APAC on the move

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By HERE Technologies

2023 Edition

Foreword by HERE Technologies

The transport and logistics industry in Asia Pacific is a dynamic and complex landscape, driven by economic growth, evolving customer demands, and rapid technological advancements. Businesses that operate in this industry continue to face unprecedented challenges and opportunities as economies emerge from the pandemic – from managing complex supply chains to optimizing last-mile delivery.

At HERE Technologies, we are committed to supporting our customers and partners in the transport and logistics industry as they navigate this rapidly changing landscape. We understand the importance of location intelligence in driving efficiency, improving safety, addressing sustainability requirements, and enhancing the overall customer experience in this industry.

It is with great pleasure that I introduce the inaugural report, APAC on the move, from HERE Technologies. This report contains valuable insights from transport and logistics companies across Asia Pacific to help businesses navigate the current opportunities and challenges in supply chain, fleet and logistics management. A total of 1,300 respondents were surveyed across Australia, Chinese Taipei, India, Indonesia, Japan, Malaysia, Singapore, and Thailand in March 2023. The report is designed to provide our customers and partners with a deeper understanding of the trends and best practices that are shaping the transport and logistics industry in the region. We believe that the insights contained in this report will be invaluable to businesses looking to optimize their supply chains, manage their fleets more effectively, and improve their overall logistics performance.

APAC on the move is a testament to our commitment to place customers first. We believe that by sharing our expertise and insights with our stakeholders and across the industry, we can help them drive innovation, improve performance, and deliver greater value to their businesses and customers.

I invite you to read this report and join us in our mission to build a smarter, more connected, and more efficient transport and logistics industry in Asia Pacific. Together, we can unlock the power of location intelligence, drive sustainable growth, and create value for this critical industry.



Jason Jameson

Senior Vice President & General Manager **HERE Technologies**

About HERE Technologies

HERE has been a pioneer in mapping and location technology for almost 40 years. Today, HERE's location platform is recognized as the most complete in the industry, powering location-based products, services and custom maps for organizations and enterprises across the globe. From autonomous driving and seamless logistics to new mobility experiences, HERE allows its partners and customers to innovate while retaining control over their data and safeguarding privacy. Find out how HERE is moving the world forward at <u>here.com</u>.

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What is this report?



The Asia Pacific (APAC) region serves as a critical hub for global transportation and logistics.

The region is a hotbed for supply chain innovation with its rapidly growing economies, expanding consumer base and robust importexport cargo infrastructure.

However, despite the rapid growth and increasing investments in the sector, the transport and logistics industry remains vulnerable to disruptions that have affected the movement of goods and people across the region.

Given the role that this industry plays in the APAC region's economy, it is essential to understand the current state of movement across the different economies in the region.

Brought to you by HERE Technologies, the world's leading location platform, this inaugural *APAC on the move* report contains insights from transport and logistics companies across APAC and serves as a guide to help businesses navigate current opportunities and challenges in the supply chain, fleet and logistics management.



References

Executive summary

The APAC region sits at the center of global trade and logistics, home to some of the busiest ports and airports in the world. The region is expected to contribute to about half of the world's trade growth by 2030^[1].

In recent years, logistics companies have been burdened by the weight of pandemic disruptions, materials shortages, inflation and more. Many have undergone structural changes and accelerated digitization to improve supply chain resiliency and business growth.

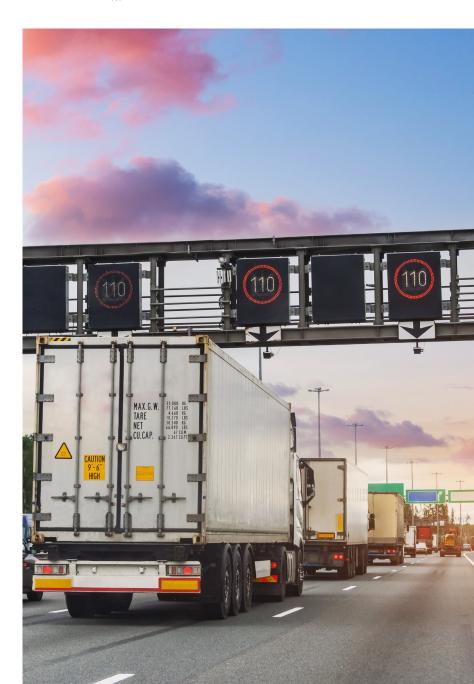
Our APAC on the move study reveals that real-time endto-end supply chain visibility is only a reality for just over half of the logistics companies surveyed in the region. Under half of those surveyed still require manual inputs for some portions of their asset tracking and shipment monitoring solution.

Many respondents have cited technology implementation as a major barrier to technology adoption. Logistics companies in APAC prefer turn-key solutions that can meet organizational objectives and operational excellence. They want reliable solutions that are easy to use and can be seamlessly integrated into their existing processes and systems without requiring extensive technical expertise or costly technology overhauls. There is also a mixture of map-based platforms with real-time location data and web-based software-as-aservice (SaaS) platforms across logistics players in APAC. While most of them have a stronger preference for webbased SaaS platforms, map-based platforms are catching up, especially among those in the courier, express, and parcel (CEP) services, and those delivering large items and cold chain items.

The logistics industry in APAC is also actively using Internet of Things (IoT) applications. Inventory management, warehouse management, and order management are among the top IoT applications used among those surveyed.

Lastly, more than a quarter of logistics companies in APAC are planning to invest in drones, robotics, artificial intelligence and machine learning. These technologies have been identified by the logistics sector in the region to seize opportunities and create lasting competitive advantage.

Global challenges such as inflation and economic disruptions are set to continue. Resilience is going to remain a key topic within the logistics industry, and technology will be crucial as the sector continues to evolve.



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Macro trends in Asia Pacific

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End-to-end supply chain visibility remains elusive

According to Gartner, 50% of product-centric firms will invest in real-time visibility in 2023^[2], and 67% of supply chain leaders in a recent McKinsey survey said they have invested in digital dashboards for end-to-end supply chain visibility^[3].

