ASEAN
DATA SCIENCE
EXPLORERS

ASEAN DSE Overview

ASEAN DSE is a flagship programme under the ASEAN Foundation's partnership with SAP, which is aimed to engage and prepare today's ASEAN youths for tomorrow's ASEAN. Besides promoting the ASEAN identity, it is to equip them with necessary digital skills they require to thrive in the Industrial Revolution 4.0. It calls for data-driven proposals in a competition targeting tertiary students across the 10 ASEAN Member States (AMS). ASEAN DSE also has a training programme segment, which aims to build digital capacity for youths in the region, bridging the digital divide in the 10 AMS and prepare them for the Digital Economy, supporting the ASEAN ICT Masterplan 2020 and ASEAN Work Plan on Youth and Education 2016-2020.

In the competition, the students use SAP Analytics Cloud to develop data analytics-backed solutions to address socio- cultural challenges across the ASEAN region. The challenges are also related to the six SDGs:

ELIGIBILITY

Nationals of ASEAN Member States

Full-time tertiary students currently pursuing undergraduate studies in one of the ASEAN tertiary institutions

16+
Above the age of 16 as of the start of the competition period

Not the Top 3 finalists from National Finals in preceding years

ASEAN DSE: Stats & Facts

16,259
students empowered with data analytics skills

1,420
educators capacitated with data analytics skills

370
higher education institutions engaged in ASEAN DSE

1,130
data analytics proposals received
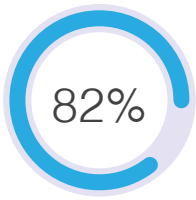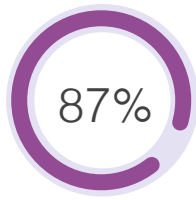
In 2020

3,053 **2,848**
male   female
youths engaged and empowered
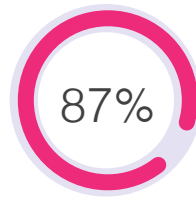
249 **241**
male   female
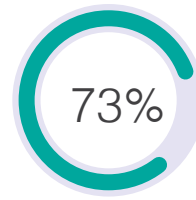educators engaged and empowered

ASEAN DSE Participants said that...

82% — ASEAN DSE is important to their future career development.

87% — their analytical and critical thinking skills improved after participating in ASEAN DSE

87% — their problem solving skills improved after joining ASEAN DSE

73% — ASEAN DSE helped them have a deeper understanding of ASEAN Blueprint 2025

Based on the results of the survey in 2020 involving 580 ASEAN DSE participants

10 Data Analytics Proposals — Team Projects

Arisa Khennavong & Silivanh Arounsavath
Institution: **National University of Laos**
Topic of Proposal: **ASEAN Challenge with Malnutrition**
Recommendations: **Food system, Healthcare, Education**

Proposal

Kyaw Zaw Lin & Min Aung Thu Hein
Institution: **Dagon University, Yangon Technological University**
Topic of Proposal: **DIGITAL INTEGRATION The Key to Growth**
Recommendations: **1. Improve broadband supply and infrastructure, 2. Build a future-ready digital workforce**

Proposal

Hoa Phung & Thinh Nguyen
Institution: **RMIT University Vietnam**
Topic of Proposal: **People with Disability: Unblocking the economic bottleneck**
Recommendations: **EmployABLE - A DIGITAL SOLUTION FOR PWD'S EMPLOYMENT**

Proposal

Jairus Carlo Libunao & Alleah Eunice Tuliao
Institution: **Nueva Ecua University of Science and Technology**
Topic of Proposal: **Redefining Waste Management**
Recommendations: **Integrating a WTE Incineration Plant to the Cradle to Cradle**

Proposal

Tanyaluk Prasomtong and Sutteera Sirimongkolmuang
Institution: **Chulalongkorn University**
Topic of Proposal: **Inclusive mental health service for the well-being of ASEAN**
Recommendations: **Increase the number of mental health care providers Increase accessibility to mental health services**

Proposal

Hakim Ridzuan & Hamizan Sufri
Institution: **Politeknik Brunei**
Topic of Proposal: **Cleaner energy towards sustainable cities**
Recommendations: **ASEAN Resilient Energy Initiative 2050**

Proposal

Pichmonyka Chan & Kunheng Eang
Institution: **Camed Business School, Institute of Foreign Languages**
Topic of Proposal: **Solving the income inequalities in ASEAN**
Recommendations: **1. Innovation in labor and social policies, 2. Policy to promote the human resource**

Proposal

Oscar Fang Jack Ling & Quah Chun Meng
Institution: **Universiti Teknologi Malaysia**
Topic of Proposal: **Youth Unemployment**
Recommendations: **ASEAN Multidimensional Exchange Program**

Proposal

Koay Tze Min & Ng Yi Ming
Institution: **National University of Singapore, Yale-NUS College**
Topic of Proposal: **ASEAN Women-UP Townships Network**
Recommendations: **Innovating ASEAN-wide strategies in: higher education, community service, and entrepreneurship institutional innovations in the provision of social services & healthcare**

