UNIVERSITI TEKNOLOGI MALAYSIA

ACADEMIC WRITING REPORT

INDUSTRIAL TALK 2 WITH TUN HJ. ABDUL ALIM

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Tun Hj. Abdul Alim bin Abdul Muttalib, a graduate of Universiti Teknologi Malaysia (UTM), currently serves as the Head of Technology and Innovation at Serunai Commerce. With over a decade of experience in the technology sector, he has contributed to numerous development projects across various organizations. Serunai Commerce is widely recognized for its innovative halal technology solutions, including systems that verify the halal status of consumer products. His professional journey reflects a strong integration of technical expertise and strategic leadership, positioning him as a key figure in advancing digital halal ecosystems.

Computer science education is often perceived as synonymous with programming proficiency; however, its foundation extends far beyond coding. Two essential competencies emphasized during the session were Project Management (PM) and the Software Development Life Cycle (SDLC). SDLC serves as the blueprint for software development, encompassing stages such as planning, analysis, design, implementation, testing, deployment, and maintenance. Effective project management ensures structured workflows, prevents project failure, and fosters team coordination, all of which are vital for sustainable career growth (PMI, 2021). These principles are indispensable across computing disciplines, including artificial intelligence, data engineering, and software development.

The technology industry today prioritizes a blend of technical and managerial competencies. Key skills include comprehensive knowledge of SDLC and project management, collaborative competence for seamless coordination across diverse roles, and proficiency in methodologies such as Waterfall and Agile. The Waterfall model, introduced by Royce (1970), is suited for projects with fixed requirements, while Agile approaches, as articulated in the Agile Manifesto (Beck et al., 2001), emphasize flexibility and iterative delivery. Additionally, the responsible integration of AI has become a critical requirement. Tun Hj. Abdul Alim advocated a balanced approach that combines 60% human expertise with 40% AI utilization to maintain quality and market value, echoing research on automation bias and human–AI collaboration.

The talk provided valuable insights into the gap between academic theory and practical application, particularly in applying SDLC principles to real-world projects. Tun Hj. Abdul Alim's reflections underscored the importance of adaptability, collaboration, and continuous learning as core professional values. This perspective aligns with Kolb's experiential learning theory (1984), which emphasizes learning through iterative cycles of experience and reflection.

The session reinforced the need for students to internalize foundational principles early and apply them consistently across projects to avoid challenges during their transition to industry.

To achieve academic and professional success in computer science over the next four years, students should strengthen their core foundations by mastering SDLC and project management principles early to avoid challenges during final-year projects. Maintaining a balance between human skills and AI tools, applying the recommended 60:40 ratio, will ensure quality outcomes while leveraging technological. Acquiring methodological versatility by becoming proficient in both Waterfall and Agile approaches will prepare students for the diverse requirements of various industries. Actively applying theory to practice through internships and projects will deepen comprehension and skill retention (Kolb, 1984). Finally, engaging in continuous learning by exploring emerging tools and technologies beyond formal coursework will help students remain competitive in the evolving tech landscape (OECD, 2019).