

Report On
*Impact of critical success factors and challenges on the adoption of Lean
tools and techniques in Accenture Footwear & Leather Products Ltd.*

By

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An internship report submitted to the Procurement & Supply Management in partial fulfillment of
the requirements for the degree of
Masters in Procurement & Supply Management

Procurement & Supply Management
Brac University
March 2019

Declaration

I affirm that:

1. The internship report I've presented is entirely my own creation during my time studying at Brac University.
2. The content of the report is solely composed by me and does not include any previously published material or work from any other author, unless properly referenced and credited.
3. None of the content within this report has been used for or submitted to any other academic program or institution for a degree or diploma.
4. I have duly acknowledged all significant sources of assistance and support utilized in the preparation of this report.

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Letter of Transmittal

26-09-2024

Md. Rashed Morshed
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Subject: Letter of Transmittal

Dear Sir,

Enclosed is my report titled "Implementation of Lean Tools & Techniques Affected by Critical Success Factors and Challenges of Lean in Accenture Footwear & Leather Products Ltd."

I have endeavored to complete the report with the necessary information and recommended suggestions in a concise and comprehensive manner to the best of my ability.

I am confident that the report will meet the expectations.

Yours sincerely,

Nasarul Alam Nasib
ID: 17182001
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Non-Disclosure Agreement

[This page serves as a Non-Disclosure Agreement between the Company and the Student.]

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Abstract

The core principle of the Lean philosophy is the elimination of waste from operational systems. The objective of this research is to examine the application of Lean principles and practices in the manufacturing industry, concentrating on Lean methodologies and techniques. Additionally, it seeks to identify the key factors that contribute to the success of the adoption of Lean and the obstacles that arise during its execution. For a better understanding of Lean methodology's applicability and efficacy in manufacturing, the relevant research literature was reviewed in depth. It has been observed that in service contexts, as opposed to production settings, it is frequently more difficult to detect wasteful, non-value-added activities. Nevertheless, there are common types of waste in both industries, including motion, overproduction, overprocessing, waiting, inventory, overprocessing and transportation. These seven forms of process waste can be addressed and eliminated using a variety of well-known Lean tools and methodologies. The five S's, value stream mapping, visual management, red tag approaches, kanban, value stream analysis process mapping and have all received a lot of attention in healthcare settings. In order to fully grasp how Lean principles might be applied in service contexts, particularly in manufacturing settings, a thorough literature review was undertaken. A comprehensive examination of various scholarly sources was conducted in order to identify pivotal success factors and obstacles associated with the implementation of Lean principles in the manufacturing sector. Additionally, a comparative analysis of secondary data obtained from factories concerning the advantages and implementation of Lean practices was incorporated into the study. Theoretical Lean tool outcomes were assessed in relation to practical inquiries conducted at Accenture Footwear & Leather Products Ltd. The report employs a case study methodology, which is consistent with the research philosophies of constructivism and interpretivism. Data was collected from Accenture Footwear & Leather Products Ltd. utilizing qualitative methodologies, which encompassed semi-structured interviews and observations. The processes of the current production department were analyzed in light of the interview results. Thereafter, pertinent Lean techniques and tools were suggested in order to optimize efficiency and reduce inefficiencies. The results of the study validate the viability of incorporating Lean principles into the manufacturing division. A multitude of non-value-added activities have been detected in existing processes, underscoring the criticality of their elimination. Following this, a proposal is put forth to streamline and standardize procedures with the objective of improving work efficiency and patient contentment within the rheumatology division. After conducting an analysis of the data, the researchers offer suggestions for the implementation of Lean principles, emphasizing particular Lean tools and techniques that are suitable for Accenture Footwear & Leather Products Ltd.

Keywords: Lean Manufacturing, Lean in Production, Lean Tools and Techniques, Critical Success Factors of Lean implementation, Challenges of Lean implementation, Process improvement

Acknowledgment

I extend my heartfelt gratitude to the individuals who provided continuous encouragement, assistance, and support throughout the completion of this study.

Firstly, I am immensely thankful to my supervisor, Sir Md. Rashed Morshed, for his invaluable guidance and unwavering support throughout the thesis process. Without his assistance, this study would not have been possible.

