Recommendations for Cloud Transformation in APEC (Endorsed)

Purpose: Information
Submitted by: United States
Recommendations for Cloud Transformation in APEC

The APEC Putrajaya Vision 2040, the Aotearoa Plan of Action, and the APEC Internet and Digital Economy Roadmap (AIDER) promote innovation and the digitalization of society to empower all APEC people and businesses to participate and grow in an interconnected global economy.

Cloud computing has become an essential enabler of the digital transformation of economies and businesses. By providing on-demand access to scalable computing resources in a secure, reliable, sustainable, and cost-effective manner, public cloud services can be an effective information technology solution that empowers governments and businesses to deliver more agile, secure, resilient, and user-centric digital services to their citizens and customers.

APEC member economies support the followingRecommendations for Cloud Transformationto realize these benefits across APEC economies:

1. **Develop cloud-ready human capital skills and businesses**
   - Inclusive digital skilling for both individuals and SMEs: APEC Economies should promote workforce training that emphasizes digital skills, entrepreneurship, cybersecurity, advanced education, and professional certifications. Economies should also consider partnerships with industry and academia to develop necessary skills, encourage information sharing on policies and best practices, and promote capacity building to develop an APEC-wide cloud-ready workforce.
   - Cloud-enabling entrepreneurship and businesses: APEC economies should encourage use of cloud to expand access to cutting-edge tools, scalable computing resources, artificial intelligence tools, and other capabilities for start-ups, SMEs, and other businesses.

2. **Invest in cloud-ready digital infrastructure**
   - Universal Broadband Access: APEC economies are encouraged to: (i) adopt robust, compatible rules to incentivize and facilitate investment in broadband deployment and (ii) invest in a mix of fixed and mobile technologies, including, but not limited to fiber, fixed wireless, satellite, and 5G. This will help drive reliable and cost-effective solutions for universal broadband access, which is crucial for widespread adoption and use of cloud computing.

3. **Foster an enabling regulatory environment that promotes secure cloud adoption**
   - Cross-border Data Flows: APEC economies should continue to cooperate to facilitate cross-border data flows with appropriate protections for privacy and personal data, while respecting applicable domestic legal frameworks. The secure and trusted
movement of data across borders is essential to the global economy and the adoption of cloud services.

- **Establishing Clear Roles and Responsibilities:** APEC economies should clearly identify roles and responsibilities for entities engaged in cloud computing, including through guidelines for data protection or privacy laws and relevant regulations. For example, cloud service providers generally undertake the obligations and responsibilities as data processors, whereby they process data stored in the cloud according to the instructions and on behalf of their users. These responsibilities differ from those for data controllers, who make decisions on how data is processed. Clear identification of roles and responsibilities is essential to building trust and confidence in the cloud.

- **Consistent Application of Good Regulatory Practices:** To promote cloud transformation, APEC economies should consistently apply good regulatory practices in the development of fit-for-purpose, transparent, accountable, and evidence-driven regulations for the digital economy. Good regulatory practices include transparency in the regulatory process, the opportunity for input from the public, experts, and interested stakeholders before regulations are finalized, and analysis of evidence according to sound, objective, and verifiable methods. Regulators should also apply good regulatory practices that promote innovation and online safety.

4. **Encourage International Standards**

- When adopting technical standards that impact the use of cloud services, APEC economies should encourage consensus-based international standards to enable interoperability and strong cybersecurity outcomes. International standards provide a common language that can facilitate trade, accelerate innovation, support interoperability, promote cybersecurity, and enable people to work together toward greater common goals that cut across disciplines and borders.

5. **Foster an Energy Policy Environment to Support Cloud Adoption**

- **Energy Efficiency of Public Cloud Services Compared to Traditional IT:** Where appropriate, APEC economies should encourage businesses to migrate to cloud services and consider ways to reduce their energy consumption and carbon footprint. Cloud service providers can achieve significant energy efficiency improvements through improved IT utilization compared to traditional IT services.

- **Availability of energy, preferably renewable energy:** APEC economies should consider how to enable robust, competitive energy markets with innovative energy procurement mechanisms, low-cost financing and incentives for renewable energy investment.