


ANNEX A

Techblazer Award Winners

Category/Company	Product/ Solution
<p>Most Promising Innovation (Gold)</p> <p>EyRIS Pte. Ltd.</p> <p>EyRIS aims to transfigure the delivery of healthcare through AI-powered solutions, with the ultimate goal of being the game changer in the future of first-stage medical diagnostics. Its foray into the healthcare industry focuses on the development and commercialisation of innovative products to revolutionise the detection of retinal and chronic diseases in our communities.</p> <p>Our flagship product, SELENA+, is an AI that is capable of detecting three retinal diseases, diabetic retinopathy, glaucoma suspect and age-related macular degeneration. SELENA+ has transcended significant geographical barriers by establishing its presence in 26 countries today, a feat that required careful navigation around various international regulatory approvals.</p> <p>For more information, please visit: https://eyris.io/.</p> 	<p>Singapore Eye LESioN Analyzer+ (SELENA+)</p> <p>SELENA+ is an Artificial Intelligence (AI) Deep Learning System (DLS) that involved the synergy of research and expertise between the Singapore Eye Research Institute (SERI) and the National University of Singapore (NUS). Using Convolutional Neural Networks, SELENA+ automatically grades fundus images and detects eye diseases such as Diabetic Retinopathy, Glaucoma and Age-Related Macular Degeneration to limit the effects of preventable blindness.</p> <p>It assesses images of the retina taken using a fundus camera to generate a report that highlights urgent cases requiring specialist referrals. SELENA+ has been deployed in 22 countries, and sights are now set on the China and US markets among many others. Beyond international expansion, EyRIS' next steps involve developing new verticals that can detect other conditions such as chronic kidney disease, stroke and cardiovascular diseases.</p>

<p>Most Promising Innovation (Silver)</p> <p>WIZ.AI</p> <p>Wiz.Ai is a fast-growing company deploying cutting edge conversational voice AI technology into enterprises. Backed by globally leading R&D team of scientists, researchers, linguists, industry experts, Wiz is constantly pushing the boundaries of humanistic AI conversation for ASEAN languages.</p> <p>With diverse industrial modules, Wiz increases customer satisfaction with seamless and personalised experiences, realises tremendous cost savings with handling large call volumes and drastically improve productivity for customer outreach in scale.</p> 	<p>WIZ.AI Conversational Voice AI Talkbot</p> <p>The A.I. Virtual Talkbot solution enables enterprises to apply ‘voice-enabled interaction’ over multiple communication mediums (mobile, WhatsApp calls and in-app call conversation) to automate customer service support.</p> <p>By applying human-like emotion and tonality, the WIZ Talkbot is able to effectively engage and serve customers, and has pioneered the use of such technology for Singlish, Singapore Mandarin, Bahasa Indonesia, and other regional vernacular languages.</p> <p>The WIZ A.I. Virtual Talkbot is powered by proprietary deep technologies to enable human-like conversational capability with emotions and tonality, including automatic speech recognition (ASR), natural language understanding (NLU), natural language processing (NLP), real-time text-to-speech (TTS), and multi-round dialogue technology.</p>
<p>Most Promising Innovation (Bronze)</p> <p>Ackcio Pte. Ltd.</p> <p>Ackcio builds reliable wireless data acquisition systems for industrial monitoring applications. The company automates monitoring processes and provides remote, intelligent data to enable increased safety and efficient risk management in mission-critical industries, including construction, infrastructure, mining, and rail.</p>	<p>Ackcio Beam</p> <p>Ackcio Beam is an industrial data acquisition platform that allows for reliable wireless monitoring of existing industrial sensors in mission-critical industries. Ackcio Beam uses patented long-range wireless mesh network, named Ackcio Mesh, which makes it possible for the solution to collect</p>

Ackcio’s flagship solution, Ackcio Beam, is an industrial data acquisition platform that uses a patented long-range wireless mesh network to monitor sensors accurately and reliably in both above ground and underground environments. Ackcio is headquartered in Singapore and supports clients across the world.

For more information, visit www.ackcio.com or follow us on social media.



industrial sensor readings accurately and reliably in underground and above ground settings.