I am indebted to the Production department at Accenture Footwear & Leather Products Ltd for their cooperation, which made this report achievable. My sincere appreciation goes to the General Manager, Mr. Tahmidul Haque Stalin, whose interest in my topic and willingness to assist were instrumental in the success of this study.

Special thanks are extended to my MPSM friends and the staff of Accenture Footwear, whose presence brought joy and positivity to our research journey.

Lastly, I express my deepest gratitude to my family, loved ones, and friends for their unwavering support and encouragement throughout my master's program and this research endeavor.

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Chapter 1: INTRODUCTION

- For this report, a comparative study utilizing secondary data from various industries was conducted. The findings would be more robust, nevertheless, if secondary data for industries provided more specifics regarding the steps taken to implement Lean. This is due to the fact that the majority of these publications emphasize waiting time reduction, financial savings, and other benefits.
- The method of recording data was used for data collecting. However, because the interview period for this research was rather lengthy in certain circumstances, the interviewer was unable to properly utilize related strategy to make the interview un-interrupted.

1.1 Background of the Study

In today's rapidly evolving world, management practices are undergoing swift transformations, exerting significant influence on businesses and their managers alike (Burnes, 2004). Organizations are increasingly striving to decentralize their structures and depart from traditional policies, employing a variety of strategic change tools to enhance operational efficiency (Burnes, 2004; Kotter, 2007). Many firms are adopting Lean as a strategy to strengthen their position as they struggle to respond to the pressures of the market and stay competitive. By locating waste and lowering operating expenses, lean stands as one of the quality improvement strategies adopted by firms to enhance organizational performance. The successful application of Lean is said to have potential benefits for businesses. Lean system, for instance, can assist sustain long-term satisfaction of the customers (Maleyeff, 2006).

According to the literature, the Lean tool has gained popularity as a result of the effectiveness displayed by Japanese manufacturing companies (Womack, Jones & Roos, 1990, p. 188). By recognizing several types of waste inside the manufacturing chain, Toyota executives "Mr. Kiichiro Toyoda and Mr. Taiichi Ihno" originally established the concept of Lean (Black & Miller, 2008, p. 4). Today, nevertheless, it has developed into a management strategy to enhance all processes throughout the sector (Taleghani, 2010). The significance of service operations in the global economy is growing due to the escalating requirement and interest in superior services (Frozen Food Digest, 2002; Bowen & Youngdahl, 1998). Customer service is enhanced as a result of a 30% increase in employee productivity resulting from lean implementation (The Staff of the Corporate Executive Board, 2010). However, despite this, companies are failing to deliver exceptional services to their customers (Piercy & Rich, 2009).

The primary objective of this study is to examine and gain a comprehensive understanding of the Lean implementation methodology within the hospitality sector, with a specific emphasis on

Accenture Footwear & Leather Products Ltd. To fill in this void in knowledge. The researchers will provide assistance in understanding Lean methodologies and tools within this particular framework, along with the challenges and obstacles that arise during their implementation. Drawing upon a comprehension of Lean principles, this study posits a number of Lean tools and techniques with the intention of augmenting process efficiency in the manufacturing industry. The following recommendations have been formulated after conducting an extensive literature review and conducting meticulous analyses of the production department processes at Accenture Footwear & Leather Products Ltd.

1.2 Report Question

Academic research on lean has generally concentrated on production and how it affects business performance and process improvement; however, the service sector's adoption process has received very little attention. Consequently, the following inquiries have been developed:

"How is the application of Lean methods and techniques impacted by important success factors and challenges of Lean in Accenture Footwear & Leather Products Ltd.?" Upon a comprehensive understanding of Lean tools, critical success factors (CSFs), techniques, challenges, and benefits gleaned from a literature review, the report will be aligned with empirical data from the Production department at Accenture Footwear & Leather Products Ltd. This alignment aims to elucidate potential process enhancements achievable through Lean methodologies.

