

NEWSLETTER

Industrial Visit 2 - Johor Port Berhad, Pasir Gudang



“ **Summary**

Seventy-two first-year students from the Faculty of Computing recently participated in an industry visit to Johor Port Berhad, Pasir Gudang as part of the Technology and Information System course. We departed from Universiti Teknologi Malaysia (UTM) by bus under the guidance of our lecturers, Dr. Suriati and Dr. Razak.

After we arrive, we were warmly welcomed by the Johor Port staff before entering the briefing room. Then, they introduced themselves and welcomed the visitors. The visit began with a safety video that emphasized safety as a top priority in port operations. This was followed by a corporate video that provided an overview of Johor Port's background, services, and its significant role in supporting Malaysia's logistics and trade industry.

The highlight of the visit was an informative presentation by En. Mohammad Taufiq Abdul Razak and Tn. Hj. Badrul Hisham Abdul Halim from the ICT Department. They explained how integrated IT systems are used to manage large-scale data flows, highlighted the port's IT infrastructure, and discussed the importance of maintaining high-level network security. After that, an interactive quiz session was conducted to reinforce understanding of the presentation. This encouraged active participation among the students.

The visit concluded with a tour around the port. We observed real port operations and facilities firsthand. It make the learning experience both practical and insightful.

REFLECTION

We will never forget our trip to Johor Port Berhad. It showed us how technology, future jobs, and people connect together in a real workplace.

First, the tech talk was impressive. We saw a live dashboard with a 79.10% uptime number, which made the idea of “data analysis” feel real and useful. The network diagrams and server plan they showed us full of load balancers, firewalls, and virtual servers—proved how important a strong IT system is for keeping a port running 24/7 without problems.



We feel very surprised when we found out that some of the staff there are from our university, UTM. It made the visit feel more special. We feel proud to see them working successfully there. They have shown us a clear path after we graduated.

After the talk, we boarded on our bus for a tour around the port. Even though we could not get off from the bus, the weather on that day was good and the view was amazing. The huge machines and giant ships were very shocking to see up close. Besides, all the staff were really friendly and passionate, making our trip very interesting.

To summarize this visit, it shows us how to connect our knowledge to real world jobs. Also, behind a successful company must have a group of dedicated people and a smart digital system. This visit was definitely made us more excited about working in technology path in the future.



TECHNOLOGIES & ISSUES

Key Technologies (Infrastructure & Applications):

The visit highlighted the wide technical stack necessary to maintain port operations.

Infrastructure & Security: The department manages core hardware and security layers including Network, Firewall, Server, and Database management. The department said that, to protect port data, cybersecurity is the prioritized focus part.



Specialised Port Systems: Johor Port using Logistics-specific strategic applications like MSIS, JPB, and CATOS (Computer Automated Terminal Operation System) to make sure their daily tracking will be smooth.

Business & Enterprise Tools: Johor port utilizes ERP systems (RAMCO, PAMS) for backend operations, such as financial management, human resources, procurement and supply chain.

Modern Development & Analytics: The team employs both traditional programming and Low-code development for application building, alongside Python and Power BI for advanced data analysis.

Strategic Issues & Operational Focus

The presentation addressed how ICT integrates with the broader business goals of the logistics industry:

Customer-Centric Services: Johor Port Berhad employing strategic applications like CATOS to provide real-time visibility for their customers to track their containers and cargo.

Operational Integration: A major focus is the integration of planning and execution for day-to-day operational and management activities, treating ICT as an essential business tool.

Efficiency and Usability: The port leverages technology to provide efficient, interactive, and fast user-friendly services that can reduce manual paperwork and minimize human error.

Governance and Standards: Johor Port also using international ISO/IEC standards to ensure that its ICT operations meet global benchmarks for cybersecurity and data privacy.

Organizational Structure & Governance

The visit provided insight into how a large-scale ICT department is structured to handle these technologies:

Core Pillars: Johor Port Berhad ICT department is divided into four main functional areas: Infrastructure, Business Application, Project & Governance, and Admin & Helpdesk to ensure their project move smoothly.

Support Framework: Johor Port Berhad ensures operational continuity by providing a centralized point for troubleshooting and technical assistance. By streamlining communication between users and the ICT department, the Helpdesk minimizes downtime and supports the port's objective of delivering fast and user-friendly services to both internal staff and external stakeholders.