The technology allows industrial monitoring contractors to monitor their sensors in challenging environments like large and obstructed projects, underground tunnels, etc., where existing LoRa-based and short-range wireless mesh-based systems have difficulties in operating. In contrast, since the wireless data acquisition system boasts a long-range mesh communication system, it can be used for monitoring projects in a wide range of settings where existing wireless systems are impractical.

Category/Company	Product/ Solution
<p>Best Adoption (Public Sector)</p> <p>Ministry of Manpower</p> <p>Our vision is to develop a great workforce where Singaporeans can aspire to higher incomes and fulfilling careers. Complementing this is a great workplace where companies are lauded for having outstanding employment practices and organisational cultures.</p>	<p>FWMOMCare</p> <p>During the height of the COVID-19 situation and the urgency of it affecting the Migrant Workers (MW) community, the FWMOMCare team took on the challenge to deliver a brand-new React-Native mobile Foreign Worker Well-Being application within 2 weeks in the 3 major app stores (Google, Apple and Huawei) to support the migrant workers well-being.</p>

To achieve this vision, our mission is to improve the skills and productivity of the Singaporean workforce as the basis for better jobs, higher incomes and a secure retirement. We will judiciously supplement our workforce with foreigners, such that they strengthen the Singaporean core. We will also build progressive workplaces, strengthen tripartite relationships and encourage harmonious work cultures so as to create fair and forward-looking employment practices that provide safe and healthy work environments and enable balanced work-life.

Please visit www.mom.gov.sg for more information.



The team worked to deliver the first minimum viable product (MVP), and iteratively improved the solution based on various feedback received to overcome technical, operational obstacles and constant engagement with agency partners (MOH, HPB, DSTA etc).

Best Adoption (Public Sector) – Special Mention

Tan Tock Seng Hospital

Tan Tock Seng Hospital (TTSH) is the flagship hospital of the National Healthcare Group and part of Singapore’s Public Healthcare System. As a pioneering hospital with strong roots in the community for over 177 years, TTSH is recognised as the People’s Hospital, serving a resident population of 1.4 Million living in Central Singapore.

Digitalisation of Customised Orthoses and Prostheses

The TTSH Foot Care & Limb Design Centre has successfully innovated and digitalised their clinical practice and manufacturing methods for customised orthoses and prostheses, through the adoption of technologies such as 3D-scanners, Computer-aided Design, Computer-aided Manufacture, and 3D-printing. This has brought better value to patients in terms of design and quality of their customised devices.

Together, with 70 community partners and 80 community health posts, it brings care beyond the hospital into the community as an integrated care organisation – Central Health.



Tan Tock Seng
HOSPITAL

National Healthcare Group

The product streams that have been introduced to patients through the digitised methods include ankle foot orthoses, knee ankle foot orthoses, etc. The digital transformation included a business and care model collaboration with other hospitals. This was through the set-up of a “Hub & Spoke” model to deliver national prosthetic and orthotic services. Through this model, patients had greater and earlier access to care, care remains integrated and patients are right-sited with costs remaining affordable.

Best Adoption (Enterprise)

Singapore Airlines Ltd

The SIA Group’s history dates back to 1947 with the maiden flight of Malayan Airways Limited. The airline was later renamed Malaysian Airways Limited and then Malaysia-Singapore Airlines (MSA). In 1972, MSA split into Singapore Airlines (SIA) and Malaysian Airline System. Initially operating a modest fleet of 10 aircraft to 22 cities in 18 countries, SIA has since grown to be a world-class international airline group that is committed to the constant enhancement of the three main pillars of its brand promise: Service Excellence, Product Leadership and Network Connectivity.



Cabin Crew Digital Ecosystem

The Cabin Crew Digital Ecosystem, comprises:

1. Mobile apps
 - a) Crew App for flight & operational admin tasks
 - b) Crew Journey App for individual learning & development
 - c) 1SQ app for management updates & company news
 - d) BEST (Beyond Excellent Service through Technology), onboard app for personalised passenger servicing
2. Backend systems
3. Wearables

The use of tech such as mobile, cloud, AI, optimisation, composite architecture & IoT enables delivering measurable outcomes in an agile and cost-effective manner.