1.3 Objectives of the Study

The instance of the Production department at Accenture Footwear & Leather Products Ltd. will be examined in this study. The research is conducted with the following aims in mind:

- Acquire knowledge of the Lean methodologies and tools applicable to the service sector.
- To analyze and contrast successful Lean implementation strategies that have been applied in the manufacturing sector, with the aim of comprehending how the concept of Lean can contribute to ongoing enhancements.
- To identify CSFs and challenges that organizations face during the Lean implementation process.
- To correlate the literature review findings with the actual investigation conducted by AFLPL's Production department.
- To suggest suitable Lean methods and techniques relevant to various Service sectors, including Accenture Footwear & Leather Products Ltd.'s Production department, to streamline and systematize the working process.

1.4 Explanations of Key Concepts

It is important to note the definitions of the different concepts employed in the research. Consequently, the key ideas are explained below.

- **Lean Production**

Lean production is a theory that was developed in response to Toyota Motor Corporation's success (Womack et al., 1990, p. 67), to use less resources than a mass manufacturing method. Additionally, Emiliani (1998) concurs that the goal of lean production is to cut back on non-value-added operations to save resources. Through the process of integrating the entire firm, the use of agile manufacturing was extended beyond shop floor procedures to encompass all industrial functions (Kollberg, Dahlgaard & Brehmer, 2006).

- **Lean Thinking**

Lean thinking focuses on producing results with the least amount of waste possible. It develops when businesses run with a culture of listening and thinking, with process design being established by employees who provide goods or services (Atkinson, 2004). Organizations should share the benefits of implementing Lean thinking to foster this mindset. They should also continuously look for waste, keep an eye on the flow, and prioritize client happiness (Melton, 2005).

- **Lean Services**

Lean services aim to increase efficiency by removing waste from service processes. Although waste in services can be both tangible and intangible, managing the latter is more difficult because it is more difficult to recognize. Lean service has produced successful outcomes in the areas of retail, aviation, healthcare, and finance (Piercy & Rich, 2009). It is crucial for top management to give employees more power and autonomy when it comes to making decisions about improving processes within their own job domains. This empowerment should follow the implementation of Lean methodologies in services, with a focus on altering employee behaviors and attitudes. (Maleyeff, 2006).

- **Waste**

Waste is any action that doesn't bring value to the business beyond the bare minimum of personnel, parts, and equipment (Slack, Chambers & Johnston, 2007, p. 465; Bicheno, 2004, p. 15). Similarly, to this, George (2004, p. 28) defines waste as everything that costs time, money, or labor yet is not valuable to customers. Waste happens as a result of how organizational systems are designed to work. Furthermore, there is no conclusion to the quest for waste in enterprises (Emiliani, 1998).

- **Value-Added Activities**

Value-added activities offer value from the client's standpoint and for which they are prepared to pay, according to George (2004, p. 28). Customers cannot do these tasks on their own or without spending

a significant amount of time and money (Maleyeff, 2006). Only the customers themselves can determine value-added activities (Kollberg et al., 2006).

Non-value-added activities: Tasks that do not benefit the customers and for which they are unwilling to pay; as a result, they ought to be abolished (George, 2004, p. 28). These tasks are viewed as wasteful since they are carried out as a result of the current organizational setup (Maleyeff, 2006).

Chapter 2 FINDINGS AND DISCUSSION

This chapter examines the analysis of empirical data gathered from informal conversations and observation. To achieve the goals of the research, researchers examined the data. The findings from this analysis and a discussion of how Accenture Footwear & Leather Products Ltd.'s production department can use Lean tools and techniques are offered. Three sections make up this section. The backdrop is given in the first section. Accenture Leather & Footwear Ltd. The researchers talk about the adoption of 5S and process mapping in the second phase of their study on Lean. The benefits, drawbacks, and CSFs of implementing Lean in the Production department at UCKK are also examined.

2.1 Background of Accenture Footwear & Leather Products Ltd

Accenture Footwear & Leather Items Ltd (AFLPL) was founded to build a business that offered excellent value products to both retailers and customers. The company was founded because of market demand for high-quality leather, leather, and PU products.

AFLPL has been servicing its clients from all over the world with pride. With the support of a team of enthusiastic and knowledgeable employees, AFLPL has transformed the market with its innovative work. We employ genuine leather, polyurethane leather, a combination of the two, and other materials to create high-quality leather goods. The pleasure of our customers, both before and after the sale, is very important to us.

