

THE IMPACT OF INVENTORY MANAGEMENT ON THE PERFORMANCE OF ATALA  
LIMITED



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University in Partial Fulfilment of the Requirement for the Award of Bachelor of Science Degree

in Business Administration

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## DECLARATION

We hereby declare that this Applied Project is the result of our own original work and that no part of it has been presented for another degree in this university or elsewhere.

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We hereby declare that the preparation and presentation of the Applied Project were supervised in accordance with the guidelines on supervision of Applied Project laid down by Ashesi University.

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## ABSTRACT

The primary goal of the project is to increase operational efficiency within Atala Limited and avoid discrepancies in stock takes by providing a system that allows for real-time data reconciliation. Atala Limited needs a system that provides real time data reconciliations to implement the values of integrity and efficiency, while monitoring and controlling stock and inventory levels across branches. Structured interviews and literature reviews were used as the means of data collection. The Deputy General Manager of Atala Limited and the staff who were dealing with their old system were involved in the data collection process. Open-ended questions were used in interviews to get insight into the organization and industry. After analyzing the data collected, it is recommended that the company incorporates the Tally Prime Software, Tally.net, as well as a policy document to improve the inventory control system that the company currently has. When these proposed solutions are implemented in the daily operations of the business, it would help to combat the issues surrounding inventory management control. Among the many features provided by Tally Prime which includes data reconciliation and synchronization as well as stock alerts, Atala Limited will also benefit from the ability to access data from any location, on any computer, at any time through Tally.net. We believe that this software will greatly improve the efficiency of inventory management at Atala Limited

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## EXECUTIVE SUMMARY

Atala Limited, being one of the leading suppliers and producers of quality building materials in Ghana, needs an effective inventory system, coupled with the other various systems used in the business, that would help improve branch data synchronization. A group of three junior consultants have taken up the project to find a better method to aid Atala Limited in tracking its inventory.

An extensive literature review was conducted to gain insights into the building, construction, and retail industry by the team of junior consultants. After conversations with stakeholders through interviews, situational analyses and needs assessments were undertaken to identify the gap and problem at hand.

Atala Limited requires a system that can effectively and efficiently track inventory levels across all its locations. Tally software — a small and medium business enterprise resource planning software — is presently used by Atala Limited for this function.

Based on the findings, it was concluded that the organization does not require software to replace Tally because it is performing satisfactorily. Instead, it was revealed that a system that would support the operations department by synchronizing all information across all branches was the necessary. In addition, the team created policies to help with the components that do not require automated assistance. This would aid in fine-tuning the company's entire control system.

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## **1.0 INTRODUCTION**

### **1.1 The Project**

Inventory management is an essential practice in every firm, especially retail firms, because it aids in the buying, storing and selling of stock, as well as ensuring that the right type and amount of stock is available for customers. In the building and construction industry, one of the most common difficulties companies and individuals face is inventory management. The inventory management system for the construction industry involves procurement, identification, transport, and storage of materials in construction projects (Timetric, 2017). Consequently, there is a requirement for modern innovation to develop tools for further tracking practices with the end goal of inventory management in construction projects. A team of three-abled junior consultants (Miss Addai-Deseh, Miss Zateh - Gamor and Mr Orevaoghene) have worked with Atala Limited to assist the organization in designing a strategy and development plan for an alternative system of tracking inventory and store updates from all the branches of Atala Limited. The consultants will research the available systems and advise the company on a system that best suits the needs and requirements of Atala Limited. The consultants are expected to recommend or develop an alternative system of tracking inventory that can efficiently keep track of inventory records and quality assurance from all branches.

### **1.2 The Task**

This the tasks involved in this project, the junior consultants selected for this project are expected to recommend or develop an alternative system of tracking inventory for the company that can efficiently keep track inventory records and quality assurance from all branches.



Modules must also be developed to successfully integrate and implement new inventory tracking system to employees of Atala Limited. There should be a detailed breakdown of the financial costs of designing and deploying these systems and expected expenditure for the first three months of deployment. An evaluation of the financial and non-financial benefits of adopting the recommended technologies or systems should be included as well.

## **2.0 Organizational Profile**

### **2.1 Company Profile**

Atala Limited has been a leading supplier and producer of quality building materials and steel products such as rebars (iron rods) and cement since its inception in 1986. The operations include the supply of high tensile strength rebars imported from Europe and cement, mild steel rebars, angle irons, binding wire, nails, BRC mesh and steel plates. Atala Limited provides quality building materials at unbeatable prices while not compromising quality and safety. The mission of Atala Limited is to provide building materials at unbeatable prices without compromising on quality and safety. The company's top priority is to contribute to the overall development of the real estate and construction industry by collaborating with public and private developers and consumers. The company's success is driven by the principle of trust and the provision of superior customer services. Atala Limited is currently present in ten regions of Ghana.

### **2.2 Internal Analysis**

The construction industry in Ghana contributes substantially to gross domestic product (GDP) and employment. The \$8 billion industry in Ghana accounted for 18.8 per cent of the nation's annual GDP in 2018 and is a central pillar of Ghana's National Development Plan. In Ghana, key construction sub-sectors include housing and urban development - residential buildings; municipal

and commercial buildings; infrastructure - water and sanitation; energy; and transport infrastructure – roads, airports, ports, and harbors. In the past week, we carried out industry research by interviews. From the information gathered from Atala's head office, we understood that the head office received the supplies before distributing them to the other branches. This way, it was easier for the business to keep track of suppliers' materials. The head office is solely in charge of purchasing the materials needed to be sold. There is no clear departmental structure; therefore, everyone at the top helps each other out with the various tasks and new clients. There are some prevalent teams and departments such as the audit team, finance team, human resource, and operations team. However, they lack a marketing/sales team in the firm. From further insights, we realized the distribution of iron rods and cement depends on the availability of trucks used for distribution. When a client makes a purchase order, materials are conveyed in trucks to the construction site; this includes same-day delivery if trucks are available. We discovered that the main clients in this industry are construction companies. Although individuals purchase building materials, 80% of clients are constructors. In addition, technology plays a significant role in the industry and in the company. Technology is used in the process of procurement, monitoring, and control. These systems track the number of sales and inventory availability across distribution centers. A company such as Atala Limited acts as an intermediary between producers and consumers. They partner with producers because producers do not sell directly to consumers and customers do not usually buy the quantities producers are looking to sell. Customers tend to buy lower quantities than what producers make. This is the gap in the industry where retailers like Atala come into play, as they can handle the quantities manufacturers produce while meeting the needs of consumers.

