Mechanics of Disruption

- **Identifying Types of Innovations**
- https://www.coursera.org/learn/digital-disruption/lecture/4vmsZ/types-of-innovation
- **What is Disruptive Innovation?**
- https://www.coursera.org/learn/digital-disruption/lecture/PXOGt/how-is-disruptive-innovation-different

Identifying Types of Innovations

- There are four types of innovations, two of them are:
  - **Incremental innovation**: Based on existing knowledge and aimed at existing markets using existing technology. Example: Shaving blades with increasing number of blades over time.
  - **Radical innovation**: Refers to new markets and new technology. Example: Introduction of the iPhone with a touchscreen and internet communication device.

Identifying Types of Innovation

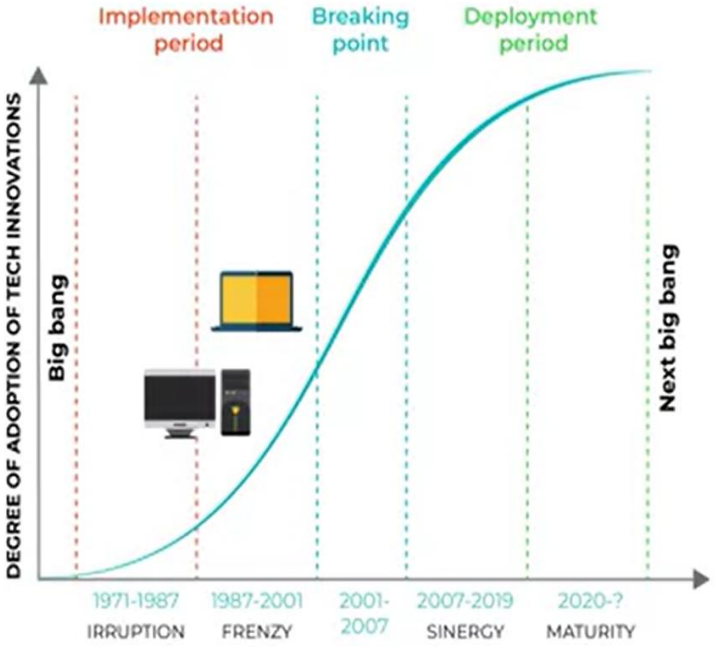
- Other two types of innovation are:
  - **Architectural innovation**: Benefits from existing technology by deploying it in new markets. Example: Copy machines becoming smaller and lighter over time.
  - **Disruptive innovation:** Benefits from new technologies in existing markets, offering a new alternative to customer needs. Example: Laptop computers becoming more portable than desktop computers.

Disruptive Innovation

- Disruptive innovation brings new technology into existing markets, offering a new alternative to customer needs.
- It starts with a low-cost, new solution for an existing market problem.
- Market leaders often disregard disruptive innovations because they seem too basic compared to their current offerings.
- However, disruptive innovations deliver economic value and accessibility to many customers.
- Established firms tend to ignore disruptive technologies until it becomes too late.
- Disruptive innovation creates a new product performance trajectory, serving mainstream customers with new features of value.
- Eventually, disruptive innovators become market leaders and face potential new disruptors.

Technology Enabled Disruption

- 5th Technological Revolution started in 1971 and is ongoing
- Revolution brought personal computing, smartphones, and the internet
- Microchip played a crucial role in the evolution of computer power
- Increase in computing power led to innovations like laptops and smartphones

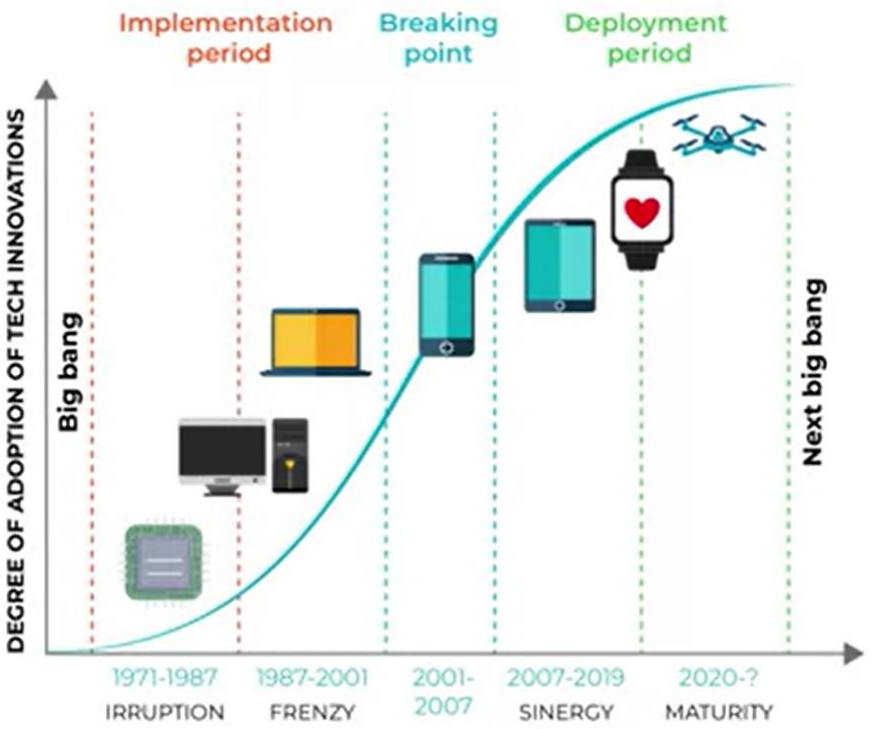


Technology Enabled Disruption

- Impact of these technologies on consumers and corporations:
  - Increased personal productivity
  - Enabled work on the move
  - Rise of business travel
  - Deployment of special microchip-enabled devices like drones and security sensors
  - Era of large software packages for business operations
  - Internet of Things (IoT) - everyday appliances became smart and internet-connected

Technology Enabled Disruption

- iPhone story:
  - iPhone introduced in 2007 as a radical innovation
  - First compact phone and internet communications device without a physical keyboard
  - Popularized new features and functionalities
  - Led to the rise of smartphones as a new category
  - Brands like Samsung, LG, Huawei, and Apple became winners in the industry
  - Transition from PCs to smartphones had a significant impact on the market



How does Amazon drone delivery work? - BBC News (youtube.com)

Technology Enabled Disruption

- Amazon plans to launch drone delivery services in the UK starting next year, promising delivery within 20 to 30 minutes for small packages.
- They currently operate drone deliveries in parts of the US, including Lockford, California, where drones are used to deliver packages over short distances.
- The drones are monitored closely, can travel up to 3.5 miles, and are equipped with technology to avoid obstacles.
- Amazon aims to scale the service gradually based on regulatory approvals, emphasizing safety and efficiency compared to traditional delivery methods.