AI PLAYBOOK

Essential Domestic Services Sectors

An AI adoption guide for companies in the education and healthcare sectors, featuring sector-specific examples to enhance service quality, efficiency and workforce sustainability.

NTUC'S AI-READY SG INITIATIVE

INTRODUCTION

NTUC's AI-Ready SG is an initiative driven by NTUC Job Security Council to help workers thrive in an AI-enabled future. Working with tripartite partners, AI-Ready SG consolidates AI initiatives for both workers and employers, equipping workers with AI relevant skills, supporting companies in business transformation and job redesign for better worker outcomes, and improving job matching so workers can access better opportunities; thereby contributing towards a fair transition for workers amid AI adoption.

This playbook is designed to guide workers and companies in navigating the AI-enabled economy. It shares resources, strategies, and success stories that illustrate how job redesign and upskilling in AI can raise productivity and benefit both workers and businesses.

AI READY SG An initiative of NTUC Job Security Council

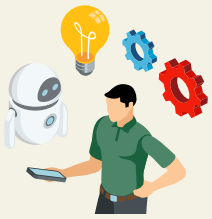
e2i Employment and Employability Institute

ntuc LearningHub

ntuc sme partners

SUPPORTING OUR WORKERS

TRAINING & UPSKILLING SUPPORT



AI is reshaping the way we work, creating new opportunities for workers. By upskilling in AI, workers gain confidence in using AI tools and can take on AI-augmented roles. NTUC is committed to ensuring every worker has access to AI training, regardless of background or experience. Through NTUC LearningHub's broad-based and role-specific AI courses (supported by SSG funding), AI upskilling is made accessible and affordable.

Broad-based AI Skills Training

NTUC LearningHub's curated broad-based courses build essential AI and critical thinking skills for professionals across industries. Participants learn practical generative AI skills, including prompt engineering and business applications, alongside sector-specific use cases to support effective decision-making in an AI-enabled workplace.

Role-based AI Skills Training

Leaders

Courses that focus on equipping leaders to lead AI-driven changes, implementing AI strategies and making data-driven decisions.

Marketing Professional

Courses to equip marketing professionals with practical AI skills to enhance creativity and campaign performance.

Finance Professional

Courses that help finance professionals harness generative AI for smarter decision-making and work automation.

Visit NTUC LearningHub's website to find out more!

https://www.ntuclearninghub.com/ai-playbook/eds

Union Training Assistance Programme (UTAP)

NTUC members can defray the cost of AI courses and AI tools through UTAP, with **50% support on unfunded cost***.

**Unfunded cost refers to the balance fee payable after applicable government subsidy. Prevailing funding caps apply.*

For more information on eligibility and how to claim your benefit, please visit: ntuc.org.sg/uportal/programmes/union-training-assistance-programme

NTUC LearningHub Learning eXperience Platform (LXP)

A one-stop online learning platform, which offers timely, bite-sized and quality content to upskill anytime and anywhere.

Discover more at ntuclearninghub.com/lxp

EMPLOYMENT SUPPORT

Navigating career transitions and finding the right opportunities can be challenging in a rapidly changing job market. As AI reshapes jobs and skills, employment support for workers must harness AI and evolve alongside the technology. NTUC is committed to supporting workers at every stage of their career, providing practical resources, personalised guidance, and innovative tools and solutions to better meet workers' evolving needs.

NTUC AI Career Coach (AICC)

The **NTUC AICC** is a one-stop AI-powered platform that helps workers at every stage in their job search journey to assess their career readiness, pinpoint skills gaps, and explore pathways to upskill or pivot into in-demand roles.

Receive your personalised career support at aicareercoach.ntuc.org.sg/dashboard

NTUC e2i's Career & Job Centres

e2i operates **Career and Job Centres** across the island that offer personalised career coaching and job matching services to support jobseekers in navigating the job market. Through tailored guidance and job matching, e2i helps jobseekers identify suitable opportunities, address skills gaps, and make informed career moves as jobs and skills evolve in the AI-enable economy.

For location details and operating hours of e2i Career Centres and e2i Jobs and Skills Centres, please visit:

e2i.com.sg/locations/

Make an appointment to meet a career coach today:

https://e2i.sg/jobmatching

ENABLING BUSINESS AND WORKFORCE TRANSFORMATION

AI TRANSFORMATION

AI is a key driving force of today's industrial transformation. As industries transform, AI is also creating opportunities for workers to take on safer, smarter, and higher-value roles. Across the world, AI is reshaping jobs, reducing repetitive tasks and enabling employees to focus on higher value-added tasks.

To help workers and businesses embark on this transformation, NTUC acts as a strategic enabler through tripartite collaboration:

Collaborative Strategy Design
Bringing the labour movement, employers, and government partners together

»

Workforce Integration
Aligning technology adoption with job redesign and upskilling

»

Guided Transformation
Using proven tools like the Operations & Technology Roadmap (OTR)

NTUC supports companies in business and workforce transformation, upskilling, and job redesign, including AI adoption through the Company Training Committee (CTC) and grant funding. In turn, workers benefit from better career prospects and wages through skills allowances, wage progression, and career development plans. This approach enables companies to embed AI into their operations to boost productivity while creating better jobs and better job prospects for workers.

