

# EXPLORE BEYOND YOUR BOUNDARIES

## With Mr Loke Wai San, Executive Chairman of AEM

*By Lim Teck Heng, IEL Student Writer for IEL*



Trained as an engineer but eventually making splashes in the business world, Mr Loke Wai San is testament to the benefits of a multidisciplinary education. In a sharing session with students, he recounted his school and work experiences, and outlined the values that fuelled his success.

Mr Loke listed his personal mantras, which also double as advice for students, as follows: keep learning, push beyond your comfort zone, take some risks, and remain humble. He also summarised the qualities that are important to him in the form of the acronym PACKING, which stands for Passion, Ambition, Courage, Knowledge, Integrity, Nurture, & Grit. In particular, he noted that most engineers were INTJs in terms of their Myers-Briggs Type Indicator which meant that teamwork does not come easy for them. Instead, it was something that needed to be learned and nurtured. He also pointed out certain synergies between the qualities: once someone acquires enough knowledge in the subject matter, the courage to take risks will come naturally.

At the tender age of 16, Mr Loke left for Lehigh University in the United States to pursue his bachelor's in electrical engineering. He branded those formative years as a period that 'shaped his approach to life'. At Lehigh, he was challenged intellectually and forced to grapple with disciplines out of his comfort zone.

Mr Loke encouraged students to take up a mix of sciences and humanities to achieve a balanced education. He had fond recollections of his Freshman English classes where he had to pore through philosophy classics by the likes of Plato and Nietzsche. Initially, he struggled with academic writing and thought Freshman English was his toughest class ever at Lehigh. Yet by the end of it he was thankful that it shaped him into a more critical thinker. He felt that the ideas were so invigorating that he eventually pursued other subjects in Philosophy. He also went on to do a minor in Psychology.

Microelectronics was another class that Mr Loke enjoyed. It imbued in him the enduring principle of starting with the end in mind that he still holds dear in his heart even today.

In his macroeconomics class, the professor saw his potential in a finance-related career

and advised him to reconsider his future. His professor's words proved correct as Mr Loke later went on to have an accomplished career as a business consultant and entrepreneur.

Outside of academics, Mr Loke shared about the hobbies that he indulged in, and how they had shaped his character. He participated in team sports which taught him how to embrace failure and get up stronger each time he fell. Playing chess taught him the importance of having a game plan and plotting three steps ahead.

Mr Loke also urged students to mingle with overseas people when on exchange instead of sticking to the Singaporean crowd. He was speaking from experience as he had forged diverse friendships during his time at Lehigh. In his interactions with his overseas friends, he was humbled by how hard some of them worked to get a place in school.

After graduation, Mr Loke secured a R&D engineer position at Motorola. As a junior engineer, he was sometimes placed in high-stress situations and was expected to make huge calls that implicated entire production lines. Starting with the end in mind was a useful principle that Mr Loke abided by. It helped him make important decisions swiftly and efficiently. On one occasion, he decisively called for a systems level test when the production line was down. He intended to identify where the holes in the system were so that they could work backwards and debug the problem. After discovering that the problem could only be remedied the next day, he decided not to waste everyone's time and asked for the workers to go home for the day. His spontaneity and openness with sharing data allowed him to bring engineering concepts to market quickly, earning him fast promotions up the corporate ladder.

During his subsequent tenure at management consulting firm AT Kearney, Mr Loke found that the Pareto Principle worked wonders for him. The Pareto Principle states that 20% of one's effort brings about 80% of the outcome. This taught Mr Loke to be efficient with his resources and avoid investing excess effort into projects that would only reap diminishing returns. He also emphasised the need to be data-driven in problem-solving. He would begin with a hypothesis and gather evidence in a way that was mutually exclusive and collectively exhaustive to validate his initial conjecture.

On the topic of investing, Mr Loke drew parallels between risk taking and a game of Texas hold 'em. In Texas hold 'em, one would fold after getting dealt a bad hand and calculating that the odds are stacked in his favour. Similarly, in investing, when credible information comes in showing that your stocks are failing, you should not persist with your bad investments in the blind hope that you can recoup your losses. In his words, 'one should not take grit the wrong way'. Grit might be important but knowing when to cut your losses was just as important. He claimed that failure was nothing to be ashamed of, and that it was better to fail fast and start again. He did recognise that folding might be counterintuitive especially for INTJ types who are confident about their own judgements, so he emphasised that folding must be learned.



Mr Loke took questions from members of the audience. In one question, he was asked about the leadership qualities that he feels are important to an engineer. He highlighted two defining qualities: the ability to influence and change habits, and having a compelling vision for people to follow. Elaborating on his notion of a vision, he explained that today's leaders cannot gain legitimacy just by 'barking ideas'; there is a need for the 'persuasion of critically thinking minds', and a robust vision does just that.



Mr Loke also discussed what students should consider when deciding whether to join a start-up. He claimed that this decision should be personality-driven, and that students who derive a lot of joy from thinking of new ideas would be suited for start-ups. However, he offered a word of caution that jumping right into start-ups as a fresh graduate would expose one to too much chaos, and also hinder one from developing robust, long-term habits. Instead, he advised students to get their grounding first at a bigger company before moving to a start-up.

Mr Loke closed his sharing by issuing a call to action for all the students in the audience. He reminded them that while what they were learning in school was no doubt invaluable, they must stretch their learning and explore beyond their boundaries.