# Technology, mental health & well-being

## An engagement initiative by Sycomore AM and Axa IM

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# Technology, mental health & well-being

## Introduction

# INTRODUCTION

## TECHNOLOGY INCREASINGLY SEEN AS NEGATIVE FOR MENTAL HEALTH…

POLITICO
Future Pulse
*The collision of health care and technology.*

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### The health concerns that hang over the metaverse

By ALEXANDRA S. LEVINE | 11/17/2021 10:00 AM EST

Presented by CVS Health

THE BIG IDEA

**VIRTUAL REALITY CHECK:** The coming metaverse from Facebook and other companies — which aims to reimagine today's internet as a 3D experience we can be a part of instead of looking at a screen — could improve or expand access to health care.

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### Social media use linked to depression in adults

People over age 35 were mostly likely to be negatively affected by highly visual apps, such as TikTok and Snapchat.

vidéos radio jt magazines

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### s visioconférences peuvent provoquer ppelé la "Zoom fatigue"

### UK's first gaming addiction centre swamped by demand during pandemic

Over a third of patients stuck on waiting list after referrals dou

The Mainichi
Japan's National Daily Since 1922

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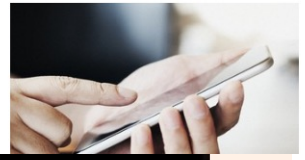
### Nearly 10% of young schoolkids in Yokohama considered internet and gaming addicts: poll

December 6, 2021 (Mainichi Japan)

Japanese version



YOKOHAMA -- Nearly 10% of this eastern Japan city's elementary and junior high school students tend to be addicted to gaming and the internet, a survey by the Yokohama Municipal Board of Education has found.

ABC NEWS

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### Scholars pen open letter to Facebook calling for transparency on youth mental health

ABC Gold Coast / By Dominic Cansdale

Posted 12h ago

# ENGAGEMENT OBJECTIVE

## PRIMARY GOAL FOR TARGETED COMPANIES

- Define a policy and implement measures to mitigate potential adversary effects on end consumer mental health and wellbeing

## SECONDARY GOALS FOR TARGETED COMPANIES

- Publish a commitment to child digital safety in business codes, human rights policies or risk assessment frameworks.
- Develop a mechanism for reporting online harms.
- Cooperate with authorities on reporting online abuse.
- Partner with third parties on online safety
- Provide content control for the company products. This can include blocking access to certain content or product features that control or restrict access.
- Develop a child safety website.
- Support educational initiatives for online safety.

# DEFINITIONS & ENGAGEMENT SCOPE

## CONTENT VS HARDWARE

- Content: video games, streaming, social media, Internet, adtech
- Hardware : screens, smartphones, tablets, computers, TVs

## DEFINITION OF DIRECT vs INDIRECT MENTAL HEALTH ISSUES LINKED TO TECHNOLOGY

- Direct health issues: attention disorder, poorer sleep quality, behavioral troubles, nervous disturbances, fatigue…
- Indirect health issues: overweight or obesity linked to staring at screens…

=> We will center on direct mental health issues only

# SCOPE OF THE ENGAGEMENT

| hardware | media & internet | Gaming | Software | edtech | fintech |
|---|---|---|---|---|---|
| ERICSSON | Alphabet | EA | zoom | 2U | EURONEXT |
| | facebook | | | | |
| | | UBISOFT | Meltwater | skillsoft | |
| | NETFLIX | | | | coinbase |
| SAMSUNG | Spotify | SONY | Office | Chegg | |