The next section outlines NTUC's resources and services to help companies kickstart their AI transformation journey.

GETTING STARTED ON AI TRANSFORMATION

The NTUC AI Transformation Blueprint offers a step-by-step framework to assess AI readiness (via the AI Readiness Index), provide tailored consultations, develop a customised AI Operation and Technology Roadmap, identify training and talent needs, and access CTC and grant funding to implement AI.

Here is how companies can leverage NTUC's ecosystem of resources to get started:

1. AI-Readiness Assessment

Complete a 3-minute AI assessment to receive a personalised report on your organisation and workforce's current AI readiness and identify key gaps to reach your desired state.

- **http://ntuc.airi.sg**

2. Consultation

Receive consultation from NTUC's Industry Training Officers (ITO) who will guide you through your transformation journey, connecting you with the necessary help and resources to achieve your goals.

- **https://www.ntuc.org.sg/jsc/contact-us**

3. AI OTR

Partner us to build a future-ready business and workforce by developing a customised AI Operation and Technology Roadmap (AI OTR). This process identifies suitable resources including AI solutions and training to support business growth and manpower transformation.

4. AI Training

NTUC LearningHub offers customised learning solutions and Learning eXperience Platform (LXP) courses, with various government funding of up to 90%.

5. Talent & Job Redesign

e2i provides access to funding support and programmes that make upskilling, reskilling and job redesign more affordable and practical for SMEs.

6. AI Solutioning

Collaborate with NTUC ecosystem solution partners to scope AI application projects to solve business challenges and drive AI adoption effectively.

7. NTUC CTC & Grant

Form a Company Training Committee (CTC) with us and drive business and workforce transformation through AI skills upgrading, job redesign, and AI solution adoption with CTC funding of up to 70%.

Read about how some businesses have tapped on the CTC and grant to transform their business and workforce in this playbook.

THE AI OTR METHODOLOGY

The **AI Operation & Technology Roadmap (AI OTR)** is a structured, forward-looking framework that helps companies align their business objectives, technology plans, and workforce strategies. Unlike conventional transformation efforts that focus purely on identifying technology, OTR emphasises on cross-functional collaboration, ensuring alignment between leadership, operations, and technical teams.

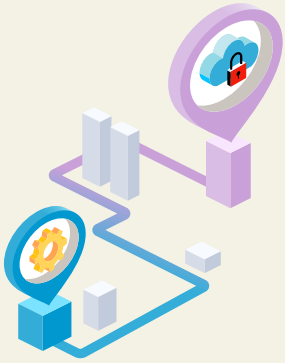
Understanding the Need for Change

OTR helps companies anticipate industry shifts, assess their impact on competitiveness, and clarify the business objectives driving AI adoption. Through facilitated workshops, leaders and employees co-create purpose-driven AI initiatives aligned with strategic priorities and workforce needs, ensuring AI adoption is guided by intent, not technology.

Mapping Digitalisation and AI Opportunities

With clear objectives, companies identify high-value AI and digital opportunities aligned to business needs. Facilitators help prioritise initiatives based on impact, feasibility, and readiness, ensuring resources deliver meaningful outcomes for both businesses and workers.

Charting the Path Forward



The OTR culminates in a time-bound AI roadmap that aligns business vision, technology adoption, and workforce development. Anchored by a strong workforce transformation plan, it equips employees with the skills and mindset for AI adoption. Through this process, organisations embed AI into how they plan and operate, ensuring a human-centric and future-ready transformation.

Sustaining Transformation Through Ecosystem Collaboration

Sustainable AI transformation is enabled by Singapore's tripartite ecosystem. As a key connector, NTUC links companies to funding, training, and capability-building support which ensures AI roadmaps translate smoothly from strategy to implementation.

Thank you to the NTUC IT&T & UWEEI team for partnering with us to shape our 2030 AI and digitalisation roadmap. The workshop's methodology was instrumental in helping our team to form a unified roadmap by uncovering blind spots, spark meaningful discussions, and connect insights across various functions. Through the workshop, we gained clarity and alignment that will guide us forward. We see this not as the end, but the beginning of a deeper collaboration, and we look forward to continuing this partnership as we transform our workforce for the future.

Mr Balamurali Kumar V,
Senior Director, Manufacturing Excellence
STMicroelectronics

STMicroelectronics

Uweei

Through the AI Roadmap OTR, we gained clarity on where AI can create the greatest impact for SSMC. The structured process helped us identify opportunities, prioritise initiatives, and align our teams. We didn't just chart our unique roadmap, the process also helped align our people to move forward with confidence. We extend our sincere thanks to UWEEI and NTUC for bringing us through this process!