<p>Best Adoption (Enterprise) – Special Mention</p> <p>PSA Corporation Ltd</p> <p>PSA Singapore operates the world’s largest container transshipment hub in Singapore, handling 36.6 million TEUs of containers in 2020. With connections to 600 ports globally, shippers have access to daily sailings to every major port in the world, operating 24/7 all year round. Beyond port operations, PSA also offers cargo solutions to customers operating in advanced manufacturing, cold chain, e-commerce, and energy & chemicals. This value adding service is enabled by CALISTA™, a digital platform that facilitates trade and helps shippers to better manage their physical movement of goods, trade financing and compliance. Visit us at www.singaporepsa.com</p> 	<p>5G: Powering Connectivity at the Next Generation Port</p> <p>Automating container handling equipment (CHE) is a key strategy for PSA towards boosting productivity and enhancing our overall service level. Equipment automation requires that operators be able to teleoperate the CHEs to handle any exceptions and emergencies. To ensure operational safety, teleoperations of CHEs requires very low latency (<50ms) for real-time control signals and video, along with very high bandwidth (>100Mbps) for real-time transmission of high-resolution video streams.</p> <p>5G lists enhanced mobile broadband (eMBB) and ultra-reliable ultra-low-latency communication (URLLC) amongst its key features, both of which are instrumental in addressing our connectivity needs.</p> <p>As 5G is not yet commercially available nor proven, PSA embarked on a pilot 5G adoption project to assess and validate its performance using real-world operational workloads at our “Living Lab” located within Pasir Panjang Terminal.</p>
<p>Best Adoption (SME)</p> <p>ONG&ONG Group Pte Ltd</p> <p>ONG&ONG Group is a holistic 360° solution consultancy excelling in infrastructure, education, commercial and high-density living. We design, engineer and manage. We have about 570</p>	<p>Digital Beyond</p> <p>Digital Beyond is a holistic digital transformation approach initiated by ONG&ONG Group for all its offices. The firm adopts a digital strategy for three key areas, Workplace, Workforce and Workflow, to</p>

professionals managing multi-disciplinary projects across the region, namely; Singapore, Malaysia, Vietnam, Indonesia, Thailand, Myanmar, and Mongolia.



improve internal processes and collaboration with external stakeholders.

Digital Workplace leverages on cloud-based technologies to provide a virtual working environment for internal and external parties in the value chain.

Digital Workforce focuses on human capital digitalisation process with the iWeb2 mobile application, developed in-house, that provides staff's personalised profile and content on the go.

Digital Workflow improves the overall delivery process of design, engineering and project management with automation. An add-on application, BIMomatic, was developed in-house to automate and speed up digital project delivery.

Best Adoption (SME) – Special Mention

EDN Media Consultant Pte. Ltd


EDN is an educational service provider to the Ministry of Education and conducts enrichment workshops, educational tours, e-learning and providing edutech solutions.



Immersive Learning Experience

EDN Media Consultants digitalised their tours to adapt their business during the pandemic. They created Virtual Tours consisting of immersive and interactive solutions for students to use in schools and home-based learning.

<p>Best Adoption (NGO)</p> <p>Ren Ci Hospital</p> <p>Founded on the principles to serve all regardless of race, religion and background as a charity healthcare institution in 1994, Ren Ci serves needy beneficiaries with the primary mission of providing affordable medical, nursing and rehabilitative care services for the community.</p> <p>Our suite of care services continues to play an active role in the growing prevalence of the silver population in Singapore through supporting the healthcare needs of the senior community.</p> 	<p>CARES4WOUNDS</p> <p>CARES4WOUNDS is an Artificial Intelligence (AI) assisted software which is able to capture 3D images, measure, record, track progress & provide treatment guidance for wounds. It comprises of a mobile application (downloaded on e.g. iPad) and a web-based monitoring tool. CARES4WOUNDS software automates 3D wound measurements (length, width & depth) & tissue classification under 1 second.</p> <p>Embedded AI algorithms translate the captured information into internationally approved wound assessment workflows, trend charts & treatment guidance – hence enabling prompt, accurate & standardised wound care & assessment.</p> <p>Ren Ci is the first in Intermediate and Long Term Care (ILTC) sector to adopt this innovation, which has proven to improve patient care & staff productivity. Based on a time study, CARES4WOUNDS reduces assessment & documentation time from 8 mins (manual) to 1 min (automation) per wound. This amounts to a time saving of 7 mins & translates to productivity gain of an est. 546 hours per year.</p>
Category/Company	Product/ Solution
<p>Student Techblazer (Gold)</p> <p>Nanyang Technological University</p> <p>As DementiCarers, we want to make caregiving easy for everyone. DementiCare is a mobile</p>	<p>DementiCare</p> <p>DementiCare is an app to reduce the barrier of skills and experience required to care for Dementia</p>

