



Education, Energy, and the Environment Committee
House Bill 1141
State Information Technology - Prohibited Applications and Websites
March 30, 2023
Favorable with Amendment

Chair Feldman, Vice Chair Kagan and committee members, thank you for the opportunity to share our position on House Bill 1141. The bill bans all products by ByteDance Ltd. and TenCent Holdings Ltd. from all state-owned information technology, including all devices and networks.

While the University System of Maryland (USM) understands the importance of protecting information and technological systems from foreign government hacking and monitoring, it's best to take a risk-based approach in the USM. The ability to tailor our environment to support the use of technology and information in low-risk situations while restricting and protecting our technology and information in high-risk situations is crucial. The complete ban of all products by ByteDance Ltd. and TenCent Holdings Ltd. does not allow the necessary flexibility to refine security and privacy measures to the needs of unique university communities.

Scope of the Bill

The bill requires the ban of all applications and websites developed by ByteDance Ltd. and TenCent Holdings Ltd. on all state owned or leased "information technology" (as defined in the State Finance and Procurement Article, Section 3.5-301 of the Maryland Code). Section 3.5-301 of the Maryland Code defines Information Technology as:

"Information technology" means all electronic information processing, including:

- (1) maintenance;***
- (2) telecommunications;***
- (3) hardware;***
- (4) software; and***
- (5) associated services.***

This would essentially require that USM institutions block any application and/or website by ByteDance or TenCent Holdings from all information technology and networks owned, operated, or leased by an institution or its agents. This also requires a ban on all applications and/or websites from the statewide education and research networks that the USM operates for groups across the state. By requiring the ban on statewide education and research networks, the effect of the ban will go far beyond the original public sector scope and impact private institutions as well as any other organization that partners with Maryland's research and education networks. This could have a harmful effect on interinstitutional collaboration on our statewide education networks. Lastly, it would impact the use of applications and websites by ByteDance and TenCent Holdings on personal devices that connect to an institutional or state network. That would impact on the experience of all students and guests of our institutions in addition to employees.

Impact of a Total Ban on USM Institutions

USM institutions and the communities we serve would be significantly impacted from an academic, operational and financial perspective by a total ban on applications and websites operated by ByteDance Ltd. and TenCent Holdings Ltd.

Educational Impacts

Within USM institutions, gaming platforms are at the heart of many video game design and data visualization classes. Video Game design classes rely on the ability to research and play games that are on the market. Students also use development tools provided by video game companies to develop new games. In particular, Unreal Engine, by Epic Games, is used across many USM video game programs and activities. Unreal Engine is an incredible tool for developing games, as well as non-game interactive and VR applications; and with source code, students can learn how game design engines work from the inside. Beyond video game classes, data visualization instruction also uses game-based data visualization tools to teach data analysis. Classes across the institutions also use voice and instant messaging tools such as Discord for formal class discussion and informal student to student discussions. Taking away these tools would harm video game and data visualization classes and take away a popular tool for class and student discussion.

Research Impacts

House Bill 1141 will impact research in several areas of the USM. While the bill allows for security research, it would block all other types of research. For example, UMBC uses the Unreal Engine, by Epic Games, for data visualization research. Unreal Engine is the only large-scale commercial-quality game engine available with full programming source code. The Unreal Engine is the underlying framework for the UMBC Imaging Research Center's three plus year research project to build visualization solutions for clients such as the City of

Baltimore and US Military Intelligence. Banning applications and websites from ByteDance and TenCent Holdings would have a catastrophic impact on these data science / visualization research programs.

