Technology: TikTok
Company/Designer: ByteDance Ltd. (founded by Zhang Yiming, Beijing, China, 2012)

How is the environment affected by this technology?

Evidence/Sources:
TikTok requires large-scale data centers to host videos and run algorithms, consuming significant electricity and cooling water. Smartphone production and constant streaming also contribute to e-waste and carbon emissions. *(Source: International Energy Agency, 2023)*

How does the design of this technology impact people?

Evidence/Sources:
TikTok's "infinite scroll" and personalized algorithm encourage long watch times and addictive behavior. The design rewards short attention spans and prioritizes entertainment over reflection or deep engagement. *(Source: Center for Humane Technology, 2024)*

What are the company's business practices (ex: labor, profits)?

Evidence/Sources:
TikTok profits from advertising based on user data collection. Reports cite long working hours for content moderators and algorithmic bias in which creators are promoted. *(Source: The Guardian, 2023)*

What laws/policies apply to this technology?

Evidence/Sources:
TikTok is regulated under GDPR (EU) and COPPA (U.S., for child data). The U.S. government has investigated national security risks due to data being accessible to China-based employees. *(Source: BBC, 2024)*

What are the intended effects of this technology?

Evidence/Sources:
To create and share short-form videos for entertainment, creativity, and community connection. *(Source: TikTok Mission Statement, 2024)*

What are the unintended, unobvious, and disproportionate effects?

Evidence/Sources:
Data exploitation, youth addiction, misinformation, and surveillance risks. Algorithms have been found to disproportionately target or suppress marginalized creators. *(Source: Washington Post, 2024)*

Is the creation, design, and use of this technology just, particularly for minoritized or vulnerable groups?

Evidence/Sources:
Studies show algorithmic bias against people of color, LGBTQ+ creators, and disabled users. *(Source: MIT Tech Review, 2023)*

In what ways does this technology encourage and discourage learning?

Evidence/Sources:
Encourages micro-learning and exposure to diverse cultures. Discourages depth, retention, and focus. *(Source: Pew Research, 2023)*

How would your experience change if you did not use this technology?

Evidence/Sources:
Users might shift to platforms like YouTube Shorts or Instagram Reels, or engage in offline hobbies and social learning. *(Source: Common Sense Media, 2024)*

Considering your answers above, are there hazards associated with this technology that should stop its use?

Evidence/Sources:
Yes, data privacy risks, algorithmic discrimination, and addictive design are significant hazards. *(Source: Forbes Tech Council, 2024)*

Arguments For (Benefits)

- Creative expression and cultural exchange

- Easy access to information and trends

- Economic opportunities for creators and small businesses

- Community formation among niche groups

Arguments Against (Drawbacks)

- Data harvesting and surveillance

- Mental health issues and addictive design

- Algorithmic bias and censorship

- Environmental and labor concerns

Communicate Conclusions

TikTok is **"ethical, but only conditionally."**
It offers significant cultural and educational benefits, but ethical issues in data privacy, design, and equity demand reform. Ethical use would require transparent data policies, algorithmic fairness, and better digital literacy education.

Take Informed Action

Personally: Limit screen time and data sharing.
Pedagogically: Teach students to analyze algorithmic bias.
Collectively: Support regulation for fair algorithms and transparent data use.