Vivek Vaidya, Global Client Leader for Mobility, Frost & Sullivan

"The awareness about having real-time visibility on assets and cargo has gone up tremendously in the post-pandemic era and that trend is likely to continue. This underlines a strong growth potential for solution providers like HERE Technologies in this space for the next decade."



The trend

Logistics firms in APAC just want the basics: to improve fundamental business performance indicators.

Better shipment visibility across the supply chain can help with that and is becoming table stakes, even as consumer demand has moderated and shipping rates declined from the second half of 2022 into 2023.

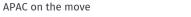
However, for some logistics firms in the region, end-to-end visibility remains elusive due to challenges with implementing the technology.



Why it matters

Organizations can only effectively manage their supply chains when they have full visibility over what happens at each node in the supply chain.

Companies that have implemented end-to-end supply chain visibility technologies are twice as likely as others to minimize supply chain challenges.





Methodology

References

02

The rise of an application-first approach for supply chains

By 2026, 25% of supply chain execution vendors will have rewritten their core application to a microservices architecture^[4].

Sockalingam Muthiah, Head of Professional Services, Asia Pacific, HERE Technologies

"The logistics supply chain has become incredibly complex. By shifting to an API-first approach, logistics companies become interoperable with existing or new infrastructure. It's the best way to digitize every link in the value chain. In the long term, an API-first approach opens doors to future digital – and scalable – transformation and keeps logistics businesses competitive."



The trend

The biggest barriers to implementing logistics solutions for APAC logistics firms are identifying the right partners and suppliers, integrating new solutions with their existing software, and implementation costs – particularly during a time of increasing inflation in APAC and the consequent rise in fuel costs.

To overcome those challenges, logistics IT suppliers are offering application program interfaces (APIs) and standard connectors to integrate with common business software suites such as Oracle and SAP ERP systems.



Why it matters

The use of supply chain APIs allows for the seamless exchange of businesscritical data, functionalities, and actionable insights between multiple applications within a supply chain ecosystem.

APIs have the power to unify disparate platforms to drive efficiencies and collaboration, reduce costs and achieve greater scalability and innovation.

Methodology

References

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More to invest in demand and supply planning and optimization

According to the World Economic Forum, over 50% of trucks on the road have been empty or only partially loaded in 2021^[5]. 80% of companies will suffer significant value loss due to a failure to merge their digital supply chain twin and control tower initiatives^[4].

Kushal Rajveer, Head of Industry Solutions, Supply Chain, HERE Technologies

"Balancing supply and demand while minimizing expenses and environmental impact is crucial for cost-effective and efficient supply chain operations. Businesses can achieve this optimization by leveraging data analytics to identify inefficiencies, adopting multi-modal transportation options, and embracing digital solutions for better collaboration and visibility."



The trend

Logistics companies in APAC that have moved on to address supply chain visibility are now reconfiguring and reshoring their supply networks to increase their resilience and mitigate risk, as planning for complex, multi-tier supply chains remains a challenge.

The use of map-based solutions with realtime data is catching up within the industry. Map-based platforms are reliable and provide logistics companies with the intelligence to make real-time decisions and offer greater resilience than web-based platforms due to the availability of offline maps in areas with patchy connectivity.



Why it matters

Logistics organizations must become more agile to future-proof and digitize their supply chains. It is a delicate balance between minimizing costs and not implementing new technologies, but the more planning is done, the more resilient companies will be in preparing for all possible scenarios. 03.

Getting ahead with location

Getting ahead with location



As the world becomes increasingly connected, the importance of efficient and reliable transportation and logistics services cannot be overstated. Businesses and consumers alike rely on these services to move goods from one place to another quickly and cost-effectively. To achieve this, location data and services play a crucial role in the transportation and logistics industry. HERE Technologies provides cutting-edge solutions that cater to the needs of companies, enabling them to optimize their operations, improve overall asset tracking and shipment visibility, and enhance overall customer experience.

HERE owns a rich portfolio of map data and location services that can be easily integrated into existing IT landscapes and offer a scalable way to increase the ROI and throughput of assets. These products and services go beyond traffic data and navigation to include tour planning, optimization, and routing services.

From the first to the last mile, HERE has helped businesses within the transport and logistics sector with the following:

- Increasing fleet utilization through advanced tour planning to lower operational costs
- Calculating accurate ETAs and improving on-time performance
- Data analytics of assets, reports and tracking of inventory
- Dynamic route optimization with on-road freights
- Gaining end-to-end multimodal visibility
- Improving driver safety, enhancing the driver experience and retention
- Keeping track of shipments
- Tracking and management of warehouse assets
- Tracking of returnable, reusable packages



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Findings from this study speak to the need for logistics providers to engage professional services to speed the implementation of inhouse software development or offthe-shelf turnkey software or offload the entire effort to system integrators or location consulting boutiques to develop a bespoke solution.



William Strugger

Senior Director, Global Marketing Intelligence

HERE Technologies



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Industry overviews

Survey findings

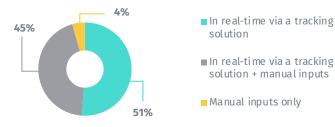
References

Asia Pacific overview

The transportation and logistics sector in APAC has, in recent years, come under pressure from relentless consumer demands, changing customer expectations, and the arrival of new competition from start-ups and customer-turned-rival logistics operators.

The current method of tracking logistics assets, shipment, and cargo

45% of APAC logistics companies are using asset tracking and shipment monitoring software with manual inputs to track assets, shipment, and cargo. Japan is leading with most logistics firms leveraging real-time tracking, with no manual inputs.



