**Statement of academic purpose**

I’ve heard heartbreaking stories about how people, including my relatives, downsized to smaller homes because of the 1997 Asian financial crisis. On the national level, this crisis caused an economic decline, particularly in the industrial sector, which led to premature deindustrialization. Many expected rapid recovery post-crisis, but it never occurred. Instead, investors prefer China’s industrial sector, trapping Indonesia in the ‘middle income level’ for 29 years.

“If only Indonesia was competitive enough, would Indonesia be able to return to its industrialization peak and attain ‘high income level’ status?” I asked myself this upon learning about our dismal economic history. These stories sparked my motivation to learn more about premature deindustrialization, inspiring me to want to help Indonesia regain its industrialization peak and economic strength.

When I took an optimization course during my undergraduate studies, I learned that Indonesia couldn’t compete with China due to inefficiencies in our manufacturing process, particularly manual labour. Delving into China’s industrial history, I learned the usage of data analysis and optimization was pivotal in reducing cost and increasing production capacity. Seeing a potential where Indonesia can also use data to optimise its manufacturing process reinforced my decision to pursue MSc in Operations Research and Analytics.

Throughout my undergraduate studies, I took Introduction to Operational Research and statistics courses to become proficient in data analysis and optimization. I also sought internship opportunities for real-world experience in applying data analysis for optimization and identifying factors affecting a company’s operating costs. My first data analysis experience was at Sayurbox, an e-grocery start-up with a declining customer satisfaction index (CSI) and, thus, declining competitiveness against similar start-ups. As I went through their customer experience’ data, I discovered inefficiencies in their customer journey flow, leading to higher user complaints and cost. To alleviate the issue, I suggested using a customer service bot to assist the customer service team, decreasing the average response time for customers as well as reducing their customer journey by 40%, leading to a 20% increase in CSI and 15% decrease in cost within months. Here, I learned the value of good data management and how to design an efficient network process flow using data analysis. This knowledge will be helpful in reducing Indonesia’s industrialization cost.

Balancing my skills in optimization, I also worked to develop my business instincts in order to combine both technical skills and business perspectives for making decisions that aligns better with a company’s objective. Becoming a CEO Office Intern at Finku has helped shape my leadership and business acumen. The flexibility to rotate to other roles, such as business development and partnership as well as product management, allowed me to have a better bird’s eye view of the business. I discovered that the problems in early-stage start-ups are about discovering a suitable end-to-end system which is heavily related to operations management. This is also where I decided that I want to follow the career journey of Finku’s co-founder who used to work as a management consultant prior to becoming an entrepreneur that aspired to contribute in improving Indonesians’ financial literacy. In my case, I want to contribute to bring back Indonesia’s industrialization peak by providing consultation services that can help manufacturers increase their productivity while ensuring high quality production, so that Indonesia can become more competitive in industrialization, and eventually raise its income level.

My ambition to support Indonesia’s industrialization will be fostered by pursuing Operations Research and Analytics at LSE. Indonesia’s current industrialization practices, similar to Sayurbox’s issue, still have many labour redundancies and inefficiencies, leading to increased likelihood of human errors and, thus, cost. LSE’s Artificial Intelligence and Deep Learning course will help me develop a strong understanding in building intelligence that can be implemented in manufacturing, such as maintenance scheduling or machine failure prediction, to minimise human errors. The game theory and operations research modelling courses offered in the LSE OR program intrigue me because game theory studies strategic behaviour in decision making which is a very important component in running a company. Moreover, LSE’s OR department has several professors with interests in game theory, such as Professor Olivier Gossner, Dr Grammateia Kotsialou and Dr Robert Simon. I believe the opportunity of learning game theory from several professors is a great choice for my personal development, in addition to improving the optimisation model that I made.

Moreover, the emphasis of this program for consultancy roles to be part of its practical experience is designed to support the needs of students who aim to work in consultancy, like myself. Additionally, Castore Consulting, part of LSE’s career society, will provide rigorous training for future candidates applying for consultancy roles like me, while Women Leaders of Tomorrow can be a social space for ambitious future women leaders to connect and exchange thoughts. I understand that building and running a company is not an easy route, especially for women leaders, so being able to have a space where aspiring female entrepreneurs, like me, are nurtured can be a head start.

By combining innovation and entrepreneurship, I believe an efficient manufacturing system that I want to discover can be implemented in my future factory. Once the design has been tested and is proven to be optimised, I hope to provide private consultations for other factories in Indonesia to help discover their most efficient factory system. Through these opportunities, the number of factories in Indonesia that are working efficiently will eventually rise, making Indonesia to be on track towards returning to its industrialization peak era or even more! It will be my personal honour if I can apply both my academic and professional skills gained from LSE to pursue my long-term goal of becoming an entrepreneur.