



IS3103 Digital Transformation Proposal Group 5C

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Executive Summary

The purpose of this proposal aims to elevate Silverpool Inc's competitiveness within the shipping industry through the use of digital transformation. A brief summary of Silverpool's background along with an analysis of how Covid 19 has impacted business will be covered to set the context and relevance of this proposal.

Next, current obstacles towards digital transformation and their impact within Silverpool Inc will be discussed. Five recommendations to improve current processes and technologies will then be introduced to effectively deal with the problems previously discussed. A feasibility assessment for each recommendation will be given and a change management plan will be shared to show the suggested timeline to implement these changes. Lastly, we will conclude with the expected benefits these solutions will have on Silverpool Inc's business.

1. Background

1.1. Shipping Industry

Maritime trade is one of the fundamental driving forces of transnational trade. Accounting for 80% of international trade⁽¹⁾, the traditional shipping industry is currently looking towards shortening the supply chain and embracing the use of technology.

To shorten the supply chain, companies are encouraged to rely less on lean inventory methods and take up nearshoring and reshoring of processes and goods as their recommended model. This would reduce their interdependence on other international services and products for their business⁽²⁾.

There is also a huge push to adopt technology to reduce overhead within the industry. For example, a non-profit organisation Digital Container Shipping Association (DCSA) has been established to act as a standardising body for the industry. Some of these standards include improving CyberSecurity and utilising Electronic Bill of Lading to unify communication between stakeholders involved in a transaction⁽³⁾.

1.2. Covid 19 Impact

Due to Covid-19, there has been a shortage of empty containers to meet global trade demand which has made it difficult for shipping companies to find and get a hold of containers to transport their goods.

There was also a cut in the number of containers available at the beginning of the pandemic and this was in response to a decrease in trade and production of goods as everything was getting shut down. However, as the situation got better, the sudden increase in demand for consumer goods and shipping meant that all of a sudden, there were insufficient number of containers available to pick up empty containers from ports⁽⁴⁾. This was a big issue that plagued the shipping industry as customers were unhappy that their demands were not being met. This was exacerbated by travel restrictions in certain countries that prevented some containers from being collected as well.

Port congestion was also an issue that contributed to bottlenecks in the supply chain. The lack of manpower due to workers falling ill and Covid-19 restrictive measures slowed operations down lengthened the time required to process, load and unload cargo at ports⁽⁵⁾. As a result, vessels have to wait longer to enter ports. Occasional outbreaks of the Covid-19 virus also led to the shutdown of several ports, making it necessary for vessels to divert to other busy ports which further caused congestion to grow.

The operations of shipping companies were heavily disrupted by the Covid-19 pandemic as the shortage of shipping containers and congestion at ports meant that they had to seek alternative

shipping equipment and routes to resume their business and deal with unpredictable delays in their operations.

1.3. Silverpool Inc

Founded in 1995, Silverpool is a shipping company that provides general shipping and cargo services to the East Asia region. Currently, Silverpool has a sizable fleet of 20 vessels with several offices covering coastal ports within mainland China, Taiwan, Singapore and Japan.

Silverpool focuses on container liner transportation of bulk cargo from port to port with support businesses in compliance, port to warehouse delivery and tracking services for their containers.

Silverpool has been trying to expand their influence to South Asia and even Europe, but have failed as they have found that breaking into a market with strong existing competition to be extremely challenging and this is due to their inefficient use of IT and the lack of a centralised IT system which makes taking on more projects difficult. This problem persists due to the lack of technical expertise amongst senior management members and the presence of rigid attitude towards change.

Recognising the urgent need for change, Silverpool is finally ready to embrace digital transformation in order to differentiate itself as a more efficient and reliable maritime business.

2. Challenges faced by Silverpool Inc.

2.1. Business Challenges

2.1.1. Inability to scale their business

Silverpool has attempted to scale their business by taking on more customer deals but their business has shown signs of stagnating growth and decreasing market share, depicting clear signs of Silverpool's inability to scale their business. A deeper analysis reveals that Silverpool has high costs stemming from its inefficient processes and that these inefficiencies are a result of its obsolete systems being unable to catch up with their current business needs.

For example, Silverpool's current cargo management uses a simple spreadsheet, not leveraging IT and because of this, employees on land spend up to 40% of their time each day contacting different ships asking if they are carrying a certain cargo. As a result of this, precious time and resources are wasted doing ad-hoc tasks to plug in the gaps in information the spreadsheet is unable to capture, which can all be easily handled if they were to embrace the right IT resources.

With their current cargo management process, Silverpool is unable to manage more cargo which thus prevents them from scaling their business and limiting their potential revenue.

2.1.2. Inability to differentiate in a saturated market

As a relatively small player in this competitive industry, it is important for Silverpool to stand out from their competitors in order to compete against larger companies with economies of scale. However, Silverpool has not been able to make effective use of IT to complement its business strategy. As a result, they have fallen behind competitors who have embraced IT to develop their own niche and were able to capture more customers using differentiated services.

Currently, Silverpool's use of IT is only as a supporting department to store data and take on ad-hoc requests by other departments. Using Nolan & McFarlan's IT Strategic Impact Grid, Silverpool is currently in the "Factory Quadrant", using IT systems to only complete daily tasks. These include using Excel spreadsheets to track ships and the type of cargo they carry, checking delivery statuses and human resource allocations.