Motivations for purchasing logistics assets tracking solutions

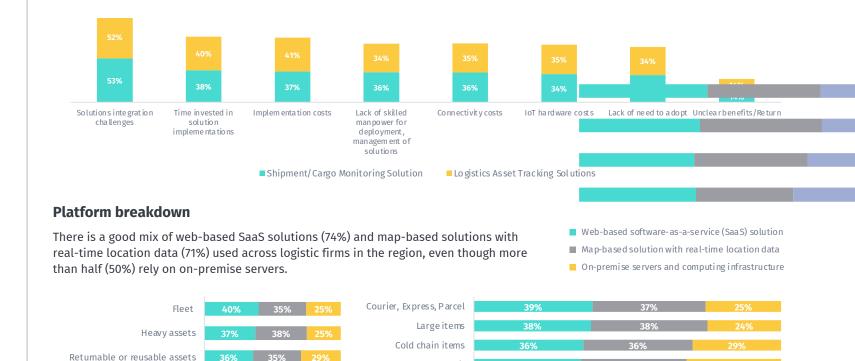
APAC logistics companies are placing companies first, followed by financial benefits.



Barriers to adopting tracking solutions

Other warehouse assets

APAC logistics players have cited solution integration challenges as their main adoption dilemma. This is followed by the time required to implement the solution, and the implementation costs.



Dangerous goods

Solid and/or liquid bulk

References

Asia Pacific overview

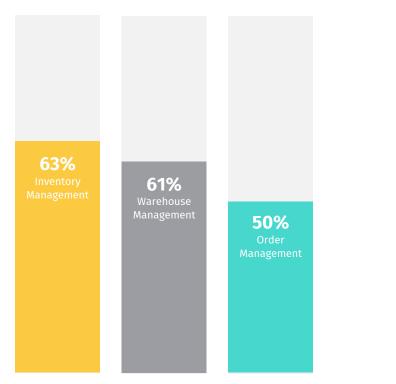
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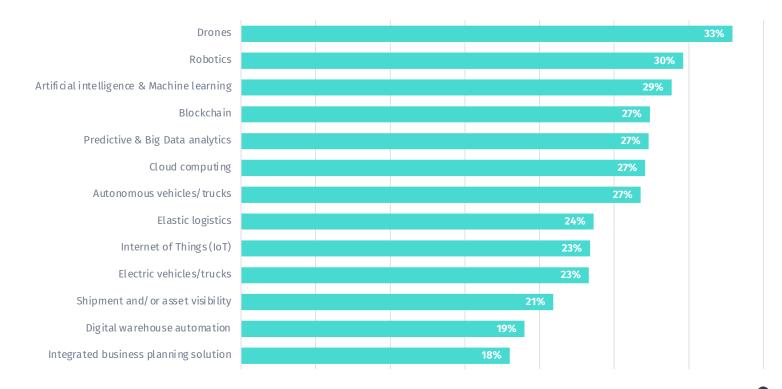
The current usage of IoT applications

Most APAC logistics players are leveraging IoT applications to manage localized inventory and order instead of fleets, assets, and supply chains.

Future technologies to invest in the next three years

More than a quarter of logistics companies in APAC are planning to invest the most in drones (33%), robotics (30%), and artificial intelligence and machine learning (29%).





Australia overview

The freight and logistics industry is an intrinsic part of the Australian economy, accounting for approximately 8.6% of Australia's GDP^[6] today. However, the pandemic has exposed flaws within the industry and the Australian logistics industry continues to be under pressure from relentless consumer demands, changing customer expectations, and high costs.

The current method of tracking logistics assets, shipment, and cargo

49% of Australian logistics companies are using asset tracking and shipment monitoring software with manual inputs to track assets, shipment, and cargo.



In real-time via a tracking solution + manual inputs

Manual inputs only

Motivations for purchasing logistics assets tracking solutions

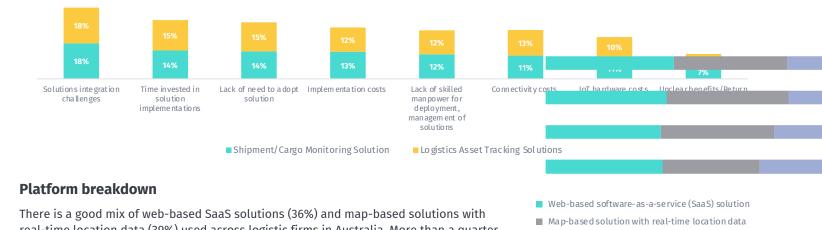
Australian logistics companies want some level of innovation growth with tracking solutions.

57% Highlight areas of inefficiencies for reducing cost and continuous improvement

49% Reduction in



Australian logistics players have cited solution integration challenges as their main adoption dilemma. This is followed by the time required to implement the solution and lack of need to adopt tracking solutions.



real-time location data (39%) used across logistic firms in Australia. More than a quarter (25%) rely on on-premise servers.



Courier, Express, Parcel	37%	38%	25%
Largeitems	38%	39%	23%
Cold chain items	36%	39%	
Dangerous goo ds	36%	34%	30%
Solid and/or liquid bulk	34%	37%	30%

On-premise servers and computing infrastructure

Australia overview

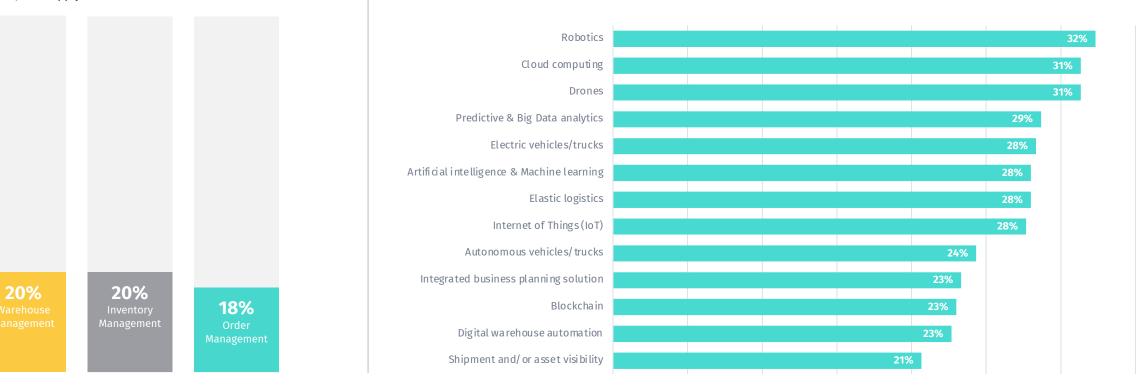
The freight and logistics industry is an intrinsic part of the Australian economy, accounting for approximately 8.6% of Australia's GDP^[6] today. However, the pandemic has exposed flaws within the industry, and the Australian logistics industry continues to be under pressure from relentless consumer demands, changing customer expectations, and high costs.

