BEST RUN AWARDS FOR SEA
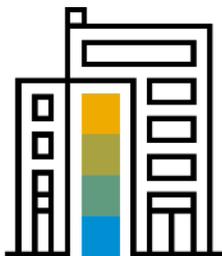
MAKING THE WORLD RUN BETTER

2021

Singapore LNG

Project ICE

An Integrated Cloud Enterprise Resource Planning (IC-ERP=ICE) platform to support Finance, Procurement & Warehouse, Asset Maintenance & Reliability and Human Resource functions

SLNG
SINGAPORE LNG

THE BEST RUN **SAP**

Company Information

Headquarter   Singapore

Industry   Oil and Gas

Website   https://www.slng.com.sg/

Incorporated in 2009, Singapore LNG Corporation ("SLNG") is a driver and catalyst for the growth of LNG-related businesses in Singapore, and is helping to establish the nation as an LNG hub for the region. As the owner, developer and operator of Singapore's and Asia's first open-access, multi-user LNG terminal, SLNG plays a vital role in strengthening Singapore's energy security, as one of the 4 Switches of Singa pore's Energy Future, identified by the Energy Market Authority (EMA).

With more than 95% of Singapore's electricity generated from natural gas, SLNG helps to strengthen the country's energy security by enabling LNG to be imported from anywhere in the world; and by ensuring undisrupted send-out of regasified LNG for power generation.

SLNG is looking beyond its mandate towards Catalysing New Possibilities in the Energy Transition, to help create a more secure and more sustainable energy future for Singapore, and to support Singapore's ambition to become an LNG hub for the region. In addition to its core Throughput Services, SLNG offers a wide range of other LNG-related solutions such as Storage & Reload, Vessel Gassing-up & Cool-down, Transhipment, Break-bulk / LNG Bunkering, and LNG Truck Loading.

SLNG has always placed emphasis on environmental, social and governance matters in its business operations, and has embraced Sustainability as an integral part of its corporate strategy. It has developed a Green Strategy that aligns its efforts with those of the Si ngapore Government, particularly the Singapore Green Plan 2030. SLNG has set for itself an ambitious target to materially reduce its carbon emiss ions by 30% by year 2030, and to attain carbon neutrality by 2050. SLNG is also working with like-minded partners to explore greener fuel sources and new ways to reduce carbon emissions.

SLNG is Catalysing New Possibilities in the Energy Transition, Powered by SAP Cloud and Digital Core

Singapore LNG

"Quote"

"With SAP S/4HANA Cloud, we have an integrated platform that gives us a single source of truth for more effective and accurate data analysis. The integrated platform also enables greater productivity through enhanced automation and embedded analytics, scalability to support future business growth, as well as reliability by reducing data discrepancies across multiple systems.
The real-time insights that we gain allow us to be more agile and competitive as we respond to market demands and new opportunities in LNG and beyond."

Mr Chong Nai Min,
Vice President
(Information Technology), SLNG

Challenge

Adapting to today's digital economy in the never normal requires a strong digital core. Previously, SLNG stored data in separate finance, HR, procurement and maintenance systems. Frequent disruptions in data interfaces often led to data discrepancies and the need for manual reconciliations. With SAP S/4HANA Cloud, the objective is for SLNG to simplify operational processes, reduce downtime with predictive technology, and transition employees to high-value work.

Solution

SLNG has chosen SAP S/4HANA Cloud (Private Cloud Edition) to help optimise its business processes. Other SAP solutions implemented include Intelligent Robotic Process Automation (iRPA) for workflow automation, SAP Intelligent Asset Management for asset reliability management, SAP Ariba (Sourcing, DSN) to digitise procurement, SAP SuccessFactors and Concur for core HR processes and employee claims, SAP Analytics Cloud (SAC) and Qualtrics for employee experience management. SLNG has been using SAP Finance for financial management and reporting since 2013.