In order to properly develop as a business, IT must be incorporated into business planning and strategy. This means efficient use of IT systems that will allow Silverpool to be able to accomplish both day to day tasks, as well as assist in analysing and strategizing future business prospects. Hence Silverpool needs to realign IT and business together to help get them into the "Strategic Quadrant" of the IT Strategic Impact Grid.

2.1.3. Lack of Transparency between Silverpool & Clients

Silverpool's existing mode of communication with customers is extremely rigid. Cargo owners must go through ship brokers to be able to reach Silverpool for any requests or updates on cargo conditions. Necessitating customers to use this indirect communication channel for even simple requests negatively affects customer experience due to slow information exchange.

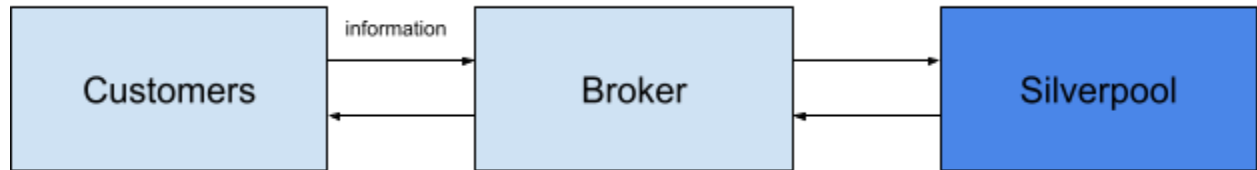


Figure 1. Current flow of information

For example, information relating to cargo tracking, such as arrival date, expected delays or damage sustained along the shipping process regarding a specific cargo should be easily obtained by the customer in a quick and transparent manner. Recently, a tracking request for cargo by a new customer could only be completed in 4 days and the feedback received from them was of slight disappointment.

2.2. IT Challenges

2.2.1. Ineffective usage of IT department

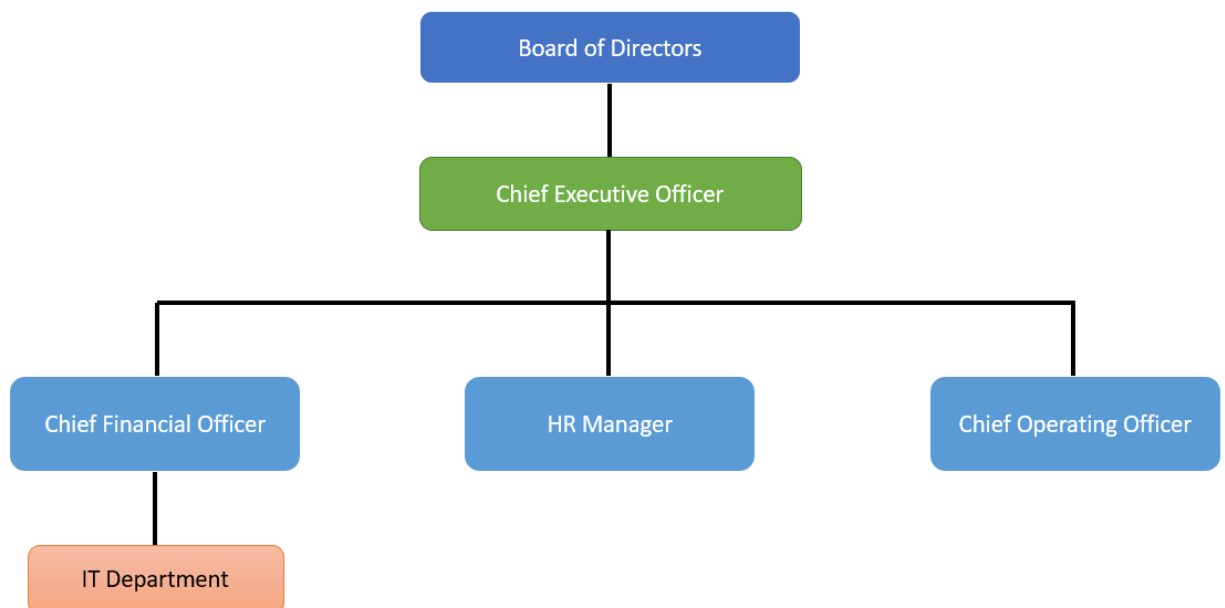


Figure 2: Silverpool's Current Organisational Structure

As shown in Figure 1, the IT department currently sits under the Chief Financial Officer (CFO). However this has become an issue as the CFO is not technically savvy enough to make executive decisions regarding the IT department in Silverpool, preventing Silverpool from making effective use of IT as a strategic asset to drive business growth.

The poor management of the IT department translates to a lack of investments into IT and a disorganised workflow between the IT department and the business side of Silverpool. The lack of existing standardised operating procedures within Silverpool's IT department has exacerbated problems of distrust and lack of belief towards the IT department from the business side.

2.2.2. Underutilised data

Silverpool currently has vast amounts of data that goes unused. Massive amounts of valuable business, operational and customer data are generated and stored away by the company daily. However, this data is left untouched as Silverpool lacks the appropriate analytical tools and technologies that facilitate the organisation, management and processing of data. The lack of skilled data analysts in the company further hinders its ability to turn its data into useful insights.

As a result, Silverpool is unable to fully monitor and analyse its business activities to pinpoint problems and areas for improvement. Without insights derived from data analysis, inefficient processes cannot be identified and decision-making remains poor, leading to the incurrence of unnecessary costs. Additionally, Silverpool risks falling behind its competitors who have already begun leveraging data to enhance their services.

