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# TIKTOK

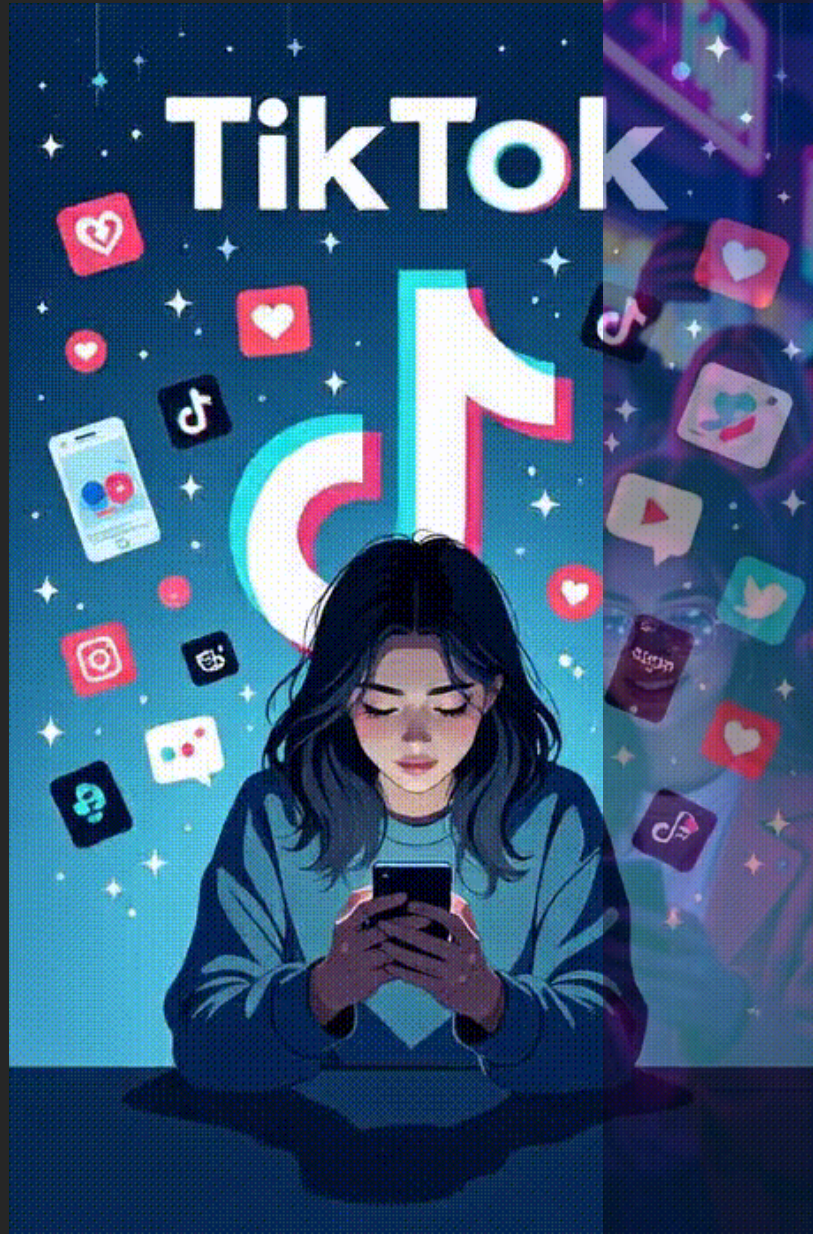
## AS A CASE

**Moral and Ethical Impact  
& Immediate Effects on  
Human Knowledge**

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Human Centred Design

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# TECHNOLOGY AND ACCESSIBILITY

## **What is TikTok?**

- Launched 2018 (ByteDance + Musical.ly merge)
- Short-form video platform (15s–3min)
- Global adoption >1B users in 2 years

## **Accessibility**

- Free app, low entry barrier (phone + internet)
- AI-driven “For You” feed lowers search friction

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# MORAL LENS

## WELLBEING X ADDICTION

### Wellbeing Concerns

- “Infinite scroll” + dopamine-driven design
- Validated addiction measures: TikTok Addiction Scale (PTTUS)
- Attention span reduction: heavy short-video use linked to lower focus in young adults

### Health Risks

- Higher screen time ↔ adolescent obesity risk (meta-analysis, 44 studies)
- WHO: sedentary behavior guidelines urge limits

*Note for delivery: Frame this as “design affordances” rather than blaming users—this aligns with human-centred design ethics.*

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# ETHICAL LENS

## DATA AND GOVERNANCE CONCERNS

- EU fines (€530m, 2025) for inadequate child-data protections
- Cross-border transfer & national security concerns → bans on government devices

## Algorithmic Risks

- Opaque recommender → filter bubbles, misinformation
- Echo chamber research: evidence is mixed, but diversity exposure matters

*(Visual: news headline montage)*

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# IMMEDIATE EFFECTS

## RAPID ADOPTION

- Dance/lip-sync → expanded into education, activism, commerce
- “For You” page reshaped discovery: people consume before intent

## Industry Response

- Clones: Instagram Reels, YouTube Shorts, Netflix “Fast Laughs”
- Short-form became industry default

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# SOCIETAL SHIFTS

## SCREEN TIME, ACTIVITY, OBESITY

- **Youth culture:** new influencers, meme culture dominance
- **Education:** micro-learning (“EduTok”)
- **Commerce:** live shopping, TikTok Shop
- **Social life:** reduced face-to-face interactions, more sedentary time

*(Visual: split-screen: TikTok learning vs TikTok shopping)*

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# LONG-TERM EFFECTS

## Positive

- Democratized creativity, visibility for underrepresented groups
- Global cultural exchange

## Negative

- Increased anxiety/depression in youth
- Attention fragmentation
- Institutional mistrust (data governance, national security)

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# DESIGN RECOMMENDATIONS

## WELLBEING BY DEFAULT

- Adjustable feed pacing;
- "Break" prompts;
- Friction at high-use thresholds;
- Default bedtime quiet hours for minors

## EXPOSURE DIVERSITY

- Inject serendipity & dissenting viewpoints;
- User-visible diversity sliders;
- Periodic "new domains" challenges

## DATA DIGNITY

- Plain-language data flow maps;
- Local storage guarantees;
- Third-party audits;
- Parental dashboards;
- Region-appropriate safeguards



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# TAKEWAYS

## TIED TO BRIEFING...

- TikTok is a UX success story  
→ but design choices amplify **addiction, attention loss, sedentary risks**
- Ethical acceptance depends on **data transparency & wellbeing-first design**
- Human-Centered Design can balance creativity with responsibility

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# REFERENCES

- World Health Organization. (2020). *WHO guidelines on physical activity and sedentary behaviour*. <https://www.who.int/...>
- Bull, F. C., et al. (2020). 2020 WHO guidelines... *Int. J. Behav. Nutr. Phys. Act.*, 17, 141. <https://doi.org/10.1186/s12966-020-01037-z>
- Aykut, G., et al. (2023). Reliability and validity of the problematic TikTok Use Scale... *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsy.2023.1068431>
- Haliti-Sylaj, L., & Sadiku, A. (2024). Impact of short reels on attention span... *Eurasian Journal of Applied Linguistics*, 10(3), 60–68.
- Zhang, X., et al. (2024). Mobile phone short video use negatively impacts attention... *Frontiers in Human Neuroscience*. <https://doi.org/10.3389/fnhum.2024.1383913>
- Shojaati, M., et al. (2022). Screen time increases overweight and obesity risk among adolescents: **Systematic review & meta-analysis**. *BMC Primary Care*, 23, 220. <https://doi.org/10.1186/s12875-022-01761-4>
- Wang, Y., et al. (2022). Effect of screen-time intervention on obesity... **Meta-analysis of RCTs**. *Preventive Medicine*. <https://doi.org/10.1016/j.ypmed.2022.107021>
- Bountouridis, D., et al. (2023). Filter bubbles in recommender systems: **Systematic review**. *arXiv:2307.01221*.
- Nielsen, R. K., et al. (2022). **Echo chambers & polarisation**: Literature review. Reuters Institute. <https://doi.org/10.60625/risj-etxj-7k60>
- Reuters. (2025, May 2). TikTok fined €530m... (EU DPC).

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# SPEAKER NOTES

- S2:** TikTok's mass adoption stems from extremely low friction: no search, just scroll; the recommender "meets" the user.
- S3:** There's now validated measurement for *problematic TikTok use*; lab evidence suggests attentional costs with heavy short-video use. [Frontiers+1UOA Scholar](#)
- S4:** Ethical acceptance depends on transparent data governance; EU rulings and public-sector bans show institutional risk perceptions. [ReutersAP News](#)
- S6:** WHO frames the health baseline; meta-analyses link screen time to adolescent obesity risk; interventions can help. [World Health OrganizationBioMed CentralScienceDirect](#)
- S7:** Information diets narrow under some recommender settings; bake in diversity to reduce bubble effects. Evidence is mixed → avoid overclaiming. [arXivReuters Institute](#)
- S9:** Human-centred fixes: wellbeing defaults, exposure diversity sliders, and audit-ready data flows.

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# THANK YOU

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