# Technology, mental health & well-being

## Risk mapping

# RISK MAPPING

| Direct mental health consequence | Description of mental health issue | Content | Hardware | Companies targeted | Bad practices | Good practices | References |
|---|---|---|---|---|---|---|---|
| Attention disorder | • Concentration issue<br>• Lack of reaction<br>• Disconnection from reality | ✓ | ✓ | GAFAM, LG, Sony, Samsung | • Push notifications<br>• Infinite scrolling<br>• Profiling | Chegg mental health week, screen time monitoring (Ubisoft for children), limited scrolling (NA). | Too early or screen overuse leads to concentration disorders (L'enfant et les écrans, un avis de l'Académie des sciences, Institut de France, Académie des sciences, 2013, Bach et al.) |
| Behavioral troubles | • Isolation, mutism<br>• Depression,<br>• Pervasive developmental disorders / autistic disorders | ✓ | ✓ | Apple, LG, Sony, Samsung, EA, Ubisoft, Netflix, Facebook | • Violent video games (EA, Activision)<br>• Social media (TikTok, Instagram, Facebook)<br>• Screen overuse | Screen time monitoring (Ubisoft). NENT active visioning for children (NENT). For video games, promote family / sports game (Nintendo). Design social media platforms especially for children (GoBubble, Spotlite). | Too early or screen overuse leads to depression, isolation, psychiatry issues. Because of the immersion it generates, screen culture can also prevent people from stepping back and causing a form of confinement. (Bach et al., 2013)<br><br>OECD 2018, Children & Young People's Mental Health in the Digital Age, Shaping the Future<br><br>Severe communication and behavioral problems for children exposed to screens: staring into space, lack of reaction to questioning, isolation, mutism, incomprehension, intolerance to frustration, strong agitation, aggressiveness, stereotypies. (Les écrans : un danger pour les enfants de 0 à 4 ans, Docteur Ducanda) |
| Addiction | • Behavioral addiction<br>• Lack of autoregulation | ✓ | ✓ | Netflix, Nordic Entertainment Group, GAFA, Believe (video segment), Tencent, EA, Coinbase, Euronext, | • Autoplay (Netflix, YT)<br>• Push notifications (Facebook, Insta)<br>• Infinite scrolling (Facebook)<br>• Profiling & social media engagement<br>• Loot boxes | Ubisoft steps vs addiction for young users. No autoplay (Prime settings), increase time latency between two episodes (NA), display nb of hours watching / spent on mobile phone / social media (Netflix). | A little bit of internet use is positive, while excessive use has a negative impact on mental wellbeing (OECD 2018, Children & Young People's Mental Health in the Digital Age, Shaping the Future).<br><br>Smartphone and Internet addiction categorized as a behavioral addictions which symptoms include salience, tolerance, mood modification, conflict, withdrawal and relapse (Grant et al., 2010; Griffiths, 2005). |

# RISK MAPPING

| Direct mental health consequence | Description of mental health issue | Content | Hardware | Companies targeted | Bad practices | Good practices | References |
|---|---|---|---|---|---|---|---|
| **Sleep time & quality** | • Poorer sleep quality<br>• Loss of deep sleep<br>• Sleep disorders<br>• Late sleep<br><br>Linked with addiction | | ✓ | Apple, LG, Sony, Samsung | • Screen overuse | https://www.thelightphone.com/, Blue-light filters / smartphone with AMOLED display and QuadHD resolution (Samsung S20). Monitoring sleep quality, motion, and bio-signals (Apple Health). | Screen time and Internet usage affect sleep (Brunborg et al., 2011; Vollmer et al., 2012)<br><br>SNS addicts show poorer sleep quality than non-SNS addicts (Wolniczak et al., 2013).<br><br>The presence of a screen in the child's room linked to an altered amount of sleep (J. Lédée, 2018)<br><br>Excessive smartphone use at night could keep one awake till late, thus impairing sleep and influencing stress and depression (Lemola et al., 2015).<br><br>Sleep loss—particularly the loss of deep sleep—is linked to a long list of chronic health conditions, including Alzheimer's disease, anxiety, dementia, depression, hypertension, and type 2 diabetes. It also affects cognitive function, attention, and decision making. McKinsey |
| **Wellbeing** | • Nervous disturbances<br>• Weakening of the immune system<br>• Eardrum problems<br>• Fatigue | | ✓ | Apple, Ericsson | • Facebook enhancing cyberbullying and hatred online<br>• Spotify proposes music depending on mood, can induce depressive state | Research on health impacts of its technology with academics (Ericsson on 5G).<br>Health monitoring technology (Apple Health). | Social media can contribute to increased stress and low self-esteem (UK Royal Society for Public Health)<br><br>The negative effects of smartphone overuse on health include cancer; brain tumor; nervous disturbances; weakening of the immune system; problems with the eardrum; pain in the wrist, neck, and joints; fatigue; and sleep disorders (Alasdair and Philips, 2017; Richard, 2001) |
| **Language development** | Lower language skills for children | ✓ | ✓ | Netflix, Amazon Prime | • Passive visioning for children | Active visioning for children (NENT), screenless toys (Tonies) | Exposure to the TV statistically delays language development (C. Panayoty-Vanhoutte, 2015)<br><br>Young children exposed to non-interactive screens for more than 2 hours a day have poorer school performance; elimination of other forms of cultivation (Bach et al., 2013) |