A total ban on TikTok would also block research such as:

- Dancing to the #challenge: The Effect of TikTok on Closing the Artist Gender Gap

Yifei Wang, Associate Professor Jui Ramaprasad and co-author Anandasivam Gopal – Robert H. Smith School of Business

<https://today.umd.edu/could-the-next-viral-dance-challenge-help-narrow-musics-gender-gap>

- Pitfalls of the TikTok Resume Trend

Associate Professor Cynthia Kay Stevens – Robert H. Smith School of Business

<https://www.rhsmith.umd.edu/research/pitfalls-tiktok-resume-trend>

- There's a long history of dances being pilfered for profit – and TikTok is the latest battleground

Jill Vasbinder, Senior Lecturer in Dance <https://umbc.edu/stories/theres-a-long-history-of-dances-being-pilfered-for-profit-and-tiktok-is-the-latest-battleground/>

Marketing Impacts

A total ban of TikTok would have dramatic impacts on marketing across the USM. Many university admissions departments use TikTok to advertise programs to high school students. Institutions also use TikTok to reach our current students and alumni, promote events, solicit donations, and announce accomplishments. Lastly, our athletics programs utilize TikTok heavily to draw attention to our athletic teams, advertise upcoming games, and attract new athletes. A ban of TikTok would impact the USM's ability to engage with its community around the globe and grow its programs.

Entertainment Impact

The gaming impact on university communities would be tremendous. TenCent Holdings is one of the largest gaming conglomerates in the world. As shown above, they own part or all of nearly fifty different gaming companies, including many of the biggest titles in gaming and four of the five major e-sports environments. The University of Maryland, College Park has over 1500 students enrolled in intermural e-sports as well as intercollegiate esports

competition teams. All other USM institutions also have students participating in gaming and e-sports activities. In addition to student entertainment, many students use video games as a stress relief tool and mental health aid. Cutting off students from the game networks they have paid to participate in and are passionate about will have a dramatic impact on our communities.

Family / Social Impacts

Many members of the USM community rely on ByteDance and TenCent products for daily activities. A significant number of our Asian community members use WeChat to stay in contact with family in the US and abroad. E-commerce and financial services, offered by these companies, are also used for daily activities. A ban on the products of these two companies would result in cutting off many of the tools that our Asian community members use for daily life and contact with their families.

Discord is also broadly used by our students as a daily communication tool. Many student organizations use Discord to pass messages and communicate about campus events. Discord is heavily used for communication while playing video games and is the way that many students stay in daily contact with their friends around the globe. Cutting off Discord would significantly impact a tool that our students rely on to stay connected to their friends and peers.

Technical / Labor / Financial Impact

Trying to implement a total ban across all state-owned devices and networks would also be very challenging from technical, financial, and labor perspectives. We do not currently have technical capabilities in place across all our infrastructure to block all the apps related to ByteDance Ltd. and TenCent Holdings Ltd. Purchasing the hardware and software to implement such filtering would easily pass \$1 million. These two companies also offer over 200 different products through the companies listed above. Even if we had the money and technology to implement the filtering, it would be very time consuming and technically challenging to implement filtering for every individual program and service. These two companies are also buying and developing new companies and solutions on a regular basis, so ongoing effort would need to be spent to maintain the blocks.

Conclusion

In the end, House Bill 1141, as written, will have a dramatic impact on many facets of recruitment, marketing, research, education, and the daily lives of our students and other community members. It would also be extremely expensive and technically difficult to implement. The USM acknowledges the risk to security and privacy that ByteDance Ltd. and

TenCent Holdings Ltd. pose to our communities and have plans in place to manage the risks in balance with the needs and resources of our communities.

The USM respectfully requests an exemption from the proposed prohibitions detailed in House Bill 1141. The USM seeks solely to retain the flexibility to block the use of applications and websites by ByteDance Ltd. and TenCent Holdings Ltd. on critical infrastructure while still allowing the use of these applications and websites in low-risk areas of our institutions.

The Scope of ByteDance Ltd. and TenCent Holdings Ltd.

