

# MIS782 – Value of Information

IT Portfolio and RBV Theory

Assessment Task – 1

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## Executive Summary

Maersk has a diverse portfolio of IT assets and resources. Key IT assets that Maersk has invested in and are utilised in this report include cloud migration, blockchain, integrated supply chain, modern transportation management systems, automation, data analytics, fleet tracking using IoT, digital e-commerce platforms, decarbonisation and sustainability, and partnerships & acquisitions. Maersk's resources and capabilities used in this report comprise of operating efficiency, worldwide infrastructure and network, technological advancements, and strong brand image & trustworthiness. These assets and resources have helped Maersk to gain competitive advantage through streamlined supply chains, data-driven insights, increased operational efficiency, and an emphasis on sustainability. Maersk is capitalising on these while investing in future innovations.

## Introduction and Organisational Background

Maersk is a prominent global business group headquartered in Copenhagen, Denmark that operates with a primary focus on global container shipping and logistics along with supply chain solutions. This organisation functions in a super-competitive environment where information is paramount. For optimising logistics and pricing, the market knowledge around trade routes, competitor strategies, and customer needs is important for Maersk. To ensure efficient operations and customer satisfaction in their business, it is essential to track shipment location, potential delays, and resource availability in real-time. Maersk utilises blockchain, automation and other technologies for secure tracking and data analysis. Usage of vast amounts of data assists Maersk to optimise demand prediction, trade routes, and enables data-driven decision making.

- **Market:** Maersk serves a broad spectrum of customer segments. These comprise of trade and transport companies, energy companies, engineering corporations, oil, and gas sectors, along with retail customers through their stake in Dansk Supermarket Group.
- **Strategy:** Maersk's core strengths lie in their extensive fleet, global infrastructure, advanced technologies such as blockchain-based

freight tracking and a wealth of industry know-how. These provide value propositions like streamlined global supply chains, global reach, reliability, and industry expertise. Maersk sustains strong relationship with their customers through an emphasis on strong branding, reliability, leadership, performance-based results, and global accessibility.

- **Operations:** Maersk's main activities are focused on transport and logistics, energy exploration and production, and retail operations. To maintain their global network, it is essential for Maersk to make significant investments in infrastructure, vessels, offices, terminals, rigs, and employee training.
- **Industry:** The global shipping and logistics industry is highly competitive and requires continuous innovation. Here, the companies constantly aim to optimise routes, reduce costs, and adopt/leverage innovative technologies to gain competitive advantage. Maersk distinguishes itself via its massive global presence, heterogenous service offerings, and dedication to sustainability initiatives.

### **Question 1: IT Portfolio Theory View**

Maersk's IT portfolio investments show a strong focus portraying their aim for a balance between value, risk, and return. All these investments assist Maersk in increasing overall revenue and efficiency.

IT asset class	IT assets	Business returns and outcomes
Infrastructural IT (moderate risk, moderate returns)	Cloud Migration	The shift to cloud-based infrastructure provides substantial scalability and resilience to Maersk which is vital for their global operations. Tangible returns are: possibly decreased IT infrastructure costs. Intangible returns are: agility and better disaster recovery.
	Blockchain	Investment in the in-house blockchain-based solutions for e.g. TradeLens earlier, boosts Maersk's visibility and security in supply chains. Tangible returns

		are: Increased efficiency, possible decreased insurance costs. Intangible return is: enhanced trust.
	Integrated Supply Chain	Constructing warehouses and distribution centres incurs significant infrastructural investments. Tangible returns are: cost savings and improved asset utilisation. Intangible returns are: scalability, customer satisfaction.
Transactional IT (low risk, high returns)	Modern Transportation Management Systems	These systems yield improved route optimisation, freight consolidation, and shipment data in real-time. Tangible returns are: Increased efficiency, decreased transportation costs.
	Automation	Maersk is able to streamline operations and reduce dependency on manual labour by investing in robotic process automation along with terminal automation. Tangible returns are: increased efficiency and quicker turnaround times.
	Integrated Supply Chain	Bettering ocean freight, logistics, and terminal operations incurs significant transactional focus. Tangible returns are: improved efficiency, decreased freight costs, and faster processing.
Informational IT (moderate risk, moderate returns)	Data Analytics	Using big data and analytics, Maersk is able to get insights into market trends, customer behaviour, and operational blocks. Tangible returns are: potentially optimising price and identifying new markets.

