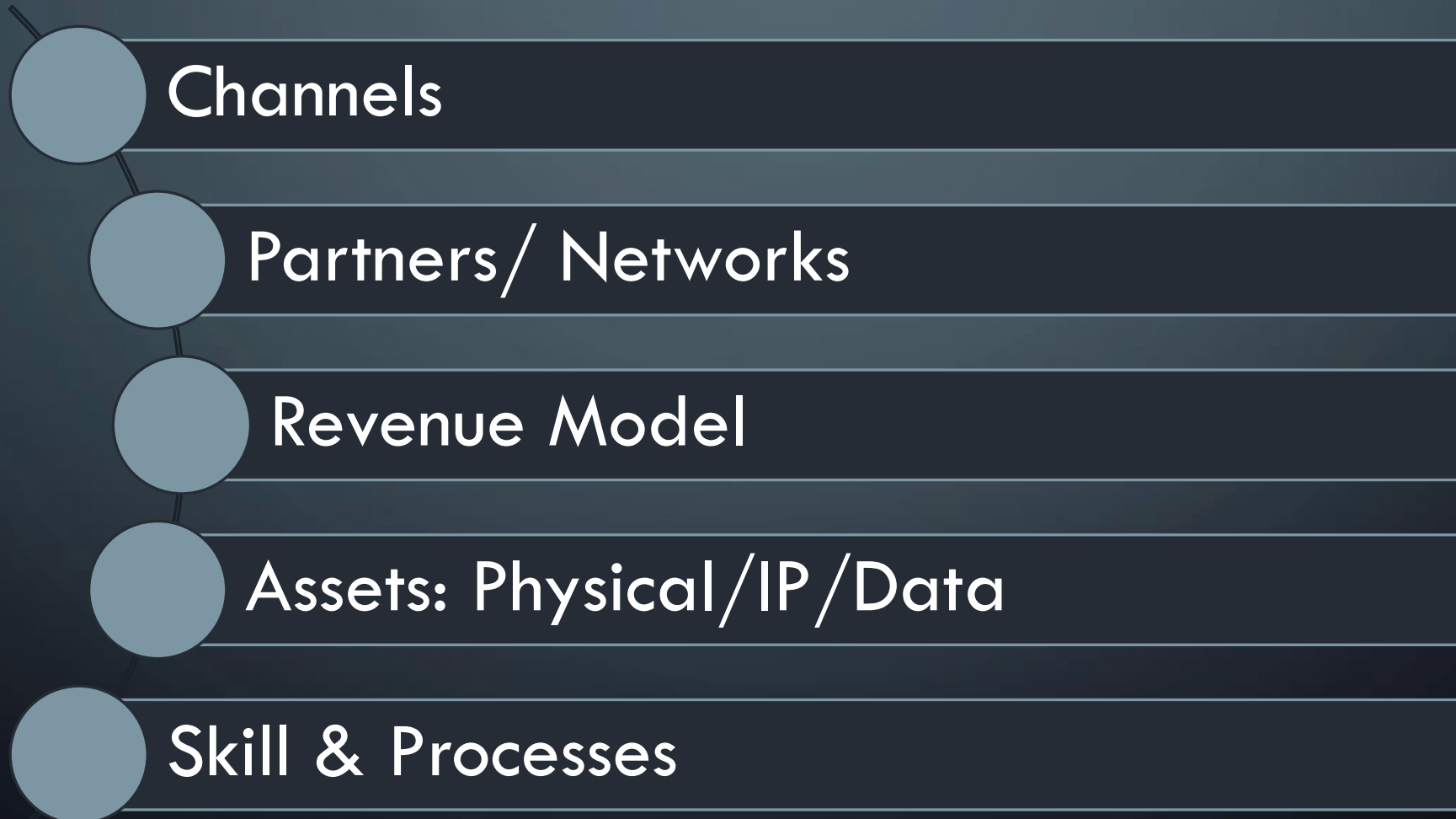
**Value Network  
Differential**



# VALUE PROPOSITION DIFFERENTIAL



# VALUE NETWORK DIFFERENTIAL





# CASE STUDIES



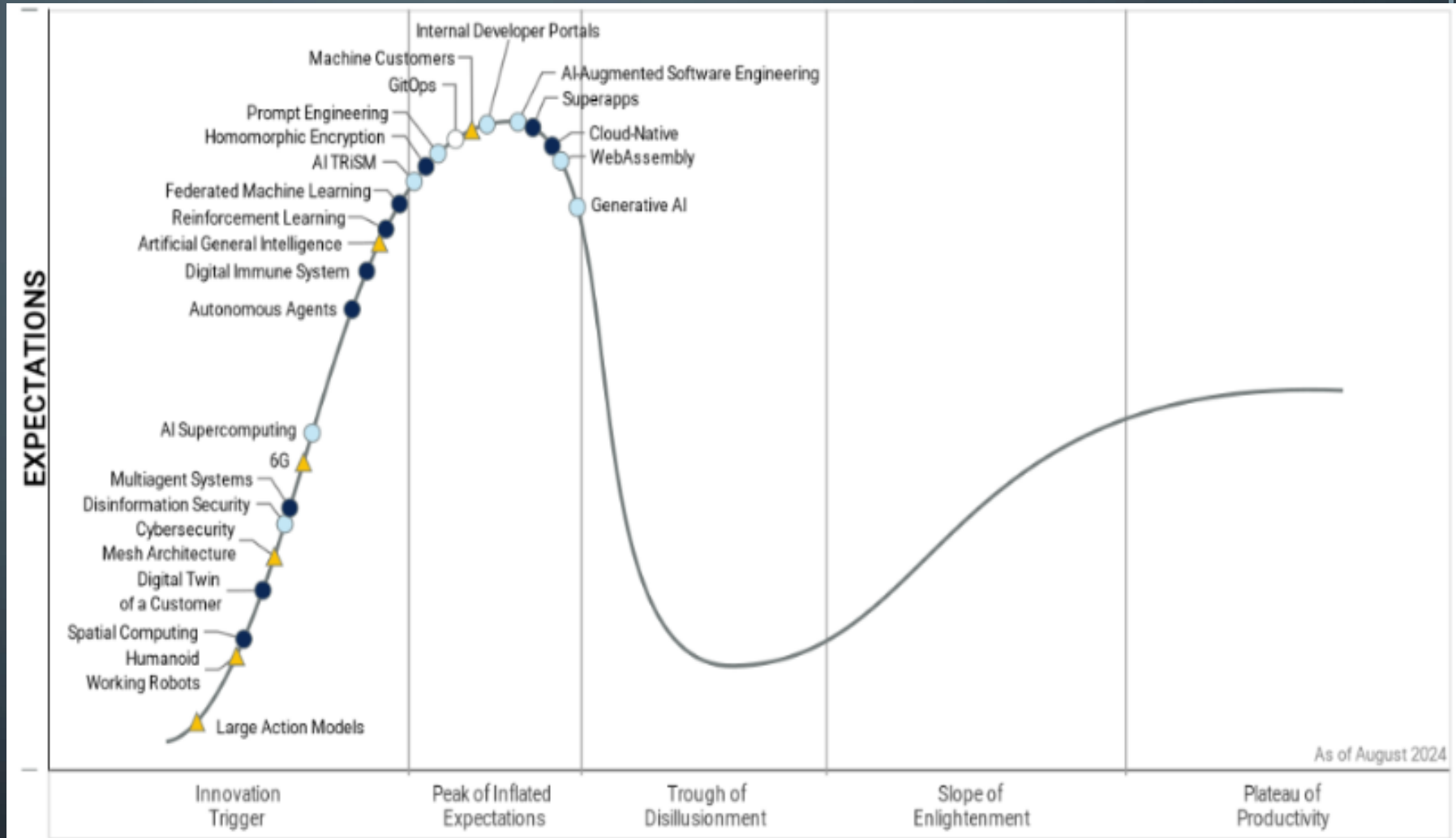
## ➤ Airbnb Vs. Marriott



# GARTNER HYPE CYCLE: TECHNOLOGIES

- <https://www.gartner.com/en/research/methodologies/gartner-hype-cycle>