The goal of this organization is to consistently innovate and be passionate about handcrafted leather goods that are both fashionable and durable. The business supplies and exports designer collections, which are altering market trends. The AFLPL Team is inspired to introduce a cutting-edge variety of items with quality as its defining characteristic under the direction of fashion authorities and designers from all around the world. In a relatively short period, the business has gained the respect and approval of numerous companies, like Zara, Puma, and Barshka, to name a few. We are currently exporting our top-notch goods to a wide range of nations.

2.2 Lean Implementation

2.2.1 Challenges and obstacles faced when applying Lean methodology in the production area of Accenture Footwear & Leather Products Ltd

I will present the findings from the interview guide's CSF questions and implementation of quality practices difficulties in sections E and F in this section. Additionally, based on the observation and interviews, prospective CSFs and problems for the implementation of Lean have been identified.

2.2.1.1 Analysis of CSF's and obstacles to implementing quality procedures based on AFLPL Production's personnel

I asked the Chief of Production, a Specialist, and a Supervisor to rank the CSFs and obstacles to implementing quality in the factory. Based on a literature review, five criteria were chosen. Their responses were based on their prior knowledge of quality initiatives used in manufacturing environments.

Table 1 provides an overview of the outcomes for CSFs and difficulties. This demonstrates that top management engagement is the most significant CSF, and the results demonstrate that the main issue is identifying non-value-added operations. The data analysis results for CSFs and difficulties are consistent with what the literature recommended.

“Implementing Lean in the current environment poses significant challenges, as it requires raising awareness of the concept across all factories. Additionally, there is a need to engage with the Ministry of Industrialization to establish regulations on working conditions, which is essential for improving the functionality of manufacturing institutions.” (Assertion 1)

"Senior management support for quality practices is difficult to obtain because of the production department's myriad issues. This is a result of the AFL's chronic underinvestment in even necessities. (Assertion No. 3)

These interviews imply that financial constraints may make Lean implementation in the AFLPL now impractical. Researchers are hopeful that some of the less expensive features of lean that were suggested in this study could be implemented right away. This would be the initial step in streamlining the department's procedures. Lean may also be used more extensively in the future if AFLPL resolves the issue of insufficient funding.

Table 1: CSF's and Challenges results from AFLPL Staff perspective

CSFs' criteria	% of Total Score	Challenges' criteria	% of Total Score
<i>Top Management Involvement</i>	27%	<i>Non-value-added activities</i>	31%
Linking to overall Factory strategy	22%	<i>Resistance to change</i>	24%
Building trust within the organization	11%	Forecasting the demand of production services	7%
<i>Effective Communication</i>	24%	Standard documentation	22%
customer involvement	16%	Employee empowerment	16%
Total	100%	Total	100%

Source: Developed the authors based on interviews

2.2.1.2 Discussion in CSF's and Challenges for AFLPL on Lean Implementation based on Analysis

The literature review's understanding of CSFs and obstacles offered a solid foundation for the research, while several factors were generalized across other fields and organizations. The department will be able to use some of the suggested Lean tools and procedures because i was able to identify and interpret some of the special problems and distinctive CSFs relating to AFLPL.

CSF's

- Management acceptance of the need for Lean: Lean adoption is impossible without management support. This is because Lean will call for several modifications in the AFLPL's processes, some of which may take time. Equipment purchases and employee training are also necessary. Only with managerial assistance would these improvements be possible. However, gaining management support requires both accepting the need for change and appreciating the advantages of lean.

Challenges

- Staff resistance to change: Through observation and interviews, i was able to conclude that the department's personnel have a very low motivation level. Low pay and poor working conditions are the main contributing factors. Lean implementation will call for certain adjustments to existing processes, but only with the staff's cooperation. As a result, while promoting change inside an organization where staff members lack motivation, is likely to spark resistance to change. It will take more time and effort.

