117TH CONGRESS 2D SESSION

H. RES. 1399

Expressing support for the designation of the month of November 2022 as "National XR Month".

IN THE HOUSE OF REPRESENTATIVES

September 28, 2022

Mr. ISSA (for himself, Ms. Delbene, Ms. Clarke of New York, and Mr. Lieu) submitted the following resolution; which was referred to the Committee on Oversight and Reform

RESOLUTION

Expressing support for the designation of the month of November 2022 as "National XR Month".

- Whereas "XR" is an umbrella term used to describe immersive technologies, including augmented reality, virtual reality, mixed reality, and other technologies not yet invented, that enable the integration of digital content and the physical environment in a manner that supports user engagement;
- Whereas XR is a critical part of the emerging technology ecosystem that includes artificial intelligence, machine learning, robotics, quantum computing, and advanced communications;
- Whereas the House of Representatives and the Senate have passed legislation designating immersive technology as a

- "key technology focus area" for United States research and development prioritization;
- Whereas XR is expected to be the next major computing platform, succeeding the laptop and smartphone and forming the foundation for the next iteration of the internet;
- Whereas XR will impact all sectors of society, creating new employment opportunities, a new economy, and new ways of communicating, learning, and engaging with the world;
- Whereas an estimated 23,000,000 jobs globally will use XR technology by 2030;
- Whereas the market for immersive technologies is projected to reach over \$450,000,000,000 by 2030;
- Whereas XR is positively impacting the delivery of essential human services such as—
 - (1) health care and medicine, where it is—
 - (A) helping surgeons train and increase their skill level for complex surgeries;
 - (B) used to assist stroke survivors with motor recovery;
 - (C) used for cognitive behavioral therapy, supporting veterans recovering from post-traumatic stress disorder (PTSD) and helping patients with mental illness address their anxiety disorders;
 - (D) used to treat dementia and cognitive decline, allowing elderly patients to recall old memories that would be otherwise unattainable due to illness or inaccessibility; and
 - (E) being explored as an alternative to pharmaceuticals for pain management; and
 - (2) public safety, where it is—

- (A) providing safe, effective, risk-free training environments for firefighters and allowing firefighters to see through smoke to identify people and objects in a fire emergency;
- (B) preparing emergency medical personnel to interact with a wide range of patients and environments;
- (C) supporting real-time coordination among first responders during natural disasters; and
- (D) helping police officers hone the skills needed to deescalate tense situations;

Whereas XR is preparing Americans for the future of work by facilitating workforce training and development, where it—

- (1) has the potential to effectively and efficiently train new workers without the need for costly physical resources and facilities;
- (2) could expand opportunities for remote collaboration across thousands of miles and provide real-time remote assist which allows experts to guide workers through complicated tasks;
- (3) facilitates the upskilling of the current workforce to support worker retention;
- (4) increases safety in hazardous work environments by allowing businesses to virtually train employees on complex or dangerous tasks;
- (5) provides knowledge capture to ensure that expertise and know-how is not lost if an experienced employee leaves;
- (6) provides text-to-speech capability for visually impaired employees; and

- (7) has the potential to provide captions or subtitles for live audio for individuals that are deaf or hard of hearing;
- Whereas XR is improving efficiency in manufacturing, construction, logistics, and agriculture, where it is—
 - (1) used to improve speed and accuracy in engineering and product design;
 - (2) used to create interactive 3D virtual models that save manufacturers time and money associated with developing countless physical prototypes;
 - (3) streamlining complex assembly on the factory floor by allowing engineers to see renderings of cables, bolts, parts, and instructions for how to assemble a component;
 - (4) used to remotely monitor the condition of infrastructure and assist with predictive maintenance;
 - (5) facilitating cost-savings in urban planning by providing the opportunity to identify and remove potential design flaws before and during the construction phase; and
 - (6) facilitating new advancements in smart farming, giving farmers real-time visualization of crops and providing assessments of land quality;
- Whereas XR is used in the classroom to improve educational outcomes and provide career training, where it—
 - (1) provides multisensory learning experiences not available in physical classrooms;
 - (2) promotes cognitive, social, and emotional development for diverse learners;
 - (3) provides immersive career exploration experiences for students;

- (4) prepares students for the growing demand for technology expertise and immersive media development skills in the workforce; and
- (5) inspires students' creativity and confidence to try new things;
- Whereas XR brings people together, fosters a sense of community, and helps build empathy, where it—
 - (1) has the potential to facilitate real-time translation, giving people easier, more natural ways to overcome language barriers;
 - (2) provides diverse and inclusive immersive experiences that encourage greater empathy between individuals; and
 - (3) bridges physical separation and isolation for coworkers, friends, and families by providing shared, synchronous spaces for community and collaboration; and
- Whereas XR plays an essential role in supporting United States national security objectives, where it is—
 - (1) used by the United States military for training programs; and
 - (2) used for emergency preparedness and disaster response and management: Now, therefore, be it
 - 1 Resolved, That the House of Representatives—
 - 2 (1) recognizes the positive economic and cul-
- 3 tural impact of XR in the United States; and
- 4 (2) supports the designation of "National XR
- 5 Month" to promote the development of this impor-
- 6 tant emerging technology.