The current usage of IoT applications

Australian logistics players are leveraging IoT applications to manage localized inventory and order instead of fleets, assets, and supply chains.

Future technologies to invest in the next three years

Close to a third of Australian logistics companies are planning to invest in robotics (32%), cloud computing and drones (31% each), and predictive and big data analytics (29%).





Methodology

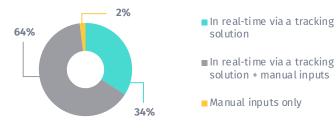
References

Chinese Taipei overview

E-commerce and the increasing demand for microchips and semiconductors – of which Chinese Taipei is the leading supplier – have driven the logistics growth in the region. The pandemic and global disruption of supply chains have shifted the region's focus to becoming a regional logistics center, one that could strengthen international connections and the diversity of its domestic industries.

The current method of tracking logistics assets, shipment, and cargo

64% of Chinese logistics companies are using asset tracking and shipment monitoring software with manual inputs to track assets, shipment, and cargo.



Motivations for purchasing logistics assets tracking solutions

Chinese logistics companies want tracking solutions to optimize internal processes and benefit their customers

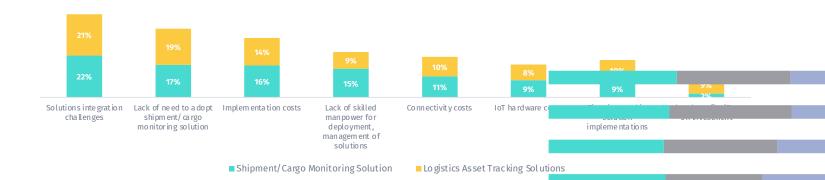
44% Improved efficiency in fleet utilisation and productivity

39% Better drivers' management (drivers' retention, behaviour analysis)

37% Increased customer satisfaction

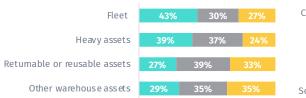
Barriers to adopting tracking solutions

Chinese logistics players have cited solution integration challenges as their main adoption dilemma. This is followed by the lack of need to adopt tracking solutions, and the implementation costs.



Platform breakdown

The majority of Chinese logistics companies are leveraging web-based SaaS solutions (39%), but the use of map-based solutions with real-time location data (36%) is catching up. More than a quarter (25%) rely on on-premise servers.



web	-Daseu	501	tware-	dS-d-St	ervice (Sdd S) so iu	lion

- Map-based solution with real-time location data
- On-premise servers and computing infrastructure

Courier, Express, Parcel	45%	33%	22%
Largeitems	35%	43%	22%
Cold chain items	33%	37%	30%
Dangerous goo ds	32%	35%	32%
olid and/or liquid bulk	33%	33%	33%



Methodology

References

Chinese Taipei overview

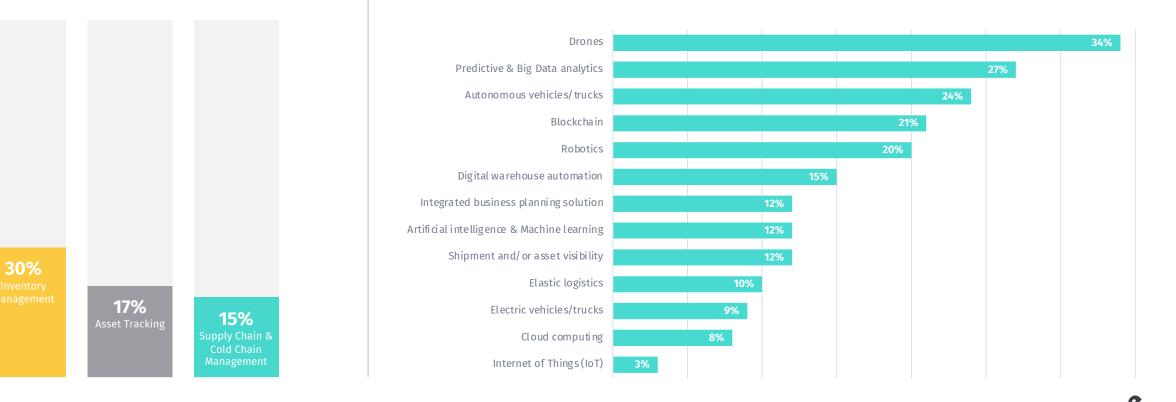
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The current usage of IoT applications

Chinese logistics players are leveraging IoT applications to manage their inventory, assets, and supply chains.

Future technologies to invest in the next three years

The top three technologies that Chinese logistics companies plan to invest in are drones (34%), predictive and big data analytics (27%), and autonomous vehicles (24%).



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India overview

India's highly fragmented logistics industry is undergoing rapid transformation and growth. With the sector accounting for 14% of the country's GDP^[7], the introduction of the National Logistics Policy is set to lower logistics costs and boost the sector's competitiveness.

The current method of tracking logistics assets, shipment, and cargo

41% of Indian logistics companies are using asset tracking and shipment monitoring software with manual inputs to track assets, shipment, and cargo.



In real-time via a tracking solution + manual inputs

Manual inputs only

Motivations for purchasing logistics assets tracking solutions

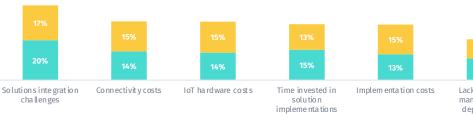
Indian logistics companies want to prioritize their customer needs and obtain financial gains with tracking solutions.

