Research Statement

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Background

Learning is the process of acquiring knowledge, approaches, or skills from study, instructions, or experience. It is through this process that we are better equipped for the future. Every student is unique and has the desire to excel regardless of their background. They have decided to continue their learning journey with us, and it is the job of educators to value add to their journey. My training in computer science and information systems, my involvement in industry projects, and my experiences in teaching and learning pedagogy from my previous roles set me an interest in exploring new methodologies in teaching and learning with new developments in pedagogies for Information Systems undergraduates, to better prepare students academically and professionally.

Besides the area of teaching and learning, I had the privilege to be involved in business process reengineering efforts in the industry. Technologies have always played a key role as an enabler in such transformations. However, successful implementation of process improvement efforts often demonstrates a closely knitted relationship between business and technology. New technologies, particularly Web3 and distributed ledger technologies (DLT) are known to be game changers for the years to come. Decentralized markets with lower costs may force organizations to redesign their processes and look at their digital transformation efforts. While some are still in experimental stages, the use of DLTs and related digital products such as NFTs and cryptocurrencies will bring about an impact.

I am interested in exploring how Web3 and DLT can bring about changes to the ecosystem from the perspective of use cases, process improvement efforts, or an overhaul of their business/operational strategies to bring about competitive edges in the industry. This will be particularly interesting for the ecosystem as central banks around the world use CBDCs and cryptocurrencies.

Research Areas

1. Project-based Learning

Projects and assignments often constitute a large part of course assessment components, many of which require students to solve a real-world problem. A good project will encompass elements of experiential learning, project-based learning, and active learning. The challenge many students face is their limited exposure to the industry which requires multidisciplinary knowledge. It may require the instructor to play an important role in facilitating through guiding questions and play an active role as students work toward the completion of their project. An effective project framework should be aligned with the university's teaching and learning pedagogy of interactive, active, and experiential learning, and achieving the requirements of the course is developed to support this. The success of this framework should not be limited to a single case study but taken beyond the scope of the project within the course. I am interested in looking at what's beyond the learning that can be extended by students on their own that will develop them professionally.

2. Non-fungible Tokens (NFTs)

NFTs are cryptographic assets that are uniquely identified and transacted over a distributed ledger. While NFTs are in the form of artworks but it has the potential to be expanded to other industries. Financial exchanges of NFTs transacted on cryptocurrencies, which may be volatile, which potentially triggers the question of the value of an NFT. The adoption of NFTs is not limited to a technology change. Traditional processes can be displaced which also implies the need for a reengineering effort. The choice of a traditional means versus a digital approach are decision organizations need to make. The different use cases for each industry on the adoption of NFTs will be an interesting area to explore.

Selected Publication and Output

- 1. Is Web3 better than Web2 for investors? Evidence from domain name auctions, by KE, Ping Fan; LAU, Yi Meng; HANLEY, Daniel Varghese. (2023.0). Pacific Asia Conference on Information Systems 2023, Nanchang, China: AIS.
- LAU, Yi Meng; Rafael Jose BARROS BARRIOS; GOTTIPATI Swapna; and SHIM, Kyong Jin. Gamified online industry learning platform for teaching foundational computing skills. (2022). Proceedings of 2022 IEEE International Conference on Teaching, Assessment, and Learning for Engineering, Hong Kong, China, December 4-7. 1-8.
- 3. LAU, Yi Meng; SHIM, Kyong Jin; and GOTTIPATI Swapna. Design and supervision model of group projects for active learning. (2021). *Frontiers in Education Conference (FIE)*.