2.2.2 5S Implementation within the AFLPL Production department

A Lean consultant who collaborated with us in the Production department mentioned that while previously advising customers to ensure their factories were well-organized and orderly, his perspective shifted after experiencing work within a factory firsthand. (Fillingham, 2007)

2.2.2.1 Findings on Current State for 5S

I developed the interview questions with a clear understanding of the theoretical features of 5S from the literature review to distinctly identify the present process within the production department. Questions about 5S tools are included in sections B and C of the interview guide to help candidates grasp the production department's current workflow.

• Sort

Distinguish between essential and non-essential elements (Black & Miller, 2008, p. 54). Whether or whether the staff separates the relevant papers and objects from the unneeded ones is important to grasp while examining the manufacturing department's processes. Additionally, it is useful to identify any non-functioning items that may be present near the allocated work locations.

The employee noted that the small office contains numerous files that lack proper organization. These files should ideally be categorized into products patterns, documentation of severe product histories, and annual projects for scientific publications related to buyer experiences. (Interview 1)

According to information from interviewers and what I saw, there were extraneous materials including books, journals, and a broken computer lying around the workspace. Staff members have to spend a lot of time sorting and organizing the objects on the desk.

• Clarify

“Establish a designated location for every item.” (Black & Miller, 2008, p. 54). The relating to "Simplify" questions can be used to determine whether or not staff members follow procedures for placing frequently used items or significant equipment in the proper locations. A product list pad, material list pad, and other items will frequently be needed.

“The information on item documentation is handwritten, making it exceedingly difficult to locate. The file that production companies obtain from product merchandisers is the most accurate source, according to this statement. The merchandiser archive, which is once quieter difficult to locate, contains product files for the current order document. To help the personnel access the information more easily, production concerns should state the date they first entered the factory. This occurs as a result of computer software lacking a database where buyers could input their product information”. (Interview 2)

I get the conclusion that the production department does not adopt "simple" within the working areas based on the interviews and observation. In factories, the history of products' information is crucial, but researchers discovered labelling of information or arranging them were not proper.

• Sweep

According to Black and Miller (2008), "manage the workspace physically and visually" (p. 54). This will facilitate the assessment of whether the department maintains a tidy and organized work environment. Employees at factory need to be aware of hygiene and cleanliness because improper care might lead to infections or illnesses. "The lone cleaner is unable to perform frequent cleanings of everything". (Interview 4)

"We only need gloves when we spray dye on objects that may contain diseases that are regarded as contagious; otherwise, we don't need to use them when sewing, applying glue, or assembling products. However, we routinely wash and sanitize our hands." (First Interview)

"It is my responsibility, along with that of the production director and the chief supervisor, to make sure that everything is well cleaned to prevent any waste that would irritate customs. AFLPL performs expert sanitary inspections regularly in addition to this". (Interview 1)

Based on information gathered from interviews and observations, it is evident that personnel are knowledgeable about disinfection procedures and conscientiously adhere to cleanliness standards while delivering care. However, to maintain organizational cleanliness, the department requires an additional cleaner.

• Standardize

"Document agreements made throughout earlier steps" (Black & Miller, 2008, p. 54). Establishing a standard operating procedure for routine tasks is crucial to ensuring that everyone follows it and that the process is consistent. When it comes to maintenance, patient admission procedures, and other workplace operations, this may be the most effective procedure to follow or the standard procedure. This section will make it easier to comprehend the procedure used by the department to provide a standardized working environment.

"Notes posted on the room doors inform the workers of the factory's procedures. There is no discount or other convenience measure available, therefore people must wait their turn if there is a line". (Interview 4)

Based on observations and interviews, it was determined that certain procedures are standardized, such as giving customers information by writing it down in a notebook. Nonetheless, scholars assert that additional standardization of certain procedures can result in a more rapid work environment.

• Self Control

"Follow through on every 5S agreement" (Black & Miller, 2008, p. 54).

To maintain productivity gains, the five 5S components—Sort, Simplify, Sweep, and Standardize—must be implemented.

Customers can express their complaints in a box that is available (Interview 1).

It is challenging to analyze this aspect of 5S in the context of the current process because the rheumatology department does not yet implement any Lean methods. Researchers do, however, work to determine whether the department makes any efforts to raise its performance, such as by listening to patient input. Additionally, there exists a designated complaint mailbox available for customers to register their dissatisfaction, they are not asked for comments. Before implementing 5S, Table 2 outlined the present procedure.