2.2.3. Legacy system

Silverpool currently relies on a legacy enterprise system, SilverPool Systems (SPS), which was an ad hoc project created since the inception of the company. Critical business features such as form generation or payment features were added haphazardly into the system causing features in the system to feel like independent applications instead of one cohesive unit. General feedback brought up salient points such as requiring needless data to fill up forms and inability to search for information across departments. This created redundant dependency between departments even for simple tasks such as information retrieval. The result is lower productivity across departments because considerable time is spent waiting for replies as well as answering plenty of requests.

Moreover, the system is vulnerable to cybersecurity threats. As the cyber threat landscape constantly evolves, Silverpool should have IT systems which are robust and hardened against cyber attacks. The recent RansomWare attack on Silverpool was extremely devastating to the company image, finances and productivity.

3. Recommendations

3.1. Organisational Change

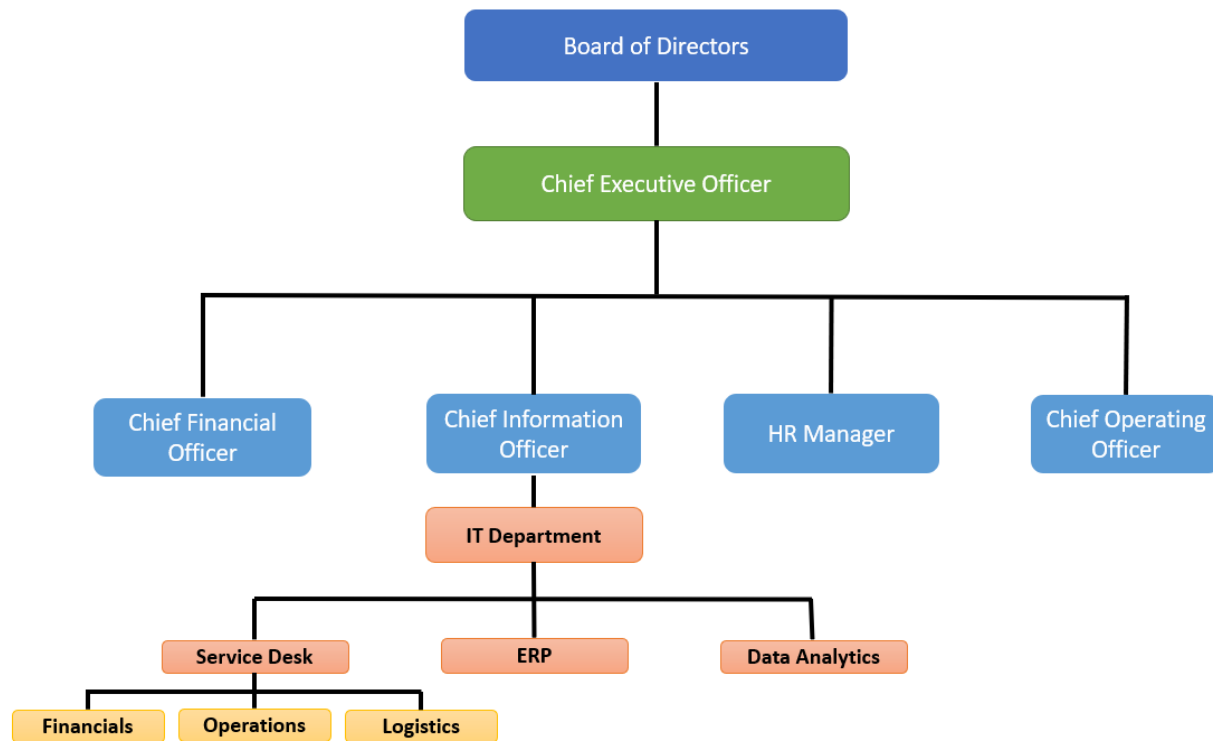


Figure 3: Silverpool's Updated Organisational Structure

iLEAD recommends bringing in an experienced Chief Information Officer(CIO) that the Board of Directors and C-Suite staff entrust to oversee and manage the IT department as well as to make executive decisions about investments and strategy for the IT department.

iLEAD will work with the CIO to introduce changes to the organisational structure of the IT department, these changes are made with the aim of providing more structure and organisation. Silverpool will see a revamped IT department that will have a dedicated support team of Subject Matter Experts (SME) for each functional department in Silverpool, this helps to ensure instant troubleshooting and thus help to build overall trust towards the IT department again.

This restructure also comes with the introduction of the Data Analytics team, who will drive the change of Silverpool becoming a data-driven company so that Silverpool can maintain their competitive edge, more will be elaborated on in our fourth recommendation.

3.1.1. Feasibility Assessment

It is clear that these organisational changes and new hirings would result in an increase in yearly cost as seen in Figure 4 below.

New Hirings	Annual Cost (SGD\$)
1x Chief Information Officer	260,000
1x Data Manager	70,000
3x Data Analysts	50,000 * 3 = 150,000
3x Service Desk SMEs	48,000 * 3 = 144,000
Total	624,000

Table 1: Estimated Cost of Organisational Change

This additional annual cost should not be seen as a burden but an investment towards digital transformation, this investment would allow Silverpool to remain competitive, gain market share and generate profits surpassing this additional cost.

Taking into consideration the possible resistance to this organisational change, iLEAD will set-up talks and channels of communication for Silverpool's current IT staff to voice their concerns such that we can communicate the reasons for change and help them through this transition.