### 3.0 Industry Analysis

#### 3.1 A Scan of the Industry

**Political** - There are rules and regulations on safety that affect the construction industry. Such as safety concerns to where the property will be erected during the construction. As well as the tools to use. However if the government turns down a project there will be no construction therefore if Atala has been contracted to supply the firm in charge of construction it could cost them in ways such as in transportation .

**Economic** - The building and construction industry contributes over GHS600m (\$154.8m) in taxes to the government and employs roughly 5800 people directly and indirectly. However, most of Ghana's building materials are imported to the country, the devaluation of the cedi has driven prices upward and had a profound effect on the cost of construction and availability of materials. (IJAEM ,2021) In order to ease transactions for construction firms and boost broader economic growth, the government is working to further increase local production of many key building materials. Local production by the government will reduce cost of importation of these materials which will benefit local suppliers such as atala. Also, Ghana has cement production capacity of more than 7.4m tpa, according to official figures. This exceeds domestic demand, which stood at around 5m tonnes in 2017; however, the growth of the construction sector has led to increases in consumption, which is benefitting local suppliers

**Social** - There are rules and regulations placed to aid employees health and safety of a business . In terms of Atala Limited, a company that deals with the supply of construction materials, the danger will come from the warehouses therefore insurance needs to be put in place as well as provision garments that will prevent hazardous accidents.

**Technological** - In August 2017 President Nana Akufo-Addo laid the foundation for a new cement plant in the free zones enclave in Tema. Known as Supacem, the \$55m plant produces 1m tonnes of cement per year and is operated by CBI Ghana. This plant will increase production and help suppliers reduce cost as well. The company is also investing \$100m in a new grinding plant at Takoradi, which will process imported clinker. The facility will also have capacity of 1.5m tpa, and is expected to commence operations by the end of 2019. (IJAIEEM ,2021) These new machines will help local suppliers such as Atala to increase their materials as well as reduce the cost of importing and shipping.

**Legal** - Suppliers of construction materials such as cement in Ghana are endorsed by the Cement Manufacturers Association of Ghana (CMAG). Atala Limited is an authorized distributor of Diamond Cement in Ghana.

**Environmental** - The manufacturing of cement; one of the products Atala is a certified distributor for, results in the harvesting of raw materials for mounting cement manufacturing which causes reduction in quantity of the non-renewable resources such as limestone. The continuous reaping of these precious resources exposes it to the risk of depletion in future. In addition to this the distribution and raw materials processing phases in the factory releases dust, noises, greenhouse gases especially carbon dioxide that contaminates the environment and aggravates the climate change. These uninvited environmental issues cause distress to the lifestyle of mankind.

## Porter's Five Forces

*Table 1- Industry Analysis*

<b>Competition in the industry</b>	Increasing number of competitors Lack of diversity with competitors Low barrier to exit
<b>Potential of new entrants into the industry</b>	Weak barrier to entry Not so High capital requirements Low brand loyalty
<b>Power of suppliers</b>	High bargaining power Increasing number of suppliers
<b>Power of customers</b>	Large number of customers Price sensitive Customer can easily substitute
<b>Threat of substitute products</b>	Homogenous products Buyer propensity to substitute

***Potential of new entrants in the industry*** - New entrants in the building and construction industry pose as threats to the other businesses already in the industry. These threats bring along reduced costs, low prices and have a unique selling point which attracts customers in the industry. Atala Limited is vulnerable to such challenges since the industry has a low barrier to entry, in the sense that owning a retailing business in the building and construction industry takes little time or effort, and quitting the market is also not difficult. Moreover, now manufacturers are also going into the retail business and thus new competition arrives.

***Power of suppliers*** - Most retail businesses acquire their raw materials from similar or several manufacturers. The manufacturers sometimes come together to determine the price of the materials. And if the retailers do not abide by the price the suppliers do not agree to supply that individual company. The underlying impact of the higher manufacturing bargaining power is that it lowers the overall profitability. How this can be solved is by Atala building efficient supply chains with several suppliers.

***Power of customers*** - As there are many retail businesses in the building and construction industry there are also many consumers. Therefore, since Atala limited does not focus on just supplying to the big companies but also supplies to individual consumers they are not affected by the bargaining power of consumers. Since a smaller customer base would cause Atala to offer discounts and promotions which in turn could affect profitability.

***Competition in the industry*** - The industry that Atala limited operates is highly competitive therefore the industry or Atala limited run the risk of experiencing low profitability from prices forcibly driven down. Since there are many competitors in the industry, customers have a lot of choice and can easily be swayed by price increase or if a certain retailer supplies substandard materials. How they deal with this issue is through incentives such as free delivery to customers who are close to any of their branches. They also strive to respond quickly to customer complaints.

***Threats of Substitute Products*** - There are not necessarily substitute products in the building and construction industry but there are a variety of materials that are manufactured and can be supplied; therefore, most retailers have the same materials so Atala must have a unique value proposition in addition to providing industry materials.

### 3.2 Organizational SWOT

Table 2- SWOT

<b>Strength</b>	<b>Weakness</b>
Good customer service Excellent delivery services Good deals such as free delivery	Lack of departmental structure Counting is done manually
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>The possibility of working on future projects. Such as on individual projects (with the increasing rate of real estate in Ghana) as well as government contracts.</li> </ul>	Suppliers determine the market price for the materials Customers not paying for materials on time Tight competition in the business industry Suppliers selling them defective materials or not the right quantity. Cannot develop a relationship with manufacturers, since some don't last in the industry

**Strengths** - Since Atala is in a competitive industry, it provides excellent customer service by readily helping its customers, who may have issues with the supplied materials. Atala spares no time in compensating their customers if the need arises. They also strive to provide their customers with a good delivery service with a bonus of free delivery if the customer wants the goods supplied at a place they deemed not too far away from their branch.

**Weaknesses** - The lack of departmental structure due to the nature of the business, a family business puts a strain on the top management since they execute every task. The various departments that they have are not particularly strong either. For instance, the IT department only has a tally system to help manage the supplied materials.