Mr Lim Soon,
Chief Executive Officer
Systems on Silicon Manufacturing Company

ssmc®
(A Joint Venture of NXP & TSMC)

Uweei

AI TRAINING TO UPSKILL WORKERS

As AI becomes more pervasive, building employees' skills and confidence is a business imperative. AI capability enables workers to adapt faster and perform better, while helping businesses drive productivity, innovation and competitiveness.

NTUC LearningHub Learning eXperience Platform (LXP) Enterprise

LXP Enterprise is a one-stop digital learning platform that enables businesses to identify skills gaps, deploy targeted training and track workforce progress using expert-led online courses. Employees can learn anytime to build job-ready digital, technical and adaptive skills, while earning certificates upon course completion.

Meet your corporate training needs with LXP Enterprise
https://www.ntuclearninghub.com/lxp/enterprise

NTUC LearningHub AI Programmes and Courses

NTUC LearningHub offers a comprehensive suite of AI programmes, from foundational AI literacy to role-based training for functions such as Marketing, Finance, and Sales. NTUC LearningHub also provides sector-specific AI modules that enable organisations to apply AI effectively within their industry.

Partner NTUC LearningHub to enhance your workforce's AI capabilities and readiness today. https://www.ntuclearninghub.com/ai-playbook/eds

TALENT & JOB REDESIGN

As more companies adopt AI, job scopes, talent needs, and skill requirements change. NTUC supports companies with programmes and funding for job redesign and reskilling, while helping them access the right talent needed for emerging roles.

Hiring & Recruitment services

e2i offers one-stop, personalised support for companies' manpower and training needs. e2i will work with you to identify your requirements, assist in outreach and screening of potential recruits, and connect you with shortlisted candidates.

For more information, please visit https://e2i.sg/manpower

Career Conversion Programmes (CCPs)

CCPs provide employers support to broaden their talent pool by reskilling mid-career new hires and/or existing employees into growth jobs with longer-term prospects and opportunities. These may include roles that are redesigned or newly created due to digitalisation or AI adoption.

For new hires
Salary support for the duration of On-the-Job Training and any facilitated training:
- Up to 70% of monthly salary (capped at $5,000/month)
- Up to 90% of monthly salary for mature workers (≥40 years old) or long-term unemployed (capped at $7,500/month)

For existing workers (redeployment / reskilling)
- Support for Job Redesign Reskilling (JRR) to enable workers to take on growth job roles that could include AI-related skills

For more information, please visit https://e2i.sg/ccp

COMPANY TRAINING COMMITTEE GRANT (CTC GRANT)

The NTUC CTC Grant, managed by e2i, supports companies with CTCs in driving business and workforce transformation, including AI adoption. It helps businesses boost productivity and competitiveness while enabling workers to develop skills, take on higher-value roles, and access better wages and career opportunities.

As of Sep 2025, NTUC had approved **over 700 NTUC CTC Grant projects** across various industries, of which over 70 are AI focused projects. Through the CTC Grant, close to 10,000 workers have been upskilled and enjoy better wages and work prospects.

Funding Parameters

Eligible companies that form CTCs can receive up to 70% funding support for qualifying project costs including (but not limited to):

- In-house or external training (non-SSG supported) tied to transformation project
- Equipment and software essential to job redesign
- Consultancy services

Qualifying items are assessed based on whether they drive better business and worker outcomes. These include (but not limited to):

- **Enterprise Transformation:** Enhance business capabilities, innovation, and/or productivity
- **Workforce Transformation:** Better career prospects and wages for workers (Singaporeans and Singapore PRs) through efforts such as job redesign.

Worker Outcome Requirements

Applicant to commit to at least 1 of the following worker outcomes:

- Wage increase; and/or
- Recurrent Skills Allowance[1] or One-time Allowance[2]; and/or
- Implemented Career Development Plan (CDP) that is communicated to staff

[1] *Frequency can be either monthly, quarterly, half-yearly, or yearly, and amount is to be commensurate with the scale and type of project, in consultation with CTCs.*

[2] *This is applicable for projects with only training components tied to an approved CTC Grant transformation project. Amount of skills allowance is to be commensurate with scale and type of project.*

For more information on eligibility and the grant, please visit

https://e2i.sg/ntucctc

SECTORAL AI SOLUTIONS

AI IN ESSENTIAL DOMESTIC SERVICES SECTORS - USE CASES ACROSS EDS VALUE CHAIN

AI is transforming every stage of the Essential Domestic Services (EDS) value chain not just by enabling smarter, faster, and more resilient operations, but also by reshaping jobs to make work safer, less repetitive, and more meaningful. As workers gain new skills and confidence with AI tools, businesses unlock efficiencies and innovation. Here are some areas where AI empowers people and drives business outcomes:

AI-driven Training Management Systems
Deliver personalised learning and automate administrative tasks for streamlined operations and effective learning.