51% Highlight areas of inefficiencies for reducing costs and provide continuous improvement

49% Increased customer satisfaction

Barriers to adopting tracking solutions

Indian logistics players have cited solution integration challenges as their main adoption dilemma. This is followed by high connectivity costs and IoT hardware costs, both of which the government is trying to resolve with the National Logistics Policy.



Indian logistics companies are leveraging a good mix between web-based SaaS solutions

(38%) and map-based solutions with real-time location data (37%). Close to a quarter

Lack of skille man power fo deployment, man agem ent of solutions

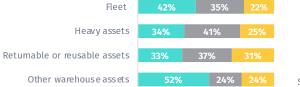
Shipment/Cargo Monitoring Solution

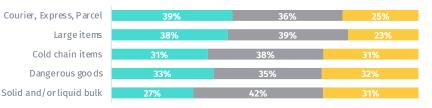
Lo gistics As set Tracking Solutions

Web-based software-as-a-service (Saa S) solution Map-based solution with real-time location data On-premise servers and computing infrastructure

(25%) are using on-premise servers.

Platform breakdown







References

India overview

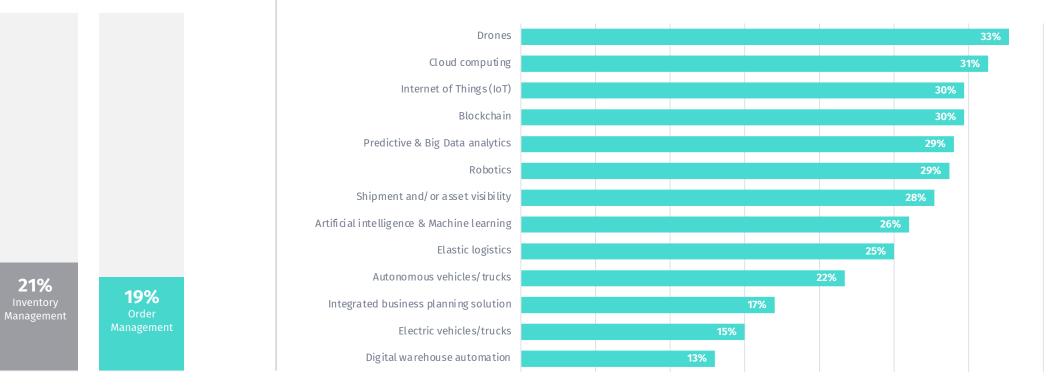
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The current usage of IoT applications

Indian logistics players are leveraging IoT applications to manage localized inventory and order instead of fleets, assets, and supply chains.

Future technologies to invest in the next three years

Indian logistics companies plan to invest the most in drones (33%), cloud computing (31%), and IoT (30%).



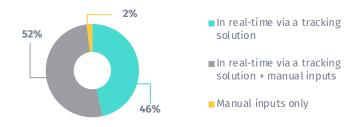
26%

Indonesia overview

The archipelagic nature of Indonesia has resulted in logistical challenges that resulted in the country's high logistics spend (23.5% of the country's GDP) compared to neighboring economies^[8]. The establishment of a National Logistics Ecosystem seeks to reduce logistics costs and improve the performance of the sector within the country.

The current method of tracking logistics assets, shipment, and cargo

More than half of Indonesian logistics companies are using asset tracking and shipment monitoring software with manual inputs to track assets, shipment, and cargo.



Motivations for purchasing logistics assets tracking solutions

Indonesian logistics companies want tracking solutions to improve internal processes and drive innovative growth.

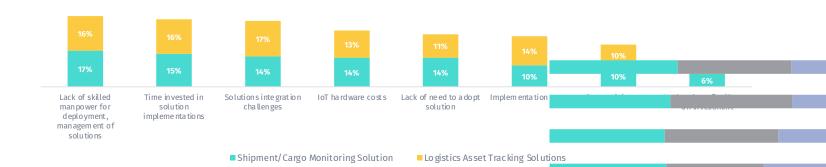
46% Optimize logistics assets

45% Expand to new areas such as ondemand logistics and last-mile logistics

44% Identify areas of inefficiencies to reduce cost

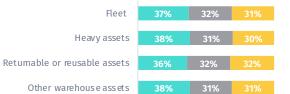
Barriers to adopting tracking solutions

Indonesian logistics players are hesitant to adopt tracking solutions due to the lack of skilled labor. The amount of time to implement the solution and solution integration challenges are also among the top three barriers to adoption.



Platform breakdown

The majority of Indonesian logistics companies are tapping on web-based SaaS solutions (38%), while there is a good mix of map-based solutions with real-time location data (31%) and on-prem servers (31%).





Courier, Express, Parcel	41%	30%	30%
Largeitems	39%	28%	33%
Cold chain items	38%	31%	32%
Dangerous goods	35%	33%	33%
Solid and/or liquid bulk	34%	34%	32%

Indonesia overview

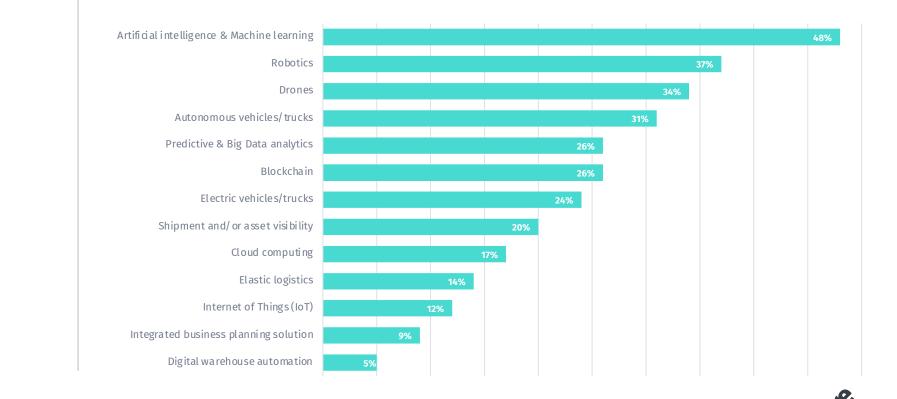
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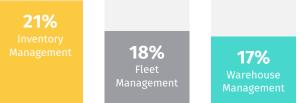
The current usage of IoT applications

Indonesian logistics players are leveraging IoT applications to manage localized inventory and fleets.