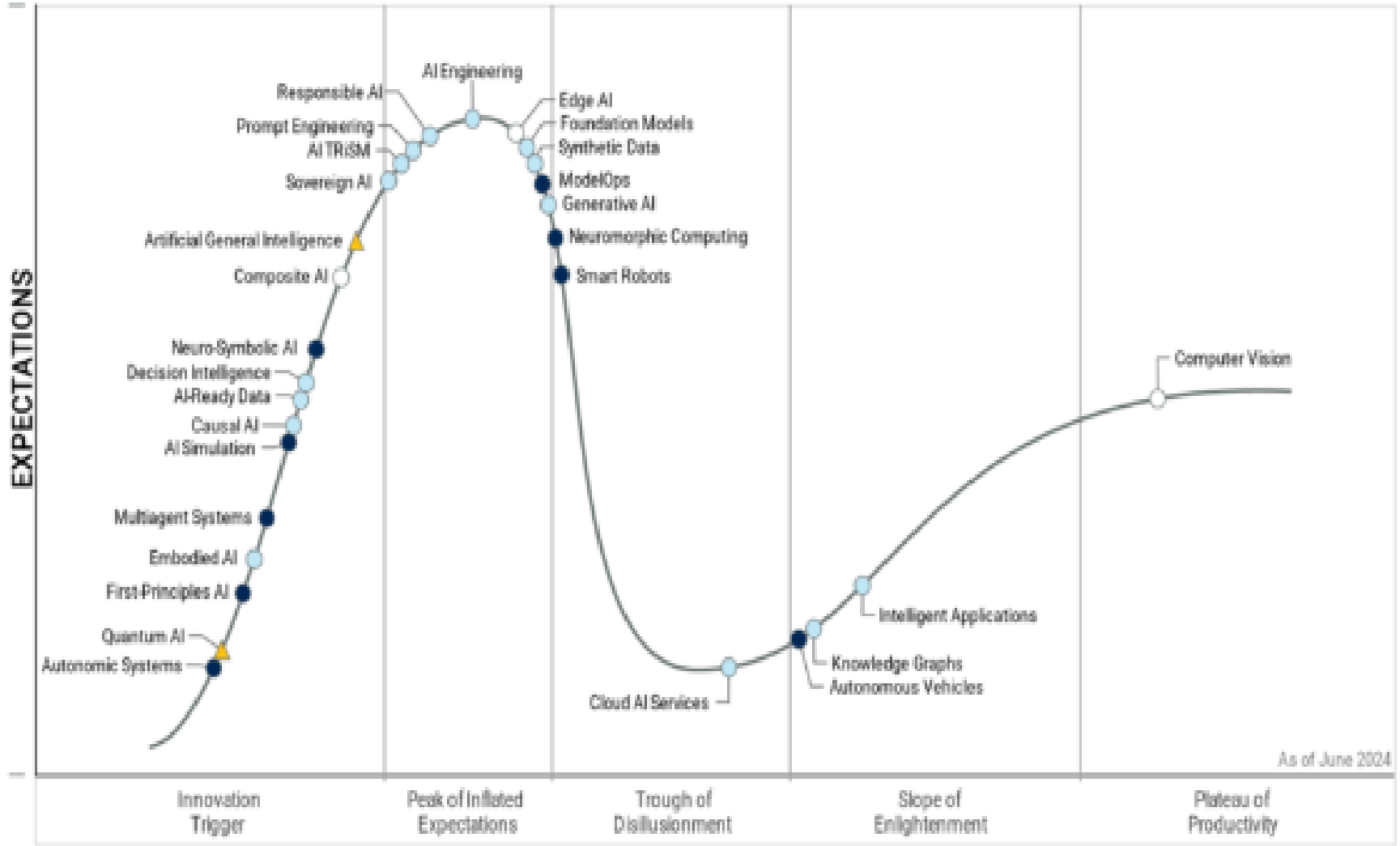
# GARTNER'S HYPE CYCLE FOR EMERGING TECHNOLOGIES , 2023



Plateau will be reached: ○ <2 yrs. ● 2-5 yrs. ● 5-10 yrs. ▲ >10 yrs. ⊗ Obsolete before plateau

# GARTNER'S HYPE CYCLE FOR ARTIFICIAL INTELLIGENCE, 2024

## Hype Cycle for Artificial Intelligence, 2024



As of June 2024

Plateau will be reached: ○ <2 yrs. ● 2-5 yrs. ● 5-10 yrs. ▲ >10 yrs. ⊗ Obsolete before plateau

# REFERENCES

- The Digital Transformation Playbook – David Rogers - book
- Christensen's Model of Disruptive Innovation - article
- Innovator's Dilemma - Book