AI-Assisted Training Contents
Generate content in a scalable manner to address market needs in real-time.

AI-Powered Image & Video Analysis
Analyse images or videos for classroom observation, patient monitoring and diagnostics.

Resource and Inventory Management
Tracking and forecasting of medical supplies to meet demands using AI predictions.

AI-powered CRM
Smart lead management system resulting in higher conversion rates.

Manpower and Resource Scheduling
Smart scheduling of resources based on patient volume, appointment priorities, and real-time operational needs.

Intelligent Customer Service
AI agents manage difficult queries by using information from different sources for faster issue resolution.

AI-driven Administrative Automation
Reduction in manual tasks and streamlined workflows, resulting in increased operational efficiency and accuracy.

AI TRAINING FOR EDS SECTORS

In addition to gaining role-based AI skills, workers across the EDS sectors can also gain sector-specific AI capabilities through NTUC LearningHub's structured training programmes. These programmes empower workers to deliver greater value in their jobs and strengthen their resilience in an evolving workforce.

NTUC LearningHub's courses are eligible for SkillsFuture Singapore (SSG) funding, absentee payroll support and Union Training Assistance Programme (UTAP) funding.

Fundamentals of AI Application

Agentic AI for Business Process Workflow Automation

Advanced Prompt Engineering

Certified in AI Governance, Risk Management and Strategy

NTUC LearningHub offers a series of AI capability courses that help organisations move from basic awareness to advanced, responsible use of AI. Companies in the EDS sectors can start by building foundational AI literacy so their workers understand how AI supports workflows and administrative tasks.

As they progress, they can adopt courses that enable simple automation, such as streamlining scheduling, managing resources, or generating teaching content. They will also learn how to integrate pre-trained AI models into products or business processes.

More advanced courses help organisations to develop customised AI models and solutions for specific business needs to improve safety, efficiency, and service delivery.

The final stage focuses on AI governance, equipping hospitals and education institutions the skills to manage data risks, uphold ethical standards, and ensure safe and trustworthy AI deployment across their operations.

Visit NTUC's LearningHub's website to find out more!

https://www.ntuclearninghub.com/ai-playbook/eds

Beyond NTUC LearningHub's structured AI training programme for the EDS sector, the healthcare sector is further supported by the Healthcare Academy. The Healthcare Academy is a collaboration between Healthcare Services Employees' Union (HSEU), Employment and Employability Institute (e2i), and NTUC LearningHub (LHUB). They support continuous learning for healthcare professionals, particularly those affected by industry restructuring and technological disruptions.

Developed by the Healthcare Academy, Gen AI 101 is a structured training programme that equips healthcare leaders with a clear understanding of AI's role in improving care delivery, operational efficiency, and decision-making. The programme also introduces a prompt-engineering framework and reinforces key ethical principles such as data privacy, transparency, fairness, accountability, and patient consent to support safe and responsible AI adoption.

Visit Healthcare Academy website to find out more!

https://www.ntuclearninghub.com/healthcare-academy

The next section demonstrates how some businesses have tapped on the strength of the tripartite partnership to embrace AI and integrate workforce upskilling into business transformation using the CTC scheme.

AI-DRIVEN TRANSFORMATIONS

AI-enabled Smart Flexi-Scheduler and Fall Prevention System

Tan Tock Seng Hospital (TTSH) is one of Singapore's largest acute care general hospitals and the flagship hospital of the National Healthcare Group (NHG) with more than 8000 healthcare staff.

Healthcare Services Employees Union (HSEU) through the **Company Training Committee (CTC)** and grant funding supported TTSH to implement an AI-enabled flexible scheduler platform provided by **BIPO** and a fall prevention system provided by **CoNEX Healthcare**.

Once fully implemented, TTSH expects to achieve greater productivity through optimised manpower and resource allocation. This solution is also anticipated to boost job satisfaction, reduce burnout, improve work-life balance, and enhance worker safety and ergonomics.

Challenges Faced	Solutions Adopted
Inflexible Scheduling Inflexible scheduling methods failed to adapt to the changing needs of nursing staff and patients, leading to a mismatch between healthcare resources and patient demand ultimately leading to staff burnout.	**Smart Flexi-Scheduling System** An AI-powered system manages different shift types, specialisations and roles. This enables flexible scheduling of the nurses while balancing ward-specific requirements and individual nurse shift preferences.
Patient Fall Vulnerability Conventional fall prevention systems offered limited predictive capabilities and could only trigger alerts moments before a fall occurred. This not only compromised patient safety but also required constant monitoring by staff.	**AI-powered Bed Exit Prediction** The solution uses thermal imaging, video analytics and predictive algorithm to predict imminent patient bed exits. The exits are predicted with at least 15 seconds lead time, enabling staff to intervene before a fall occurs.