		Intangible return is: data-driven decision-making.
	Fleet Tracking using IoT	Maersk implemented sensors that use Internet-of-Things technology across their fleet providing real-time monitoring and predictive maintenance. Tangible returns are: decreased downtime and proactive asset management.
Strategic IT (high risk, potentially high returns)	Digital E-commerce Platforms	Maersk streamlined their interactions and opened new revenue streams by developing their online trading platforms. Tangible returns are: possibly expanded customer base and augmented sales. Intangible return is: enhanced customer experience.
	Decarbonisation and Sustainability	Maersk is investing greatly in sustainable logistics, methanol-fuelled ships, biofuel production, and EV trucks. Tangible returns are: expense reduction on fuel and possible regulatory compliance benefit. Intangible returns are: increased brand reputation and alignment with customer values.
	Partnerships and Acquisitions	Maersk's strategic partnerships are meant to accelerate technological innovation and acquisitions' motive is expanding capabilities like last-mile delivery and warehouse management. Tangible returns are: amplified service offerings and faster time to market. Intangible returns are:

		new customer sectors and access to know-how.
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## Question 2: RBV Theory and VRIO Analysis

Achieving sustained competitive advantage depends on how challenging it is for the competitors to imitate the key resources which are valuable and rare for Maersk.

### 1. Operating Efficiency:

- It is **valuable** for Maersk as it provides cost savings and competitive rates.
- It is somewhat **rare** as shipping corporations want this, but Maersk's scale enables exceptional optimisation.
- It is difficult to **imitate** contemplating factors like route planning, cargo handling, and vessel maintenance as Maersk's processes have been sharpened upon decades. The competition would need significant time and resources to match their optimisation levels. Also, Maersk's processes are streamlined because of their investments in technologies like data analytics and automation. Those can be easier to adopt but to integrate them with existing systems efficiently and effectively as Maersk, resources and time is required.

### 2. Worldwide Infrastructure and Network:

- It is **valuable** for Maersk as their global reach and network are extremely important for managing international trade.
- It is **rare** as extremely few businesses have a network of same scale and density.
- **Imitate:** Adopting terminals and ports is possible but to imitate a global network of Maersk's scale is exceedingly difficult. This requires strategic acquisitions, expertise, long-term planning, and traversing through complex regulations across the globe while nurturing relations with local partners. Not to forget the billions-of-dollars of Maersk investments in assets like terminals, ships, and IT

infrastructure. Maersk's network density and reach benefits them as it constantly increases the value of their ports and terminals thereby increasing the difficulty for their competition.

### 3. Technological Advancement:

- It is **valuable** for Maersk as advancements like big data enables demand prediction while automation enables faster delivery times, amplified loading and unloading efficiency, and increased customer satisfaction.
- It is somewhat **rare** as it can be adopted by other companies but not as effectively as Maersk because of their resources and agility.
- **Imitate**: It is difficult to copy Maersk's proprietary technological solutions. Maersk's massive logistics data collection over time enables further optimisation of processes and development of new solutions thereby establishing an edge over the competition which is difficult to copy. Maersk nurtures a culture of innovation which promotes continuous improvement and attracts skilled people which is difficult to copy.