**Opportunities** - Since Atala's limited customer base is not subject to the big companies but is also open to individuals, this gives Atala the chance to always be in demand when materials are needed to be supplied. As the target market grows, so does the customer base in other regions.

**Threats** - Many manufacturers enter and exit the industry; although Atala manages to build relationships, the benefit of having a long-lasting relationship with a manufacturer is lost. Furthermore, Atala runs the risk of having customers (either loyal or not) who are not creditworthy; therefore, they face issues with their financial statements. Atala limited runs the risk of having manufacturers that want to determine the market price, and if the retailers do not obey, they are blacklisted in the industry.

## **4.0 Situational Analysis & Needs Assessment**

### **4.1 Methodology**

In carrying out the situational analysis and needs assessment, structured interviews and literature reviews were employed for data collection. These were carried out with the Deputy General Manager of Atala Limited. Interviews took the form of open-ended questions to gain insights into the company and the industry. Questionnaires were used to investigate areas of high importance. These were the current inventory management system used, the construction industry, the retail,



and the logistics management industry. The team made sure to label these areas as high importance due to the regularity of these topics as literature review was carried out.

Studies showed that different inventory models could support logistics issues of product distribution and process design. This was evident in Hau L.Lee's paper on product and process design's adequate inventory and service management. This paper revealed that to gain control over inventory, firms should approach redesigning the product's manufacturing and distribution process (Lee, 1996). This allowed the team to shift perspective from focusing on the systems implemented in inventory management to the processes involved. This enabled the consideration of steps and gaps lacking when focusing on solutions and functionalities.

"The focus point of supply chain management is inventory control. This has influenced firms to pursue inventory reduction strategies when faced with challenges" (Dooley, 2005). Frank Dooley's take on the supply chain industry was based on the theory that to develop the most logistical strategy, a firm must understand the nature of their product demand and supply chain capabilities; otherwise, they focus on reducing inventory levels as the way to curb their challenges. This insight allowed us to consider the nature of materials sold by Atala Limited. In doing so, we discovered that the nature of goods sold by the company contributed to the company's problem. A theory known as Quality Control chart theory can be used to measure the performance and accuracy of an inventory management system. This method suggested by Ricardo Ernst & Jose Luis highlighted that measuring and defining inventory accuracy is one of the major underlying problems in the industry. This helped the team appreciate different theories and approaches to defining what inventory accuracy looks like for Atala Limited. (Ernst.R., Guerrero.J, & Roshwalb, A., 1993).

## 4.2 Situational Analysis

A lack of data reconciliation, in particular, causes problems with inventory management and fact-checking in the business. Because Atala does not use cloud-based software, the operations manager is unaware of what is going on at the various branches in real time. Because data is traditionally reconciled using the end of day process, reports sent by branch managers may contain human errors. From this, we derived the problem statement.

## 4.3 Needs Assessment

The needs assessment tool was used to identify gaps and needs, as well as how to address them for future progress. The team was able to identify the business's needs and the actions to attain the needs through interviews as well observations with various departments and management. As a result, we arrived at the conclusion that inventory control was the firm's most pressing necessity.

Atala limited needs a system that can efficiently and effectively monitor its inventory levels across branches. Atala limited currently uses Tally software for this role. Tally is a distributed enterprise resource planning software for small and medium businesses. Tally is an ERP, enterprise resource planning software used to collect, store, and manage company data. Tally can be used to track resources such as materials, purchase orders and cash. Initially, it was perceived that the problem was caused by Tally, however, after the interviews, we realized that Atala Limited needed a system to synchronize all the information across the branches to help operations in the main branch run smoothly. This system will help the company's control system and ensure efficiency in all the other branches without being physically present.

Table 3- Needs Assessment

Key Functional Areas	Key Challenges	Ideal Scenario	Effects of Problem	Associated Costs	Severity 1-low,5-high
<b>Technology and equipment- Inventory system</b>	Lack of efficient tracking system across branches	Real-time inventory management system	Financial loss, Inaccurate Strategic Planning	Undetermined but substantial	5
<b>Procurement/ Accounting - managing inventory</b>	Inconsistency in measurement, highly dependent on manual counting	0% dependence on manual counting	Financial loss, Inaccurate Strategic Planning	Undetermined but substantial	4
<b>Industry competitiveness</b>	Lack of competitive advantage in the industry	Give incentives to customers	Difficulty attracting top talent. Long-term unproductivity of employees.	Undetermined, but potentially substantial.	3
<b>Organizational Structure</b>	Lack of marketing department Lack of	Develop an organizational structure.	Low sales eventually Lack brand loyalty	Undetermined, but potentially substantial	2

	departmental structure				
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#### 4.4 Business Case

The underlying problem of Atala is its inventory management systems. Despite using the Tally software, the company faces limitations. Some of these limitations include relying on the staff to be notified of a decline in their supplied material or the correct number of materials in the branches. At the end of the research, we believe that the company does not necessarily need software to replace Tally since it is serving its purpose in the company. A system that would synchronize all the information across the branches to help the operations department. This system should help the company to track all the inventory they receive from suppliers and what they give out to their customers. The operations team would not have to wait for the report from the other branches but would see the transactions from the main branch. This way headquarters receives real-time data about the other branches' inventory. In addition to this, policies would be added to the solution in order a more seamless control system for the business. This could also increase transparency in all of the branches' operations. The corporation would be able to optimize its operations in order to increase profits while also considering the interests of its stakeholders.

