

AIR LIQUIDE: SPEARHEADING A SMART INNOVATIVE OPERATIONS CENTRE IN MALAYSIA

Key Points:

- The SIO Centre in Malaysia supports 8 countries in the Greater Southeast Asia Pacific Region
- Malaysia's strong infrastructure has allowed for cutting edge programmes, technologies and ventures to be initiated at the SIO centre.
- The SIO centre in KL functions as an innovation hub, enabling Air Liquide to deliver on new technologies born from Industry 4.0 and digitalisation.
- Local talent possess a strong sense of ownership and are receptive towards new technologies leading Air Liquide to double its presence in Malaysia.
- Open collaboration with academia and startups have fueled the SIO centre's growth and expansion.

Air Liquide was founded in 1902 and has grown to become a prominent world leader in gases, technologies and services for industry and health, with gases bringing in 96% of their revenue. The company is currently present in 80 countries, serving a vast market of 3.5 million customers. Most of their operations are managed from their central headquarters in Paris, France, whilst their footprint in Malaysia began in 1927 where they became one of the pioneers of the gas industry in the region.

In 2017, Air Liquide launched its Financial Shared Services Centre in Malaysia, whose key function involved the managing of financial transactions of all the company's entities throughout the Greater Southeast Asia region.

Fast forward to January 2018, they opened their Smart Innovative Operations (SIO) Centre in Malaysia to cater to the management and production of their industries across the Greater Southeast Asia region. This is in line with their sustainability goal, which is to improve reliability and optimise operations across its sites.

The recently opened SIO Centre also serves to complement its sister centre in Shanghai, and supports 8 countries - Singapore, Malaysia, Vietnam, Philippines, Indonesia, Thailand, Australia, and New Zealand.



(L-R) Sebastien Giard, SIO Transformation Director, and Clement Lix, Centre of Excellence Director, of Air Liquide.

Malaysia Spearheading Digital Transformation

Some of the reasons why Malaysia was chosen as a location for their SIO include the strong value represented through its developed infrastructure, young and motivated talent pool, and a growing ecosystem. Kuala Lumpur, due to its centralised location, was an ideal choice to set up their SIO centre.

Air Liquide believes Malaysia's ecosystem to be vibrant, with the presence of quality local talent in areas of data mining and analytics, and the support from startups and incubators. With digital transformation being positioned as the new frontier, Malaysia stands out amongst the countries in Greater Southeast Asia as a leader in this aspect and Air Liquide proudly stands behind this movement.

Prioritising Customers For Success

A customer-centric transformational strategy serves as the backbone of the organisation across its global operations as well as in the SIO centre here in Malaysia. Its

ultimate aim is to deliver a long-term growth that is both profitable and sustainable for the business.

Seeing a need for a new approach when it came to their clients ever-changing needs and expectations, especially during an era underpinned by technological advancements, the strategy encompasses four key pillars. These pillars include operational excellence, open innovation, selective investments and a network organisation, which the group ensures will drive performance and subsequently serve customers better.

Air Liquide places customers at the heart of the transformation, and this SIO centre not only increases the value being returned to their customers, but also uses emerging technologies to increase the global reliability of their customer's assets.

As seen on their logos and company profiles globally, Air Liquide is proud of their signature – "creative oxygen". This signature embodies their vision and culture which is to achieve their goals through creativity and to promote total innovation

and development of their employees. Thus, coupled with a customer-centric approach, the diverse talent pool within the company is able to pave the way forward for creative solutions.

Ascending The Value Chain

In line with a strong customer centric approach, various technologies have been integrated to better cater to clients. This SIO centre serves as an innovation hub that allows Air Liquide to deliver on new technologies that came about due to Industry 4.0 and digitalisation. It also serves to decentralise operations management and be closer to their customer base.

Digitalisation is their gateway to transformation and sets itself as a way to better collaborate and disseminate expertise, which in turn increases their value. Air Liquide expects to consistently deliver greater value to their stakeholders but at the same time, focusing on customers as they are at the heart of the transformation.