TRAINING

Smart Flexi-Scheduling System Training

Nurses are trained to use AI scheduling, interpret workload forecasts, and manage shifts efficiently, enhancing productivity, balanced workloads, and reducing staffing conflicts.

AI-powered Bed Exit Prediction Training

Nurses learn how the system predicts bed exits and how patient privacy is preserved via the use of thermal imaging. They also learn how to integrate AI insights with clinical protocols to prevent falls and improve patient safety.

JOB REDESIGN

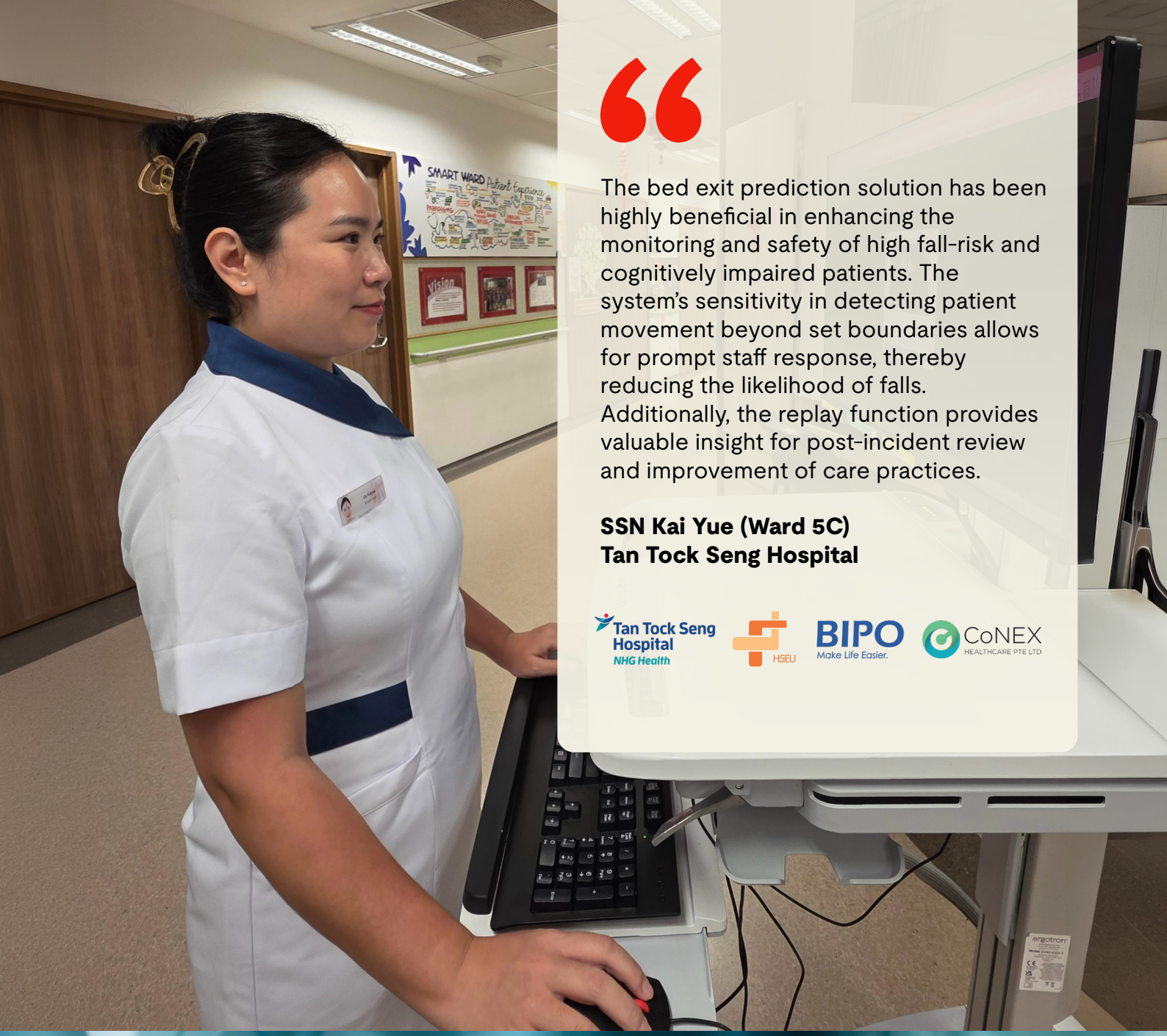
Nurses' jobs are redesigned across the grades to promote career growth through skills development and exposure to diverse roles.

- Enhances workforce flexibility, allowing staff to cover multiple units efficiently.
- Encourages leadership readiness for advanced clinical and administrative roles.

"The flexible work schedule, enabled by the flexi-scheduling solution, has extended beyond standard hours to ensure safe, holistic patient care while emphasising staff development through capacity-building and expanded roles aligned with organisational goals. This approach has led to a higher proportion of nurses reporting flexible schedules, reduced burnout, and improved teamwork.

