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The Asia Open RAN Academy

Digital Flexible Education and AORA

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Moving rapidly into the 'technology age' we are realizing that digital competency is a necessary component of education and societal development. While a relatively new and evolving concept, it just makes sense. Digital competency requires the technical skill to use digital technologies, and to use them in a meaningful way while motivating all sectors of society to participate in digital culture. COVID-19 highlighted not only the need for flexible digital education options but also the lack of digital competency across many sectors of society. While many countries were caught off-guard and struggled to provide continuing education for their populations as global stay at home orders were enacted they were also met with the sudden need to educate large swaths of their populations in order for them to engage and interact with the technologies being rolled out.

Online learning and Open RAN networks can go hand-in-hand in supporting the shift to more flexible education pathways, particularly for higher learning. The Asia Open RAN Academy (AORA) is built on community partnerships and the shared understanding of open access to information and standards. The Academy recognizes the current lack of capable talent and workforce development and is proving successful in bringing together partners to start meeting industry needs by providing holistic, active remote learning on Open RAN through a hybrid online approach.

Flexible education has two components: 1) flexible learning in educational institutions, and 2) flexible pathways for educational systems. Given the importance of needing a skilled workforce to support digitally competent citizens, the Academy is at the forefront both in utilizing a flexible digital e-learning framework and also in educating workforce needed to create more open and secure networks to support wider access to flexible educational pathways.

AORA's Learning and Teaching Framework allows new entrants to gain basic knowledge and understanding of Open RAN concepts before delving deeper into more advanced modules. A learner who completes the basic RAN courses and advanced Open RAN courses will develop competencies to build new competitive ecosystems utilizing next-generation technologies. These will provide secure, resilient, and environmentally sustainable solutions to meet the demands of a fast-growing variety of use cases and applications. The competency pathways have been specifically developed to address the needs of Open RAN Engineers, Chief Information Officers, and Chief Technology Officers, ensuring they are provided the latest educational knowledge needed to successfully do their jobs.

AORA Learning & Teaching Framework

Short-term webinars / Knowledge Sharing Sessions

Medium-term continuing professional development (CPD) units, Basic to Advanced Open RAN Certification (evidence-based competencies)

Long-term academic adoption as elective or integrated into existing curriculum Academic units

- **Courses:** Case Studies
- **Enrichment:** Laboratory, Student mini-projects, Industry internships

Our weekly KnowS PuLse webinars can be described as the ‘first step’ for students to engage with open RAN theories and concepts. Building on this, the Academy provides continuing professional development credits for in-field engineers. Held on Saturdays, the high and consistent turnout shows the need for greater educational opportunities in this space and the desire of working engineers to continue upskilling in a fast-paced environment.

AORA’s curriculum is designed in such a way to allow partnering higher educational institutions to integrate AORA’s courses in a manner best suited to their needs. The program features an online learning hub provided by complemented by additional courses provided by industry partners as they are made. Additionally, learners will be connected to partners via the Academy’s enrichment program – taking what was learned in the classroom into ‘real-world’ situations. Certificates will be stackable, allowing learners to gain a diverse portfolio of course credits, CPD units, and professional certifications for Open RAN.

Utilizing a hybrid approach, with quality assurance by industry partners, AORA is up-skilling the workforces of MNOs and ISPs so they can test and deploy open network architectures, supporting last-mile connectivity by promoting and providing an Open RAN curriculum and technical exchanges. As networks are opened, there is increased competition and new entrants to the market challenge old systems. More options mean more choice and more choice leads to reduce costs for consumers. ISPs will be able to deploy larger networks, reaching more and more people, particularly in remote and rural areas. As connectivity improves, a country’s populace is better able to engage with each other through improved technology. The pandemic taught us that the ‘e-world’ is here to stay, and we all must learn to engage and interact with each other through it and with it.

The adoption of flexible education systems can lead to inclusive and quality education. Not only promoting education but also addressing the needs of those in difficult situations, giving them greater control over their learning through a variety of learning modes and interactions. Join us on this journey as we move to make Open RAN courses more widely available to support the continued expansion of open networks in the Indo-Pacific.

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