<p>application made to reduce, digitalize and revolutionize the barrier of skills, knowledge and experience required for providing care to patients suffering from Dementia.</p> 	<p>patients. It aims to be a one-stop caregiving solution by bringing caregivers of varied experience together and providing a consistent interface to care for dementia patients.</p> <p>Research shows that 48% of Alzheimer's cases were mild and 31% moderate. Targeting Stage 1 and 2 Dementia patients makes our user base 80% of the demographic.</p> <p>The caregiver view of the app is meant to alleviate daily issues. This includes sending urgent notices to patients, chatbots to conduct symptom checking and medical conversations, and the Profile tab for details on each patient. DementiCare has in-house productivity features like notes, reminders, chat rooms too.</p> <p>The patient side has a simplistic yet immersive interface. Memory games, family reminiscing and memory-jotting keep the patient engaged. Fall detection to trigger SOS, proximity sensing and location updates work in the background to reduce complexity.</p>
<p>Student Techblazer (Gold)</p> <p>National University of Singapore & Singapore University of Technology and Design</p> <p>Skilio is an AI-powered, digital soft skills portfolio for Gen Zs to be recognised for their soft skill competencies.</p>	<p>Skilio</p> <p>Skilio is an AI-powered, digital soft skills portfolio that empowers Gen Zs to track & develop their soft skills competencies. Just like how Github enables coders to showcase their programming abilities through projects, Skilio is like Github for Gen Zs to showcase their soft skills competencies in their educational journey.</p>



Student Techblazer (Silver)

ITE College Central

The Institute of Technical Education (ITE) was established as a post-secondary institution in 1992, under the Ministry of Education. ITE is a principal provider of career and technical education and a key developer of national skills certification and standards, skilling Singapore for the future economy.

It offers three key programmes: (1) Pre-Employment Training for youths after secondary education, (2) Continuing Education and Training for adult learners, and (3) Industry-Based and Work-Study Programmes with employers.

For more information, please visit our website at <https://www.ite.edu.sg>



Contactless Sanitary Door Monitoring System

With the guidance and mentorship from lecturers at Institute of Technical Education, and supervision of engineers from ECOPLUS Manufacturing Pte Ltd, the Singapore industrial leader in Toilet Cubical design; we aim to provide a revolutionary system that will be able to benefit the current toilet system to make it safer for public under the current pandemic situation and improve existing maintenance processes.

Student Techblazer (Bronze)

NUS High School of Mathematics and Science

Loci: A Whiteboard for Everybody

Tofu Apps is a software development team creating humanist software to connect communities and simplify workflows. Tofu Apps was founded in 2020 with the launch of Loci, a fully web-based e-whiteboard app focused on accessibility, user experience, and efficiency that is considered for use in NUS High School. Tofu Apps' earlier ventures include an e-proctoring software deployed for the Asia-Pacific Informatics Olympiad, as well as apps with millions of downloads.

Find out more at tofuapps.studio



Loci is a web-first, real-time online whiteboard app for schools and communities. With social distancing and even remote learning being the norm, classroom activities were disrupted. Loci enables users to create, share and join a whiteboard instantly without signing in. In classroom settings, teachers can facilitate group work on separate whiteboards and student presentations, while students can automatically follow teachers on the gridded-infinite canvas.

With zero lock-ins, apart from an importable Loci file, users can export whiteboarding sessions to standard formats such as images and PDFs for interoperability with other software, complementing its integrations with existing solutions adopted by schools such as Google Workspace and Microsoft Teams. Nevertheless, cloud storage is also an option with an account.

Beyond education, Loci is a social tool for friends to bond over doodle sessions, DnD campaigns, or even board games with customisable templates and a built-in chat.