Modular nursing roles and optimised scheduling allow nurses to take uninterrupted breaks and create opportunities for expanded clinical competencies and hybrid roles across different settings. These hybrid roles enhance professional growth and career advancement, contributing to a significant reduction in hospital-level staff attrition.

DDN Sui Huangbo
Tan Tock Seng Hospital



The bed exit prediction solution has been highly beneficial in enhancing the monitoring and safety of high fall-risk and cognitively impaired patients. The system's sensitivity in detecting patient movement beyond set boundaries allows for prompt staff response, thereby reducing the likelihood of falls. Additionally, the replay function provides valuable insight for post-incident review and improvement of care practices.

SSN Kai Yue (Ward 5C)
Tan Tock Seng Hospital

Smart Facilities Management System

Changi General Hospital (CGH) is a tertiary referral centre with over 1,000 beds caring for more than 1 million people in Singapore and they have been delivering trusted care since 1935. CGH is a member of the SingHealth cluster of healthcare institutions.

Healthcare Services Employees Union (HSEU) through the **Company Training Committee (CTC)** and grant funding supported CGH to implement a smart facilities management system powered by AI for predictive maintenance. The solution was developed jointly with CGH and **Schneider Electric**.

Once fully implemented, CGH expects to achieve significant productivity gains through reduced manual workload and data-driven decision making. They also anticipate enhanced operational reliability through predictive maintenance and strengthened sustainability performance with real-time energy insights.

Challenges Faced

Reliance On Manual Data Collection

Data from water and power meters were manually obtained by the facilities management team. As the meters were often located in tight or elevated spaces, it was labour-intensive and time-consuming for the team to obtain the data.

Limited Capacity For Data Analysis

As the monthly utilities usage were collated and tracked manually, there was limited capability for deeper analysis on the collected data. This constrained the facilities management team's ability to perform holistic assessments and derive actionable insights.

Solutions Adopted

Automated Data Collection

The AI-powered system automatically transmits utility readings to a central cloud platform, eliminating the need to manually obtain the data and input into spreadsheets.

Smart Facilities Managment System

Beyond automating data collection, the system has built-in analytics and AI-enabled capability to support predictive maintenance. This enables the facilities management team to detect anomalies early and undertake preventive measures which minimise operational downtime.

TRAINING

To ensure effective implementation of the smart facilities management system, the facilities management team at CGH underwent training in the following areas:

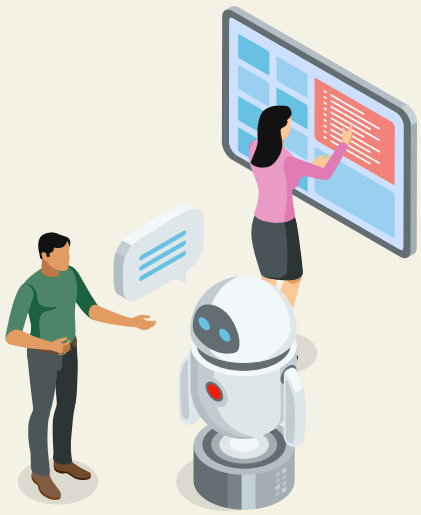
- **Digital Systems & IoT Equipment Training:** This equipped the workers with the knowledge to operate, maintain and troubleshoot the equipment and data collection platform
- **AI & Predictive Maintenance:** This enabled the workers to understand the models used for equipment health insights and to better interpret the AI-generated insights.

JOB REDESIGN

With the introduction of the smart facilities management system, the facilities management roles will evolve from manual, labour-intensive tasks to higher-value technical functions.

Instead of manually obtaining and collating the data, the engineers' role will shift to:
Operate and maintain a network of smart meters and sensors and ensuring system interoperability.
Supporting robotic operations within CGH as part of CGH's drive for automation.

The engineers will also have a new career pathway of progression to a manager role where they will focus more on strategic oversight, innovation and data-driven decision making.



"With the smart facilities management system, my job has changed for the better. Instead of manual and physical tasks, I get to analyse real-time data, spot issues early, and make decisions with the aid of AI that better support hospital operations.

It feels good to know that my work is safer, more skilled, and contributes to CGH's sustainability efforts.

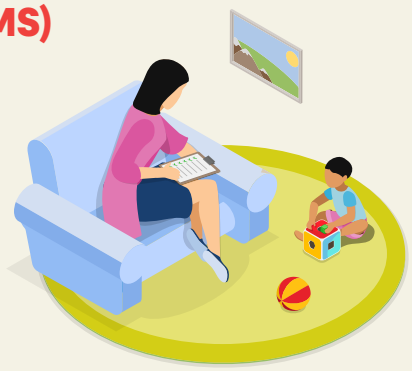
Yusuf Bin Rafi'ee, Senior Engineer (Facilities Management)
Changi General Hospital

Changi General Hospital
SingHealth

HSEU

Schneider Electric

Pedagogical Quality Management Systems (PQMS)



IYAD Perdaus is a non-profit organisation in Singapore that runs a network of early childhood development centers.