ByteDance and TenCent Holdings are conglomerates of companies that operate a vast array of applications and websites. Beyond TikTok and WeChat, the following are examples of the websites and applications operated by companies associated with ByteDance and TenCent Holdings:

ByteDance Ltd.	TenCent Holdings Ltd.
<p>CapCut – Video Editing Software</p> <p>Douyin – Chinese Version of TikTok</p> <p>Lark – Enterprise Collaboration Tool</p> <p>TikTok – Video Social Media Network</p> <p>Toutiao – News Aggregation tool</p> <p>Xigua Video – Short and Mid Length Video / TV Content</p> <p>Nuverse – Video Game Company</p> <ul style="list-style-type: none"> • Warhammer 40,000: Lost Crusade in 2021 • Marvel Snap <p>Gogokid – English Language Training Tool</p> <p>Moonton - Mobile eSports game</p> <ul style="list-style-type: none"> • Magic Rush: Heroes • Mobile Legends: Bang Bang • Mobile Legends: Adventure • Mobile Legends: Pocket • Sweet Crossing: Snake.io <p>Party Island – Social Media App</p> <p>Resso – Social Music Streaming App</p> <ul style="list-style-type: none"> • Music by Warner Music Group, Sony Music Entertainment, Merlin and Beggars Group, and others. 	<p>Social Media</p> <ul style="list-style-type: none"> • TenCent QQ – Chinese Instant Messaging • TenCent QZone – Social Network / Blogging • Tencent Weibo – Microblogging Service • WeChat – Mobile Voice and Text Messaging • Discord – VoIP and Instant Messaging Platform (Partial Ownership) <p>Game Companies (100% Ownership by TenCent Holdings)</p> <ul style="list-style-type: none"> • Epic Games • Leyou (Athlon Games, Digital Extremes, Splash Damage) • Riot Games • Sharkmob • Sumo Group • Turtle Rock Studios • Wake Up Interactive (Soleil, Valhalla Game Studios) • Inflexion Games • Fulqrum Games <p>Game Companies (Partial Ownership of TenCent Holdings)</p> <ul style="list-style-type: none"> • TenCent Holdings has a partial ownership in over thirty-seven video game companies including major companies such as: • Supercell • Epic Games (including the Unreal Engine) • Ubisoft • Roblox Corporation <p>Television, Streaming, and Comics</p>

- **TenCent Video** – Video / TV Online Streaming
- **TenCent Comics** – Comic Books Online Steaming
- **Iflix** – Malaysian Streaming Service
- **Huya Live, DouYu, Kuaishou and Bilibili** – Live Game Video Streaming

Music

- **QQ Music and JOOX** – Social Music Streaming App
- **TenCent Music**
- **Spotify** (Collaborative / 10% Stake)

E-Commerce

- **JD.com** – Payment System Similar to Paypal
- **PaiPai Second Hand** – Similar to EBay

Healthcare and Insurance

- **WeChat Intelligent Healthcare**
- **Tencent Doctorwork**
- **AI Medical Innovation System (AIMIS)**

Other

- **Sogou** – Internet Search Engine
- **QQ Haiwai** – Real Estate Listing Service
- **TenCent Credit** – Credit Scoring Service



About the University System of Maryland

The University System of Maryland (USM)—one system made up of twelve institutions, three regional centers, and a central office—awards eight out of every ten bachelor’s degrees in the State of Maryland. The USM is governed by a Board of Regents, comprised of twenty-one members from diverse professional and personal backgrounds. The chancellor, Dr. Jay Perman, oversees and manages the operations of USM. However, each constituent institution is run by its own president who has authority over that university. Each of USM’s 12 institutions has a distinct and unique approach to the mission of educating students and promoting the economic, intellectual, and cultural growth of its surrounding community. These institutions are located throughout the state, from western Maryland to the Eastern Shore, with the flagship campus in the Washington suburbs. The USM includes Historically Black Colleges and Universities, comprehensive institutions, research universities, and the country’s largest public online institution.

USM Office of Government Relations - Patrick Hogan: phogan@usmd.edu