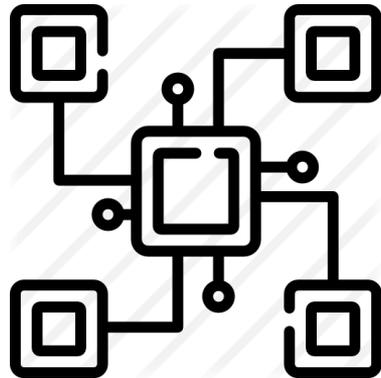


Technology



Diana Sambotin, Aditi Barla, David Song, Sid Rana, Pavan (doesn't have last name)

Overview

- The technological field presents constant threats and opportunities
- Technology affects all business aspects
- Advances in technology have improved productivity
- However, the high cost of staying up to date with technology can cause problems for a business

Opportunities

New working practices

- People work from home by using info communication technology.
- Global businesses are using video conferences to cost costs.

Increased productivity and efficiency gains

- Robots and machines are faster and more accurate than humans

Quicker product development time

- The use of CAD/CAM allows firms to produce prototypes faster

Job creation

- Advances in technology brings need for maintenance and technical staff

New products and new market

- Technology is a source of innovation and brings new products into the market

Threats

A few threats to consider...

- **Technology is not always reliable or secure.** Consider computer failure or hacked files
- **Shorter product life cycles can be out of date quickly** → need continuous updating which is difficult for smaller firms considering their budget
- **Costly.** For example, as smartphones have shorter life cycles, the business' need to devote more time and resources toward innovative product development.
- **Job losses.** Automation can lead to unemployment in mostly the primary and secondary sectors

Factors to Consider

- There are several factors to consider when adopting certain technologies:
 - **Costs** - this includes the costs to buy, install, maintain, replace, and insure the new technologies
 - **Benefits** - managers must consider the expected gains in efficiency and the profits
 - **Human relations** - employees may resist to change, and there might be impacts on morale, working patterns, and workforce planning
 - **Recruitment** - training costs and the number of people who need to be trained are important to consider
 - Training also takes time and space which could affect business functions
- Case Study
 - In June 2010, the UK's largest retailer, Tesco, opened its first supermarket without checkout staff—using self service checkouts. Although this presents the opportunity for lowered operational costs, it also raises the threat of public backlash as a result of mass job loss.

Real-World Examples

Opportunity: Tesla

- 95% of its Tesla Model 3 production is automated
- Decreases costs of assembly and human error while increasing the speed of production



TESLA

SONY®

Threat: Sony

- Had their databases hacked in 2014 by North Korea, releasing the personal information of tens of thousands of its employees
- Cost them millions in damages and also forced them to postpone the release of *The Interview*