Education Services Union (ESU) through the **Company Training Committee (CTC)** and grant funding supported Iyad Perdaus to implement the AI-enabled Pedagogical Quality Management Systems (PQMS) provided by **Vosaic**.

Upon implementation, Iyad Perdaus anticipates enhanced pedagogical quality, timely practices, and data-driven decision-making, leading to greater efficiency, accuracy, and innovation. The transformation project and training initiatives ensure staff are equipped to effectively use the PQMS, reinforcing the organisation's commitment to professional growth and improved outcomes for children and families.

Challenges Faced

Time-Intensive Supervision & Delayed Behavioural Response

Significant time spent on travel for in-person class observations.
Lag in identifying and responding to student behavioural concerns.

Supervision Feedback Gaps & Inaccurate Performance Analysis

Supervisors faced challenges in providing targeted and constructive feedback to educators due to limited observation data and time constraints.

In addition, the accuracy of performance reports was often constrained by manual interpretation and data complexity.

Solutions Adopted

AI-Driven Video Analytics With Behaviour Monitoring

AI-powered monitoring devices with remote assessment capabilities capture and analyses classroom sessions. This empowers the early intervention team to conduct prompt virtual evaluations and deliver timely support interventions.

Smart Teaching Insights & Performance Analytics Powered By AI

AI-driven video analytics feedback enables more objective, data-informed, and timely evaluations, enhancing teaching effectiveness and professional development.

The AI-powered report analysis also enables precise, objective, and consistent evaluation across educators and learners.

TRAINING

To ensure successful PQMS implementation, educators and staff underwent comprehensive training on using AI features to improve classroom observation, feedback, and analysis of pedagogical practices and student outcomes. The system enables educators to capture tacit knowledge and best practices, ensuring ongoing effectiveness and supporting continuous improvement in teaching quality and learning impact.

JOB REDESIGN

With AI integration, educators' roles were redesigned from routine tasks to high-value, impact-driven functions:

- **AI Efficiency** – AI-driven observation, automated assessment, and predictive analytics reduced routine tasks, letting educators focus on coaching, personalised learning, and data-informed interventions.
- **Proactive Facilitation** – Educators could proactively address student challenges, guide skill development, and foster critical thinking, shifting from content delivery to strategic facilitation that enhanced teaching quality, learner outcomes, and fostered institutional innovation.

> AI tools have transformed my teaching, classroom observations, feedback and assessments to be more efficient, data-driven and impactful. I can now fully focus on mentoring educators and nuturing children under my care and improving learning outcomes like never before.

Norhashikin, Centre Leader
Iyad Perdaus Choa Chu Kang

Efficient Content Generation Powered By AI

Explico is a Singapore-based educational technology (EdTech) company that uses AI and machine learning to provide personalised assessment and learning solutions for students.

Education Services Union (ESU) through the **Company Training Committee (CTC)** and grant funding supported Explico to implement zero-shot prompting by **Education Assist Singapore**.

By using machine learning, Explico's platform identifies students' academic strengths and weaknesses, offering tailored support to enhance their learning experience. This innovation is expected to ease teachers' workload significantly, reducing their preparation time by 70%.

Challenges Faced	Solutions Adopted
Time-consuming & Costly Process The process of creating a question bank with multiple questions of varying difficulties and corresponding answer keys was time-consuming.	**Adaptive Content Customisation** Users were able to easily generate the questions they need by selecting parameters like level, subject, and difficulty.
Non-Localised Content for Singapore Standards Questions generated by generic AI tools were not tailored to Singapore's curriculum and required multiple prompts for quality and relevant results.	**Efficient Localised-Content Generation** Streamlined content creation using Singapore-based prompts to efficiently generate a pool of localised content that were tailored to Singapore's curriculum.