3.2. Upgrading Enterprise System

To unify the existing IT assets of Silverpool, an upgraded enterprise system will replace the current patchwork set of IT services. This upgraded system will streamline the sharing of information between departments, as well as support a centralised system for sending, prioritising, and responding to requests for services from different departments. Creating and filling out forms will also be organised, where current processes will be reviewed during the transition to the new system, and payment processing will also be integrated.

One such enterprise system that iLEAD recommends is SAP, due to its wide range of relevant services, and an outstanding reputation in the industry. By using readily available software, Silverpool can focus on onboarding procedures, freeing up IT teams to handle other problems, and leading to a quicker return on investment.

Through S/4HANA Cloud, its enterprise resource planning system, Silverpool can centralise and streamline finances, track goods in transit, and manage freight requirements. Orders and deliveries can be monitored via a central interface, and documents can be organised for people from multiple teams to follow and work through. Additionally, with data now being stored in a

unified format, automated tools can more easily gather insights and analytics from company performance.

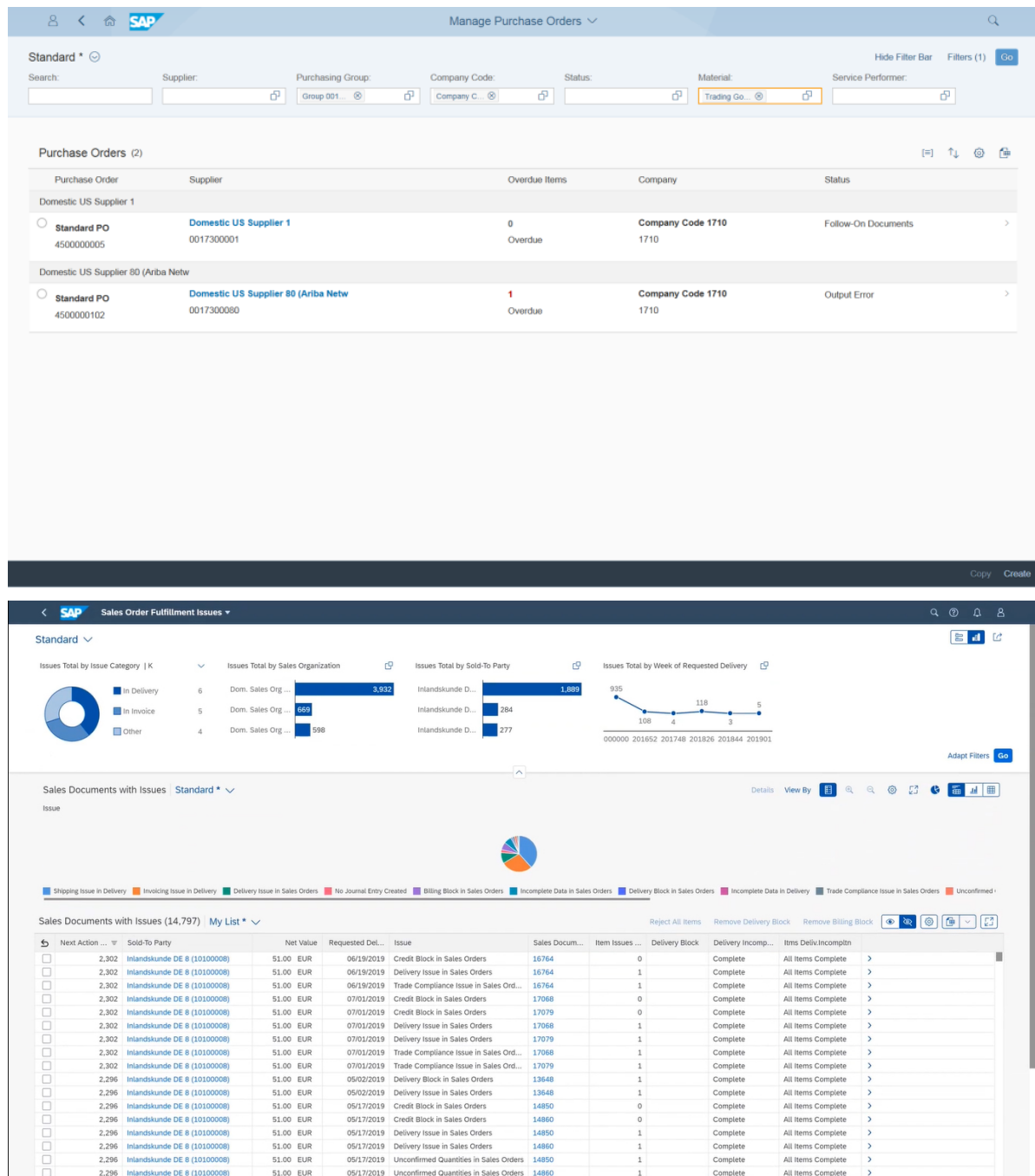


Figure 4: Screenshots of proposed ERP solution using SAP.

This will benefit the operations of Silverpool in several ways. From the company's point of view, better information management can create smoother decision making processes, which can offer an advantage for Silverpool. Additionally, more efficient request prioritisation and processing will increase trust between the departments, particularly the IT department, and will

more tightly integrate Silverpool’s value chain. From the point of view of Silverpool’s customers, a smoother payment and tracking process will improve their user experience, which can improve customer retention. By using commercially available software, Silverpool will be able to keep up with industry best practices, as well as increased protection against cyber threats, compared to in-house software packages.