### 4. Strong Brand Image and Trustworthiness:

- It is extremely **valuable** for Maersk as it enables procurement of large contracts while nurturing customer loyalty. Maersk's trustworthiness ensures customers that their cargo will get delivered on time and securely.
- It is **rare** as building trust in this business takes time and consistent excellent performance.
- It difficult to **imitate** as it relates to different factors like Maersk's distinctive history, deeds, and values. It is difficult to achieve/copy such trustworthiness for the competition especially while catering to risk-averse and high-impact customers.

### **Organisation** (Combined):

Maersk's focus on efficiency shows that they have well-organised clear-cut internal processes along with a culture that puts continuous improvement and optimisation first. Maersk's focus on development of robust management systems and structures enables well-management of their global network through coordinated port operations and fleet scheduling, communication across globe through different time zones, etc. Maersk's

focus on strategic technological investments, systems enabling research and development, and their capability to incorporate new technologies in their operations allows them to exploit their technological advancements. Maersk's old and well-known brand image portrays that they are able to maintain their trustworthiness through service consistency, quality control, and focusing on customer needs. Maersk's resources are most likely to provide sustained competitive advantage.

## Conclusion

Maersk holds the highest position amongst its competition in the global shipping and logistics industry. They are able to maintain a leading position because they possess the crucial organisational expertise to support their valuable, rare, and imperfectly imitable resources & capabilities. Maersk's investments in its assets and resources are tough to copy at big scale. For Maersk to sustain their competitive advantage, it is crucial for them to constantly adapt to evolving technological advancements and customer needs. Factors like competitors' aggressive investments in technologies like automation and data-driven operations may pose threat. Maersk's focus on innovation and agility will be vital in maintaining sustained competitive advantage.

## References

1. Maersk. (2019). *Maersk | Integrated Container Logistics & Supply Chain Services*. Maersk.com. <https://www.maersk.com/>
2. *Maersk Executive Leadership Team*. (n.d.). *Www.maersk.com*. <https://www.maersk.com/about/executive-leadership-team>
3. Maersk. (2021). *Our ESG strategy*. Maersk.com. <https://www.maersk.com/sustainability/our-approach/strategy>
4. Inc, G. (n.d.). *Top A.P. Moller - Maersk Competitors & Alternatives 2023 | Gartner Peer Insights - Third-Party Logistics, Worldwide*. Gartner. <https://www.gartner.com/reviews/market/third-party-logistics-worldwide/vendor/ap-moller-maersk/alternatives>
5. *News & Advisories | Maersk*. (2019). Maersk.com. <https://www.maersk.com/news>



6. Maersk. (2021). *Digital Solutions*. Maersk.com.  
<https://www.maersk.com/digital-solutions>
7. *Investor Relations - A.P. Møller - Mærsk A/S*. (n.d.). Investor.maersk.com.  
<https://investor.maersk.com/>
8. *Presentations | A.P. Møller - Mærsk A/S*. (2023). A.P. Møller - Mærsk A/S.  
<https://investor.maersk.com/financials/presentations>
9. *A.P. Møller-Maersk to invest more than USD\$500 million in integrated supply chain capabilities in Southeast Asia*. (n.d.). Wwww.maersk.com.  
<https://www.maersk.com/news/articles/2023/12/04/maersk-to-invest-in-integrated-supply-chain-capabilities-in-southeast-asia>
10. *A.P. Moller - Maersk and the Government of Tamil Nadu enter a strategic partnership*. (n.d.). Wwww.maersk.com.  
<https://www.maersk.com/news/articles/2024/01/07/maersk-and-the-government-of-tamilnadu-enter-a-strategic-partnership>
11. Kontos, I. (2024, February 21). *Maersk completes largest infrastructure investment in New Zealand with new cold chain facility*. Container News.  
<https://container-news.com/maersk-completes-largest-infrastructure-investment-in-new-zealand-with-new-cold-chain-facility/>
12. Schuler, M. (2023, December 4). *Maersk to Invest Over \$500 Million in Southeast Asia's Supply Chain*. GCaptain. <https://gcaptain.com/maersk-to-invest-over-500-million-in-southeast-asias-supply-chain/>
13. *Maersk Growth*. (2021). Maersk.com. <https://www.maersk.com/growth>
14. *How cloud computing is shaping the future of logistics*. (n.d.). Wwww.maersk.com.  
<https://www.maersk.com/insights/digitalisation/2023/02/06/cloud-computing-logistics>
15. *Cloud-based platforms: the key to profitable supply chains in Asia-Pacific*. (n.d.). Wwww.maersk.com. Retrieved April 4, 2024, from <https://www.maersk.com/news/articles/2023/12/04/cloud-based-platforms>
16. Hershko, R. (2022, November 29). *A.P. Moller - Maersk and IBM to discontinue TradeLens, a blockchain-enabled global trade platform*. Wwww.maersk.com.