Proposal

Wayan Rezaldi Widyanatha & Nabila Zahra Wassil
Institution: **Institut Teknologi Bandung**
Topic of Proposal: **Healthy Rivers as The Heart of ASEAN Sustainable Cities**
Recommendations: **ASEAN Integrated River Revitalization Strategy**

Proposal

Testimonials from Government Officials

"Industrial revolution 4.0 offers a huge opportunity as well as poses a great challenge for us. We currently live in a sophisticated digital and data-driven life, so it is important for young generation to learn high technology and innovation in order to be able to conduct a data-driven analysis. The post COVID-19 pandemic has also taught us to advance technology in the new normal circumstances. ASEAN Foundation has done the essential role to develop and nourish ASEAN's youth through various programs including in particular ASEAN Data Science Explorers (ADSE). I sincerely believe that ADSE will offer a valuable experience and lessons for our youth to increase their skills in harnessing data and fomulating solution through this competition."

Mr. Riaz Januar Putra Saehu
Director for the ASEAN Socio-Cultural Cooperation,
Ministry of Foreign Affairs, the Republic of Indonesia

"COVID-19 has given all of us a stronger impetus to do things differently and use digital tools and data for greater impact. While there's truth in "knowledge being king", it's even more relevant now for our youths to be given every opportunity to learn how to effectively harness the power of data and apply their minds to designing effective solutions that can work across different socio-cultural contexts. The National Youth Council is pleased to support this initiative and are heartened to see more youths from our Institutes of Higher Learning participating in the ASEAN DSE platform to acquire these skills and to learn more about ASEAN through this process."

Jedidiah Tan
Deputy Director, National Youth Council Singapore

"Youth enhancement in advanced data transformation is the key for nation building with emphasizing on youth centred, data driven."

Dr. Vellapandian A/L Ponnusamy
Chief Executive Officer of the Institute for Youth Research,
Ministry of Youth and Sports, Malaysia

"Now more than ever, we need the youth's creativity and innovativeness in finding solutions and ways to solve emerging problems that our region and the world is facing. Their participation is paramount especially in our recovery from this pandemic and in pushing forward our collective vision of a more resilient and sustainable future for all."

Mr. Paul Anthony Pangilinan
Commissioner-at-Large Office of the President of
the Philippines, National Youth Commission

"Having ASEAN Youths as ambassadors for digitalised education is the key to growing our regional education system."

Mr. Chiv Ratha
Deputy Director-General of Youth, General Department of
Youth, Ministry of Education, Youth and Sports, Cambodia

Testimonials from Students

"Joining ADSE is an important milestone in our lives as it enables us to be more data driven and in turn, it helps us to find more analytical insights and recommendations to solve a problem. In addition, this journey has taught us that data is becoming more and more valuable in the future. Being able to filter, formulate and use the data is becoming an important skill in the future and to a nation."

Team Brunei Wasps
Brunei

"We started just as a couple of friends who wanted to do something productive during the pandemic and explore our interest in data science. As we came across ADSE, we learned so much about ASEAN and its current well-being, and how we as youths can contribute on turning insights from available data to improve it. We truly can't wait for regional finals and represent Indonesia."

Team SEA of Hope
Indonesia

"The ADSE competition is a first for us. We had no prior experience in joining case competitions, but were intrigued to know what data science was all about. The journey was, of course, filled with ups & downs as expected; though the number of ups is certainly not more than the number of fingers on my right hand. It all started with our illustrious lecturer, Dr. Yeong Che Fai. After attending a training session on the SAP Data Analytics platform. He introduced the software to our club, UTM Airost. Little did we know that it was to later encourage the club's members to participate in a data science competition (ADSE). Pulled by the allure of 'data science' despite knowing close to nothing about it, the two of us teamed up and Team Psyduck was underway."

Team Psyduck
Malaysia

"We believe that data analytics skills are crucial to us all, not only to the ones who work in technology fields. That is the main reason why we have decided to join the competition: to step out of our comfort zone and put ourselves into something unfamiliar to us. Furthermore, we are passionate about mental health inclusivity, which is still problematic in our ASEAN region; nevertheless, such an issue has been neglected. Not many people have raised conversations about it much. So, by joining this competition and presenting our findings and recommendations to the strategists and renowned officials, it is a great way to raise awareness about mental health service in our region."

Team Sour Candies
Thailand

"Our journey in this competition was beyond our expectation! Until now the thought of being the national winner hasn't sunk in yet. Going into the national finals was really nerve-wracking and at the same time exciting! We remember the challenges we had to face joining this competition. We didn't know what data science really was. Luckily, our college conducted a training on how to do data analysis. That started it all! From there, we came up with a storyboard on waste management because we noticed that there's a loophole in our current waste management system. We thought that if we don't do any actions about this now, it will continue to cause fatal consequences to us and the environment."

Team Incognito
The Philippines