3.2.1. Feasibility Assessment

An estimate of expenses involved with acquiring SAP follows:

Service	Monthly Cost (SGD\$)
Business Technology Platform	1,319.55
Document Management (Integration)	1,892.05
HANA Cloud	6,923.66
IoT	593.45
SAP Integration	5,585.40
Total	16,314.12

Table 2: Estimated Cost of new Enterprise System

It is worth pointing out that these costs are 6 percent less than the maintenance costs of the old ERP system.

The transition to SAP will take place gradually, over a 6-month period. During this period, the ERP department will work to migrate the current data and integrations, as well as support other departments in making the transition. 6 months will ensure a sufficient time period to respond to events such as system failures, problems in data migration, and create backups for data storage.

During the migration, the current system will be used as a temporary backup for teams that have not fully committed to the switch. The staff currently assigned to adding features and upgrading the old ERP system will be tasked with managing the switch, while those who are maintaining the old system will remain with that role until the final shutdown of the old system. This way, Silverpool’s current IT manpower will not be overworked.

3.3. Creating Smart Containers

Internet of Things (IOT) are devices capable of collecting data and connecting to a network to transfer that data for further processing or analysis. Leveraging on IOTs to create smart containers can help to greatly reduce current manual processes. The data collected from smart containers can be monitored by ship engineers using custom monitoring systems. As seen in Figure 5 below, the data from smart containers will be connected to the internet, allowing employees on land from both the port and HQ to have real time updates on the cargo status.

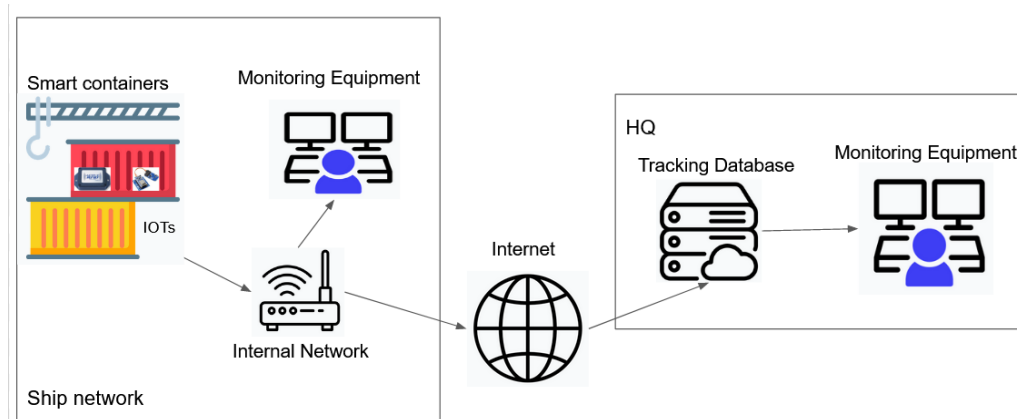


Figure 5: Network Architecture of a Container-Ship

3.3.1. RFID Trackers

Using active RFID trackers can save immense amounts of time by streamlining processes involved with loading and unloading containers. Active RFID beacons will be installed in all containers with its corresponding cargo information encoded into the beacon before each trip.

RFID beacons will occasionally send its location to the receiver located on the ship. They can also be queried manually by the receiver. Hence, any movement of the container, either loaded onto the ship or unloaded to port will be immediately known by the ship crew. With an accurate timestamp of when the container has moved, a high degree of confidence can be achieved with regards to the location of the container.

3.3.2. Smart Sensors

Using IOTs as portable sensors can greatly improve monitoring speed and accuracy of real time alerts on cargo in the containers. This allows for granular monitoring to quickly and precisely detect problems which engineers on duty can swiftly respond to.

IOTs will be equipped in two main areas, on container doors and in special containers for temperature sensitive cargo. Sensors on container doors will monitor for unexpected actions and provide assurance that the cargo is not tampered with. Temperature sensors will monitor the

temperature in these special containers to ensure that the temperature sensitive cargo is properly kept.



Figure 6: Image of Temperature Sensor with the IOT

3.3.3. Feasibility Assessment

An estimated cost of the new devices:

Device	Cost (SGD\$)
Active RFIDs	10000 containers * 20 ships * \$3 = \$600,000
Receiver	20 ships * \$3000 = \$60,000
Smart Sensor IOTs	10000 * 5 * \$3 = \$150,000
Implementation Cost	\$30,000
Total	\$840,000

Table 3: Estimated Cost of Smart Containers

Operationally, installing these IOTs into these containers will be done by the vendors. The installation will take place over a time period of 6 months to properly install the IOTs in all the containers. However, containers which are undergoing the installation process cannot be used and this will affect Silverpool's business due to the overall decrease in cargo shipment during this period. To mitigate this business impact, the installation process will take place in phases and the total number of containers that can be worked on at one time will be directly proportional with the number of ships undergoing repairs. This will ensure that sufficient containers remain to fulfil orders, minimising impact on the business.

3.4. Track and Trace API

Having smart containers allows Silverpool to customise and implement new customer centric features by integrating the information retrieved from the Smart Containers into the DCSA Track and Trace open API. By expanding the functionality of this API, customers can query for this additional information on their side without the need to go through the hassle of contacting Silverpool. This innovative integration of both hardware and software solutions will help Silverpool increase transparency of information between customers and Silverpool, a first in the industry.