From their operations here in Malaysia, Air Liquide is concentrating on four main aspects. Firstly, to be at the forefront of automation in the process industry. Secondly, to raise the bar on their data analytics capabilities. Besides that, they are looking at expanding in the field of digitalisation and are on the hunt for expertise to nurture and drive the business forward. Essentially, once achieved, the final outcome would be a cocktail of strengths that would move Air Liquide up the value chain.

Fortunately, in the area of data analytics, the SIO centre in KL is well on its way to achieving its objectives thanks to Air Liquide's global operations reach and innovative new programs.

Data Powerhouse

The SIO Centre – which is gradually being connected to 18 production units across Greater Southeast Asia region – utilises predictive analytics and digital technologies in their operations across the region, allowing them to meet the rapidly changing needs of customers. This is made possible through big data acquired from their data reservoir, which enables them to improve their production-unit energy efficiency and around-the-clock, seven days a week responsiveness.

Across its global operations which span 400 plants, Air Liquide collects a billion bits of data daily which is then stored in their



Some of the vibrant local talents at the SIO Centre in Malaysia.

data centres. A new analysis program was conceptualised by the SIO centre to analyse statistical and historical data, which allows them to identify any signals that may lead to a malfunction. Thus, technical interventions can be executed before a situation arises.

Capitalising On Quality

In the last two years, Air Liquide has more than doubled its presence in Malaysia and are committed towards developing the talent pool. Since its opening, it has hired more than 75 local talents and Air Liquide's management committee has plans to develop these bright talents in the field of digitalisation. These local talents range from subject matter experts, equipment experts, data scientists, IT developers, as well as technical experts.

Carrying forward Air Liquide's company culture of open innovation to the Malaysian SIO, they had hoped to enhance their history and legacy in the region. This was met with tremendous success from the local talents hired in Malaysia as they were very receptive to the concept. The local talents also have a strong sense of ownership in the projects they manage and are very motivated towards developing new and exciting ways to better serve Air Liquide's customers. What's more, there is also a big appetite here in the adoption of new tools and technologies, which bodes well for the future of the digital space in Malaysia.

Moving forward, Air Liquide plans on training these employees with the right

skills to handle Industry 4.0 and digitalisation. This blend of capabilities has led the SIO centre here to achieve a perfect 0% attrition since setting up.

Thriving Collaborative Initiatives

As part of their open innovation strategy, their branches in Malaysia have been actively engaging with startups and academia to form meaningful collaborations.

To fuel their talent growth, Air Liquide Malaysia has formed an agreement with University Malaya and Multimedia University (MMU), participating in their career fairs and promoting the organisation. They are also proposing internships and looking into research collaborations with these universities on specific topics. The willingness and commitment of universities in the country to partner with Air Liquide has not only played a huge role in their organisation's growth and expansion in the region, but is also a positive sign for future collaborations and ventures.

In between May to July of 2018, the SIO in KL also organised a student data challenge for the whole Asia Pacific region whereby 650 participants across eight countries had to provide their version of an algorithm to optimise energy efficiency. It was a proud achievement when the Malaysian students made the top 20 of the competition. This was a clear indication of the level of talent and education of Malaysians to be able to stand their own against other regions.

Besides academia, MDEC and MaGIC have also played crucial roles in connecting Air Liquide with many startups, to work on proof of concepts. One such collaboration was with 3D CapsLock Sdn. Bhd. in the area of virtual reality, allowing viewers to take a tour of their SIO Centre remotely.

Notably, the SIO centre has recently collaborated with a local startup and competed in the French-Malaysian Innovation Challenge where they won first place. This presents the perfect value proposition for them and proves that the startup scene in Malaysia has many collaborative opportunities. Air Liquide is already looking to partner with more startups both here and the ASEAN region.

Fitted with the right talent, infrastructure, innovative culture, data network, collaborations and technologies, Air Liquide is ready to launch their Malaysian SIO centre as well as its employees into the new frontier that is Industry 4.0.



The SIO Centre is a data powerhouse that utilises predictive analytics and digital technologies in their operations across the region.