<https://www.maersk.com/news/articles/2022/11/29/maersk-and-ibm-to-discontinue-tradelens>

17. Maersk. (2021). *Supply Chain Management*. Maersk.com. <https://www.maersk.com/supply-chain-logistics/management>

18. *Using automation to revolutionise a lifestyle retailer's growth*. (n.d.). Wwww.maersk.com. Retrieved January 14, 2024, from <https://www.maersk.com/news/articles/2023/09/20/using-automation-to-revolutionise-a-lifestyle-retailers-growth>

19. *Learn how Maersk achieves global IoT connectivity - Onomondo*. (2023, March 28). Onomondo.com. <https://onomondo.com/case-stories/maersk/>

20. Maersk. (n.d.). *Technology at Maersk*. Wwww.maersk.com. <https://www.maersk.com/about/technology>

21. *Services*. (2022). Maersk.com. <https://www.maersk.com/supply-chain-logistics/e-commerce-logistics/services>

22. *Maersk makes another move into E-commerce with its first tech acquisition*. (n.d.). Wwww.maersk.com. Retrieved April 4, 2024, from <https://www.maersk.com/news/articles/2021/09/15/maersk-makes-another-move-into-e-commerce-with-its-first-tech-acquisition>

23. Maersk. (2024). *Annual Report 2023* (Maersk, Ed.) [Review of *Annual Report 2023*]. Maersk. [https://www.maersk.com/~media\\_sc9/maersk/news/press-releases/files/2024/02/08/apmm-annual-report-2023.pdf](https://www.maersk.com/~media_sc9/maersk/news/press-releases/files/2024/02/08/apmm-annual-report-2023.pdf)

24. Maersk. (2023). *Annual Report 2022* (Maersk, Ed.) [Review of *Annual Report 2022*]. Maersk. [https://www.maersk.com/~media\\_sc9/maersk/news/press-releases/files/2023/apmm-annual-report-2022.pdf](https://www.maersk.com/~media_sc9/maersk/news/press-releases/files/2023/apmm-annual-report-2022.pdf)

25. Maersk. (2022). *2021 Annual Report* (Maersk, Ed.) [Review of *2021 Annual Report*]. Maersk. <https://ml-eu.globenewswire.com/Resource/Download/9135269a-6909-4fac-a06f-11fc0b222a97>

26. Maersk. (2021). *2020 Annual Report* (Maersk, Ed.) [Review of *2020 Annual Report*]. Maersk. <https://ml->

[eu.globenewswire.com/Resource/Download/b6733b95-7047-4870-a4cc-8acb20c41dbf](https://eu.globenewswire.com/Resource/Download/b6733b95-7047-4870-a4cc-8acb20c41dbf)

27. Maersk. (2020). *2019 Annual Report* (Maersk, Ed.) [Review of 2019 Annual Report]. Maersk. <https://ml-eu.globenewswire.com/Resource/Download/35da68a1-f018-4dc3-85f9-95994bc5dc6b>

## Appendices

### A.P. Moller – Maersk's Business Model Canvas