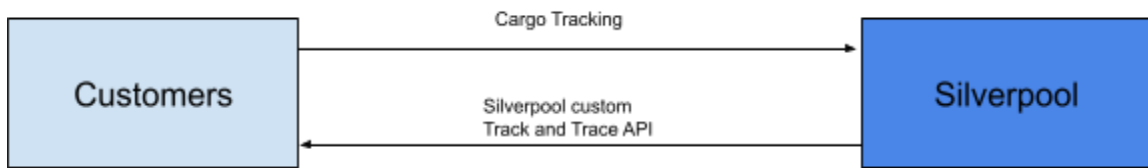


Figure 7. New flow of cargo tracking requests

Leveraging on the information provided by smart containers, customers can not only receive information about where their cargo is but also the status of their cargo and its current conditions. Moreover, the customer is not required to have a huge change to their existing code base and can quickly adapt to the new change in less than a week.

3.4.1. Feasibility Assessment

Amending the current software of Track and Trace API to display information obtained from the smart containers would be achievable quickly. The extensibility of Track and Trace API helps to make customising the software feasible. Developers in Silverpool's IT department have given an estimate that this will take less than 3 weeks to complete.

To ensure that customers are able to quickly adapt to the changes, clear instructions including example code will be available as documentation for all. This allows any developer trying to access the new features to be able to get up to speed as soon as possible.

3.5. Use of Data Analytics

Making use of data analytics will enable Silverpool to take advantage of its data. As Silverpool incorporates data and insights into its decision-making process, smarter decisions can be made to improve business outcomes. Various types of metrics can also be monitored to identify problematic and inefficient aspects of its business to lower its costs and improve its services.

3.5.1. Financial Metrics

Tracking key financial metrics like net profit margin, working capital, accounts receivable and payable can provide Silverpool with a comprehensive overview of its business activities at a glance. This subsequently enables Silverpool to ensure that progress is being made in achieving their goals.

3.5.2. Logistics Metrics

By monitoring metrics such as On-Time delivery, cost of transportation and warehousing, Silverpool can make better-informed decisions. For instance, it can identify the best shipping routes to minimise costs or delivery time. As a result, not only can Silverpool benefit from a reduction of costs, but it can also maximise customer satisfaction through shorter delivery times, giving Silverpool an edge over its competitors.

3.5.3. Human Resources (HR) Metrics

Ensuring that Silverpool is able to attract and retain qualified employees is increasingly important as it continues to grow. To do so, Silverpool can look into its employee turnover rate, employee productivity rate, cost and revenue per hire and more to adjust its hiring practices to bring in highly-skilled employees that can contribute to its growth. Moreover, tracking these metrics also gives Silverpool the opportunity to introduce initiatives that promote better organisational culture.

To conduct these analyses, Silverpool's new Data Analytics team will utilise S/4HANA Embedded Analytics, the set of analytical features built into its new enterprise resource planning (ERP) system, S/4HANA Embedded Analytics. A new group of data analysts, together with existing analysts in Silverpool, will form Silverpool's new Data Analytics team given its current lack of skilled analysts. Leveraging tools found in its new ERP system will allow Silverpool to seamlessly integrate analytical insights into their workflows. The KPIs, reports and dashboards created by Silverpool's Data Analytics team can also be easily shared with other departments to support their operations and formulation of effective business solutions. Additionally, access to real-time transactional data can strengthen Silverpool's ability to make time-sensitive decisions and respond better to unexpected situations⁽⁸⁾.