Table 2: Figuring out current process before 5S

5S	Figuring out current process before 5S implementation
Sort	• A dysfunctional table has not been promptly restored. • The work space is cluttered with books and dysfunctional computers. • The compact workplace is filled with a multitude of disorganized documents. • The lack of sufficient space and absence of a designated secretary has resulted in inadequate organization of materials from prior years within the files.
Simplicity	• There are insufficient cupboards to properly classify files. • Material documents are difficult to locate as information is handwritten for material receipts. • In the Production department, materials are stored in the warehouse, but the storekeeper needs to provide dates to facilitate easier retrieval of information.
Sweep	• There is only one cleaner for the entire department. • The Chief of the Production Department and the main supervisor are tasked with ensuring cleanliness to prevent infections that could affect patient satisfaction. Additionally, the department receives frequent visits from professional sanitary inspectors from AFLPL.
Standardize	• Workers are informed about factory processes through notes posted on room doors. In cases of waiting lines, workers wait for their turn without any coupons or facilitative measures in place to streamline the process.
Self-discipline	• There is only a complaints box available for workers and buyers to share their grievances.

2.2.2.2 Analyzation of 5S Proposed State

The method for implementing 5S within the department is covered in this section. Additionally, given an understanding of the production department at AFLPL, academics have attempted to provide practical and useful tools.

Since this department is only recently learning about Lean theory, it is best to hold off on using it heavily at first because doing so would result in an unsuccessful implementation of Lean. Consequently, academics have only proposed a limited number of practical and straightforward ways and procedures to initiate the development of a framework of Lean within the division.

• Simplify and Sort

Although IT has advanced greatly to serve many industries, the healthcare industry still lags in using modern technology to manage administrative tasks (The Economist, 2005, cited in Natarajan, 2006). Intriguingly, hospitals are not making the best use of 5S, one of the key tools that will assist to organize, streamline, and eliminate waste in the workplace. These are some methods that have been suggested for use by the Production department in implementing the 2S.

-Use red labeling to identify broken items: Based on a literature assessment of this technique, we believe this will help identify broken items and equipment. Staff will place a red tag with a brief description of the issue if, for example, specific equipment isn't functioning or extra books are causing a pile-up around the workplace. To categorize and indicate the appropriate symbol, tagging can be done using various colors.

It is imperative that every employee in the department comply with this policy in their designated work areas. Furthermore, should they happen upon any disorganized items beyond their division, they might consistently notify the inspection team responsible for examining this protocol.

Green: Valuable, but either misplaced or unrelated to that division

Yellow: Indicates that an object, such as a computer or piece of equipment, is broken

Red: Symbol for discarded or superfluous objects.

- Investment in Computers and IT Systems: I found that customers data is not appropriately organized after reviewing departmental processes. By investing in computers and IT systems, personnel would spend less time looking for and creating customers reports because the relevant documentation would be filed in the right sequence. Additionally, the information should be stored electronically from the time a customer registers to the time they are visited so that factory owners & merchandisers can access it when needed during customers or Buyer visits.

- Visual supply management: There are some materials supplies and other daily supplies in the manufacturing department. Researchers advise using visual management to make it simpler to identify these resources. Let's say that there are hand gloves. To save employees time searching for it, a picture may be placed in front of it. The supplies for the materials can likewise be used in this way.

- **Sweep**

According to Liker and Meier (2006, p. 64), individuals who are not familiar with 5S mistakenly believe that it is solely a tool for cleaning the workplace. The use of the 4S methodology leads to a working environment that is free from any unnecessary or wasteful activities. Additionally, the "sweep" aspect of the methodology guarantees that the area is consistently clean, organized, and free from any unnecessary clutter. By utilizing the "Sort" and "Simplify" tools as recommended, the working environment will become meticulously arranged, resulting in a more efficient and effortless cleaning and maintenance process for the cleaners. Researchers also posit that the staff is already cognizant of hygiene and cleanliness but they recommend recruiting supplementary janitors to augment these circumstances.