#### Objectives

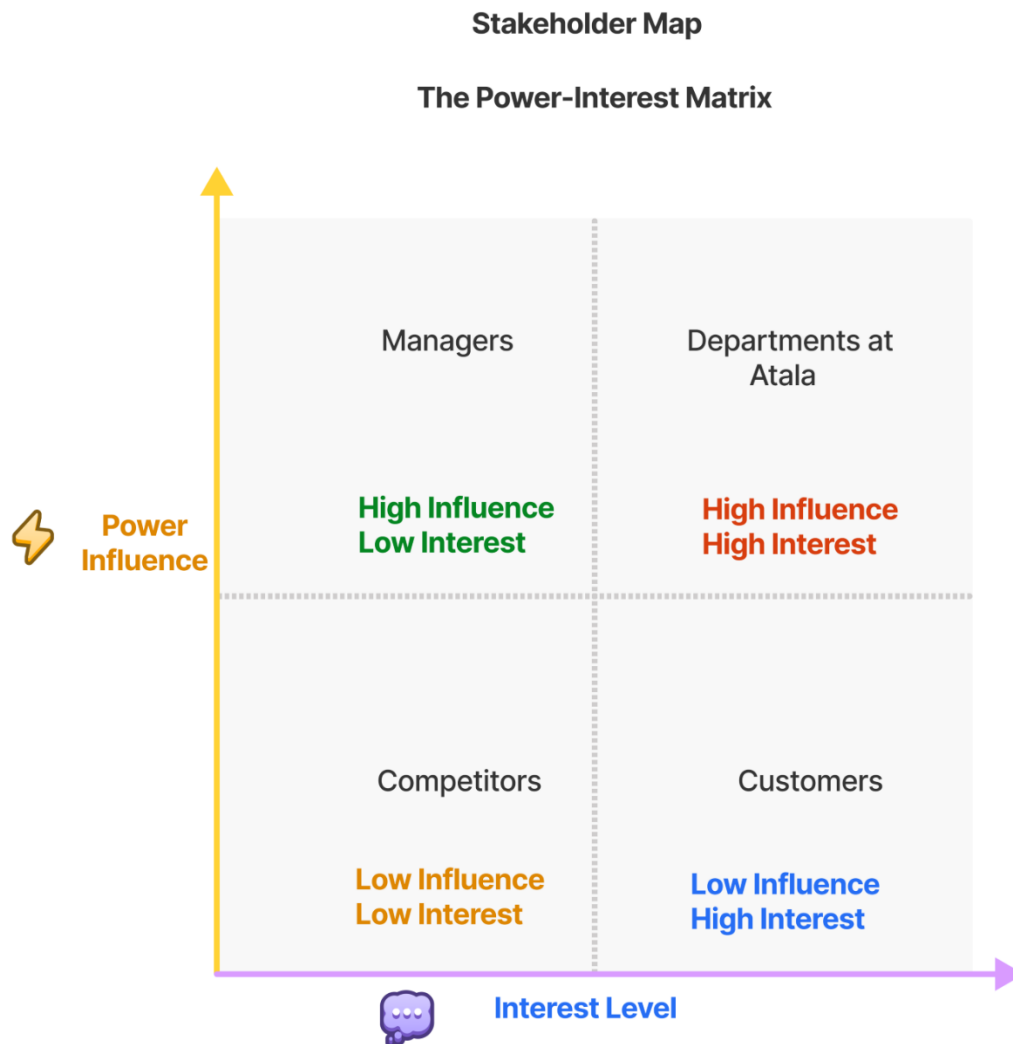
- To create a system that aids in the improvement of synchronization between the head office and other branches, allowing the head office to obtain accurate inventory data, resulting in a 10% increase in efficiency.

- Creating a system that alerts the headquarters when specific supplies fall below a certain threshold will increase operations and inventory efficiency by 15% while reducing losses by 10%.
- Develop a few policies to finetune the whole control system of the company. This would guide some of the processes and increase efficiency by 10%

### **Stakeholder Map**

In the matrix , the first quadrant has the ‘high power and low interest’ stakeholders who are the managers of Atala. These are the people that need to be engaged but not so much because they are not always on the grounds as work goes on so there might be some missing information. The second quadrant talks about the ‘high influence, high interest’ stakeholders who in this case are the employees in the various departments at Atala limited. These people are important because they can help the junior consultants paint a good picture of what the problem could be in the firm based on the various day-to-day activities.

Figure 1- Stakeholder Map



The third quadrant has the ‘low influence and low interest’ these are the stakeholders who do not have direct impact on the inner workings of Atala. The fourth quadrant is the ‘low influence, high interest.’ These are stakeholders who do not have a direct impact of Atala but are interested in the services provided by the company, who would be the customers of the company.

## 5.0 Solution and Implementation Plan

### 5.1 Problems & Solution

#### Identified problems

Based on conducted research, the team discovered that a lack of real-time data reconciliation caused inventory and fact-checking issues in the business. This analysis was based on an understanding that the Atala Limited Operations Manager received end-of-day reports from branch managers via email regarding sales and stock statuses of each branch. The Operations Manager expressed concern about having to rely on the branch manager's daily report, which could be prone to human error due to its time-consuming nature. Despite human error, there also comes the inevitable delay in addressing issues in the various branches, since data is manually reconciled at the end of the day.

#### Solutions

To address the issue of a lack of real-time data reconciliation, the team looked into two solutions: a digital solution called Tally Prime and a policy document that addresses critical issues like how much inventory should be kept on hand as well as when and how much should be ordered, including stock replenishment. Tally Prime is the name of the digital solution, which is an integrated business management software that includes features such as inventory management, accounting and invoicing, reports, and many others. Tally Prime gives the user access to a subscription service called Tally Software Services. This subscription provides advanced technological value such as online business reports, online data synchronization, remote access, and many other features. Because it is possible to synchronize data across the main branch and

other branches with the click of a button, the feature of online data synchronization will allow Atala to operate from multiple locations. The previously mentioned features allow Atala Limited to access their data from anywhere by using Tally.Net services.

The initially mentioned features serve the purpose of providing a “standard” of sorts for the Operations Manager, allowing him to use the real time data he receives from the various branches as a measure of accuracy for the final daily report he receives. The ability to access real-time data allows the Operations Manager to be aware of situations in other branches and quickly respond to problems as they arise. For example, if a stock is nearly depleted, Tally prime, which includes a cloud server version, can provide the Operations Manager with real-time data about the stocks, allowing the business to avoid stock depletion.

Atala Limited’s goals and objectives are to gain a large market share in the retailing construction industry, and to be one of the market's most successful companies in the long run. In terms of inventory management, Atala Limited wishes to reduce or eliminate discrepancies during stocktaking in order to proportionally reduce operational inefficiencies. Inventory reports, such as the stock summary, are one of Tally Prime's features that help keep track of stock movements. Because Tally Prime detects low inventory, it saves time in ensuring adequate stock. Furthermore, the Re-order Level feature provides real-time data on the status of the stock, such as how long it lasts and how long until it needs to be restored, allowing users to generate stock status reports.

Not only that, but because Tally Prime is cloud server software, it allows for better control of all business transactions in the company. Tally Prime enables Atala to stay one step ahead of the market's technological era and it ensures that customers receive better service as a result of having a well-balanced and efficient operation.



An inventory management policy document will be created that details the rules that Atala Limited's management and staff must follow in order to efficiently manage inventory.. These policies will serve as a guide for management and employees to follow, reducing errors and increasing business operational efficiency. The policy is integrated into the software to ensure integrity of data. The policies will address critical issues such as how much inventory should be kept on hand as well as when and how much should be ordered, stock replenishment. Furthermore, the document contains suggestions to assist Atala in overcoming the effects of poor inventory management, resulting in an increase in business productivity. These policies will benefit Atala in a number of ways. First, the policies developed will help to ensure that there is no excess inventory, which could lead to spoilage, obsolescence, and damage. The policies will also help Atala track their inventory accurately, allowing them to fulfill orders on time and with accuracy. For example, periodic review policy order up policy, which is mentioned in the inventory policy document, acts as a stock alert and aids in stock replenishment. Cement, for example, sells quickly in Atala Limited. Atala can use periodic review order up policy to ensure that 500 cements are ordered every 5 days, which helps to combat the issue of cement overstocking or understocking. This ensures that customers are never dissatisfied with the services provided by the company. To achieve great periodic review, order up to policy results, Atala Limited should conduct extensive research on the stock items when deciding when and how many items to order.

Inventory management, according to Horngren, Datar, and Forster, is an area that requires more attention because inventories account for more than 40% of the total costs of manufacturing firms and more than 70% of the total costs of retail chains. Inadequate inventory management practices result in either overstocking or understocking (Onyango,2012).Many companies' inventory policies are designed to hold enough finished stock to meet market demand while

minimizing holding costs. These policies assist in carrying fewer inventories, lowering costs, and delivering products to customers more quickly. As a result, inventory management policies are critical if a business wants to strike a balance between efficiency and responsiveness. (Chambers and Lacey, 2011). As it currently stands, there are a number of organizations that have taken up the employment of basic inventory management techniques and control methods to maintain control over their inventory costs. The increase in demand for inventory management and control ties back to the fact that businesses acknowledge that (knowledge of) their inventory is key in the survival of the business. As a result of this, inventory management has slowly grown into a key aspect of supply chain management. The latter concept, which deals with the management of the flow of goods throughout the manufacturing to consumption phase, has strong links to the former concept, as they both hold fast to the task of reviewing business materials, and the processes they undergo. The role of inventory management in supply chain management is meant to provide further insights into the understanding of stock control measures, thereby enhancing the managers' contribution to the continuity and efficient productivity of their organization

### **Cost Benefit Analysis**

benefits and costs when making decisions. The cost-benefit analysis will provide insights to the team and Atala Limited on whether to proceed with the proposed solutions or not. It will also explain whether the solution's cost outweighs the benefits and if an investment is a sound decision. The cost of Atala implementing Tally Prime and Tally.net as a plugin was ₱11,309.82, and the benefits were ₱31,000. Atala should proceed with the strategy implementation because the benefits outweigh the costs. Tally Prime and Tally.net reduce the risk of business collusion. This can be attributed to the fact that when the iron bars are delivered from the port to the various

branches, the branch managers must count and enter the data into Tally, which is then viewed by the Operations Manager in the main branch. Thus, if a branch's figure is significantly off, the Operations Manager can address the problem as soon as possible before it has a negative impact on the business. Tally.net, the plug-in, allows the business to use Tally remotely, which is beneficial for auditors since they occasionally go to all the branches for checks. This way, they do not have to wait to report an issue or provide information but can rather act immediately, since Tally can be accessed from anywhere. Auditors are able to enter whatever information they come across to keep the operations manager on top of all business affairs.

Because the benefits of inventory management policies outweigh the costs, Atala Limited should implement the policies to keep the business' operations from collapsing. Policies will aid in the maintenance of management structures so that errors and mishaps do not occur daily. Policies serve as guidelines that enable employees to execute tasks and be productive. Considering that cement sells faster than other materials at Atala Limited, a policy stating that cement should be restocked every three days is implemented in response. Now that the policy is made clear and straightforward, the employees in charge of check-ins and the manager will be able to do their jobs more efficiently. This leaves fewer flaws in the business process because everyone has a clear guideline to follow (See cost-benefit table in appendix).

## 5.2 Implementation Plan

### **Project goals and Objectives**

#### **Problem Statement:**

Atala Limited needs a system that provides real time data reconciliations to ensure the values of integrity and efficiency, while monitoring and controlling stock and inventory levels across branches.

**Goals:**

The primary goal of the project is to increase operational efficiency and avoid discrepancies in stocks or warehouses by providing a system that allows for real-time data reconciliation.

**Objectives**

- Using a cost-benefit analysis tool to evaluate the various inventory management solution tools.
- Providing on-the-spot assistance in comprehending the selected solution tool

**Success criteria**

Success for Atala means having a significant market share in the retail business of the building and construction industry in Ghana. One of the objectives they want to achieve is to become one of the leading retail companies in the market. Growing its market share and operating branches throughout the country is also a sign of success for them. In terms of inventory management, success should be that they have a well-functioning system with no inconsistencies in stock taking and tracking. The proposed solution suggested by the team (Tally Prime) will be able to help the company achieve its goals and become successful in the industry. This is because its features would help management have more control of the operation in all branches as well as reduce the problem of inconsistencies.

**Scope statement:**

The project included carrying out research into the construction and retail industry and gaining an understanding of inventory management processes. The team engaged the various stakeholders of the project in order to gain various perspectives. The project entailed an internal analysis of the company's environment and culture, and research into efficient systems that can be adopted as a solution. The solution is being presented to Atala to make sure it aligns with the company's goals.

**Human and other resources:**

Deputy Manager – This person will foresee all the activities of the project/implementation of the solution.

Sales Personnel – This person will be one of the main interactors of the system.

Checkers – These people will input the data they collect.

System administrator: This person will oversee the system setup and technical administration.

Communication liaison: This person will serve as the liaison between the project team and the end-users.

Core department members: These are the people championing for the software, from each department of Atala.

Equipment: Computers/ Laptops – this is where the system is going to be installed and used by the various department Atala.