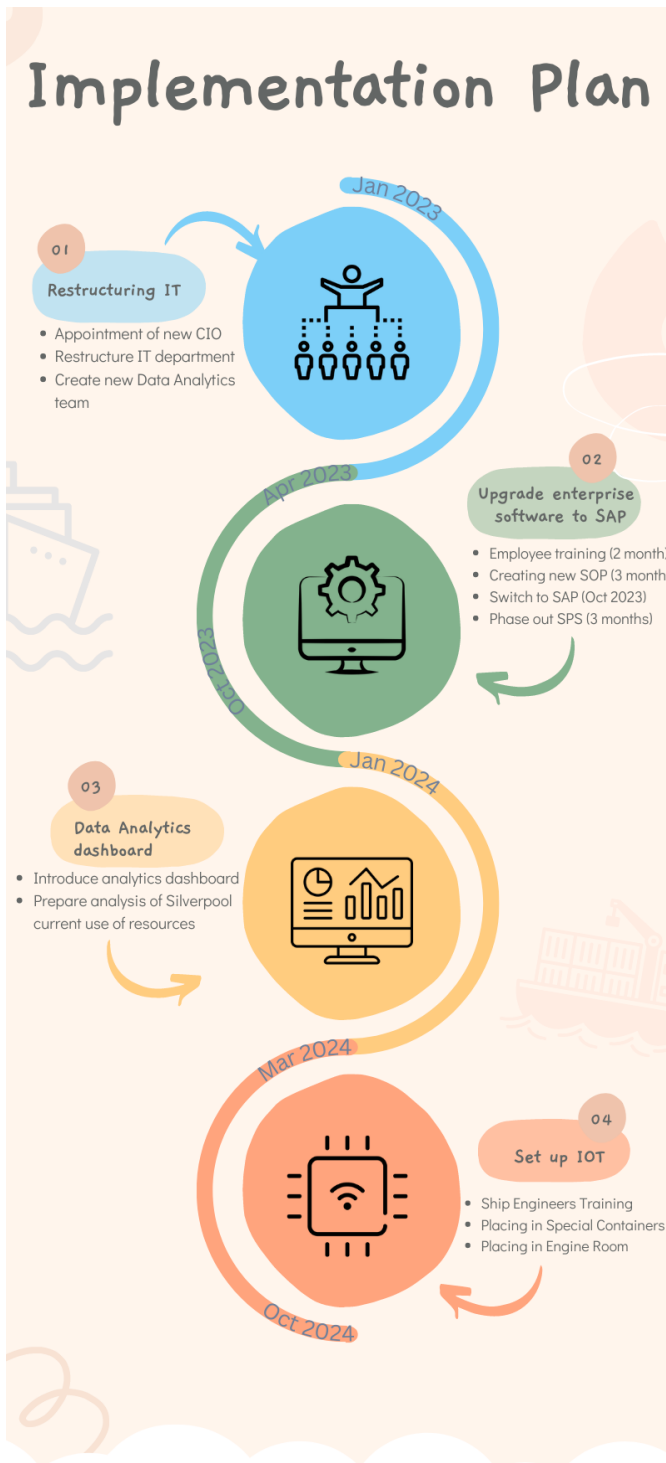
3.5.4. Feasibility Assessment

Obtaining the analytical tools will not be a problem financially given that Silverpool will be using the analytical features embedded in its new ERP system.

Unfortunately, getting the Data Analytics team running may prove to be challenging as the majority of analysts forming the team will be new. However, we believe that Silverpool's existing employees joining the department can help make this process smoother by guiding their new coworkers along.

Additionally, since the team is unlikely to be experienced in using these analytical tools, training has to be provided. An adjustment period might also be necessary for the team to become proficient in these tools.

4. Implementation Plan



Digital Transformation Within Silverpool

4.1. Phase 1: Restructuring

The implementation of iLEAD's digital transformation plan will begin with the most important step, the restructuring of the IT department. This starts with the appointment of a new CIO. This step will also include the hiring of a Data Analytics Manager to manage Silverpool's new Data Analytics team. This is projected to last 4 months.

4.2. Phase 2: Upgrade to Enterprise System

Next we will replace Silverpool's legacy systems and bring in SAP Enterprise System. This phase will be split into 3 steps. Training of all staff on the new system will first be conducted in the first 2 months to allow staff to know what to expect. All departments will create and standardise their Standard Operating Procedures with regards to using SAP in the next 3 months. On the 1st of October, all of Silverpool will start to use SAP. The next 3 months would be to slowly remove and decommission SPS.

4.3. Phase 3: Use of Data Analytics

This would be followed by the introduction of Silverpool's Data Analytics Dashboard which is meant to be used by the data analytics team and business managers. There will be a 2 weeks pilot testing phase. This process is projected to take 2 months.

4.4. Phase 4: IoT Devices

Lastly, we will be introducing IoT devices. We will first acquire these devices and sensors at the start of the year. Starting March 2024, we will first train ship engineers and crew on how to use the IOT devices and interpret their data. We will then attach them to all of Silverpool's specialised containers first. A pilot test of 2 weeks will occur to gather feedback on the usability and user interface. After successful implementation, we will then install the remaining devices in all the ship engine rooms. Overall, this will be projected to take 6 months.

5. Stakeholder Analysis

5.1. Higher Management

The main concerns of the Board, CEO, CFO, COO regarding the Digital Transformation of Silverpool would be the return on investment of the proposed recommendations and how these changes will impact the long-term goals for the company. Although the upfront cost is significant, it is imperative that Silverpool undergoes transformation in order to remain competitive. iLEAD recommends having monthly C-suite meetings to provide timely updates on the progress of the plan, this would help to ensure that higher management are in the loop of the progress.

5.2. IT Department

The support and cooperation of the IT Department is crucial to the success of implementing these new changes. Not only is the department responsible for setting up Silverpool's new IT infrastructure, but it is also in charge of supporting other employees as they learn to use the new systems. Hence, involving them in decision-making processes is necessary to support them as they complete their tasks. Obtaining their feedback on these changes also ensures that their concerns are addressed.

5.3. Ship Crew

The ship crew's willingness to digitalise their processes on the ship will have a huge impact on the success of digital transformation in operational technology, specifically IOTs as a monitoring tool. The experienced crew are very used to the traditional way of doing things and might be frustrated while interacting with the monitoring system. To improve uptake of this technology, training workshops will be conducted to teach crew members how to use these IOTs. A pilot testing phase will also be conducted to give the nautical engineers a chance to try the new system and give their feedback. The feedback will be used to update the monitoring software's usability and user interface.

5.4. Other Employees

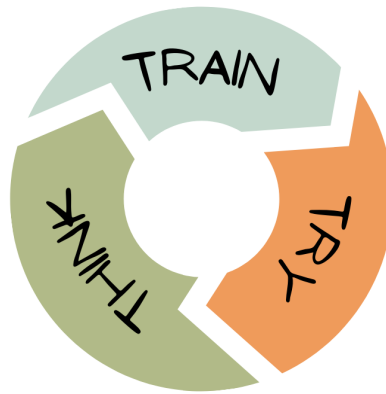
Naturally there would be mixed responses towards the Digital Transformation by Silverpool's Employees, it is imperative that we convince them of the urgent need for change in order for Silverpool to remain competitive. Wherever they might be on the Adoption Matrix, they will be able to raise their concerns to the HR Manager and tech leads through the seminars on Silverpool's Digital Transformation. iLEAD would then make use of our own Strategies for Overcoming Resistance Framework to deal with any form of resistance to change amongst the employees, convincing them of the need for transformation. Similar as above, training workshops will be conducted to improve uptake of this technology.

5.5. Clients

Silverpool's clients will not be directly affected by the change. However, they may be concerned that these internal changes will affect the quality of the services they receive. There is a risk that this concern will cause them to be unwilling to do business with Silverpool after the change. Thus, the short and long term benefits for clients should be communicated via newsletters, and their end-user feedback leveraged to further refine the transformation.