Future technologies to invest in the next three years

The top three technologies that Indonesian logistics companies are most interested in are artificial intelligence and machine learning (48%), robotics (37%), and drones (34%).





Methodology

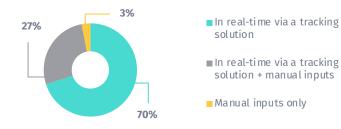
References

Japan overview

The Japanese logistics industry is set to face the looming '2024 Problem' as stricter regulations to limit the working hours for truck drivers kick in from April 1, 2024. With the pandemic having a significant impact on the sector, major players within Japan are rapidly adopting new technologies to meet the demands of the market. In fact, Japan leads the APAC region with the highest percentage of firms tracking assets in real-time with no manual inputs.

The current method of tracking logistics assets, shipment, and cargo

Japan leads the APAC region, with 70% of logistics firms advancing to tracking logistics assets, shipment, and cargo in real-time with no manual inputs.



Motivations for purchasing logistics assets tracking solutions

Revenue, customer benefits, and sustainability are top of mind for Japanese logistics companies.

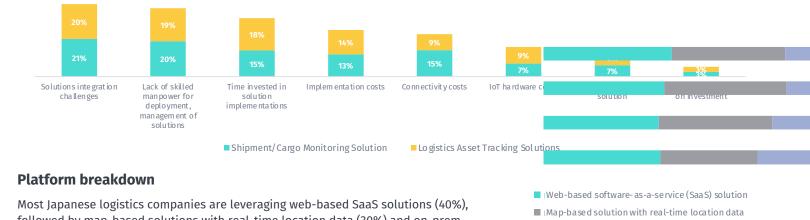
63% Increase revenue

60% Increase customer satisfactior

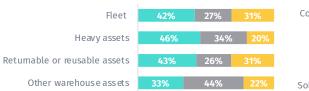
56% Improved sustainability efforts

Barriers to adopting tracking solutions

Japanese logistics players are held back from adopting tracking solutions mainly due to solutions integration challenges. They are also concerned over the lack of skilled labor and the lack of time to implement such solutions. These barriers are aligned with the '2024 Problem', which the logistics industry is facing.



Most Japanese logistics companies are leveraging web-based SaaS solutions (40%), followed by map-based solutions with real-time location data (30%) and on-prem servers (30%).





On-premise servers and computing infrastructure



References

Japan overview

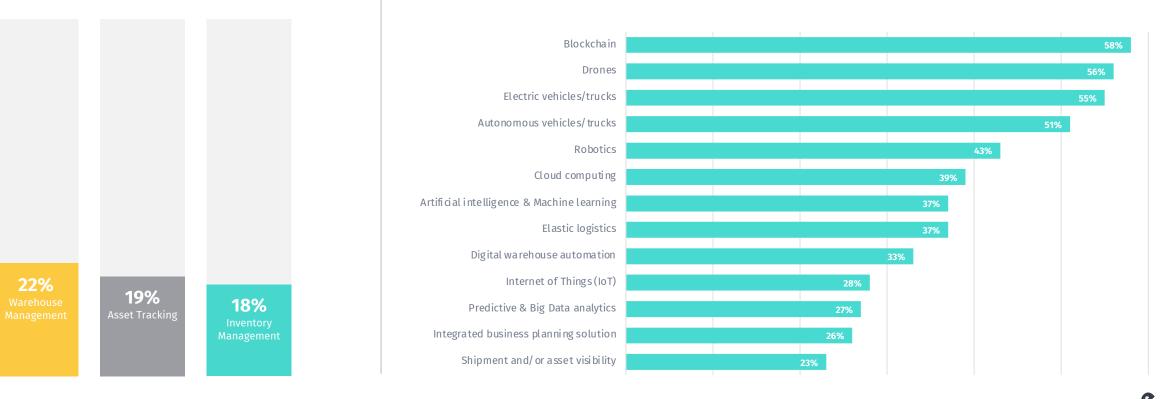
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The current usage of IoT applications

Japanese logistics players are leveraging IoT applications to manage localized inventory and asset tracking.

Future technologies to invest in the next three years

Japanese logistics companies are most interested in investing in blockchain (58%), drones (56%), and electric vehicles (55%).



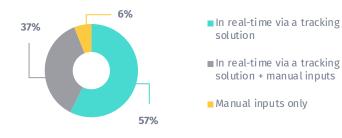
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Malaysia overview

Despite the potential negative impact of continued high inflation and rising interest rates, the Malaysian logistics industry continues to be propelled by robust growth drivers such as improved logistics infrastructure, rising freight volumes, and a fundamental expansion in domestic e-commerce.

The current method of tracking logistics assets, shipment, and cargo

More than half of Malaysian logistics firms are using asset tracking and shipment monitoring software with manual inputs to track assets, shipment, and cargo.



Motivations for purchasing logistics assets tracking solutions

Continuous improvements and financial benefits are top of mind for Malaysian logistics firms.

59% Improved capacity planning, trend visibility and forecasting

Barriers to adopting tracking solutions

Challenges in integrating tracking solutions into existing software and infrastructure is the number one reason for Malaysian logistics players not to adopt tracking solutions. This is followed by the lack of time to implement the technology and high IoT hardware costs.



Shipment/Cargo Monitoring Solution

Logistics Asset Tracking Solutions

Platform breakdown

The majority of Malaysian logistics companies are leveraging map-based solutions with real-time location data (42%), followed by web-based SaaS solutions (38%) and on-prem servers (20%).