# REGULATION

## EU US UK | Gaming

The Star Wars Battlefront 2 loot box controversy in 2017 increased the scrutiny of regulators on monetization in video games. Since then, **Belgium and Netherlands enforced a loot box ban** and other countries are talking about potential regulation (UK and US notably).
**Proposed bill to ban loot boxes & in-game micro-transactions in the US:** In 2019, Senator Josh Hawley introduced a bill to congress that would ban loot boxes, and other micro-transactions, in games played by minors, but the bill has not progressed any further.

## China | Gaming

**National Press and Publication Administrationn online gaming limitation for children**
Since September 31, 2021, minors are not allowed to play more than 3-hours of games a week and only between 8 p.m. and 9 p.m. on Fridays and weekends, and1hour on public holidays. Previously under-18 gamers were allowed to play 90 minutes a day.

## UK | Social Media & Gaming

**Age-Appropriate Design Code (Children's code)**
Children's Code Legislation aims to stop companies targeting children with ads and nudging them to stay online. Breaking the code will carry the same potential penalties as the EU's General Data Protection Regulation (GDPR), including a fine of up to 4 % of global turnover for companies that do not comply.

## US | Online platforms, Social Media & Gaming

**The Children's Online Privacy Protection Act calls on major US tech and gaming companies to voluntarily adopt the UK Information Commissioner's Office's code for American children.** Congress proposed 16 as the age at which children should legally be allowed to give away their data and their privacy.
**The California Age-Appropriate Design Code Act** requires online platforms to consider the best interest of child users and to default to privacy and safety settings that protect children's mental and physical health and wellbeing. Businesses with an online presence will have to complete a data protection impact assessment before offering new online services, products, or features likely to be accessed by children.
**The Kids Online Safety Act (KOSA)** legislation would require social media platforms put the interests of children first by requiring platforms to make safety the default and to give kids and parents tools to help prevent the destructive impact of social media.

# REGULATION

## EU | Online Platforms, Internet Services Providers & Gaming

**Digital Services Act**

This legislation on digital services sets the principle that what is illegal offline is also illegal online. It establishes a set of rules to make digital platforms responsible and to fight against the distribution of illegal or harmful contents and products. It mainly targets internet services providers, cloud computing services, online platforms (marketplaces, content sharing platforms, social networks, etc.) and large online platforms and search engines. The DSA contains a provision of systemic risks (art 34) which covers, among other topics, physical heath, mental health and protection of minors.

## EU US | Internet

**Declaration for the future of the internet**

33 signatories in addition to the EU members states and the US have adopted the Declaration setting out a vision of a trusted internet. Partners commit to protect human rights online and across the digital world.

## California | Social Media

**AB 587**

Fight disinformation, hate speech and extremism. The state requires social media platforms to reveal their content moderation policies.

## US | Social Media

**Platform Accountability and Consumer Transparency Act (PACT)**

Legislation introduced to Senate in 2020 compelling social-media platforms to allow academic researchers access to their data, proposed by the Stanford University researcher Nate Persily.

## France | Hardware

**Loi Studer**

Reinforces parental controls by requiring manufacturers of  manufacturers of connected devices to install a parental control device and to offer its activation when the device is first put into service.

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## Indicators

# INDICATORS

1. the company has a high-level commitment to child digital safety in business codes, human rights policies or risk assessment frameworks.
2. the company has a mechanism for reporting online harms.
3. the company cooperates with authorities on reporting online abuse.
4. the company partners with third parties on online safety
5. the company provides content control for its products. This can include blocking access to certain content or product features that control or restrict access.
6. the company has a child safety website.
7. the company supports educational initiatives for online safety.
8. the company has other significant initiative(s) not covered above (e.g., online child safety programs for parents, online child safety training for employees, child online safety team, etc.)