Outcome

SAP S/4HANA Cloud connects data at the source and is available in real-time for business planning. The heart of SLNG is its employees, from the financial analyst responsible for payment processing to the maintenance planners who coordinate maintenance activities at the terminal. SLNG uses iRPA to automate administrative tasks and workflows, allowing employees to save time and focus on more strategic work. For example, SLNG has built bots to automate the payment process for non-PO invoices that were previously entered manually. Unplanned downtime can be costly and may erode customer trust. At SLNG, maintenance technicians follow a planned schedule to service equipment and respond to service requests. Using a predictive approach, SLNG aims to maximise asset availability and reduce maintenance costs by using historical data and usage patterns collected by sensors, to detect potential failures. SLNG is also in the process of measuring the following benefits, set out as the business objectives at the beginning of the project.

5%	**4%**	**10%**
Reduction of indirect procurement spend	Reduction of asset maintenance cost	Improvement of FTE Productivity

Business Challenge and Objectives

SLNG is much more than an LNG terminal operator. It plays a key role in Singapore's energy security, in supporting Singapore's ambition to be an LNG hub for the region, and in helping to grow the LNG eco-system in Singapore and beyond. It is also an advocate for various decarbonisation efforts and the adoption of newer, more sustainable sources of energy.

The IT team in SLNG is contributing to this transformation via their Digital Roadmap to create the base for efficient and smooth expansion.

The business challenges that needed to be addressed are:

1. Simplification of SLNG's IT architecture (different 3rd party applications in each LoB)
2. Lack of a scalable platform (to be ready for future organic and inorganic growth)
3. Multiple versions of truth (data) (challenging to run analysis and scenario planning efficiently)
4. Multiple interfaces (30+) (frequent business disruptions)

The objective for SLNG is not just a simple ERP upgrade. By addressing these challenges, SLNG is aiming to become a true Intelligent Enterprise.

The specific Business Objectives for SLNG are to simplify the current system architecture and merge different systems into a common integrated cloud platform to better address business needs including:

- Increased reliability – reducing interfaces and data discrepancies across multiple systems

- Ease of doing business - Productivity – enhanced automation, analytics and insights

- Business growth - Scalability – supporting business growth and integration of new SPVs

- Empowered workforce

Benefits & Outcomes

BUSINESS / SOCIAL	IT	HUMAN EMPOWERMENT

SLNG ran a comprehensive Value Assessment exercise with SAP, and the CFO & CPO, COO, CHRO and CIO are actively participating along with their teams. The following benefits were agreed at the end of the exercise and are currently being tracked by SLNG:

ASSET MANAGEMENT

- Optimise spare parts / MRO Inventory
- Reduce maintenance cost, and
- Reduce unplanned downtime

PROCUREMENT

- Improve procurement team productivity
- Reduce direct & indirect spend

FINANCE

- Improve Finance team productivity
- Reduce external audit cost

IT

- Savings from retiring existing 3rd party applications
- Improving IT team productivity and enabling the team to become a strategic partner to the business

HUMAN RESOURCES BENEFITS

- Improving employee productivity across functions via reducing manual / repetitive / error-prone tasks, and
- Reducing unwanted turnover via improving the employees' experience with technology

Additional Information - SLNG Value Realization Framework

SLNG's engagement with SAP stands out due to one more critical reason. Throughout this engagement, Singapore LNG has shown a genuine commitment towards not only successfully identifying their challenges and capabilities to address them, but also committing towards a successful implementation and Value Realization post-Go-Live.

The IT and LEAN teams from SLNG worked with SAP to develop and implement a fit-for-purpose **Value Realization Framework** in order to identify, track and report quantified improvements. Each LoB CXO involved in the exercise committed to deliver a certain improvement value. Using this VR framework, SLNG is now well on its way towards realising the expected benefits from their investment in technology.

The image below gives a conceptual model of the VR framework that is being executed in SLNG: