

# FIT3138 - Assignment 2

14 October 2024

## Business Case for Implementing Top Gear Bikes Enterprise Systems



**Prepared by:**  
**Group 513**

- 1. Joanna Moy (32694547)**
- 2. Kanaya Sudiyanto (32988672)**

# Table of Contents

<b>1.0 Introduction/ Background.....</b>	<b>1</b>
<b>2.0 Business Objective.....</b>	<b>1</b>
<b>3.0 Current Situation and Problem/Opportunity Statement.....</b>	<b>3</b>
<b>4.0 Critical Assumption and Constraints.....</b>	<b>4</b>
<b>5.0 Analysis of Option and Recommendation.....</b>	<b>8</b>
<b>6.0 Preliminary Project Requirements.....</b>	<b>12</b>
<b>7.0 Budget Estimate and Financial Analysis.....</b>	<b>14</b>
<b>8.0 Schedule Estimate.....</b>	<b>18</b>
<b>9.0 Potential Risks.....</b>	<b>20</b>
<b>References.....</b>	<b>23</b>
<b>10.0 Exhibit.....</b>	<b>27</b>
Exhibit A.....	27
Exhibit B.....	33
Exhibit C.....	52
Exhibit D.....	55

## **1.0 Introduction/ Background**

Top Gear Bikes (TGB) has been a leader in the high-performance racing bike industry since its establishment in 1989. Over the years, the company has established a solid reputation for quality and innovation, with its operations rooted in Melbourne, Australia. However, despite the company's notable growth, TGB's business processes have remained largely unchanged—relying on outdated legacy systems, which have limited its ability to remain competitive in today's rapidly evolving market.

As TGB plans to expand its manufacturing operations to India, Vietnam, and China, while also maintaining its research and development (R&D) and manufacturing plants in Melbourne, the company faces significant challenges. These include managing global suppliers, optimising inventory, and obtaining real time data for effective decision-making. To address these issues, TGB must implement a flexible and integrated Enterprise Resource Planning (ERP) system, one that simplifies operations, supports global expansion, and facilitates online customer orders alongside real time mobile access for its sales team. This business case explores the justification for implementing an ERP system to address TGB's operational inefficiencies, support global expansion, and position the company for long-term competitiveness.

## **2.0 Business Objective**

The key business objectives of Top Gear Bikes (TGB) are to improve operational efficiency, enable business scalability, and optimise decision-making capabilities through the adoption of an enterprise resource planning (ERP) system. These goals are motivated by the company's desire to remain competitive in a rapidly changing industry and support its projected development into new territories. Here are the detailed objective that TGB are trying to achieve:

1. Improving Decision Making Capabilities:

TGB's senior executives and middle managers need timely and reliable data to make accurate decisions. They are currently unable to easily access important data due to constraints in antiquated legacy systems. The new ERP system will deliver

- real time, centralised data from all departments, allowing for data-driven decision-making.
2. **Streamlining Operations and Improving Agility:**  
TGB's old and fragmented systems hinder its ability to operate efficiently and effectively. The ERP system will combine many business processes, such as production, sales, supply chain, and inventory management, allowing TGB to react swiftly to market changes and operational issues. This will improve cooperation between the Melbourne factory and its offshore manufacturing sites in Vietnam, India, and China.
  3. **Expanding into International Markets:**  
TGB's expansion into international markets, including sourcing materials and sub-assemblies from Vietnam, India, and China, and outsourcing manufacture, necessitates improved supply chain management. The ERP system will offer powerful features for managing multi-location, multi-currency, and worldwide supply chains.
  4. **Improving Customer Experience:**  
TGB strives to improve customer experience by enabling online orders and offering real time visibility into orders. The ERP will streamline customer relationship management (CRM), resulting in increased customer satisfaction and loyalty through improved service.
  5. **Optimising Inventory and Vendor Management:**  
TGB aims to optimise inventory and vendor management by implementing vendor-managed inventory (VMI) systems that prevent overstocking and stockouts. The ERP will automate inventory management, giving them greater control over demand forecasting, purchasing, and supplier relationships.
  6. **Providing Mobility to Sales Managers:**  
TGB's business area sales managers need real time access to the ERP system when working outside the office. By enabling cloud-based capability, the ERP system will enable mobile access to critical sales data, allowing managers to make informed choices on the go.
  7. **Predictive Analytics for Strategic Planning:**

To remain competitive, TGB should use predictive analytics for strategic planning and forecasting. The ERP system will include advanced analytics tools for forecasting demand, evaluating profitability, and driving strategic decisions.

8. Cloud vs. On-Premise Flexibility:

TGB is debating whether to fully use a cloud-based ERP system or to use a hybrid solution. The business goal is to ensure that the chosen system can handle both cloud and on-premise functions, giving the ability to manage operations securely and efficiently.

### **3.0 Current Situation and Problem/Opportunity Statement**

TGB currently operates with a variety of legacy systems that were custom-built for the company's early needs. While these systems have served TGB for decades, they no longer provide the flexibility or real time capabilities necessary to support the company's growth and market positioning. As TGB expands its operations to include offshore manufacturing in India, Vietnam, and China, managing multiple suppliers and coordinating global logistics has become increasingly complex. The inability of TGB's current systems to provide timely, accurate data hinders decision-making for both top executives and middle managers, leaving the company vulnerable to inefficiencies and delays.

This presents a significant problem for TGB as it navigates global expansion and seeks to optimise operations. Without a centralised, integrated system, it is difficult to maintain control over inventory, manage demand efficiently, or track profitability across a wide product range. The lack of real time data further complicates sales and customer service efforts, particularly for the sales managers who require mobile access to the system while working remotely. Additionally, the push towards online customer orders and vendor-managed inventory highlights the need for a system capable of providing transparency and integration across all business functions.

At the same time, this situation presents a critical opportunity for TGB to modernise its processes and technology through an ERP implementation. By implementing an ERP system, TGB can address its operational challenges, improve its decision-making, and ensure seamless coordination between manufacturing, inventory,

and sales. Moreover, an ERP solution offers the potential for better predictive analytics, helping TGB strategically plan and respond to market changes more effectively.

## **4.0 Critical Assumption and Constraints**

### **1. Global supply chain integration (Joanna)**

Integrating the global supply chain is a crucial element for the effective deployment of ERP systems in companies like TGB. This process involves aligning and coordinating all aspects of the supply chain—from suppliers to manufacturers and distributors—across different international locations. As TGB considers shifting production to India, Vietnam, and China, this integration allows for smoother coordination, reduces lead times, and enhances the efficiency of logistics and inventory control. A well-synchronised supply chain provides access to real time data, enabling better decision-making, quicker responses to demand shifts, effective management of disruptions, and maintaining a steady production flow.

Global supply chain integration through ERP can simplify the challenges of managing multiple suppliers and production sites in various regions. It aids in strategic planning and offers the agility to respond to market changes or shifts in supply conditions. In TGB's case, this integration goes beyond operational improvements; it also aims to gain a competitive advantage through superior customer service, consistent delivery timelines, and optimised inventory management.

### **2. Real time mobile access for sales team (Joanna)**

Real time mobile access for the sales team is vital for ERP implementation, allowing sales representatives to retrieve current information such as customer details, inventory availability, and order updates from any location. This feature speeds up decision-making and enhances responsiveness to customer needs, resulting in improved service quality and greater efficiency in sales. Incorporating real time mobile access supports uninterrupted operations

across different regions, aligning with TGB's aim to modernise sales processes and maintain a competitive edge in the market.

### **3. Vendor managed inventory (VMI) capability (Joanna)**

Vendor-Managed Inventory (VMI) is a supply chain management strategy in which the supplier manages and replenishes inventory levels using real time data provided by the buyer. This approach creates closer coordination between production schedules and inventory requirements, resulting in more efficient inventory turnover and fewer stockouts. By shifting inventory management to suppliers, VMI reduces the operational load on the buyer, allowing them to concentrate on other essential activities.

Implementing VMI at TGB would enable smoother coordination with its global suppliers, ensuring a consistent supply of raw materials and components without the risk of overstocking. This approach is especially beneficial in managing offshore production, as it allows for better alignment between supply and manufacturing needs. VMI can help TGB reduce lead times, decrease inventory holding costs, and maintain ideal stock levels, thereby creating a more adaptive and responsive supply chain. This strategic alignment is key to meeting customer demands and sustaining a competitive position in the market.

### **4. Clear goals and objectives (Kanaya)**

Defining particular goals ensures that the ERP corresponds with TGB's business drivers, such as facilitating online customer orders, controlling vendor inventories, and growing operations into India, Vietnam, and China. Clear objectives help to prioritise ERP features, guide vendor selection, and prevent scope creep during implementation. This clarity guarantees that the system supports strategic initiatives such as profitability tracking, predictive analytics, and smooth dealer collaboration.

### **5. User Training and Change Management (Kanaya)**

Given TGB's varied user base, comprehensive training needs to be provided to enable easy adoption. Training programs must cater to experienced, inexperienced, and casual users, as well as those requiring only basic system awareness. Effective change management, which includes clear communication,

engagement, and overcoming user resistance, ensures that employees embrace the technology and alter their processes accordingly. This is critical for teams such as sales managers, who will want mobile ERP access.

## **6. Effective Project Management (Kanaya)**

Strong project management guarantees that the ERP deployment stays on schedule and under budget. TGB must create a governance framework to manage risks, monitor milestones, and oversee the integration of legacy systems with the new ERP. Effective leadership and collaboration across departments, particularly offshore manufacturing, will be critical for meeting project objectives and ensuring a smooth transition to the new system.

## **Assumptions and Constraints**

In addition to the six factors that have already been identified, several other assumptions are fundamental to the success of TGB's ERP implementation:

### **1. System Scalability and Adaptability:**

- Assumption: The ERP solution is expected to support TGB's future expansion, handling increased data loads, additional users, and evolving business processes without requiring major system upgrades.

### **2. Stakeholder Support and Engagement:**

- Assumption: Senior management, department leaders, and end-users will provide consistent support and actively engage in the ERP transition process, reducing resistance through clear communication of the system's benefits.

### **3. Budget Management and Financial Planning:**

- Assumption: The budget for the ERP project will be managed effectively, with financial planning balancing upfront costs (software, consulting, training, customization) and long-term returns. This assumes that any potential budget shortfalls will be addressed without compromising the project.

## **Constraints:**

- **Varied User Proficiency and Resistance to Change**



With a diverse workforce of 2,000 employees and four main groups of end users, including experienced and inexperienced core users, inexperienced casual users, and users requiring simple system awareness, TGB faces the challenge of ensuring effective user training and overcoming resistance to change. Training programs must be comprehensive and adapted to varying levels of technical proficiency. Without careful planning, training could take longer than expected, leading to delays in ERP adoption and overall productivity dips during the transition.

- **Legacy System Integration and Offshore Coordination**

Managing the integration of old legacy systems, as well as project coordination across offshore manufacturing facilities, may put a strain on project managers' resources. TGB must build efficient governance frameworks to monitor milestones, manage risks, and maintain clear communication between onshore and offshore personnel. Any mismatch in this cooperation could lead to delays, cost overruns, or system implementation difficulties.

- **Mobile Access Infrastructure**

Ensuring real-time mobile connectivity for TGB's salesforce requires a strong and dependable mobile infrastructure across multiple countries. Network dependability can vary by region, especially in growing markets such as Vietnam and India. This may limit the usefulness of real-time mobile access for sales managers who need to maintain connectivity to the ERP system for inventory checks and order processing.

- **Data Security and Privacy Compliance**

The ERP system must comply with regional data protection regulations (e.g., GDPR, regulations in India, Vietnam, and China), which is necessary for safeguarding sensitive customer and supply chain information. Failure to comply with these laws could expose TGB to legal risks and erode customer trust.

## 5.0 Analysis of Option and Recommendation

### 1. SAP S/4 HANA (Joanna)

- **Deployment:** Offers cloud, on-premise, and hybrid deployment options, with a hybrid model providing TGB the flexibility to maintain critical operation on-premise while harnessing cloud capabilities for global inventory and supply chain management.
- **Scalability:** Highly scalable, designed for large multinationals like TGB, enabling intuitive user and location additions with its in-memory database for real time data processing.
- **Key Features:** Includes advanced production planning, shop floor management, real time analytics, and AI-driven financial management, ideal for optimising TGB's various business functions.
- **Challenges:** High initial costs and complex deployment processes, taking 12-24 months, and challenges with data migration from legacy systems require careful planning and significant investment.
- **Weighted Scoring:**
  - Total Weighted Score: 64.20
  - Strong in scalability, flexibility, and vendor support, but has higher implementation costs and longer deployment time.

### 2. NetSuite ERP (Joanna)

- **Deployment:** Primarily a cloud-based ERP system that utilises SaaS, allowing for quick implementation and reduced upfront costs compared to on-premise systems.
- **Scalability:** Offers modular architecture that enables businesses to add features and users seamlessly as they grow, maintaining performance even with increased transaction volumes.
- **Key Features:** Includes financial management, inventory control, order processing, and supply chain management modules that support operational efficiency and compliance with regulatory requirements.

- **Challenges:** Data migration complexities, customisation challenges, and the need for effective change management can delay implementation and require experienced consultants to align with business needs.
- **Weighted Scoring:**
  - Total Weighted Score: 81.10
  - Strong in cost-effectiveness, user friendliness, and rapid implementation, but slightly less customisable and flexible compared to SAP S/4 HANA.

### 3. Microsoft Dynamic ERP (Kanaya)

- **Deployment:** Hybrid (cloud + on-premise) for flexibility (Poliform, 2019), making it adaptable for businesses with varying infrastructure needs.
- **Scalability:** Modular structure allows TGB to scale gradually and integrate operations as the business grows (Wright, 2023).
- **Key Features:** Robust supply chain management, CRM, real time financial reporting, and mobile accessibility.
- **Challenges:** Customisation increases costs and requires IT support for ongoing maintenance. Implementation time is faster than SAP but slower than NetSuite.
- **Weighted Scoring:**
  - Total Weighted Score: 78.55
  - Strong in user-friendliness, scalability, and flexibility, but has slightly higher costs compared to NetSuite.

### 4. Oracle Fusion Cloud (Kanaya)

- **Deployment:** Fully cloud-based for seamless integration across multiple locations (Kumar, 2022).
- **Scalability:** Suited for global operations with multi-currency, multi-location support (Kumar, 2022).
- **Key Features:** Advanced analytics, automation, financial management, and predictive capabilities. Designed for complex, multinational operations.

- **Challenges:** Higher implementation and training costs compared to other options. Requires specialised expertise for adoption, especially for smaller teams with limited IT resources.
- **Weighted Scoring:**
  - Total Weighted Score: 72.75
  - Strong in scalability and advanced analytics, but lower scores in cost and implementation time due to its complexity.

Weighted Scoring Model for TGB's ERP System Implementation									
Created by: Joanna and Kanaya		Date: 14/10/2024							
Criteria	Weight	SAP S/4 HANA		NetSuite		Microsoft Dynamic		Oracle Fusion Cloud	
		Score	Weighted Score (%)	Score	Weighted Score (%)	Score	Weighted Score (%)	Score	Weighted Score (%)
Cost of implementation	20%	52	10.40	85	17.00	73	14.50	60	12.00
User friendliness	15%	70	10.50	85	12.75	85	12.75	80	12.00
Implementation time	15%	40	6.00	82	12.30	82	12.30	70	10.50
Scalability and flexibility	15%	90	13.50	75	11.25	85	12.75	85	12.75
Integration with legacy systems	10%	60	6.00	68	6.80	70	7.00	75	7.50
Vendor training and support	10%	85	8.50	75	7.50	80	8.00	75	7.50
Long-term maintenance cost	15%	62	9.30	90	13.50	75	11.25	70	10.50
<b>Weighted System Scores</b>	<b>100%</b>		<b>64.20</b>		<b>81.10</b>		<b>78.55</b>		<b>72.75</b>

Figure 1: Weighted Scoring Model (Exhibit B)

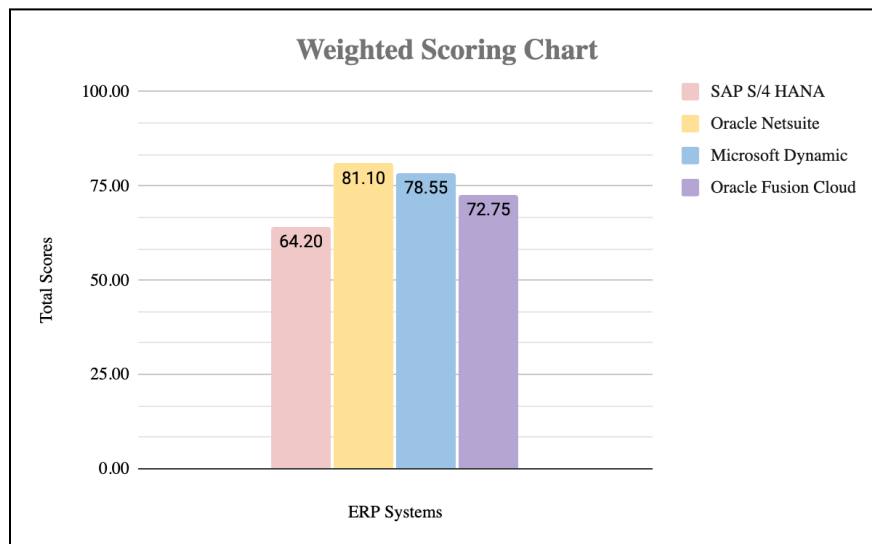


Figure 2: Weighted Scoring Chart (Exhibit B)

## Recommendation

Based on our Weighted Scoring Chart, ERP Software Evaluation Table, and Weighted Scoring Model in Exhibit B, the **Oracle NetSuite ERP** system achieves the highest total weighted score of **81.10%**, surpassing SAP S/4 HANA, Microsoft

Dynamics, and Oracle Fusion Cloud. A report by Business-Software.com (2024) further supports this, ranking Oracle NetSuite as the **top choice for Cloud ERP and Inventory Management** among 20 ERP systems for 2024—two areas critical for TGB as it modernises its operations. The report also identifies NetSuite as the **leading ERP system for midsize businesses**, a category that matches TGB's profile, given its 2,000+ employees and diverse operations. As such, NetSuite's features make it well-suited to the needs of a company like TGB.

To address TGB's deployment model decision, the Oracle NetSuite ERP system will be implemented as a fully cloud-based solution. This approach minimises upfront infrastructure costs and allows for a faster rollout—both key benefits of a cloud-based ERP. Adopting NetSuite's cloud model ensures centralised data access and streamlined updates, enabling TGB to access new features without the challenges of on-premises maintenance.

Its intuitive interface facilitates easy adoption by TGB's varied workforce, reducing training needs and minimising the risk of operational disruption. Additionally, NetSuite's rapid implementation process enables TGB to modernise swiftly, enhancing decision-making and data accuracy sooner.

NetSuite's support for mobile applications allows TGB's sales team and field staff to access real time data from any location. This functionality enhances productivity and supports timely decision-making, making it a strong fit for TGB's initiative to modernise operations and support its mobile workforce.

In terms of scalability, although it may not offer the same level of customisation as SAP, NetSuite provides sufficient flexibility to support TGB's growth plans, such as offshoring and global expansion. While integrating with TGB's legacy systems may present some challenges, NetSuite's cloud-based architecture offers tools to facilitate a smoother transition. The vendor's training and support resources are reliable, which is especially important for TGB's employees with varying levels of IT proficiency. Additionally, NetSuite's cloud model results in lower long-term maintenance costs by eliminating infrastructure upkeep, making it a financially sustainable option for TGB over time.

In conclusion, the Oracle NetSuite ERP system stands out as the best choice for TGB. It offers a balanced mix of affordability, ease of use, quick implementation, scalability, and reduced long-term costs, making it the optimal solution for TGB's ERP needs.

## **6.0 Preliminary Project Requirements**

The NetSuite ERP system offers a range of features catered to refine TGB's operations and support their growth objectives. The key requirements include the following:

### **1. Financial Management**

NetSuite provides various tools for managing financial processes, such as accounts payable and receivable, general ledger, budgeting, and automated revenue recognition. For TGB, this feature takes into account accurate financial tracking, compliance with industry standards, and efficient management of cash flow, which is pivotal for supporting strategic decisions and managing its global supply chain. These tools would help reduce manual tasks, enabling TGB's finance team to focus on strategic evaluation.

### **2. Inventory Management**

This module offers real time visibility into inventory levels across multiple locations, integrating effortlessly with procurement and order management systems. For TGB, which needs to manage a complex supply chain and manufacturing processes, the ability to track stock levels accurately minimises risks of stockouts and excess inventory. This guarantees timely order fulfilment and helps balance inventory levels with demand, improving customer satisfaction and reducing carrying costs.

### **3. Order and Supply Chain Management**

NetSuite's order management capabilities optimises the process from order receipt to fulfilment, reducing errors and automating key steps. This is especially beneficial for TGB as they transition to offering online customer orders, aiding in smoother order tracking and fulfilment. The integration with

supply chain management would also help TGB manage supplier relationships and optimise the movement of materials.

#### **4. Customisable Reporting and Analytics**

NetSuite's SuiteAnalytics provides live data analysis for different business operations through customisable dashboards and reports. This would allow TGB's management to track performance metrics, identify trends, and make data-driven decisions. Additionally, the availability of detailed reports on sales, production, and financial performance could help TGB optimise operations and address issues proactively, hence improving the overall agility of the business.

#### **5. Scalability and Flexibility**

The modular architecture of NetSuite would allow TGB to start with its core functionalities like financials and inventory and later expand with modules such as CRM and e-commerce. This flexibility would support TGB's potential expansion plans, allowing them to add users or features without requiring a complete system restructure. As TGB grows and explores new markets, this scalability would ensure that the ERP system remains aligned with their evolving needs.

#### **6. Cloud-Based Deployment**

As a cloud-based system, NetSuite would allow TGB to implement the ERP without the need for extensive on-premises IT infrastructure. This would in turn reduce the initial capital expenditure and facilitate remote access for TGB's sales and management teams, supporting a more flexible and mobile work environment. This also establishes that TGB can maintain seamless operations across multiple geographical locations, which conforms to the company's goals of simplifying global operations.

#### **7. User Training and Change Management Support**

Effective training and change management are both imperative for a successful ERP implementation. NetSuite's support services—including training programs and user guides, will be deemed essential for making sure that TGB staff can adopt the new system effectively. Engaging employees early in the

process and providing ongoing training could therefore reduce resistance to change, making the transition smoother and maximising the system's benefits.

## **7.0 Budget Estimate and Financial Analysis**

The costs for implementing NetSuite ERP at TGB are calculated based on industry standards and the company's specific requirements. The major purpose is to update TGB's outdated systems, improve decision-making, and help the company expand internationally. The estimates are based on a 9-12 months implementation timescale and include all initial and ongoing costs, as well as the estimated benefits over a three-year period. The following is a detailed budget estimate and financial analysis for TGB's NetSuite ERP deployment.

### **Preliminary Budget Estimate**

The total estimated cost for Year 0 (the implementation phase) is \$3,217,500. This cost estimate is comprehensive and includes the following categories:

#### **1. Software Subscription – \$2,400,000**

TGB requires an annual subscription to NetSuite ERP for 2,000 users at a cost of \$1,200 per user. This ensures all employees can access the system to perform their duties efficiently.

#### **2. Base License Fee – \$75,000**

A one-time organisation-wide licence fee is required to implement the ERP across TGB's multiple departments, enabling system-wide functionalities.

#### **3. Implementation Services – \$200,000**

This includes consulting services, data migration, and process mapping to integrate existing systems into NetSuite, ensuring a smooth transition from legacy systems to the new ERP.

#### **4. Customisation – \$50,000**

Customisation of the system to meet specific TGB department needs, including sales, supply chain management, and HR functionalities.

#### **5. Initial Training – \$100,000**



Training programs tailored for TGB's diverse staff (2,000 employees), including experienced, inexperienced, and casual users. This includes specialised training sessions to minimise disruption during system adoption.

**6. Ongoing Training and Support – \$50,000**

Continuous training and support for TGB's staff to ensure smooth operation and adapt to any changes or updates in the system.

**7. Ongoing System Maintenance – Included**

System maintenance, security updates, and performance monitoring are included in the subscription package to maintain smooth operation post-implementation.

**8. Hardware and Infrastructure – \$50,000**

This covers any additional hardware upgrades or network infrastructure improvements required to support the cloud-based deployment of the ERP.

**9. Contingency – \$292,500**

A 10% contingency allowance for any unforeseen costs during implementation, such as additional training, customisation, or unexpected infrastructure upgrades.

**Expected Benefits**

The total annual projected benefits from implementing NetSuite ERP are estimated to be \$11,250,000, realised through various operational improvements across TGB. These benefits include:

**1. Increased Sales Revenue – \$1,500,000**

Streamlined order processing, invoicing, and customer tracking is expected to increase sales productivity by 1-2% across 50 sales staff.

**2. Streamlined Efficiency – \$2,500,000**

Automation of back-office tasks (HR, finance, IT) will result in a 5% improvement in task completion efficiency, leading to significant labour savings across 300 employees.

**3. Reduced Errors and Rework – \$2,000,000**

Automation will reduce manual errors, particularly in finance and supply chain operations, saving 3-4% of employee time across 500 employees.

**4. Improved Inventory Management – \$1,000,000**

Enhanced inventory tracking and reduced overstocking will improve warehouse efficiency, impacting 200 staff in warehousing and logistics.

**5. Reduced Downtime and Faster Decision-Making – \$750,000**

real time data access will allow managers to make data-driven decisions more quickly, improving overall productivity for 35 managers.

**6. Automated Reporting and Analytics – \$1,500,000**

Automated financial reporting and analytics will save time for 150 employees, allowing them to focus on strategic tasks rather than manual data collection.

**7. Simplified Compliance Management – \$500,000**

The ERP will reduce time spent on compliance-related activities, streamlining the audit process and saving time for 50 employees in HR, finance, and legal.

**8. Improved HR and Payroll Processing – \$500,000**

Automating payroll and attendance tracking will improve HR efficiency, impacting 100 employees in HR and administrative roles.

**9. Increased Production Efficiency – \$1,000,000**

Improved coordination between departments and optimised production schedules will reduce overtime and improve production efficiency for 400 staff in production and R&D.

**Financial Analysis**

A Net Present Value (NPV) and Return on Investment (ROI) analysis were conducted using a discount rate of 8%, based on a three-year financial forecast. The summary of this analysis is as follows:

- Total Estimated Costs (Year 0): \$3,217,500
- Annual Ongoing Costs (Years 1-3): \$300,000
- Total Annual Projected Benefits: \$11,250,000

The \$300,000 annual cost for Year 1 to Year 3 represents the ongoing operational costs after the initial ERP implementation phase. Here's the justification for this amount:

1. Software Subscription (\$180,000): Ongoing licence fees for the ERP system, covering 2,000 users and relevant modules.

2. Support and Maintenance (\$60,000): Technical support, system updates, bug fixes, and general maintenance of the ERP system.
3. Training New/Existing Users (\$30,000): Ongoing training sessions for new hires and refresher courses for existing staff.
4. Minor Customisation/Adjustments (\$30,000): Small system tweaks or customisations as business processes evolve.

#### **NPV and ROI Calculation:**

- **Net Present Value (NPV): \$25,001,712.01**

The NPV calculation shows a positive value of \$25,001,712.01, indicating the project will yield substantial financial benefits over three years.

- **Return on Investment (ROI): 607.21%**

The ROI is 607.21%, demonstrating a highly profitable project for TGB, with a payback period within the first year.

The implementation of NetSuite ERP at TGB is highly justified. The \$3,217,500 initial expenditure includes the costs of software licensing, customisation, and training, all of which are required to enable a smooth transfer to the new system. This cost is considered low when compared to the estimated yearly benefits of \$11,250,000 from increased sales revenue, operational efficiency, and mistake reduction. The financial analysis shows a strong Net Present Value (NPV) of \$25,001,712.01 and a high Return on Investment (ROI) of 607.21%, indicating that the project will provide significant profits over a three-year period. The analysis demonstrates that NetSuite ERP is not only cost-effective but also a financially solid investment that will provide long-term value for TGB.

## 8.0 Schedule Estimate

The implementation of the NetSuite ERP System for TGB is estimated to take approximately 9-12 months, considering the complexity of migrating from its previous legacy systems and the need for thorough training and customisation features. The projected go-live date would be set for **August 2025 - November 2026**, if implementation would start in November 2024. Below is a breakdown of the key phases and milestones of the implementation project:

### **1. Initial project planning and kickoff (1 month):**

*Start date: Start of November 2024*

*End date: End of November 2024*

- Define project scope, goals, and deliverables.
- Establish a project team consisting of key TGB stakeholders, IT staff, and NetSuite consultants.
- Develop a detailed project plan with timelines, roles, and responsibilities.

### **2. System configuration and design (2-3 months):**

*Start date: Start of December 2024*

*End date: End of January 2025 - End of February 2025*

- Work with NetSuite consultants to configure the ERP system, according to TGB's requirements, including financial management, inventory control, and order management modules.
- Conduct initial design workshops to map TGB's business processes to the NetSuite environment.
- **Milestone: Approval of the system design and configuration blueprint.**

### **3. Data migration and integration (2-3 months):**

*Start date: Start of February 2025 - Start of March 2025*

*End date: End of March 2025 - End of May 2025*

- Cleanse and prepare data from legacy systems for migration to NetSuite.
- Migrate critical data such as inventory records, customer details, and financial data into the new system.
- Set up integrations with existing software systems like CRM or supply chain management tools.

- **Milestone: Completion of data migration and successful integration testing.**

#### **4. User training and change management (1-2 months):**

*Start date: Start of April 2025 - Start of June 2025*

*End date: End of April 2025 - End of July 2025*

- Conduct training sessions for TGB staff on using NetSuite, focusing on key modules like inventory management, financial reporting, and order processing.
- Develop user guides and provide training workshops for different user groups, such as finance, sales, and warehouse teams.
- **Milestone: Completion of user training sessions and readiness assessment.**

#### **5. System testing and user acceptance testing (UAT) (1-2 months):**

*Start date: Start of May 2025 - Start of August 2025*

*End date: End of May 2025 - End of September 2025*

- Perform thorough testing of the system to ensure that it functions as expected, covering end-to-end processes like order-to-cash and procure-to-pay.
- Address any issues or bugs identified during testing and refine system settings based on user feedback.
- **Milestone: Successful completion of UAT and final sign-off for go-live.**

#### **6. Go-live preparation and launch (1 month):**

*Start date: Start of June 2025 - Start of October 2025*

*End date: End of June 2025 - End of October 2025*

- Conduct final data validation, making sure that all integrations are functioning correctly.
- Plan for system switchover, including backup of critical data from legacy systems.
- Roll out the NetSuite ERP system to TGB users and monitor transition
- **Milestone: Official go-live date and transition to the new ERP system.**

#### **7. Post go-live support and stabilisation (1-2 months):**

*Start date: Start of July 2025 - Start of November 2025*

*End date: End of July 2025 - End of December 2025*

- Provide post-implementation support to address any issues that arise after go-live.
- Monitor system performance and provide additional training as needed to facilitate a smooth adoption.
- Conduct a review meeting to assess project outcomes and document lessons learned.
- **Milestone: Project closure and handover to TGB's internal team for ongoing management.**

**Estimated Timeline:** 9-12 months

**Projected Go-Live Date:** August 2025 - November 2025

## 9.0 Potential Risks

### 1. R01: Data Migration Issues

**Score: 63 (Probability: 7, Impact: 9)**

TGB's data is scattered across legacy systems, spreadsheets, and manual records, making it challenging to ensure accurate and complete data migration into the NetSuite ERP.

**Justification:** The high probability score of 7 reflects the complexity of migrating fragmented data, which is likely to lead to issues without proper planning. The high impact score of 9 is due to the severe consequences of data loss or inconsistencies, which could disrupt operations and affect decision-making.

**Trigger:** Inaccurate, incomplete, or missing data from various outdated sources.

**Root Cause:** Poor documentation of data, fragmented data sources, and reliance on legacy systems.

**Potential Response:** Mitigation—TGB should conduct a comprehensive data audit, allocate sufficient resources for data cleansing, and implement a phased data migration with testing at each stage. These actions will ensure smoother

integration, reduce errors, and prevent costly delays. Given TGB's reliance on multiple outdated systems, these strategies are essential to minimise disruptions and ensure accurate data integration.

## **2. Change Management Resistance**

**Score: 49 (Probability: 7, Impact: 7)**

TGB's 2,000 employees, who have various levels of technical skill, may be hesitant to adopt the new cloud-based NetSuite ERP due to the major process changes necessary.

**Justification:** The high probability score of 7 is related to the extent of the change and the likelihood of resistance from staff used to outdated systems. The impact score of 7 shows that low adoption could affect the effectiveness of the ERP system, delaying the realisation of its benefits.

**Trigger:** Fear of job displacement, disruption to familiar workflows, negative user feedback.

**Root Cause:** Resistance to change, lack of awareness of the ERP's benefits, insufficient early communication.

**Potential response:** Mitigation—TGB should establish a systematic change management program, involve key stakeholders early on, and provide extensive training customised to different user levels. This will enhance user adoption rates while reducing pushback.

## **3. Scope Creep**

**Score: 49 (Probability: 7, Impact: 7)**

Expanding the scope of the NetSuite ERP deployment to meet increasing business needs, particularly as TGB grows into Vietnam, India, and China, may result in project delays and budget overruns, because triple constraint, budget, time and scope are linked one to another.

**Trigger:** Requests for additional features or customisations beyond the initial plan.

**Root Cause:** Inadequate scope definition and change control processes.

**Justification:** A high probability score of 7 indicates the likelihood of extra feature requests and customisations throughout implementation. The effect score of 7 is based on the possibility of higher costs and longer delays if scope creep occurs.

**Potential response:** Avoidance—Develop a clear project scope from the start and adopt a strict change management strategy. Before approving any changes, consider the cost and time consequences.

#### **4. Budget Overruns**

**Score: 35 (Probability: 5, Impact: 7)**

TGB may incur unexpected costs, such as customisations, additional training, and reliance on external consultants. Data migration fees, which account for 10-15% of the project budget, can increase expenses.

**Trigger:** Underestimated costs for customisation, training, or prolonged data migration.

**Root Cause:** Lack of thorough budgeting and inadequate resource planning for TGB's complex business processes.

**Justification:** A medium probability score of 5 indicates that, while cost overruns are common, they may be mitigated by precise budgeting and regular reviews. The effect score of 7 illustrates the significant strain that overruns could put on TGB's budget if not handled properly.

**Potential response:** Mitigation—TGB should incorporate a financial buffer (contingency fund) in its budget and undertake frequent financial assessments to monitor spending. This method will assist in managing unforeseen costs and keeping the project under budget.



## References

- Al-Said Ahmad, A., & Andras, P. (2019). Scalability analysis comparisons of cloud-based software services. *J Cloud Comp*, 8(10).  
<https://doi.org/10.1186/s13677-019-0134-y>
- Albright, S. (2023). *Navigating the challenges of implementing NetSuite: Tips and strategies*. TechJournal.org.  
<https://techjournal.org/navigating-the-challenges-of-implementing-netsuite>
- Archana, M., Varadarajan, V., & Medicherla, S. S. (2022). *Study on the erp implementation methodologies on SAP, Oracle NetSuite, and Microsoft Dynamics 365: A review*. arXiv. <https://doi.org/10.48550/arXiv.2205.02584>
- Baltasar, B. (2024). *The state of SAP S/4 HANA adoption: Trends, successes, and challenges*. ASUG.  
<https://www.asug.com/insights/the-state-of-sap-s-4hana-adoption-trends-successes-and-challenges>
- Beheshti, H. M., Blaylock, B. K., Henderson, D. A., & Lollar, J. G. (2014). Selection and critical success factors in successful ERP implementation. *Competitiveness Review*, 24(4), 357–375. <https://doi.org/10.1108/CR-10-2013-0082>
- Business-Software.com. (2024). *Top 20 enterprise resource planning software report: Comparison of the leading ERP vendors*.  
<https://www.business-software.com/offer/top-20-erp-software/>
- Carton, F., Adam, F., & Sammon, D. (2008). Project management: a case study of a successful ERP implementation. *International Journal of Managing Projects in Business*, 1(1), 106–124. <https://doi.org/10.1108/17538370810846441>

- Claassen, M. J. T., Weele, A. J. V., & Raaij, E. M. V. (2008). Performance outcomes and success factors of vendor managed inventory (VMI). *Supply Chain Management: An International Journal*, 13(6), 406-414.  
<https://doi.org/10.1108/13598540810905660>
- ERP Research. (n.d.). *SAP S/4 HANA modules list*. ERP Research.  
<https://www.erpresearch.com/en-us/sap-s/4-hana-modules#PM>
- Françoise, O., Bourgault, M., & Pellerin, R. (2009). ERP implementation through critical success factors' management. *Business Process Management Journal*, 15(3), 371–394. <https://doi.org/10.1108/14637150910960620>
- Gunturu, S. R. (2024). An overview on SAP S/4 HANA deployment options and transition paths. *International Journal of Advanced Research in Science Communication and Technology*, 4(2), 209-216.  
<https://doi.org/10.48175/IJARST-18826>
- Holland, R. (2024). *Deployment approaches to SAP S/4 HANA 2024*. SAPinsider.  
<https://sapinsider.org/research-reports/deployment-approaches-to-sap-s4hana-2024/?hs-embed-af=t>
- Kaurema, J., Småros, J., & Holmström, J. (2009). Patterns of vendor-managed inventory: Findings from a multiple-case study. *International Journal of Operations & Production Management*, 29(11), 1109-1139.  
<https://doi.org/10.1108/01443570911000159>
- Lee, C., Kim, H. F., & Lee, B. G. (2024). A systematic literature review on the strategic shift to cloud ERP: Leveraging microservice architecture and MSPs for resilience and agility. *Electronics*, 13(4), 2885. <https://doi.org/10.3390/electronics13142885>

- Li, Y., Wu, F., Zong, W., & Li, B. (2017). Supply chain collaboration for ERP implementation: An inter organisational knowledge-sharing perspective. *International Journal of Operations & Production Management*, 37(10), 1327-1347. <https://doi.org/10.1108/IJOPM-12-2015-0732>
- McCue, I. (2022). *ERP modules: Types, features & functions*. NetSuite. <https://www.netsuite.com/portal/resource/articles/erp/erp-modules.shtml>
- McCue, I. (2024). *15 benefits of ERP for businesses in 2024*. NetSuite. <https://www.netsuite.co.uk/portal/uk/resource/articles/erp/erp-benefits.shtml>
- Medicherla, S. S., & Archana, M. (2022). *Study on the ERP Implementation Methodologies on SAP, Oracle NetSuite, and Microsoft Dynamics 365: A Review*. ArXiv:2205.02584. <https://doi.org/10.48550/arXiv.2205.02584>
- Momoh, A., Roy, R., & Shehab, E. (2010). Challenges in enterprise resource planning implementation: State-of-the-art. *Business Process Management Journal*, 16(4). <https://doi.org/10.1108/14637151011065919>
- Nataraj, A. (2020). *SAP S/4 HANA implementation challenges*. Clarkston Consulting. <https://clarkstonconsulting.com/insights/sap-s-4hana-implementation-challenges/>
- Percherla, A. K. (2024). SAP S/4 HANA in the cloud - Optimising migration pathways, balancing pros and cons. *Journal of Scientific and Engineering Research*, 6(12), 274-278. <https://doi.org/10.5281/zenodo.11216285>
- Qureshi, M. R. N. M. (2022). Evaluating enterprise resource planning (ERP) implementation for sustainable supply chain management. *Sustainability*, 14(22), 14779. <https://doi.org/10.3390/su142214779>

- Redwood. (n.d.). *SAP S/4 HANA architecture: A complete guide*. Redwood.  
<https://www.redwood.com/resource/sap-s-4hana-architecture-guide/>
- Schwarz, L. (2024). *Types of ERP explained: Size, deployment, industry and more*.  
NetSuite. <https://www.netsuite.com/portal/resource/articles/erp/erp-types.shtml>
- Tai, Y., Huang, C., & Chuang, S. (2016). The construction of a mobile business application system for ERP. *Kybernetes*, 45(1), 141-157.  
<https://doi.org/10.1108/K-02-2015-0041>
- Wong, B., & Tein, D. (2003). Critical success factors for ERP projects. In Project Management conference. AIPM.  
<https://opus.lib.uts.edu.au/bitstream/10453/6918/1/2003001727.pdf>
- Wright, D. R. (2023). User Training and Change Management Synergy: Keys to ERP Success in SMEs. *Frontiers in Management Science*, 2(6), 38–46.  
<https://www.paradigmpress.org/fms/article/view/938>

## **10.0 Exhibit**

### **Exhibit A**

#### **Factors for a successful ERP implementation**

##### **1. Global supply chain integration (Joanna)**

Integrating global supply chains allows organisations to synchronise activities across various regions, offering instant insights and facilitating smooth coordination among suppliers, manufacturers, and distributors. This feature would be essential for TGB as it plans to offshore production to multiple locations, including India, Vietnam, and China.

An effective supply chain integration would also help in reducing lead times, mitigate disruptions, and ensure a consistent flow of materials, all of which are important for maintaining production schedules and meeting customer demands. Research indicates that ERP systems significantly enhance supply chain integration by providing efficient information sharing between partners. For example, according to Li et al. (2017), ERP systems improve the sharing of data across the supply chain, thus reducing uncertainties and allowing for better decision making across organisational boundaries. This kind of data visibility would allow TGB to manage its inventory more accurately and respond promptly to shifts in demand or supply chain disruptions.

Moreover, another study published emphasises that ERP systems support sustainable supply chain management by integrating real time data flows between suppliers and internal operations (Qureshi, 2022). This integration would be most essential for TGB's goal of standardising its operations across multiple offshore locations, helping the company achieve greater efficiency and cost savings. Additionally, it aligns with TGB's need to adapt quickly to market changes and coordinate efficiently with overseas suppliers.

Therefore, global supply chain integration through ERP systems is essential for TGB, as it not only improves operational efficiency; however, it also supports strategic decision making, reducing the risks associated with managing a dispersed manufacturing setup.

## **2. Real time mobile access for sales team (Joanna)**

Real time mobile access for the sales team is a vital factor in a successful ERP implementation, particularly for companies like TGB that have a dispersed sales force.

Real time access would allow the sales teams to retrieve critical information such as customer data, inventory status, and order updates while on the move. This enables faster decision-making and improved responsiveness to customer needs, directly impacting sales performance. A study published demonstrates that mobile ERP systems significantly enhance sales efficiency by providing access to ERP data anytime and anywhere, leading to more efficient sales processes and improved customer service (Tai et al., 2016).

Additionally, research conducted by Li et al. (2017), highlights how mobile ERP applications can streamline order management and sales tracking, enabling sales representatives to manage tasks like order modifications and inquiries without delays. This feature can be particularly beneficial for TGB, whose sales team needs to handle customer interactions and orders in real time to stay competitive.

If TGB adopts mobile ERP capabilities, it ensures that sales representatives can maintain productivity even outside of traditional office settings, thus enabling quicker responses to customer inquiries and maintaining a seamless sales process across different regions. This aligns with TGB's goal of modernising its systems for better agility in the market.

## **3. Vendor managed inventory (VMI) capability (Joanna)**

Vendor managed inventory (VMI) is an important element for effective ERP implementation, offering significant advantages in inventory control and supply chain efficiency for companies like TGB.

With VMI, suppliers take on the responsibility of managing inventory levels using real time data, maintaining optimal stock levels and reducing the risk of stockouts. This model shifts inventory management duties to the supplier, alleviating the buyer's burden and allowing for more efficient restocking. A study notes that VMI can improve service levels, strengthen supply chain oversight, and

potentially lead to cost savings (Claasen et al., 2008). Adopting VMI at TGB could simplify inventory management, particularly in handling raw materials and components from global suppliers, thus aligning inventory levels more closely with actual demand.

Furthermore, a multiple-case study by Kauremaa et al. (2009), underscores the significance of strong buyer-supplier relationships and effective information sharing for VMI's success. These elements enable suppliers to make accurate decisions regarding replenishment, leading to shorter lead times and enhanced supply chain coordination. In TGB's situation, as the company explores offshore manufacturing in different regions, VMI can help navigate the complexities of varied production schedules and ensure materials are available when needed, minimising delays and promoting smoother operations.

Integrating VMI into TGB's ERP approach could therefore foster better alignment between suppliers and production processes, offering greater adaptability and responsiveness to market needs. This would ultimately strengthen TGB's market position by improving inventory efficiency and reducing the overall costs associated with managing stock levels across its supply chain.

#### **4. Clear goals and objectives (Kanaya)**

Clear goals and objectives provide the foundation for a successful ERP implementation. Projects without specified goals run at risk of scope creep, misaligned expectations, and system underperformance (Beheshti et al., 2014). TGB believes that defined objectives are crucial to ensuring that the ERP system directly supports critical business drivers such as real time customer order management and vendor-managed inventory (VMI). These goals must be consistent with TGB's strategic aim of strengthening dealer collaboration, demand management, and profitability tracking.

Furthermore, creating quantifiable targets allows the project team to track progress and highlight areas where changes are required (Françoise et al., 2009). For example, TGB's ambition to enter new markets such as India, Vietnam, and China necessitates an emphasis on supply chain integration, logistics coordination, and real time inventory and order status monitoring. A well-defined

scope guarantees that the ERP deployment contains the necessary functionality, such as cloud-based access for remote sales managers, in accordance with TGB's operational priorities.

Clear goals can also help TGB decide whether to use a cloud-only or hybrid ERP solution. A methodical approach to goal planning will assist the organisation in determining which solution best supports on-premise control while also providing the flexibility required for offshore manufacturing activities. Overall, TGB's ERP project will be successful if these predefined goals are closely followed throughout the project's lifecycle.

## **5. User Training and Change Management (Kanaya)**

According to Françoise et al. (2009), user training and change management are critical for ensuring successful ERP adoption, especially in an organisation like TGB where worker knowledge varies. The ERP implementation will affect 2,000 individuals from numerous divisions, including operational managers, sales teams, warehouse workers, and R&D specialists. Because these groups have varying degrees of computer literacy—from experienced users to those who need basic system awareness—tailored training programs are essential (Abugabah et al., 2019).

Training should be tailored to specific roles. Sales managers, for example, must learn how to access the ERP system using mobile applications in order to make real time decisions, whereas warehouse employees may only require basic inventory management features. Furthermore, early and ongoing training can lessen resistance, ensuring that users are confident in the new processes. This is especially critical considering TGB's diverse staff, which includes permanent employees and 400 contract workers who must all work together during the period of transition.

Change management is also necessary to overcome potential resistance to new ways of working. According to Wong et al. (2008), ERP projects sometimes fail because staff are unwilling to leave behind familiar systems, particularly legacy systems that have been in existence at TGB since 1989. A proactive change management strategy that includes clear communication of the project's



benefits, regular updates, and chances for employee feedback will help in adoption. Involving key stakeholders, such as operational and middle management, will guarantee a smooth transition throughout the organisation.

Implementing these strategies will help TGB avoid common ERP adoption difficulties and create a positive transition environment. This is especially important as the company grows its activities overseas, requiring seamless integration of new processes with the ERP system to enable business development.

## **6. Effective Project Management (Kanaya)**

Effective project management is critical for keeping the ERP implementation on track and ensuring that the project achieves its goals within the time and financial constraints (Carton et al., 2008). TGB's ERP project involves various complicated activities, including integrating legacy systems, managing offshore manufacturing processes, and coordinating with suppliers from multiple countries, including China, India, and Vietnam. A systematic project management method will ensure that these components are coordinated and carried out efficiently.

The governance architecture must include explicit dates, milestones, and roles. TGB will need to recruit a professional project manager to monitor implementation and resolve any risks, such as delays in integrating outdated systems or issues with offshore production. The project team must also work with various vendors and internal departments to ensure that the ERP system supports TGB's operational requirements, such as demand forecasting and profitability tracking.

Beheshti et al. (2014) examined that project management strategies such as risk management and stakeholder communication are also important. TGB's Board of Directors and CIO are heavily invested in the project's success, therefore regular updates and transparent reporting will be required to keep their trust. Risk management techniques should prioritise early detection of possible concerns, such as staff system adoption challenges, and the development of mitigation plans to reduce disruptions.

Given the complexities of TGB's operations and the requirement to manage both on-premise and cloud-based systems, agile project management approaches may be advantageous. This would allow the project team to respond quickly to changes, keeping TGB competitive in a changing market.

## **Exhibit B**

### **ERP Options and recommendations**

#### **1. SAP S/4 HANA ERP (Joanna)**

##### **Deployment**

The deployment of SAP S/4 HANA offers multiple options that provide flexibility depending on an organisation's needs, making it a suitable choice for diverse scenarios. The SAP S/4 HANA system can be deployed through three primary approaches: on-premises, cloud-based, and hybrid models. The on-premises option allows organisations to maintain control over their systems and data, hosting the solution within their data centres. This approach offers maximum customisation and integration capabilities with existing systems that are ideal for organisations with specific regulatory or data security requirements. Research suggests that this model is most appropriate for businesses that prioritise data control and have the necessary IT infrastructure to support in-house management (Gunturu, 2024). Alternatively, the cloud deployment option, including SAP's S/4 HANA Cloud (both public and private editions), allows companies to capitalise on cloud-based services while also benefiting from faster time-to-market and lower initial investment costs. This deployment style provides scalability, where businesses can adjust resources based on evolving demands. This also reduces the burden of infrastructure management, making it appealing for organisations that aim to simplify IT management (Holland, n.d.).

One of the key benefits here is the subscription-based pricing model, which helps in managing cash flow and reducing capital expenditure. In relation to TGB, the SAP S/4 HANA system's deployment flexibility could support their transition from outdated systems by offering options that align with their infrastructure abilities and strategic goals. Choosing a hybrid approach, for instance, could allow TGB to keep critical operations on-premise while also adopting cloud functionalities for new processes, offering a balanced approach between control and flexibility.

### **Scalability**

The scalability of SAP S/4 HANA is a key strength, turning it into a fitting selection for businesses anticipating growth and evolving operational needs. Moreover, this system could easily scale to accommodate increased data processing demands, user numbers, and expanded functionalities, taking into consideration the adaptability as the organisation grows. SAP S/4 HANA's scalability is primarily driven by its in-memory database architecture, which enables high-speed data processing and real time analytics. This provides businesses to handle large volumes of transactions and complex operations while compromising performance. According to an article written on the SAP S/4 HANA Architecture, the in-memory computing capacity of S/4 HANA reinforces that the system maintains high levels of performance, even as data loads and user numbers increase (Redwood, n.d.). Furthermore, the flexibility of S/4 HANA's deployment options—whether in a cloud-based environment or on-premises—supports a cohesive scalability. Cloud-based deployments, for instance, can be easily adjusted to meet fluctuating demands, providing elasticity that can quickly accommodate changes in business size or activity (Percherla, 2024). This makes the system a cost-effective solution for businesses that experience seasonal or unexpected growth, as they can scale up or down without the need for significant infrastructure investments.

Regarding TGB, the scalability aspect of SAP S/4 HANA could be distinctively advantageous as it would support their expansion plans, such as offshoring manufacturing to new locations. The ability to process increased customer orders and manage diverse supply chain activities efficiently will be vital for the company, allowing them to maintain service quality while also growing their market presence. Thus, SAP S/4 HANA's scalability guarantees that TGB can adapt its ERP system as its operational needs evolve. Additionally, the system also supports advanced modules like production planning, sales and distribution, and real time inventory management. Hence, providing a versatile platform across various business functions.

### **Key Features**

SAP S/4 HANA offers several key features that distinguish it as a powerful ERP system, notably for businesses seeking to optimise operations and achieve real time data processing. One primary feature is its simplified data model, making use of the SAP HANA in-memory database, which reduces data redundancy and accelerates transaction processing (Redwood, n.d.). This structure allows businesses to access and analyse large datasets in real time, elevating the company's decision making potential and, consequently, its overall system performance. Furthermore, this ERP system includes embedded analytics, which integrates analytical capabilities directly into transactional processes. This indicates that users can access predictive analytics, simulations, and real time reporting without needing to separate analytics platforms, significantly improving business insights and efficiency (ERP Research, n.d.).

With regards to TGB, these features could potentially enhance its efficiency in production and supply chain management while also providing actionable insights from their business data. The ability to incorporate real time analytics with daily operations suggests that TGB could respond swiftly to market changes, optimise inventory levels, and establish smoother order fulfilment. These functionalities align well with TGB's requirements for a modern ERP solution that supports digital transformation and sustains competitiveness in the market.

### **Challenges**

The implementation of SAP S/4 HANA comes with several challenges that organisations would need to navigate carefully to achieve a successful deployment. One of the main challenges is the complexity of data migration. Transitioning from legacy systems to SAP S/4 HANA often involves migrating large volumes of data, which can be difficult, specifically when dealing with inconsistent or poorly managed data from older systems. This process can be time-consuming and requires careful planning to ensure that data is accurate and consistent throughout the migration process (Nataraj, 2020). Another significant challenge would be the high cost and extended timelines associated with implementing the system. Many organisations have reported that the costs of

migrating to SAP S/4 HANA frequently exceeds its initial budget, mainly due to unforeseen consulting fees and the need for specialised expertise (Baltasar, 2024). This transition can take around 1.5 years on average, with some projects extending further if not properly managed. These costs often include re-engineering existing business processes to align with SAP S/4 HANA's structure, which can be resource-intensive.

It is definitely essential for TGB to understand these challenges in preparation for a realistic implementation plan. Addressing the complexities of data migration would be key to ensuring a smooth transition from their outdated systems, especially given their current struggles with timely and accurate data. In addition to that, planning for the potential cost overruns and involving experienced partners could help TGB manage the financial and time investments required for a successful adoption of SAP S/4 HANA. By anticipating these challenges, TGB can better position itself to uphold the long-term benefits of the ERP system.

## **2. Netsuite ERP (Joanna)**

### **Deployment**

The NetSuite ERP is primarily a cloud-based ERP system, utilising Software as a Service (SaaS) for delivering enterprise resource planning capabilities. This deployment model enables organisations to access their ERP systems through the internet, eliminating the need for extensive on-premises hardware and IT infrastructure. Cloud deployment also allows companies to achieve a quicker implementation timeline and reduce the upfront capital expenditure compared to traditional on-premises systems. A literature review by Lee et al. (2024) emphasises that cloud-based ERP systems like NetSuite offer a scalable and agile framework, especially suited for businesses needing to adapt quickly to changes in their operating environment. This flexibility is particularly valuable for organisations transitioning from legacy systems, as it simplifies the integration process and reduces the dependency on internal IT resources. Another study comparing deployment strategies for leading ERP systems, including

NetSuite, highlights that the SaaS model's rapid deployment could significantly improve operational efficiency by providing real time data access across multiple geographic locations (Archana et al., 2022).

For TGB, which has outdated systems that hinder decision making, NetSuite's cloud deployment can effectively transition to a modern ERP system without the need for significant internal IT investment. This can enable TGB to better manage inventory and customer orders online, aligning closely with their strategic objectives and supporting business growth while also mitigating the risks associated with large scale IT projects.

### **Scalability**

In addition, the NetSuite ERP was designed with scalability in mind, making it a suitable solution for businesses experiencing growth or fluctuations in their operational needs. This scalability allows organisations to expand their use of the system without requiring a complete overhaul, thus ensuring that their ERP investment continues to serve them effectively over time. NetSuite's cloud-based nature supports this scalability by offering the ability to add new features, users, and modules as a company evolves. Research highlights that cloud ERP systems, including NetSuite, can efficiently handle increased demand by including cloud resources to scale up without compromising performance or data integrity (Al-Said Ahmad & Andras, 2019). This approach allows businesses to maintain consistent service quality even as transaction volumes and user numbers grow, an important factor for companies aiming for long-term scalability. Another study notes that NetSuite's modular architecture enables businesses to adapt to changes in market conditions or internal requirements by adding new capabilities, such as e-commerce or CRM functionalities, without significant disruption to existing operations (Schwarz, 2024).

For TGB, which plans to modernise its operations and potentially expand its business reach, NetSuite's scalability would be highly beneficial. As TGB grows its inventory management and online customer order capabilities, NetSuite's ability to adjust to increased data and user demands can ensure that

TGB continues to operate successfully, making it a strategic fit for their expansion goals and long-term operational needs.

### **Key Features**

The NetSuite ERP system offers a comprehensive suite of features that allows businesses to enhance their operational activities, making it appropriate for companies looking for efficiency and real time insights. As a cloud-based system, NetSuite provides integrated modules that support various business functions, including financial management, inventory control, order processing, and supply chain management. This centralisation of key processes into one platform enables organisations to manage their operations more efficiently while also maintaining consistency across departments.

One of NetSuite's standout features is its robust financial management capabilities, which include tools for general ledger management, accounts payable and receivable, budgeting, and automated revenue recognition. According to research, these tools help businesses maintain an accurate financial record and support compliance with regulatory requirements, which is particularly important for companies that require detailed financial oversight (McCue, 2022). Furthermore, the platform's ability to automate these processes helps organisations save time and reduce manual errors, freeing up resources for strategic activities. Another key feature of NetSuite is its inventory management module, which provides businesses with real time visibility into stock levels across multiple locations. This module integrates well with procurement and order management functions, allowing companies to optimise their inventory levels, minimising carrying costs, and thus ensure timely delivery of products. Studies highlight that this feature is especially useful for companies with complex supply chains, as it helps to balance stock levels with demand, reducing the risk of stockouts or overstocking (McCue, 2024).

In regards to TGB—a company looking to modernise its operations and improve its decision making, these features can be particularly valuable. The integrated financial tools can help TGB maintain a clearer overview of its cash



flow and budgeting needs, while the inventory management capabilities can optimise their stock levels to better serve customer orders. This alignment of core business functions into a centralised system ensures that TGB is able to respond quickly to market changes and maintain efficient operations.

### **Challenges**

Nevertheless, implementing this ERP system can present several challenges, primarily due to its integration into existing systems, customisation requirements, and the need for effective change management. These challenges could potentially impact the timeline and overall success of the ERP project if not addressed properly. One significant challenge is the complexity of data migration from previous legacy systems into NetSuite. Migrating data requires ensuring that information is accurate, consistent, and complete, which often involves a time-consuming process of data cleaning and validation. Research indicates this phase, which is crucial for maintaining operational continuity after the transition (Albright, 2023). Moreover, it highlights that data migration is a key factor that can lead to delays if not planned and tested meticulously. Another common hurdle is the complexity of customising NetSuite to align with specific business needs.

While the platform does offer a high degree of flexibility, this can result in customisation becoming overly complex, especially if organisations try to replicate their legacy processes rather than adapting to NetSuite's best practices. This challenge often requires experienced consultants to guide the customisation process and ensure that the ERP configuration aligns with the company's operational goals without introducing unnecessary complexity (Momoh et al., 2010). For TGB, these challenges highlight the need for thorough planning and preparation before implementing NetSuite. TGB would benefit from dedicating time to cleanse and organise their data before migration and engaging experienced ERP consultants to guide the customisation process. By addressing these challenges upfront, TGB can reduce the risk of delays and ensure a successful transition to the new system, making it easier for employees to adapt to the changes and fully utilise the benefits of the ERP system.

### **3. Microsoft Dynamic ERP (Kanaya)**

#### **Deployment**

Microsoft Dynamics 365 offers hybrid deployment options, making it flexible for businesses like TGB to choose between cloud-based or on-premise solutions. This is a crucial feature for TGB, as they may want to keep critical operations on-premise while leveraging cloud capabilities for mobility and global scalability (Rizqy et al., 2022). This flexibility allows TGB to tailor their ERP setup to their unique needs, balancing data security with the accessibility of cloud services.

#### **Scalability**

Microsoft Dynamics 365 is designed with modular architecture, enabling TGB to gradually scale up operations without overhauling the entire system. This is especially relevant as TGB plans to expand its manufacturing and supply chain operations across Vietnam, India, and China (Elbahri et al., 2023). The system's flexibility to grow with the company ensures that TGB can easily incorporate new functions as their business evolves.

#### **Key Features**

- **Supply Chain Management:** Microsoft Dynamics 365 provides robust tools for inventory tracking, vendor-managed inventories, and real time order processing, which aligns with TGB's objectives of improving supply chain visibility and efficiency (Rizqy et al., 2022).
- **Integration with Other Microsoft Tools:** Integration with Microsoft products like Power BI, Teams, and Office 365 enhances cross-department collaboration, a benefit for TGB's large and diverse workforce (sadeh et al., 2020). This seamless interaction ensures that TGB can utilise data insights across different departments, facilitating better decision-making and collaboration.
- **Financial Reporting and CRM:** The system also offers real time financial reporting and customer relationship management (CRM) tools, which are essential for TGB as they aim to enhance their financial visibility and customer engagement across global markets (Elbahri et al., 2023)

## **Challenges**

- **Customisation Costs:** One of the main challenges TGB may face with Microsoft Dynamics 365 is the cost of customisation. Tailoring the ERP system to fit TGB's specific processes could lead to budget overruns, especially as they seek to integrate legacy systems (Elbahri et al., 2023).
- **IT Support Dependency:** As noted in previous case studies, companies using Microsoft Dynamics 365 have reported challenges with system errors and human errors during implementation phases, which require a strong IT department for support (Rizqy et al., 2022). TGB would need to ensure their IT team is prepared to manage these issues, or consider outsourcing some technical support.

This detailed evaluation considers how Microsoft Dynamics 365 can meet TGB's unique needs, focusing on its flexibility, scalability, and ability to integrate with existing operations, but also recognizing the potential challenges of customisation and support costs. These aspects ensure that TGB can efficiently manage their growing operations while minimising disruption during implementation.

## **4. Oracle Fusion Cloud (Kanaya)**

### **Deployment**

Oracle Fusion Cloud ERP is a fully cloud-based system, offering flexibility to organisations by eliminating the need for on-premise infrastructure. This cloud-based architecture allows TGB to access the system remotely, ensuring that sales managers working offsite can access real time data on customer orders and inventory, as desired by TGB's executive team (Kumar, 2022). Cloud-based deployment will also simplify TGB's goal of expanding its operations to Vietnam, India, and China by facilitating the integration of international offices and suppliers, as the system's multi-location and multi-currency support reduces friction when scaling operations globally (Carvalho et al., 2013).

### **Scalability**

Oracle Fusion Cloud ERP is designed to scale seamlessly across multiple geographies and operations. This system will provide TGB with the necessary

scalability to support both current operations and future expansions into offshore manufacturing in countries like Vietnam, India, and China. As noted in the Apollo Health & Lifestyle (2024) , Oracle's ERP system helped optimise financial operations while reducing overhead costs through automation and predictive analytics, which would be essential as TGB expands its supply chain and manufacturing processes globally.

In TGB's context, as they onboard new suppliers and offshoring manufacturing to multiple countries, the system will easily scale with these developments, supporting a growing number of transactions, employees, and locations.

### **Key features**

- **Real time Analytics and Automation:** TGB's strategic goal to perform predictive analytics and improve decision-making will be supported by Oracle's in-memory computing capabilities. This feature accelerates data processing and provides real time insights into sales, procurement, and financial management. For example, Oracle Fusion's ability to provide real time inventory tracking would greatly assist TGB in managing its global supply chain (Tarantilis et al., 2008)
- **Financial Management:** Oracle Fusion provides comprehensive financial management tools that can support TGB's transition to managing multiple international suppliers and offshore manufacturing. The system automates various financial processes, from accounts payable to tax management, reducing manual intervention and potential errors
- **Procurement and Supply Chain Management:** Oracle's integration with global suppliers ensures that TGB can seamlessly manage vendor-managed inventories (VMI) while tracking orders from multiple locations, which is a key business driver for them. As TGB sources materials from Vietnam, India, and China, Oracle Fusion will enable them to manage these relationships and inventories in real time

### **Challenges**

- **High Implementation Costs:** Oracle Fusion Cloud ERP is known for having higher initial implementation and training costs. For TGB, these costs may be significant due to the scale of their operations and the complexity of migrating from multiple legacy systems to a cloud-based ERP (Kumar, 2022). However, this investment could be justified given the long-term benefits of improved decision-making and cost efficiencies across the global supply chain.
- **Customisation Complexity:** Customising the Oracle Fusion Cloud ERP to match TGB's unique business processes could present a challenge. Although the system is highly configurable, customisation may require the expertise of Oracle consultants, which could further increase costs. This challenge is particularly relevant given TGB's need for specific capabilities like vendor-managed inventories and real time analytics.
- **Data Migration:** Migrating TGB's data from legacy systems into Oracle Fusion Cloud ERP poses risks of data loss or inconsistencies, especially given the complexity of TGB's existing fragmented systems. This requires careful planning and testing to ensure the data integrity during the transition

---

Oracle Fusion Cloud ERP provides a complete set of tools that connect financial, procurement, and operational management functions. It combines cloud-based architecture with in-memory computing to speed up data processing and enable real time analytics (Kumar, 2022). This is especially crucial for TGB, which wants to improve predictive analytics for strategic decision-making. Oracle's flexibility enables hybrid deployment, which meets TGB's preference for a combination of on-premise and cloud solutions (Tarantilis et al. 2008).

Scalability and automation are two major advantages of Oracle Fusion Cloud ERP. The successful implementation of Apollo Health & Lifestyle highlights Oracle's capacity to optimise financial operations through process

automation, cost reduction, and predictive analytics (Apollo Health, 2024). TGB can use Oracle's powerful finance modules to handle its offshore manufacturing and complicated inventory networks more efficiently.

Assumptions (Kanaya):

- **Current System Limitations:** TGB's legacy systems are outdated and fragmented, hindering their ability to make informed, data-driven decisions. Both ERPs are assumed to replace or integrate with these legacy systems to provide centralised, real time data access.
- **Budget Sensitivity:** TGB is assumed to be cost-conscious, balancing initial implementation expenses with long-term benefits like operational efficiency and cost reductions through automation and predictive analytics.
- **Diverse Workforce and Skill Levels:** TGB's workforce includes employees with varying levels of IT proficiency, making user-friendliness a critical factor in ERP adoption. Both systems are evaluated based on their ease of use and the availability of training resources.

## ERP Software Evaluation Table

	<b>SAP S/4 HANA (Joanna)</b>	<b>NetSuite ERP (Joanna)</b>	<b>Microsoft Dynamic ERP (Kanaya)</b>	<b>Oracle Fusion Cloud ERP (Kanaya)</b>
<b>SPECIFICATIONS</b>				
Vendor	SAP SE	Oracle	Microsoft	Oracle
Max No. of Users	Unlimited	Unlimited	Unlimited	Unlimited
Software Requirements	SAP's HANA database	Web browser and stable internet connection	Web browser, Microsoft Azure platform	Web browser and Oracle Cloud infrastructure
Hardware Requirements	SAP servers	N/A	N/A	N/A
Cloud, On-premise or Hybrid?	Hybrid	Cloud	Hybrid	Cloud
Scalability and Growth Potential	Very flexible	High scalability but only limited to cloud architecture	Highly scalable, modular	High scalability, suitable for global enterprises
Implementation Time	12-24 months	9-12 months	6-12 months	8-14 months
<b>Annual Price</b>				
Licensing Costs (Cloud)	\$1.5 million to \$3 million	\$1.18 million to \$3.59 million	\$1M to \$2.5M	\$1.2M to \$2.8M
Hardware Costs (On-Premise Deployment)	\$100,000 to \$250,000	N/A	N/A	N/A
Implementation and Consulting Costs	\$2 million to \$4 million	\$300,000 to \$950,000	\$400K to \$1.2M	\$500K to \$1.5M
Training and Change Management	\$1 million to \$2 million  *Additional \$100,000 to \$300,000 for Change Management costs	\$500,000 to \$1 million  *Additional \$100,000 to \$250,000 for change management program	\$750K to \$1.5M, additional \$200K for change management	\$800K to \$1.6M, plus change management costs
Ongoing Maintenance and Support	\$300,000 to \$600,000	Additional support plan: \$5,000 to \$25,000	\$100K to \$200K annually	\$150K to \$300K annually

Total First-Year Costs	\$4.8 million to \$8.6 million	\$2 million to \$5.39 million	\$2.5M to \$5M	\$3M to \$6M
<b>Features</b>				
24/7 Support	Yes	Yes	Yes	Yes
Mobile Apps	Yes	Yes	Yes	Yes
Reporting/Analytics	Yes	Yes	Yes	Yes
Customisable	Yes	Yes	Yes	Yes
<b>FUNCTIONALITY</b>				
<b>Financials</b>				
Accounts Payable	- Automated AP process - Integrated supply chain modules	- Automated AP Processes - Integrates with purchasing and inventory systems	Automated AP tracking, integrated with supply chain modules	Automated AP, advanced analytics
Accounts Receivable	- Real time receivables tracking - Automated billing - Integrated credit management	- Real time receivables tracking - Integrates with sales orders - Manages customer payments and collections	Automated billing, customer payments	Real time tracking, credit management
General Ledger	Real time financial reporting	- Real time financial consolidation - Multiple currencies and tax jurisdictions supported	Supports multi-currency and multi-jurisdiction (PoliForm, 2019)	Real time consolidation and compliance
<b>Supply Chain Management</b>				
Inventory Management	- Real time visibility into inventory levels - Integrates with global suppliers	Real time inventory tracking across multiple locations	Track inventory levels across regions	Global real time inventory tracking
Vendor-Managed Inventory	Real time VMI and automated replenishment	Access stock levels in real time	Vendor collaboration, stock monitoring	Automated replenishment and monitoring
<b>Manufacturing</b>				

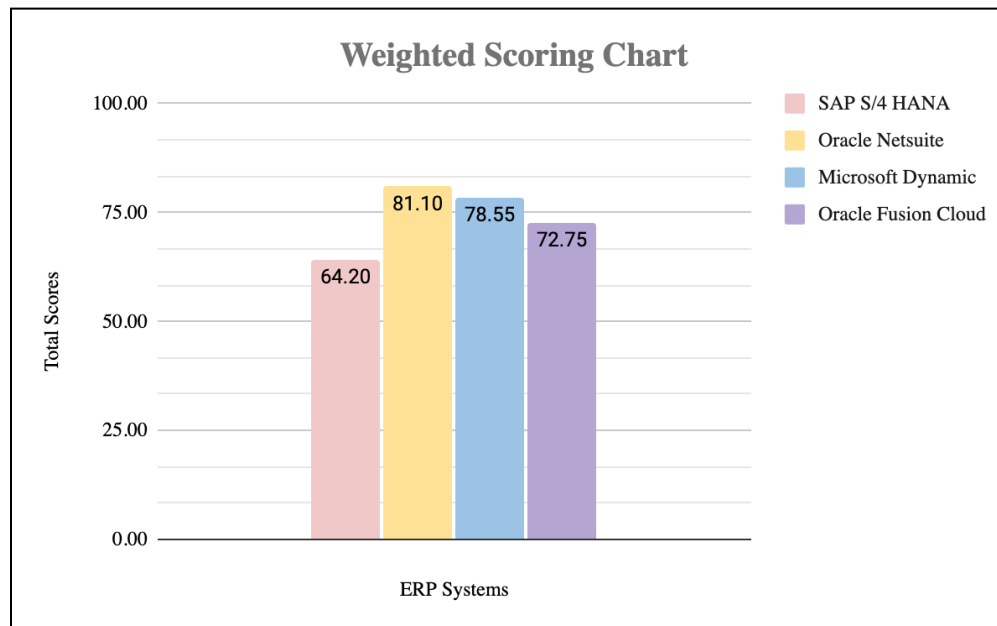


Production Planning	Advanced planning and scheduling tools	Manage production schedules based on demand forecasts	Schedules based on demand forecasts	Integrates with procurement and forecasts
Shop Floor Management	Integrated with inventory and procurement	Tracks production progress		
<b>Sales and Distribution</b>				
Order Management	<ul style="list-style-type: none"> <li>- Handles customer orders</li> <li>- Track shipments</li> <li>- Integrates with CRM</li> </ul>	<ul style="list-style-type: none"> <li>- Automates order-to-cash processes</li> <li>- Integrates with CRM</li> </ul>	CRM integration, real time tracking	CRM integration, automates order management
<b>OTHER</b>				
Which business requirements are supported?	<ul style="list-style-type: none"> <li>- Real time data and analytics</li> <li>- Managing employee digital recruitment, onboarding and training, and job placement</li> <li>- Global supply chain integration</li> <li>- VMI</li> <li>- Production and Inventory Planning</li> <li>- Mobile access</li> </ul>	<ul style="list-style-type: none"> <li>- Real time financial management</li> <li>- Inventory and supply chain management</li> <li>- Customer relationship management</li> <li>- E-commerce integration</li> <li>- Manufacturing and production planning</li> </ul>	<ul style="list-style-type: none"> <li>- Financial management</li> <li>- CRM</li> <li>- Supply Chain Management</li> </ul>	<ul style="list-style-type: none"> <li>- Financial management</li> <li>- Compliance</li> <li>- Predictive Analytics</li> </ul>
Which legacy systems would be replaced?	<ul style="list-style-type: none"> <li>- Financial systems</li> <li>- Supply chain management</li> <li>- Manufacturing system</li> <li>- Order management system</li> </ul>	<ul style="list-style-type: none"> <li>- Financial management systems</li> <li>- Inventory and supply chain tools</li> <li>- Sales and order management systems</li> <li>- E-commerce platform</li> </ul>	<ul style="list-style-type: none"> <li>- Financial</li> <li>- sales management system</li> <li>- inventory systems</li> </ul>	<ul style="list-style-type: none"> <li>- Financial</li> <li>- Supply Chain Management</li> <li>- Sales tools</li> </ul>
Additional Comments	Offers customised solutions tailored to specific industry needs	Provides multi-currency transactions, multi-language, and multi-subsidiary operations	Smooth integration with Microsoft ecosystem	Provides predictive insights and automation
Pros	✓ Provides advanced	✓ Cloud-based deployment	<ul style="list-style-type: none"> <li>✓ Easy integration</li> <li>✓ Cost-effective</li> </ul>	✓ Advanced analytics

	functionalities ✓ High scalable ✓ Full suite of financial management tools	✓ Lower cost of ownership ✓ Highly scalable and modular ✓ Real time reporting capabilities ✓ E-commerce integration	✓ User-Friendly Interface ✓ Robust Supply Chain Management ✓ Modular Structure ✓ Provides Hybrid Deployment	✓ Scalable ✓ Real time insights ✓ Automated processes ✓ Global operation support
Cons	✗ High initial costs ✗ Complex implementation and long deployment time ✗ Requires significant IT expertise ✗ Customisation can add to complexity and increase total time and cost ✗ Long-term maintenance and upkeep	✗ Customisations can add complexity and increase total cost ✗ Training can be extensive ✗ Long-term costs of subscription model ✗ Additional time and budget may be needed to integrate older legacy platforms	✗ Customisations could increase a lot of total costs ✗ It requires IT support ✗ Quite Initial Costs	✗ Higher Implementation and Training Costs ✗ Complex System ✗ Quite longer Implementation Time compared to NetSuite and Microsoft

Weighted Scoring Model for TGB's ERP System Implementation									
Created by: Joanna and Kanaya		Date: 14/10/2024							
Criteria	Weight	SAP S/4 HANA		NetSuite		Microsoft Dynamic		Oracle Fusion Cloud	
		Score	Weighted Score (%)	Score	Weighted Score (%)	Score	Weighted Score (%)	Score	Weighted Score (%)
Cost of implementation	20%	52	10.40	85	17.00	73	14.50	60	12.00
User friendliness	15%	70	10.50	85	12.75	85	12.75	80	12.00
Implementation time	15%	40	6.00	82	12.30	82	12.30	70	10.50
Scalability and flexibility	15%	90	13.50	75	11.25	85	12.75	85	12.75
Integration with legacy systems	10%	60	6.00	68	6.80	70	7.00	75	7.50
Vendor training and support	10%	85	8.50	75	7.50	80	8.00	75	7.50
Long-term maintenance cost	15%	62	9.30	90	13.50	75	11.25	70	10.50
<b>Weighted System Scores</b>	<b>100%</b>		<b>64.20</b>		<b>81.10</b>		<b>78.55</b>		<b>72.75</b>

Based on the Weighted Scoring Model for TGB's ERP System Implementation, here is the graph of the total weighted system scores, which indicates that Oracle NetSuite has the highest score, meaning that it is the most suitable ERP System for TGB Case.



## **Justification of Assigned Weights**

### **1. Cost of implementation (20%)**

Cost is a significant factor for TGB, especially considering their cautious Board of Directors. They would need to justify any large expenditures, and the initial costs for ERP implementation (i.e. infrastructure, licensing, consulting, customisation, etc.) can be substantial. As TGB is modernising outdated systems, balancing cost-effectiveness with functionality is crucial, which is why this criterion carries the highest weightage.

### **2. User friendliness (15%)**

TGB's workforce includes 2,000 staff members with varying levels of computer literacy. Hence, makes user friendliness a critical criterion. An ERP system that is easy to use will reduce the need for extensive training and minimise disruption during the transition period. A user-friendly interface will also enable TGB to quickly onboard employees and ensure higher adoption rates, which is key for a successful implementation. Therefore, the 15% weight assigned is directly linked to minimising operational risks and ensuring smooth use by staff at different skill levels.

### **3. Implementation time (15%)**

TGB needs to modernise quickly to improve its decision making and data accuracy. A lengthy implementation could delay the realisation of these benefits, creating a drag on the company's operations. Additionally, the Board of Directors will likely be concerned in regards to how quickly the ERP can be up and running to avoid disruptions and begin realising ROI. Given the urgency in modernising TGB's systems and the potential impact on business processes during the transition, implementation time is weighted at 15%.

### **4. Scalability and flexibility (15%)**

As the company grows, they need an ERP system that can scale with their business and adapt to changing needs. Flexibility is also important given their plans to offshore manufacturing and possibly expand operations. A system that can handle increasing complexity in supply chain management, customer orders, and inventory without needing significant reconfiguration is another factor that is

crucial for long-term success. Thus, this criterion is weighted at 15% as TGB would need a system that is not just a short-term solution but one that can support future growth and evolving business processes.

**5. Integration with legacy systems (10%)**

TGB's current systems are outdated, and the ERP solution must integrate with these legacy systems to ensure a smooth transition without massive disruption. While legacy system integration is important, it's not the top priority since the ERP will likely replace many of these older systems over time. However, the ability to integrate seamlessly during the implementation phase is still necessary to prevent operational bottlenecks. This justifies the 10% weight as it remains an important technical consideration but not as critical as cost or scalability.

**6. Vendor training and support (10%)**

The success of the ERP deployment will depend on vendor training and continuing assistance because TGB's staff members have differing degrees of IT proficiency. Robust training programmes and prompt vendor help are required to tackle any possible problems that may arise once the system is put into use. This criteria has a 10% weighting as TGB can invest in internal resources to handle some of these requirements even if training and support are necessary to guarantee appropriate system use.

**7. Long-term maintenance cost (15%)**

TGB needs to think about the ERP system's long-term cost commitment in addition to the initial deployment. The total cost of ownership will be impacted by recurring expenses like IT support, maintenance, updates, and licensing. Over time, a system with large ongoing expenditures may put a burden on TGB's finances. This criterion has a 15% weight since maintaining continuing cost management is essential to making sure the system is financially viable. TGB needs an ERP system that is affordable up front and over time, without requiring a lot of maintenance.

## Exhibit C

### Comprehensive Cost-Benefit Analysis

Assumptions		
Costs	Description	Estimated Cost (AUD)
Software Subscription Oracle NetSuite	Annual subscription for 2,000 users (\$1,200 per user)	\$2,400,000
Base License Fee	Organization-wide license fee	\$75,000
Implementation Services	Consulting, data migration, process mapping, system integration	\$200,000
Customization	Custom development and configuration for departments	\$50,000
Training (Initial)	Training programs for all four user groups	\$100,000
Ongoing Training & Support	Continuous support and training (annually)	\$50,000
Ongoing System Maintenance	System maintenance and upgrades (included in subscription)	Included
Hardware and Infrastructure	Additional hardware or infrastructure upgrades	\$50,000
Contingency	Allowance for unforeseen costs (10% of total budget)	\$292,500
<b>Total Estimated costs (Year 0)</b>		<b>\$3,217,500</b>

Expected Benefits	
Increased Sales Revenue	\$1,500,000
Streamlined Efficiency	\$2,500,000
Reduced Errors and Rework	\$2,000,000
Improved Inventory Management	\$1,000,000
Reduced Downtime and Faster Decision Making	\$750,000
Automated Reporting and Analytics	\$1,500,000
Simplified Compliance Management	\$500,000
Improved HR and Payroll Processing	\$500,000
Increased Production Efficiency	\$1,000,000
<b>Total annual projected benefits</b>	<b>\$11,250,000</b>

#### Annual Ongoing Cost (Year 1-3) Breakdown:

Cost Category	Exact Annual Cost (AUD)
1. Software Subscription	\$180,000
2. Support and Maintenance	\$60,000
3. Training (New/Existing Users)	\$30,000
4. Minor Customization/Adjustments	\$30,000
<b>Total Annual Cost</b>	<b>\$300,000</b>

#### Financial Analysis for TGB's Oracle NetSuite ERP System

Discount rate	8%				
	Year				
Year	0	1	2	3	TOTAL
Discount factor	1.00	0.93	0.86	0.79	
Costs	\$3,217,500.00	\$300,000.00	\$300,000.00	\$300,000.00	\$4,117,500.00
Discounted costs	\$3,217,500.00	\$277,777.78	\$257,201.65	\$238,149.67	\$3,990,629.10
Benefits	\$0.00	\$11,250,000.00	\$11,250,000.00	\$11,250,000.00	\$33,750,000.00
Discounted benefits	\$0.00	\$10,416,666.67	\$9,645,061.73	\$8,930,612.71	\$28,992,341.11
Discounted benefits-costs	(\$3,217,500.00)	\$10,138,888.89	\$9,387,860.08	\$8,692,463.04	\$25,001,712.01
Cumulative benefits-costs	(\$3,217,500.00)	\$6,921,388.89	\$16,309,248.97	\$25,001,712.01	
NPV	\$25,001,712.01				
ROI	607.21%				

## NPV Calculation

$$NPV = \sum (Discounted Benefits - Discounted Costs)$$

- Year 0:

$$Discounted Benefits = 0, Discounted Costs = 3,217,500$$

$$Net Cash Flow = 0 - 3,217,500 = -3,217,500$$

- Year 1:

$$Discounted Benefits = 10,416,666.67, Discounted Costs = 277,777.78$$

$$Net Cash Flow = 10,416,666.67 - 277,777.78 = 10,138,888.89$$

- Year 2:

$$Discounted Benefits = 9,645,061.73, Discounted Costs = 257,201.65$$

$$Net Cash Flow = 9,645,061.73 - 257,201.65 = 9,387,860.08$$

- Year 3:

$$Discounted Benefits = 8,930,612.71, Discounted Costs = 238,149.67$$

$$Net Cash Flow = 8,930,612.71 - 238,149.67 = 8,692,463.04$$

$$NPV = (-3,217,500) + 10,138,888.89 + 9,387,860.08 + 8,692,463.04$$

$$NPV = 25,001,712.01$$

## ROI Calculation

$$ROI = \frac{Total Discounted Benefits - Total Discounted Costs}{Total Discounted Cost}$$

- Total Discounted Benefits

$$= 0 + 10,416,666.67 + 9,645,061.73 + 8,930,612.71$$

$$= 28,992,341.11$$

- Total Discounted Scores

$$= 3,217,500 + 277,777.78 + 257,201.65 + 238,149.67$$

$$= 3,990,629.10$$

$$ROI = \frac{28,992,341.11 - 3,990,629.10}{3,990,629.10} = 607.21\%$$

## Exhibit D

### Risks Analysis – likelihood and impact and response strategy

Risk Register for Implementation of NetSuite ERP System												
Prepared by: Joanna Moy & Kanaya Sudiyanto			Date: 14 October 2024									
No.	Rank	Risk	Description	Category	Triggers	Root Cause	Potential Responses	Risk Owner	Probability	Impact	Status	Score
R01	1	Data Migration Issues	Migrating the data from the previous legacy systems may lead to data loss or inconsistencies within the data. TGB's data is scattered across legacy systems, spreadsheets, and possibly even manual records. Integrating this fragmented data into a centralized ERP database could be challenging and time-consuming, leading to delays or incomplete data migration.	Technical	Inaccurate data, missing data, dispersed and fragmented data sources; reliance on outdated systems	Poor documentation of data, lack of centralized data management, and reliance on legacy systems	Mitigation: Conduct a comprehensive data audit to identify data sources and inconsistencies. Allocate resources for thorough data cleansing and validation. Use a phased data migration approach, with testing at each stage to ensure smooth integration and avoid delays.	IT Department	7	9	Open	63
R02	2	Change Management Resistance	With a workforce of 2,000 employees, many of whom have varying levels of tech proficiency, TGB may encounter significant resistance to adopting the new ERP system. The shift to cloud-based NetSuite ERP will require process changes that employees may view as disruptive, especially those used to the legacy systems.	Organisational / Cultural	Fear of job displacement, perceived complexity of new system, disruption of familiar workflows, negative user feedback, low adoption rate,	Resistance to change, lack of awareness of ERP benefits, insufficient early communication	Mitigation: Resistance to change can be mitigated by engaging key stakeholders early and implementing a structured change management program. TGB can use tailored training programs and consistent communication to address concerns, increasing user adoption rates and minimizing pushback.	Project Manager	7	7	Open	49
R03	3	Scope Creep	Risk that the scope of the NetSuite ERP implementation at TGB expands beyond the original plan, causing delays and budget overruns, especially because TGB wants to expand its operations into Vietnam, India, and China	Project Management	Requests for additional features or customisations beyond the initial plan.	Inadequate scope definition and change control processes.	Avoidance: Establish a well-defined project scope at the outset and implement a strict change management process. Any scope changes must be formally evaluated for cost and time impact before approval, preventing unplanned additions.	Project Manager	7	7	Open	49



R04	4	Budget Overruns	TGB may face cost overruns due to unplanned expenses related to additional customizations, more extensive training than anticipated, or reliance on expensive external consultants. Data migration, which can represent 10-15% of the project cost, could also drive expenses higher if not properly scoped.	Financial	Underestimated costs of customization, training, and consultancy; prolonged data migration	Lack of thorough budgeting and inadequate resource planning for the complexity of TGB's business processes and the ERP integration	Mitigate: To mitigate the risk of cost overruns, TGB should include a financial buffer (contingency fund) in its budget and conduct regular financial reviews to track expenses. However, some degree of cost overrun may be unavoidable, and in such cases, TGB may need to accept that a small percentage of budget deviation could occur, and plan accordingly.	Finance Team	5	7	Open	35
R05	5	Delay in Project Timeline	Risk that the NetSuite ERP implementation faces delays, resulting in slower realization of benefits and potential disruption to TGB's operations during the transition.	Project Management	Missed milestones, extended testing phase	Underestimation of project complexity.	Mitigation: Develop a detailed project schedule with clear milestones and deadlines. Regularly monitor progress and allocate resources to critical tasks. Implement proactive issue resolution and adjust timelines as needed to prevent bottlenecks.	Project Manager	5	7	Open	35
R06	6	Cyber security threats	Risk that the cloud-based nature of NetSuite may expose TGB to cybersecurity risks like data breaches.	Security	Phishing attempts, system breaches	Vulnerability in cloud infrastructure	Mitigation: Implement robust security protocols, such as data encryption, access control, and continuous monitoring. Collaborate with Oracle NetSuite for security updates and regular audits to reduce the risk of data breaches.	Cybersecurity Department	5	7	Open	35

R07	7	Customisation Complexity	Customising the NetSuiteERP to match TGB's unique business processes.	Technical	Delays in project development, scope creep	The need for extensive customisation to tailor the business requirements for TGB.	Mitigation: Limit customizations to essential business needs and use NetSuite's built-in features where possible. Work closely with NetSuite consultants to avoid unnecessary complexities that could drive up costs and prolong the implementation.	IT Department	5	7	Open	35
R08	8	Data Quality Problems	The historical data stored in TGB's legacy systems may be inaccurate, inconsistent, or duplicated, leading to major quality issues once migrated into the ERP. Poor-quality data could compromise ERP performance, affecting everything from supply chain management to financial reporting.	Technical	Duplicate records, inconsistencies across systems, obsolete data (e.g., inactive suppliers)	Lack of proper data governance and inconsistent data management practices across departments	Mitigate: TGB can mitigate data quality issues by performing a rigorous data cleansing and validation process before migration. By appointing data stewards in each department responsible for ensuring data quality and accuracy, TGB can mitigate the chances of poor data impacting the ERP's effectiveness post-go-live.	IT/Data Team	5	7	Open	35
R09	9	Poor user training	Risk that inadequate training may result in low user adoption and ineffective use of the new ERP system.	Operational	High error rates, low system usage	Insufficient training sessions or lack of tailored training materials	Mitigation: Develop comprehensive and ongoing training programs tailored to different user levels. Ensure training resources are available both during and after implementation to improve user adoption and effective system use.	HR Department & IT Department	5	5	Open	25

R10	10	Poor Project Management	Managing multiple implementation phases across various departments (e.g., Sales, Manufacturing, R&D, and Supply Chain) at TGB will require careful coordination. Each department has competing priorities, and ensuring that they dedicate sufficient resources to the ERP project alongside their daily tasks could prove challenging.	Project Management	Resource allocation conflicts, overlapping priorities between departments, lack of clear timelines	Insufficient project coordination and the complexity of managing multiple phases across departments	Mitigation Action: To reduce the impact of poor project management, TGB can establish a dedicated Project Management Office (PMO) to monitor project progress, ensure stakeholder alignment, and manage timelines. By conducting regular reviews and providing adequate resources, TGB can mitigate the likelihood of this risk disrupting the ERP implementation.	Project Manager	3	7	Open	21
R11	11	Continuous Improvement Failure	After NetSuite ERP is implemented, TGB may fail to continuously optimize or update the system to meet evolving business needs, leading to inefficiencies and performance bottlenecks over time. As TGB expands, this could become critical, especially with growing operations in international markets.	Operational	Lack of ongoing support, failure to adapt ERP functionalities to new business processes	Lack of resources for continuous system improvement, and failure to maintain regular system reviews	Transfer: TGB can transfer the responsibility of system updates and ongoing improvements to a third-party managed services provider. By outsourcing post-implementation maintenance and optimization to a specialized vendor or consulting firm, TGB can ensure that the ERP system remains aligned with business needs while reducing internal pressure to manage these tasks.	IT Team	3	5	Open	15

For a clearer risk register table, please visit this link:

<https://docs.google.com/spreadsheets/d/13cjoT31TNcWuq5acFIpLVgR1KQYvx2T4/edit?usp=sharing&ouid=114309373731672575576&rtpof=true&sd=true>

**Probability and Impact Matrix**

Probability	Very High					
	High				R02	R01
	Medium			R09	R03, R04, R05, R06, R07, R08	
	Low			R11	R10	
	Very Low					
		Very Low	Low	Medium	High	Very High
		Impact				