**Risk analysis:**

A risk register will be used as a tool to identify potential risks in on this solution, sometimes it can be used to fulfill regulatory compliance but mostly to stay on top of potential issues that can derail intended outcomes. For our proposed solution, it keeps track of potential risks and how to mitigate it. It also contains information on the risk's priority and chance of occurrence.

*Table 4- Risk Analysis Table*

Risk Description	Likelihood of risk occurring	Impact of risk on solution	Owner - person managing the risk	Mitigation action
The cost of acquiring the software	Meduim	High	Atala	Further explain how the software can change the inventory management in the company and help them to achieve their goals as an organisation
Loss of Data	Low	High	Atala - IT department	Data should be backed up on company's cloud in order to prevent loss
Low User interactions	Low	High	Atala - IT and human resource department	Employees should be trained with Tally prime in order to familiarize themselves with the software
Security ( risk of losing account)	Meduim	High	Atala - IT department	The company must be able to keep all passwords as well as its data well

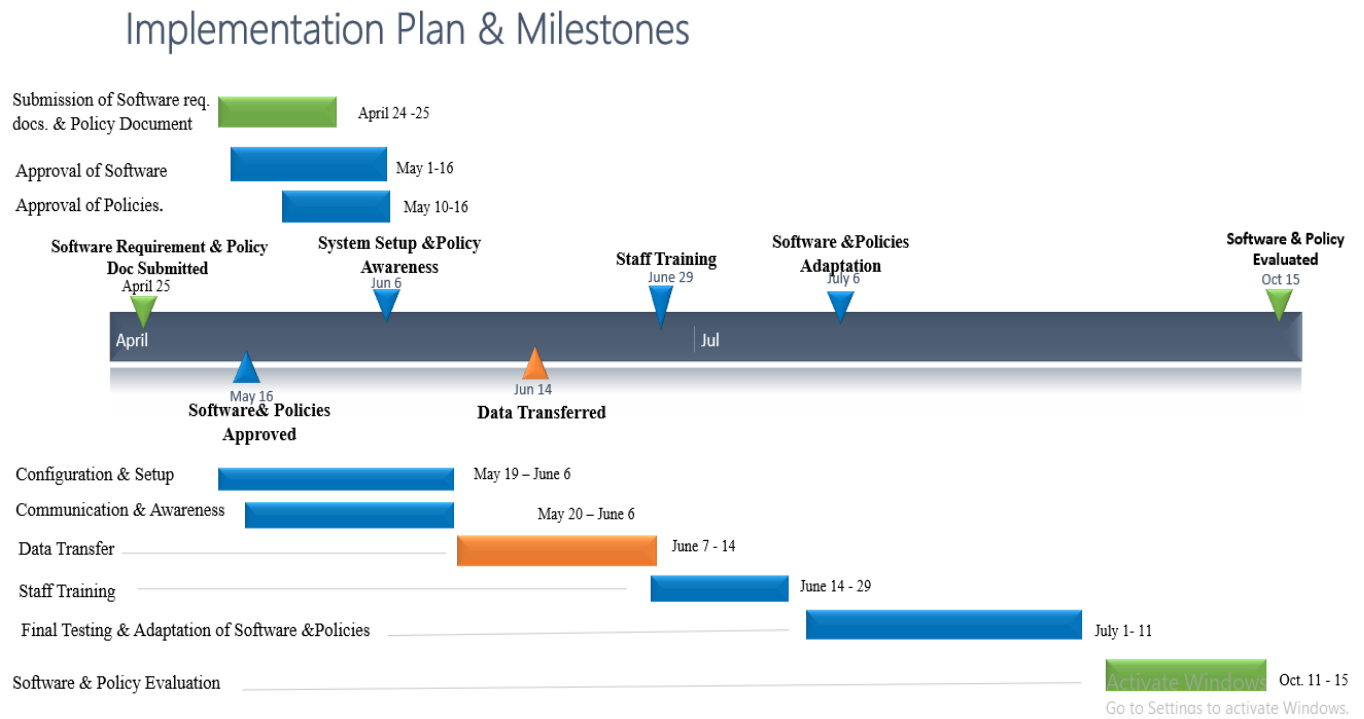
The table above and below shows the risk and mitigation action of taken in order for the solution implementation to go smoothly

Table 5- Implementation Plan &amp; Milestones

Task / Plan	Estimated time to complete	Description
Submission of solution and required documents.	25/04/22	The team would submit the solution as well as all requirement documents (System Requirement Document) for management's review
Submission of Policy Document	25/04/22	The team would submit the document containing the policies for review.
Approval of Policies	16/05/22	The policies would be approved by management
Approval of software	1/05/22 - 16/05/22	The software will be examined by the IT department and approved. They will also need an approval form the management of the company
Configuration and setup	19/05/22 - 6/06/22	IT department will take care of installing the software for the other departments that will be in contact with it
Communicate and raise awareness to employees about policies	20/05/22 - 6/06/22	Management would put in place meetings to educate employees on why the policies are important and why they need to be implemented
Transferring data	7/06/22 - 14/06/22	Transferring data to the software will not be a problem because the systems interface is very similar and will require a short time
Staff training	15/06/22 -29/06/22	Staff training will also be done to capture the new features of the software
Final Testing and Adoption of Software & Policies	1/07/22 - 11/07/22	All departments involved will try out the software during the testing period. This is to find out if there are any difficulties with the software. The software will now be in

		use. Policies will be adopted and followed by all stake holders involved
Software & Policy Evaluation	11/10/22 - 15/10/22	Management will evaluate all the policies in place to see if there is an improvement in the whole inventory control system

Figure 2- Implementation plan





## **Team roles and responsibilities:**

*Table 6- Team Roles*

<b>Team Member</b>	<b>Role</b>
<b>Israel Orevaoghene</b>	System Administrator/ Junior Consultant
<b>Serwaa-Sompa Addai-Deseh</b>	Coordinator and Researcher
<b>Zanita Zateh-Gamor</b>	Researcher

## **Implementation plan metrics**

<b>KPI</b>	<b>Matrix</b>
Data Reconciliation	Data from branches can be seen by the headquarters
Inventory measure	Business is notified when there is a shortage in inventory
Receiving time	Measure how accurate the stock keeping is
Stock Alerts	Managing stock replenishment

## **Additional Documents**

### **Software Requirement Plan**

#### **1. Introduction**

##### 1.1 Purpose of Software:

The purpose of this document is to recommend Tally Prime, an integrated business management software , to solve the inventory management problem at Atala Limited. Inventory management

issues include a lack of data reconciliation among Atala's various branches, which leads to inaccurate inventory tracking

### 1.2 Intended Audience and Use

The software requirement specification (SRS) document is a comprehensive guide designed to help individuals who handle inventory in the company gain a better understanding of the Tally software. The SRS document serves as a guide to what Tally Prime is, how it is expected to perform, and how to use Tally Prime. This document will be available to Atala Limited's operations manager, warehouse checker, IT specialist, and Manager.