6. Change Management Plan

The iLEAD team will be utilising its own change model to convey the need for digital transformation within Silverpool and help to manage any discontent towards these changes effectively. Using the Train, Try and Think model, we aim to promote a culture of constant improvement. This 3T model will be implemented for each phase in the implementation plan.



Step	Action
Train	<ul style="list-style-type: none">• Training workshops to teach employees how to use new systems/technology
Try	<ul style="list-style-type: none">• Pilot phase to give employees an opportunity to try in a blame-free environment.
Think	<ul style="list-style-type: none">• Regular feedback sessions• Seminars to raise concern• End user feedback

The 1st phase, "Train", will be aimed at guiding employees about the expectations, outcomes and expected barriers to the change. Training workshops will be introduced to comprehensively train employees in a group setting instead of letting employees teach each other in an ad-hoc style. This collective standardised training will help to make sure that everyone can work together cohesively by eliminating variations in processes or content learnt.

Next, the “Try” phase will be when the change is implemented. Pilot testing will help set up a blame-free environment for employees to try out what they have previously learnt from the workshop without any fear of making mistakes. Short term goals will also be set for the team to achieve to make visible performance gains brought about by the change. Individuals and teams are encouraged to be creative when encountering obstacles and to maximise the benefit of change.

Lastly, the “Think” phase starts after the change has been implemented. Teams impacted by the change will gather, discuss and give feedback on the new change. Feedbacks can come from the pilot testers, customer feedback, and from regular feedback sessions set up to allow employees to voice their concerns. Feedback would be important to decide if there is a need to adjust implemented changes.

7. Expected Benefits

All these changes will bring individual benefits to Silverpool but also integrate well with each other to strengthen Silverpool’s use of IT which eventually helps to boost business.

From within, the organisational changes to the IT department will help Silverpool to organise and bring much needed leadership to the IT department, which benefits Silverpool in the long-run as investments towards IT will increase and Silverpool can make efficient use of their IT resources. Additionally, smoother business processes brought about by the new enterprise system will enhance Silverpool’s internal processes and efficiency.

Furthermore, Silverpool can leverage the insights generated by their brand new data analytics team to have a clearer overview of their customer data and what strategies to implement in order to retain and attract more customers.

A better customer experience can also be delivered through Silverpool’s new IoT devices and enterprise system. Silverpool’s customers can enjoy greater transparency through receiving timely and accurate information about their cargo, and benefit from more efficient user systems.

Overall, with these changes, it is expected that Silverpool can evolve into an innovation leader in the shipping industry.

8. Conclusion

The recommendations covered in this proposal can sufficiently address the problems currently faced by Silverpool. As Silverpool begins to embrace digital transformation, it is likely to find itself in a much better position to set itself apart from its competitors and break into new markets. Overall, iLEAD believes that our digital transformation proposal can enable Silverpool to elevate its business and achieve its objectives through the strategic use of IT in its operations.

(4948 words)

9. Appendix

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9.1. Stakeholder Analysis Table

Stakeholder	Project's impact on stakeholder	Stakeholders influence on the project	What is important to them	How could they contribute to the project	How could they block the project	Strategy to engage them
Board	Low	High	- Profit - Value of Silverpool	- Vote of confidence - Increase funding for Silverpool	- Withdrawal of funds	- Highlighting the need for Silverpool to implement these changes and informing them of the benefits of doing so
CEO	High	High	- Profit - Long term	- Approval of DT plan	- Rejecting the proposal	

			impact	- Align DT plan to long-term goals		
COO	High	High	- Operations of Silverpool	- Setting an inspired mindset for the DT	- Not encouraging an inspired mindset in Silverpool	- Informing them of the benefits of implementing new changes and - Reminding them of their ability to inspire and get other employees on board so that they can enjoy these benefits
CFO	Medium	High	- Financial Health of Silverpool	- Feedback on the impact on Silverpool financials - Assist in the handover of the IT department to the CIO	- Refuse to allocate budget for recommendations	- Convince them of the affordability of new systems through a detailed breakdown of potential costs incurred
IT Department	High	Medium	- Job Security - Maintenance of new IT	- Setting up new IT infrastructure - Assisting other departments in learning the new systems	- They could refuse to implement some of the new changes.	- Involve them in decision-making processes, and let them participate in implementing the new system.
Ship Crew	Medium	Low	- New process of to monitor conditions	- Seeking to learn and use IOTs in their routine checks	- They could be indifferent to the change by thinking that digitalising their old processes are not as good as the tried and tested old methods	- By showing them using objective statistics how utilising IOT can improve their efficiency and accuracy. - Educate them on how the new system will make their jobs easier since they do not need to frequent the engine room as much.
Other	High	Low	- Job Security	- Be proactive in	- Be frustrated and	- By showing them

Employees			<ul style="list-style-type: none"> - Minimising disruptions to their workflow 	learning to use the new systems	hence unwilling to support new initiatives, making complaints about the changes	how the new systems simplify their work processes - Having a seminar with HR Manager and C-suite members on concerns they might have
Clients	Medium	Medium	<ul style="list-style-type: none"> - Quality of services - Price 	<ul style="list-style-type: none"> - Provide constructive feedback on new systems 	<ul style="list-style-type: none"> - They could be afraid that change will affect their current orders thus request that Silverpool not change 	<ul style="list-style-type: none"> - Send emails / newsletter to communicate the short and long term benefits which will result from these changes.