- **Standardize**

One common instrument tray for each of the 12 workers manufacturing various shoe parts in the Virginia Mason Shoe Factory resulted in a \$950 cost reduction (Connolly, 2005). Standardization can reduce costs and boost worker productivity because there will be no confusion and the process will be the same. We saw that some processes ought to be standardized, even in the production department.

- **Visual management at the front desk area:** Customers will receive a coupon with a numerical identifier at the reception desk and then wait in the designated waiting area until it is their turn. Exactly at the appropriate moment. On a first-come, first-served basis, reception can offer services in this fashion. Everyone will understand the procedure, and it will aid the manufacturing and merchandiser departments in organizing and working effectively.

-**Standardize processes with labeling:** Labeling can help standardize processes by assigning specified areas for products to be separated according to work processes. Production departments can use labels to do this. Researchers recommend adopting a system in the reception area that includes different trays for crucial paperwork. One tray should be designated for customer forms that have already been approved and are awaiting pickup, while another tray should be used for documents that require urgent processing. This can also be utilized in combination with a color coding system to display an indicator with a specific color.

- **Self-discipline**

According to Liker and Meier (2006, p. 64), developing the discipline to stick to these process improvements and cultivating Lean thinking while at work is essential for maintaining the benefits of Lean. The only method to instill discipline in the Lean style of thinking is to comprehend the tools similarly to how the following example is given. "A skilled mechanic does not first find a nut to loosen before bringing a wrench to the vehicle. He first ascertains the nature of the issue, and what has to be done to resolve it, and then chooses the best instruments for the task (Liker & Meier, 2006, p. 82). Researchers recommend these points inside the department to make sure that after adoption,

staff members will adhere to the 4Ss in their work process.

- **Educate and empower employees to change processes:** According to the literature analysis, employee involvement is a vital CSF, and getting top management's cooperation early on is essential for Lean implementation. The management should empower the workers to make improvements by explaining the advantages of lean to them. This will enable the department to practice self-control.
- **Incorporate Lean as a criterion for evaluating staff performance:** Lean can also be used as a criterion for evaluating staff performance. Additionally, it will guarantee that self-discipline will last.
- **Customer feedback:** It is important to ask customers for their opinions after the production is finished so that the department can better understand their experiences. Finding a place where Lean can be used or further developed will also be made easier with this.
- **Establish a Lean Audit Team:** A Lean Audit Team should consist of a minimum of two and a maximum of three personnel. This team will thoroughly assess every aspect of the organization to ensure strict adherence to Lean principles and promptly address any instances of non-compliance.

Table 3: Implementing 5S to Enhance Existing Processes

5S Proposed process improvement with 5S implementation

Sort and Simplify	1. Utilize red-tagging methods to organize items and equipment effectively. 2. Enhance computer systems and IT infrastructure. 3. Implement visual management techniques for supply organization.
Sweep	1. Hiring Another Cleaner
Standardize	1. Apply visual management techniques in the welcome area. 2. Implement standardized procedures by employing efficient labeling techniques.
Self-discipline	1. Provide education and empowerment to staff for process improvement initiatives. 2. Incorporate Lean principles into performance evaluations. 3. Gather feedback from patients. 4. Establish a Lean audit team.

Chapter 3 CONCLUSION AND RECOMMENDATIONS

The final chapter of this research project will consist of four sections. The initial segment, labeled "Conclusions," will furnish a fundamental synopsis of the investigation and present conclusions pertaining to the research subject. The second section will offer suggestions for further advancements to be made within AFLPL. The third portion will address the study's weaknesses, while the fourth section will outline additional areas that could benefit from improvement.

3.1 Conclusion

3.1.1 Overview of the Study

The adoption of Lean services enables companies to eliminate waste from their systems, facilitating the smooth operation of value-added processes. While Lean principles are applicable to both manufacturing and service sectors, their full potential in production settings remains untapped. It is imperative to implement Lean methodologies in production environments, particularly within the manufacturing sector, where the prospects for success are significant.