Web-based software-as-a-service (Saa S) solution

er, Express, Parcel	42%	40%	18%
Largeitems	41%	42%	17%
Cold chain items	40%	36%	24%
Dangerous goods	38%	35%	26%
and/or liquid bulk	33%	33%	33%



References

Malaysia overview

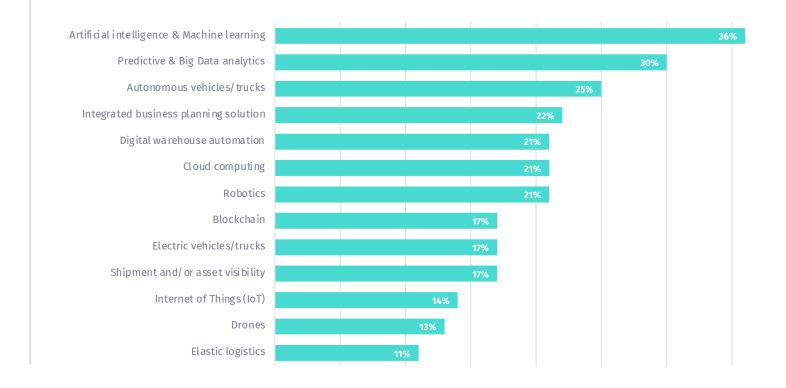
Despite the potential negative impact of continued high inflation and rising interest rates, the Malaysian logistics industry continues to be propelled by robust growth drivers such as improved logistics infrastructure, rising freight volumes, and a fundamental expansion in domestic e-commerce.

The current usage of IoT applications

Malaysian logistics players are leveraging IoT applications to manage localized inventory and orders instead of fleets, assets, and supply chains.

Future technologies to invest in the next three years

Artificial intelligence and machine learning (36%), predictive & big data analytics (30%), and autonomous vehicles (25%) are the top three technologies that Malaysian logistics firms are eyeing.





Methodology

References

Singapore overview

While Singapore has been consistently recognized as Asia's top logistics hub by the World Bank^[9], its logistics sector has been under pressure in recent years from relentless consumer demands, changing customer expectations, high costs due to inflation, and the arrival of new competition from start-ups and customer-turned-rival logistics operators.

The current method of tracking logistics assets, shipment, and cargo

Close to half of Singapore logistics firms are using asset tracking and shipment monitoring software with manual inputs to track assets, shipment, and cargo.



In real-time via a tracking solution + manual inputs

Manual inputs only

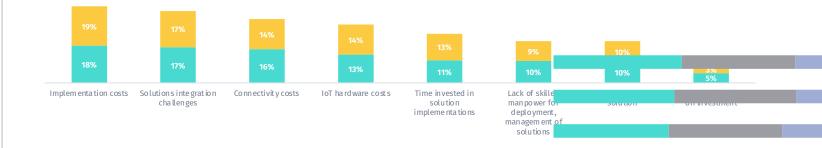
Motivations for purchasing logistics assets tracking solutions

Singapore logistics firms prioritize improving internal processes and financial benefits.



Barriers to adopting tracking solutions

High implementation costs are a significant barrier for Singapore logistics firms to adopt tracking solutions. Other top concerns include challenges in integrating the solutions with existing software and infrastructure and high connectivity costs.

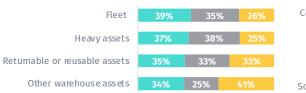


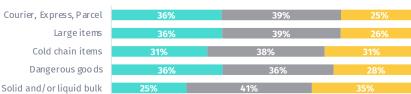
Shipment/ Cargo Monitoring Solution

Logistics Asset Tracking Solutions

Platform breakdown

Singapore logistics firms are catching up with the adoption of map-based solutions with real-time location data (36%), while the majority (39%) are leveraging web-based SaaS solutions for tracking assets, shipment, and cargo. More than half (26%) are relying on onpremise servers.





Web-based software-as-a-service (Saa S) solution

Map-based solution with real-time location data

On-premise servers and computing infrastructure



Singapore overview

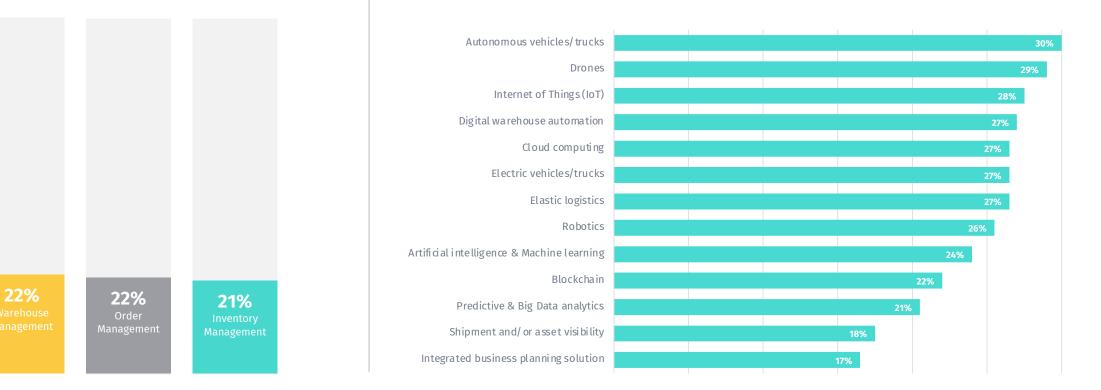
While Singapore has been consistently recognized as Asia's top logistics hub by the World Bank^[9], its logistics sector has been under pressure in recent years from relentless consumer demands, changing customer expectations, high costs due to inflation, and the arrival of new competition from start-ups and customer-turned-rival logistics operators.

The current usage of IoT applications

Logistics players in Singapore are leveraging IoT applications to manage localized inventory and orders instead of fleets, assets, and supply chains.

Future technologies to invest in the next three years

Singapore logistics firms are eyeing autonomous vehicles (30%), drones (39%), and IoT (28%) the most.