# Technology, mental health & well-being

## Engagement next steps

# ENGAGEMENT NEXT STEPS

1. Join the initiative on the PRI platform (open to non-members):
   https://collaborate.unpri.org/group/15236/about
   "Join collaborative engagement and sign letter on tech, mental health & wellbeing"

2. Deadline to join the engagement initiative (provide logo + AUM in USD by e-mail) and to provide your interests as a lead and co-lead investor for companies: **April 11th**

3. April 11th afternoon CET time: Launch call with investors joining the engagement initiative

4. April 14th: Public communication on the engagement with list of investors and total AUM

5. By end of May: Lead investors reach out to support investors to define an engagement strategy, send the template engagement letters to the companies and ask for an engagement call

6. June: Engagement call with the companies

7. By September 19th: lead investors provide feedback on their engagement calls

8. Engagement update group call in end September

# Technology, mental health & well-being

Thank you!

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# Technology, mental health & well-being

## Appendix

# GENERAL QUESTIONS TO THE COMPANY

## PRODUCTS AND SERVICES

Is the company offering tech hardware with screens or technology content (video games, steaming services, social medial, Internet, adtech etc.) services?
If relevant, what is the associated share of revenues?
Does the company's supplier produce one of the listed technologies?

## GOVERNANCE

Does the company evaluate the impact of its technology on users' health?
If yes, who is responsible (Board / top management / committees)?
Is there evidence of Employee training and whistleblower programs addressing these issues ?
Can the company provide evidence of conducting robust, systematic risk assessments of government regulations, policy enforcement, clients' use to identify and mitigate the potential risks of the companies' products and services on mental health?
What are the salient risks you have identified, associated to the development and use of this specific technology / service?
Does the company carry out systematic stakeholder engagement to assess risks to human rights?
Has the Company a formalized way for stakeholders and rightsholders to raise concerns about the impact of a company's operations or activities on their rights or wellbeing?
Does the company engage on lobbying activities on health regulation in tech? How does the company ensure these activities are coherent with its policies?
In which cases do you perform any client's due diligence ?

# GENERAL QUESTIONS TO THE COMPANY

## CHILD PROTECTION

Does the company carry out a stand-alone children's rights risk or impact assessment or integrate children's rights in other impact assessments such as human rights or social/community impact assessments.
Are there extra protections in place for children's protection I terms of well-being and privacy?
Are there specific measures in place concerning responsible marketing to children as ensuring children are not targeted with marketing of products that may be harmful to them (e.g. alcohol, tobacco, or unhealthy foods)?

## REMEDY

Is there evidence of clear, predictable grievance mechanisms enabling users or anyone the technology has impacted to notify the company when there are mental health risks?
Is there any evidence that the company provides appropriate responses or remedies ?
What does the company disclose when related to remediation measures?

# APPENDIX - EXAMPLE OF ENGAGEMENT

## NETFLIX OVERVIEW

Netflix, Inc. is an American subscription streaming service and production company. Launched on August 29, 1997, it offers a library of films and television series through distribution deals as well as its own productions, known as Netflix Originals.

## NETFLIX ENGAGEMENT PROPOSALS

Have a resource at Netflix that can speak externally to investors on ESG topics for the company.
Take actions to limit the addiction impact of the platform.
Set the transition time before the launch of the following episode of a series back to 15 seconds (vs 6 seconds since November 2020).
Commit to respect internationally recognized human rights.
Set human rights due diligence measures.

# APPENDIX - EXAMPLE OF ENGAGEMENT

## EA OVERVIEW

Electronic Arts Inc. develops, markets, publishes, and distributes games, content and services for game consoles, PCs, mobile phones, and tablets worldwide. EA is the 2nd biggest game company in the world. The company develops and publishes games and services across various genres, such as sports, first-person shooter, action, roleplaying, and simulation primarily under the Battlefield, The Sims, Apex Legends, Need for Speed, and Plants v. Zombies brands; and license games from others, including FIFA, Madden NFL, and Star Wars brands. It also provides advertising services; and licenses its games to third parties to distribute and host its games. The company markets and sells its games and services through digital distribution and retail channels, as well as directly to mass market retailers, specialty stores, and distribution arrangements. It has a strategic partnership with KLab Inc. for game development.

## EA ENGAGEMENT PROPOSALS

Screen time monitoring, especially for children.
Disclose measures to prevent addiction.
Remaster games that require to pay a lot to perform well (eg FIFA Ultimate Team).
Disclose % revenues from violent video games.
Promote family / sports game.

