NEWS LETTER

TECHNOLOGY INFORMATION SYSTEM AND INDUSTRIAL VISIT

08/01/2026

SUMMARY OF VISIT

Johor Port Berhad utilizes Information and Communication Technology (ICT) to enhance efficiency as an integrated multi-purpose port. Their ICT Department have four part which are Administration and Helpdesk, Infrastructure, Business Application, and Project and Governance. The Key systems such as JPBi e-Community, ERP RAMCO, PAMS, and internally developed applications support daily operations. JPBi e-Community is the main portal or gate way for accessing Johor Port's strategic application systems. Then, ERP stands for enterprise resource planning and PAMS stands for Port Access Management System. Besides that, they also using both low-code platforms and traditional programming to enable faster and more flexible development. The port places strong emphasis on cybersecurity, data protection, and system reliability through a robust infrastructure that includes a Data Center and Disaster Recovery Center, server virtualization, and high-availability solutions to ensure business continuity. Overall, Johor Port Berhad is a technological, efficiency, and well-managed integrated multi-purpose port that effectively utilizes ICT to support its operations, ensure system reliability and enhance customer service.

THE TECHNOLOGY AND ISSUE DISCUSSED

The technology discussed at Johor Port shows how its advance infrastructure and digital systems have changed it into a Smart Port. Such technologies include the Marine Smart Integrated System (MSIS), which uses artificial intelligence to automate marine service scheduling. Another technology implemented by Johor Port is the Johor Port Container Terminal System (JCTS), which tracks containers throughout terminal operations. Strong infrastructure such as an Active-Active Data Center and private 4G LTE Wi-Fi supports these systems by allowing continuous operations.

The inefficiency brought on by the tedious manual processes is one of the main problems these technologies address. Congestion caused by paperwork based processing can be avoided. Data can be moved seamlessly between departments with the use of integrated digital systems. This would cut down delays and increase operational efficiency of the port.

Another issue is, ports are valuable assets and are prone to cyber attacks. In order to protect the port from these attacks, Johor Port uses security measures like a DMZ zone, Active-Active Data Center and round the clock Security Operations Center (SOC) to reduce the risk of cyber attacks. These technologies boost the port's resistance to cyber attacks and safeguard sensitive data.

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REFLECTION OF VISIT

Our visit to Johor Port Berhad showed how its ICT department drives digital transformation. We learned a lot, such as their use of low-code platforms for faster app development and reducing dependency on extensive traditional coding. Their integrated systems, JBPI, ERP RAMCO, and PAMS streamline operations, and data flow across the port, which facilitates smoother data flow and operational coordination across. From an infrastructure perspective, I was impressed by their emphasis on cybersecurity and personal data protection. Their approach includes 24/7 Security Operations Centre (SOC) monitoring, regular vulnerability assessments and penetration testing. This shows they are serious about protecting their data and systems in today's digital world, where cyber threats are growing.

Overall, the visit showed how Johor Port combines modern technology, like low-code systems with strong security and backup plans. This allows them to stay efficient and reliable.

CITATION

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