TRAINING

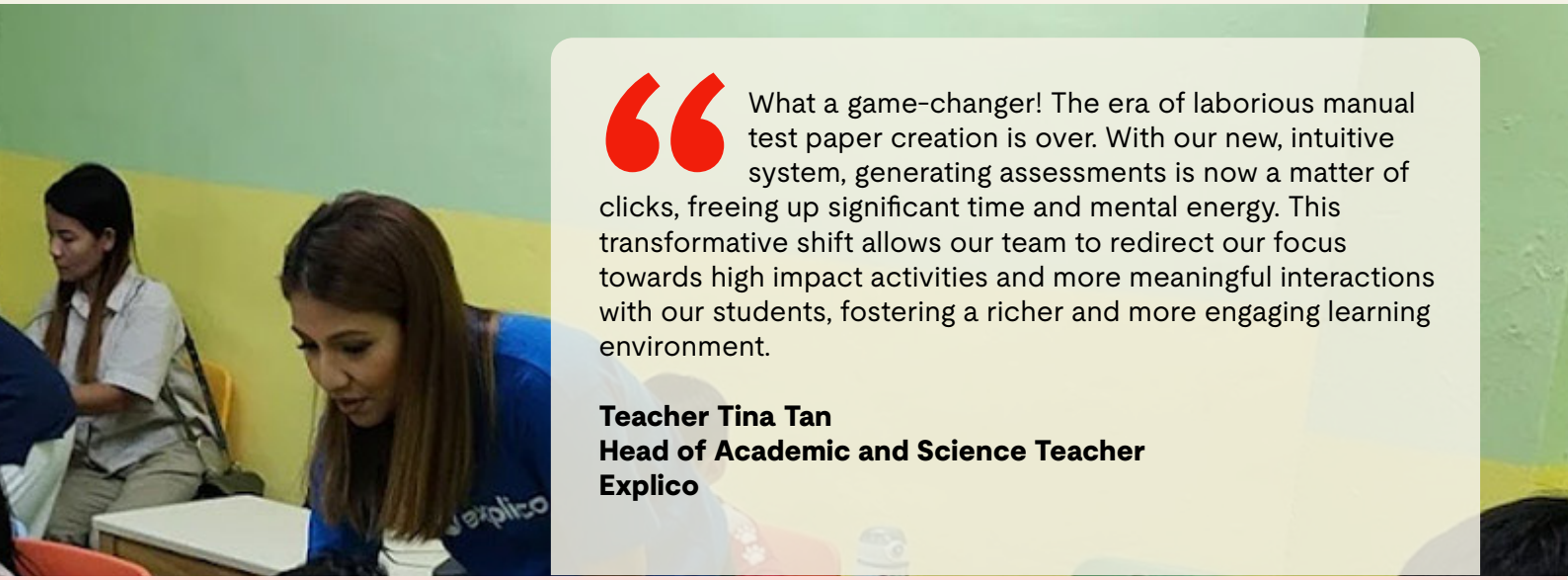
To ensure effective use of zero-shot prompting technology, teachers were trained to design prompts tailored to specific curricula and generate content aligned with MOE standards for each subject, grade level, and learning objectives.

They also learned to evaluate AI outputs for accuracy, appropriateness, and relevance, refine prompts to improve quality, and incorporate human review for final use, while understanding the ethical implications of AI-generated educational content.

JOB REDESIGN

With the implementation of zero-shot prompting technology, teachers were able to shift their focus from repetitive tasks such as content formatting and question generation to creating more engaging and impactful learning experiences.

- **Creative Content Development** – Teachers could start with AI-generated materials and then personalise them with unique activities, projects, and multimedia elements.
- **Increased Skillset** – Staff gained valuable digital literacy skills in using AI tools, making them more competitive in the evolving educational landscape.
- **New Roles** – The AI tool introduced new roles for "approvers" and "users" to perform quality checks on AI-generated content, shifting their focus from data entry to content review and curation.



"What a game-changer! The era of laborious manual test paper creation is over. With our new, intuitive system, generating assessments is now a matter of clicks, freeing up significant time and mental energy. This transformative shift allows our team to redirect our focus towards high impact activities and more meaningful interactions with our students, fostering a richer and more engaging learning environment.

Teacher Tina Tan
Head of Academic and Science Teacher
Explico

"With the support of this grant, we have transformed how teachers create and assess content. Previously, crafting a single question took up to 10 minutes; now, in the same timeframe, they can generate hundreds stored in a centralised system for easy reuse.

Additionally, Generative AI has automated the marking of open-ended questions, reducing workload and improving efficiency. This innovation is impacting educators, allowing them to focus on what matters most: teaching.

Ashutosh Shukla, CEO and Founder
Explico

explico

Education Services Union

EDUCATION ASSIST
—SINGAPORE—

AI Partner Case Study: AI-powered Leadership Profiling

A private hospital group wanted to profile its leaders for leadership development and succession planning. However, their previous approach in evaluating leaders was done in a traditional manner with long waiting time required to get the talent insights. They also faced challenges such as inconsistency, human bias and had difficulties evaluating talent fairly across different levels and roles.

With the AI-powered leadership evaluation and profiling solution by Pulsifi, the hospital was able to do their succession planning in a data-driven manner backed by analytics. They were also able to improve reporting time for data insights by up to 95% with in-depth reports generated for each leader to support their development.

pulsifi

Challenges Faced

Lengthy Evaluation Process And Inconsistent Results

Leadership evaluation was done in a manual and traditional manner which resulted in long waiting time required to get the talent insights.

Manual evaluations were also prone to human bias and led to inconsistent results which led to difficulties in identifying leadership talent in a fair manner across different levels and functions.

Solutions Adopted

Data-Driven Succession Planning

Pulsifi partnered with the hospital to assess employees against its leadership framework using psychometric and cognitive assessments.

The AI algorithm then identified leadership potential and generated personalised development plans to support leadership growth.

Reach out to us and start your AI transformation journey

FOR HIRING NEEDS:

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