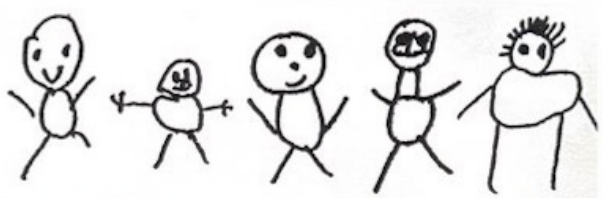
# APPENDIX – IMPACT OF SCREEN TIME

Voici les dessins d'enfants qui regardent la TV au maximum 60 minutes par jour:

Dessins enfants TV moins de 60 minutes par jour © *Peter Winterstein : Macht Fernseh dumm?*

.

Voici les dessins d'enfants qui regardent la TV plus de 3h par jour:



Dessins enfants TV plus de 3 h par jour © *Peter Winterstein : Macht Fernseh dumm?*

.

Enfin voici les dessins d'enfants qu'on a laissés seuls regarder la TV et qui en ont subi des traumatismes importants

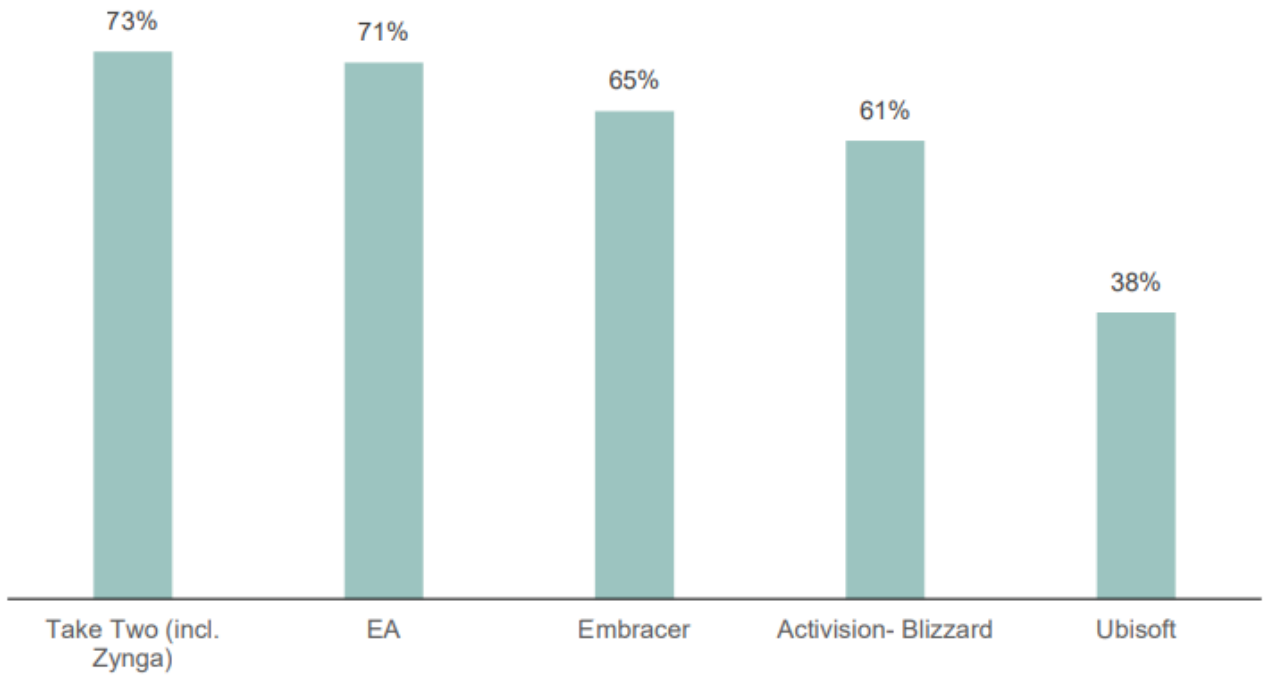
Dessins enfants seuls devant TV / traumatismes familiaux © *Peter Winterstein : Macht Fernseh dumm?*

# APPENDIX – EXPOSURE TO LOOT BOXES

For the FY ending March 22, BNP estimates that Western publishers generated between 40% and 70% of their net bookings through monetization. Companies don't split their monetization by sub-segment but it is fair to assume EA and Take Two are more exposed to loot boxes than others through their sports titles.

**Figure 11: Monetization / Live services represent the majority of Western publishers' net booking**

Monetization / Live services booking as % of group's booking




*Source: Company data, BNP Paribas Exane estimates*