### 1.3 Scope

Tally Prime is a simple online inventory system that is intended for use by anyone, including those with no background in IT or accounting. This software includes features like invoicing and accounting, as well as credit and cashflow management. Tally Prime includes inventory management among its many features, allowing businesses to easily track, forecast, and manage inventory movement in the business as well as optimize inventory levels. This feature ensures that closing stock is accurate using various valuation methods. In addition to providing real-time data, a business can never run out of stock because it can receive real-time information on the inventory that needs to be replenished as well as the correct quantities. In terms of software security, Tally Prime ensures that the company's data is always secure using Tally Vault, where all information, including the business name, is encrypted. Tally Prime inventory features account for inconsistencies in stock taking and tracking, which are resolved by real-time data synchronization. Above all, Atala Limited will use Tally Prime to avoid disappointing its customers by ensuring that there are no stock outs. Furthermore, the operations manager will have access to the inventory

information of the other branches, allowing him to make decisions such as which materials to send to which branch in the event of a shortage.

#### 1.4 Definitions (Risks)

- Data loss - The issue of losing data when the password is forgotten, necessitating the creation of a new login username and password because your data cannot be recovered.
- Low software engagement- Internal stakeholders may be unwilling to use the software, particularly if there is a lack of communication in understanding the software.
- Internet-based applications are vulnerable to disruptions like unreliable network connectivity.

## 2. Overall Description

### 2.1 User Needs

### 2.1 User Needs

### 2.2 Assumptions and Dependencies

To fully utilize Tally Prime's synchronization feature, the branches must have at least a stable network. This is because the company's information will now be stored in the cloud server.

## 3. System Features and Requirements

### 3.1 Functional Requirements of System

- The system uses a reliable, secure database
- The system provides accurate, real-time data of stocks
- The system provides fast, actionable inventory monitoring and control
- Reorder Level feature to know when stocks need to be replenished

- Scalable so additional software modules can be added with little to no configuration
- The system holds all the meta details of all inventory
- It allows the users to change their password for future security
- It allows admin to generate returns details report
- It allows admin to generate stock statement report
- It allows any user to logout when the user wants to exit the system

(Akarapu & Dasari, 2015)

### 3.3 System Features

- Defining groups, categories and batches of a product
- Flexible unit of measure, where stock items can be quantified in more than one unit
- Multiple Stock Valuation to value closing stocks

("TallyPrime Inventory Management Features | Tally Solutions", 2022)

### 3.4 Nonfunctional Requirements

- Users must change the initially assigned login password immediately after the first successful login. Moreover, the initial should never be reused.
- Employees are never allowed to update inventory information. Such attempts should be reported to the security administrator.
- Every unsuccessful attempt by a user to access an item of data shall be recorded on an audit trail.
- A system enough to handle a specific number of users without affecting its performance

- The system should be portable. So that moving from one Operating System to other does not create any problem.
- Privacy of information, the export of restricted technologies, intellectual property rights, etc. should be audited.

(Martin, 2022)

## **Inventory Management Policy Document**

### **1 Objective of the Policy**

1.1 The policy seeks to accomplish the following goals:

- i. Serve as a guide for management and employees to follow in order to reduce inventory errors and increase business operational efficiency.
- ii. Establish policies to ensure that the best inventory practices are used and that they meet the needs of the company.

### **2. Scope**

2.1 This policy applies to branch managers, deputy managers, the IT department, the sales department, and other departments involved in inventory management.

### **3. Inventory Procedures/Policies**

3.1 The inventory procedures must be followed to ensure

- i. Accurate inventory quantity records in the warehouse
- ii. Inventory stock levels are monitored to avoid overstocking or understocking.

### **4 Inventory Policies**

4.1 Stock replenishment entails determining which stock items need to be reordered.

The methods listed below can help in determining which items need to be replenished:

- i. Periodic review, order up to policy

To keep track of inventory, items should be ordered on a regular basis according to a set schedule.

- ii. Minimum stock level

The minimum quantity of a stock item that must be kept on hand at all times. The minimum stock level is determined by the item's usage rate and the time required to obtain/deliver the items.

- iii. Re-order level

A software is used to ensure that stock items have minimum and maximum levels where possible. The software includes a feature that allows you to set a re-order level and a minimum order level to help determine how much stock needs to be replenished.

- iv. Count cycle

The most common physical counting methods in the business environment are cycle counts, which count a specific number of items each day or week.

## **5 Receiving of goods into stores**

5.1 When goods are received or issued, Tally software should be updated immediately.

## **6. Inventory Storage**

- i. The warehouse should only be used for inventory storage, with restricted access.
- ii. Items should be stored separately and appropriately allocated.
- iii. Items must be entered into the Tally software. Tally Software can categorize items/stock based on the product, order number, quantity received and issued, and date of receipt.

## **7. Inventory count**

7.1 The auditors should conduct an inventory count on a monthly basis.

- i. At the end of the fiscal year, auditors and warehouse checkers should conduct a full inventory count.
- ii. If there are any discrepancies between the inventory records in Tally and the physical inventory, the auditor must document and report to the main branch operations manager or Deputy manager.
- iii. A disciplinary action must be taken in the event of a serious case of discrepancies.
- iv. The Tally software must be appropriately updated.

## **8 Inventory Records**

8.1 The inventory items must be entered into Tally software by the appropriate personnel. In order to properly manage and control inventory items, relevant information must be included.

