

DIGITAL SKILLS DEVELOPMENT

**APEC PROJECT DARE
and APRU**

APEC Project DARE

Context:

- ❖ Projected global shortage of highly skilled workers to exceed 38 million people
- ❖ Wiley Survey online survey of 123 employers, government officials, and academics
 - ❖ *75% say employers' needs and digital skills are mismatched*
 - ❖ *45% say they do not update job requirements every year*
 - ❖ *62% say that teachers and students are not enabled to incorporate data science and analytics*
 - ❖ *41% say government 's understanding of the data skills landscape is weak*
 - ❖ *52% say that coordination between government, employers and academic to close the digital divide is weak*
 - ❖ *69% are not confident today's workers are equipped to handle data ethically*
 - ❖ *Most pressing ethical concerns: machine learning and false information (72%); lack of transparency of algorithms (61%); machine learning to magnify biases in base data (60%); supremacy of AIs (59%); privacy vs surveillance (49%)*

APEC Project DARE

GOAL: Close the digital divide by 2025

- ❖ Adopt the Data Science and Analytics competencies for Data Science Professionals in 5 years
- ❖ Implement industry-driven recommended actions

Imperative from a participating university's perspective:

- ❖ The need to develop competencies for different professionals Data Stewards, Data Manager, Data Engineer and Data Scientist responsible for the entire Data Lifecycle and ensure their adoption by education and training institutions

DARE-related Initiatives

- ❖ *Scoping academe:*
 - ❖ *Assessing the Alignment of DSA programs with the DARE-defined DSA competencies*
 - ❖ *Nuancing the DARE-defined competencies for different DSA professionals*
 - ❖ *Determining the supply and demand for DSA professionals*
- ❖ *Scoping industry:*
 - ❖ *Ascertaining industry's understanding of data science in their respective verticals*
- ❖ *Scoping government*
 - ❖ *Developing a “smart University” using DSA patterned after the smart city*

Thank You
