Research

Associate Professor Ts. Dr. Lee Chia Kuang wins 2 awards at PROMAC 2025

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PUTRAJAYA, 10 December 2025 – Research developed by the Deputy Dean (Research and Postgraduate Studies), Faculty of Industrial Management (FPI), Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA), Associate Professor Ts. Dr. Lee Chia Kuang once again received recognition when he won two main awards at the Project Management Conference (PROMAC 2025) organised by The Institution of Engineers, Malaysia (IEM) at Everly Hotel, Putrajaya.

His research outcome titled ‘Project Ready: Project Management Modular Based on DEMATEL Digraph and Risk Simulator’ was elevated as the recipient of the ‘Best Poster Presentation’ Award before being announced as Champion of the ‘Research Poster’ Category, highlighting the significant contribution of technology-based research in the field of project management.

According to Associate Professor Ts. Dr. Lee, this success strengthens evidence that pedagogical innovation and digital simulation are capable of offering real solutions to professional training challenges that have long relied on traditional approaches.

“This study is based on current industry needs, which require highly skilled project managers, not only in technical aspects but also in making critical decisions, managing risks, and understanding complex interdependencies within a project.

“The reality that many students and young professionals struggle with the technically dense and theoretically challenging content of the PMBOK® Guide has driven the researcher to develop Project Ready, a modular and experience-based training model integrated with two main tools, namely the Risk Simulator and the DEMATEL Digraph.

“Risk, uncertainty, and the need to analyse cause-and-effect relationships between project factors form the foundation for more practical, interactive, and accessible solutions for students and industry,” he said.

He added that the Risk Simulator functions to conduct quantitative risk analysis through Monte Carlo simulation, while the DEMATEL Digraph, his original creation registered under Copyright CRLY2021W00277, enables participants to identify critical factors through visual mapping of cause-and-effect relationships within projects.

“The integration of both platforms transforms the learning process from merely memorising concepts into data-driven analysis and realistic simulation-based experience.

“This research also introduces innovation when the DEMATEL algorithm is translated into an Excel-based system utilising CSS and Bootstrap HTML to generate automated visual and analytical outputs, making it user-friendly and accessible even to users without deep technical backgrounds.

“This study was tested through a series of training programmes funded by the MOHE PENJANA-PACE grant involving 126 participants from 2020 to 2022,” he said.

He explained that the study results showed a significant impact, with 100 per cent of participants becoming certified PMI® members and 50 passing the CAPM® examination as of December 2024.

“The effectiveness of the training was further proven through an increase in graduate employability to 98 per cent, in addition to positive feedback on improvements in risk management skills, communication, and decision-making confidence.

“From an academic perspective, this research strengthens the body of literature through publications in Q1-indexed Scopus and Web of Science journals, and has produced three registered innovation outputs, namely the GCPM module, DEMATEL Digraph, and Project Management Principles and Practices.

“The significance of this research extends beyond the academic sphere when it demonstrates potential for transfer into various professional training platforms, micro-credentials, university programmes, and industry collaborations, including with Edustats Solutions and the Project Management Institute Malaysia Chapter (PMIMY),” he said.

He further added that this victory proves that high-impact research does not lie solely in theory or publication, but in its ability to solve real problems, empower students, and contribute to national workforce development.

“With potential expansion to the international level, Project Ready now stands as a new reference in innovation for modern project management education and research.

“In addition to supporting national human capital development, the digital innovations introduced contribute to the sustainability agenda through the use of online platforms that reduce reliance on physical materials.

“With multiple recognitions including international innovation awards and a Technology Readiness Level 9 achievement record, Project Ready is seen as a future training model that not only enhances professional qualifications but also strengthens Malaysia’s position within the global project management ecosystem,” he said.

The success of this research at PROMAC 2025 proves that the combination of modular approaches, data simulation, and digital innovation is capable of offering a more effective alternative to conventional training.

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