It should include, but is not limited to, the following information:

- i. Item name
  - ii. Order date
  - iii. Order time
  - iv. Item quantity and stock on hand
  - v. Item quantity and stock received
  - vi. Re-order level
  - vii. Re-order level
- Opening and closing balance

**9 Reporting**

9.1 At the end of each month, the various branch managers must submit a report to the main branch Deputy Manager, Operations manager, detailing the following:

9.1 At the end of each month, the various branch managers must submit a report to the main branch Deputy Manager, Operations manager, detailing the following:

**10 Policy Approval**

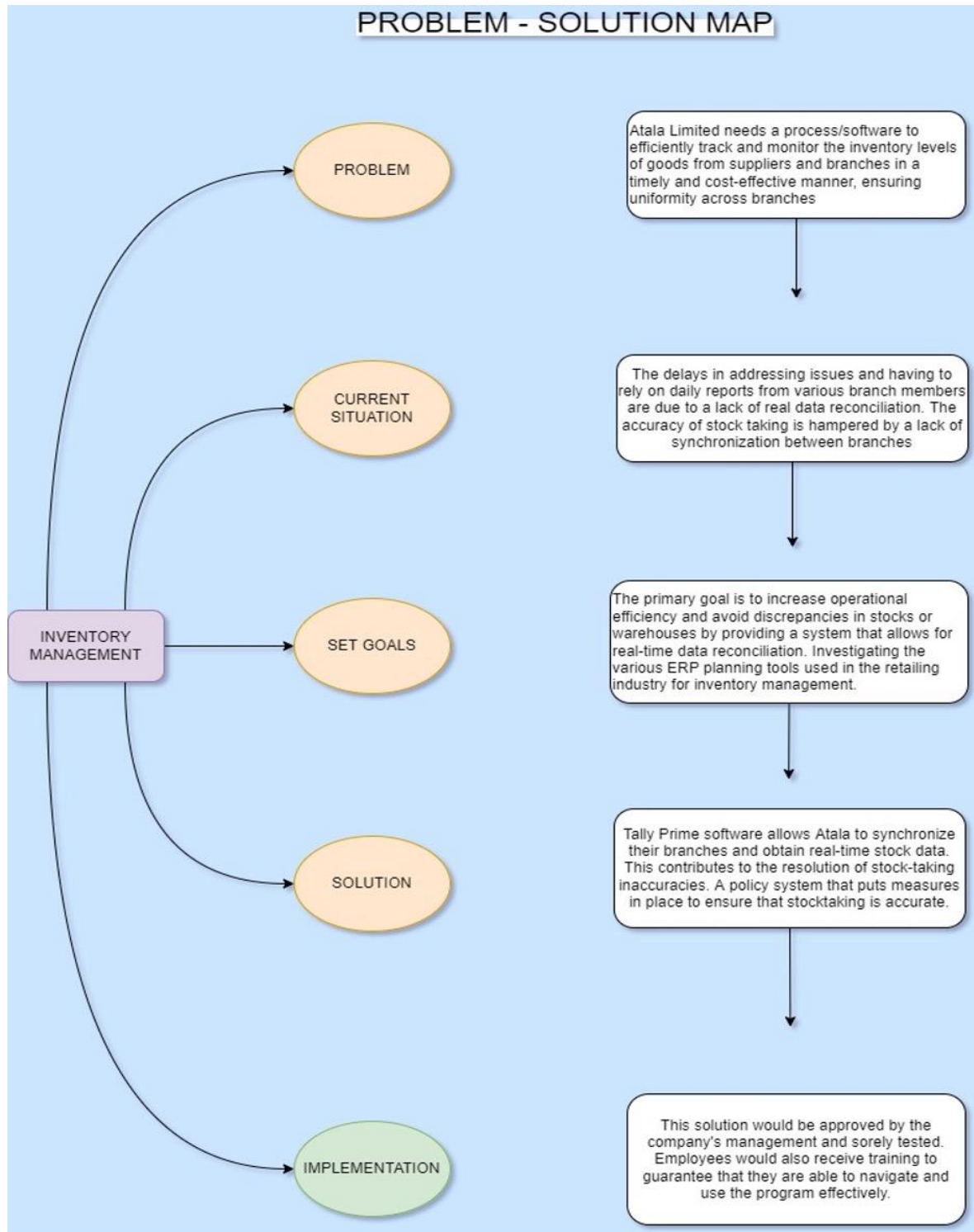
This policy was approved by the Deputy Manager of Atala .....

Dated : (d/m/y) .....

Will be effective from this day onwards until the next review.



Figure 3- Problem-Solution Map



## 6.0 Conclusion and Recommendation

Inventory management is a multifaceted topic that does not exist in isolation in the business processes. During the discussions with the team advisor and various stakeholders, valuable insights were gained. The need to understand the industry in which Atala Limited operates extended beyond the construction industry, which was the initial focus of this project, to include the supply chain and logistics industries. The paper discussed the importance of understanding the internal operations and processes at Atala Limited, as well as the company's current methods. The team visited Atala and conducted observational research with the current system in use, all in order to gain a thorough understanding of its operation. Following data analysis, key problem areas within the organization were identified, which were related to the lack of real-time data reconciliation. Adopting Tally Prime Software, TSS, and inventory management policies into day-to-day operations, according to the team's recommendations, will aid in combating inventory management control issues.

Since Tally Prime will be implemented on a cloud server, the organization will need to invest in good internet connectivity to ensure effective branch synchronization. Thus, the company should invest in building branches within areas of good connectivity as this also aligns with their goals as an organization. The software may also increase in price over the years due to inflation and currency fluctuations. They must make sure that all the branches have good computer devices as well in order to fully utilize the system. The company would have to take time to educate the employees on the policies they want to put in place. This would help the easy adoption of the policies. This software, together with the policies, if implemented, would help the company flourish.

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## Appendix

Policy cost benefit analysis

Cost	Amount
Printing	200
Wastage of working hours (maintaining and answering questions on the policies)	800
<b>Total</b>	<b>1000</b>
Benefits	
Tasks are understandable	2000
Increased productivity	7000
Reduce waste of time in decision making	9000
Increase of accountability	4500
Enhanced efficiency	10000
<b>Total</b>	<b>32500</b>

## Tally Prime cost benefit analysis

Cost	Amount
System training	1000
Sever system	2000
Software license	5309.82
Software maintenance cost	3000
Software	
<b>Total</b>	<b>11309.82</b>
Benefits	
Workflow efficiencies	9000
Enhanced productivity	8000
Higher quality database	4000
Client/customer satisfaction	10000
<b>Total</b>	<b>31000</b>