Methodology

References

Thailand overview

The Thai logistics industry is booming, with the country ranking 34 out of 139 countries in the Logistics Performance Index (LPI) in 2023 by the World Bank.^[10] With its strong logistics infrastructure. Thailand's Ministry of Transport has identified the potential to turn the country into a key logistics hub within the Southeast Asia region.

The current method of tracking logistics assets, shipment, and cargo

Logistics firms in Thailand are adopting a good mix of real-time tracking, and real-time tracking with some form of manual inputs.



In real-time via a tracking solution + manual inputs

Manual inputs only

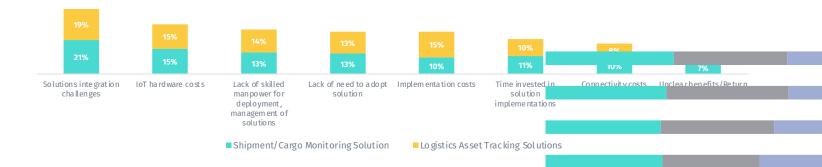
Motivations for purchasing logistics assets tracking solutions

Logistics companies in Thailand have financial benefits as their top priority when purchasing shipment and cargo monitoring solutions.



Barriers to adopting tracking solutions

Thai logistics players have cited the challenge of integrating the solutions with existing software and infrastructure as their main barrier to purchasing tracking solutions. This is followed by the anticipated high IoT hardware costs and the lack of skilled workers to deploy and manage the solutions.



Platform breakdown

Despite majority of Thai logistics firms currently adopting web-based SaaS solutions for tracking assets, shipment, and cargo (40%), those tapping on map-based solutions with real-time location data (35%) are catching up. Over a quarter (25%) prefer on-premise servers.





ier, Express, Parcel	40%	35%	25%
Largeitems	42%	33%	26%
Cold chain items	34%	41%	25%
Dangerous goods	34%	34%	33%
and/or liquid bulk	33%	38%	29%

References

Thailand overview

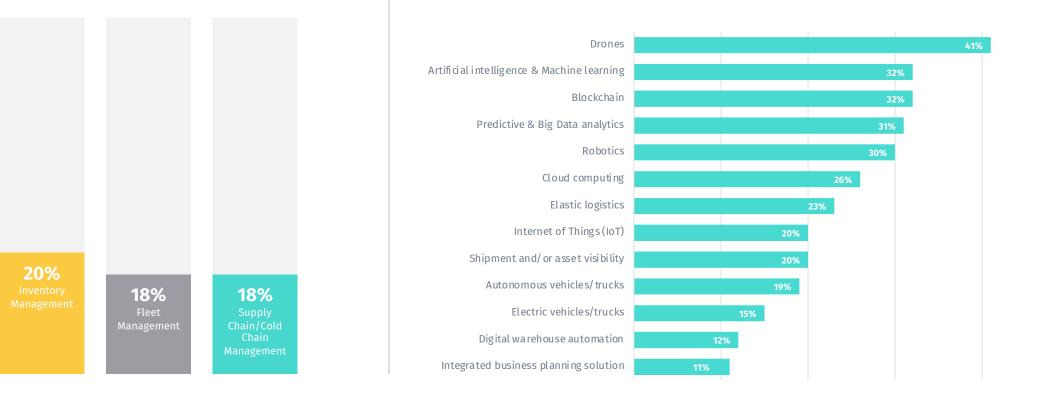
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The current usage of IoT applications

Thai logistics firms are leveraging IoT applications to manage inventory, fleet and supply chains.

Future technologies to invest in the next three years

Thai logistics firms are most interested in drones (41%), artificial intelligence and machine learning (32%), blockchain (32%), and predictive and big data analytics (31%).



05.

Methodology

Getting ahead with location

Industry overviews

Methodology

What's next?

References

Methodology: Developing the report



APAC on the move aims to uncover the latest pulse on the transport and logistics sector in Asia Pacific.

This report consists of market research data and analysis from March 2023, based on responses from 1,300 players within the transport and logistics industry across eight countries: Australia, Chinese Taipei, India, Indonesia, Japan, Malaysia, Singapore, and Thailand.

The research analyzed the current use of location intelligence within logistics and supply chain management, identified the motivations and barriers to adopting fleet and logistics asset tracking and shipment monitoring solutions, and discovered emerging trends specific to APAC that will be useful for the transport and logistics sector in the future.

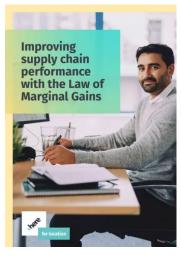


06.

What's next?

References

What's next?

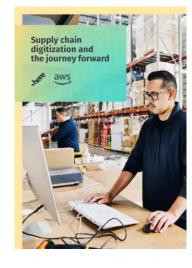










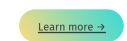








Learn more →





07.

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- ^[5] What the US' wasted truck space taught me about profitable sustainability, WEF, Jan 2023
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- ^[9] Logistics & Supply Chain Management, Economic Development Board
- ^[10] Logistics Performance Index 2023, World Bank

Key definitions

Logistics service delivery asset tracking solutions refer to solutions used to track movable assets that is leveraged to deliver logistics services, such as:

- Fleet (e.g., trailers, trucks, vans, two-wheelers, cargo trains, ships, planes)
- Heavy assets (e.g., heavy machinery or equipment used for operations, such as forklifts and cranes)
- Returnable or reusable (materials used for shipping purposes like pallets, containers, drums)
- Other warehouse assets (e.g., pallet jacks, hand trucks, roll cages)

Shipment/cargo monitoring solutions refer to solutions used to track shipment or cargo, such as:

- Courier, Express, Parcel (CEP)
- Large items (e.g., large consumer durables, furniture)
- Cold chain items (e.g., perishables, pharmaceuticals)
- Dangerous goods (e.g., chemicals, etc. requiring special care)
- Solid and liquid bulk (e.g., grains, oils)

APAC on the move