This analysis suggests that implementing Lean in the industrial industry may not always be as challenging as perceived. Unique issues arise due to the involvement of people rather than just equipment. However, the proven success of Lean and ongoing discussions about its applicability in various peer-reviewed journals suggest that deployment may be simpler in manufacturing than in services. Based on the results of the literature review on implementing Lean services and empirical data from AFLPL, I offer the following conclusions.

Implementing Lean tools and procedures in production environments was the primary research goal, along with understanding the CSFs, difficulties, and advantages that come along with it. A detailed investigation was conducted to comprehend the implications of the theoretical parts of Lean service to achieve this goal. These six crucial topics, including CSFs, the difficulties and rewards of implementing lean, along with lean tools and methodologies, a comparison of lean in factories, and lean criticisms, were covered in the literature review.

To address the research topic, a reporting framework was developed, employing a case study report methodology for the Production department of AFLPL. Qualitative data was gathered through five semi-structured interviews and observations. A comprehensive analysis and discussion were conducted utilizing the interview data. Upon evaluating the current procedures and practices within the production department of AFLPL, Lean service tools and methods from the literature research were recommended. These include process mapping, red tagging, 5S and visual management. However, it is suggested that red flagging, visual management, and other 5S techniques may be implemented in the near future, contingent upon additional investments in Accenture Footwear & Leather Products Ltd.

3.1.2 Final thoughts on the report query

The study's purpose was to address the following research question: "How is the application of Lean methods and techniques impacted by important success factors and challenges of Lean in Accenture Footwear & Leather Products Ltd.?"

I conclude that firms must select Lean tools and approaches that are appropriate for their particular business. Some Lean technologies and techniques, including process mapping, fishbone diagrams, value stream mapping, red tag procedures, visual management, 5S and Kanban and have proven effective in the products manufacturing industry.

After conducting a thorough analysis of various factories, I have discovered several approaches that would be well-suited for the production department of AFLPL. These include process mapping, 5S, red tag methodologies and visual management. To facilitate the implementation of Lean tools and approaches, I developed an interview guide to gain insights into the processes within the Production department. Based on data analysis, I advocate for the adoption of these Lean methods and approaches at AFLPL to enhance processes. The primary findings of critical success factors (CSFs) and challenges from empirical data align with previous research. I support the conclusion that top management involvement is the primary CSF, and non-value-added procedures are the primary challenge. Additionally, I highlight several benefits that the production department at AFLPL may gain from implementing Lean methodologies.

The outcomes demonstrate that AFLPL's Production department can successfully apply Lean in the future. This study concludes that Lean can be implemented in any service business and that CSFs and challenges do have an impact on the process. It offers solutions for effective execution to foster the advantages. Some advantages were noted, including shorter wait times, less stress for staff, happier customers, and more revenue for organizations. The proposed framework is put into practice in a lean manner, which helped to give a practical framework for this study.

I also concluded that the manufacturing of goods sector has to adopt lean. Lean is not well-liked in part because the terms are not well-known, and it is also a niche topic in the business and management world. I was surprised to find that, even in factories embracing Lean, there are instances where staff are not familiar with the concept. Although lean tools and approaches are similar to those used in other management theories, they have a lot of potential for adoption in all types of organizations shortly.

3.2 Recommendations

I provide recommendations to the production department at AFLPL on how to utilize Lean principles to achieve ongoing enhancements. These proposals are derived from my investigations, assessments, and literature review, with a special focus on the comparative analysis of manufacturers that embraced Lean as discussed in Chapter 2. However, in Chapter 2 of the findings and discussion, i presented the results of the current processes in the production department and analyzed the future processes by stressing the advantages of Lean.

Based on the current process and the proposed subsequent procedure discussed in the manufacturing section, it is evident that implementing Lean methodologies will lead to significant improvements. In the interim, we compiled a few Lean implementation suggestions that might work in any hospital.

- **Create a sense of necessity**

By creating a sense of necessity for the implementation of Lean, top management should affect the attitudes and behaviors of employees. This could be done by outlining the issues with the process and communicating them explicitly, as well as by emphasizing its advantages by highlighting waste reduction and value-added activities.

- **Develop a method of thinking lean**

One way to achieve this is by organizing a training session for the employees to familiarize them with the Lean techniques and practices. This would assist in formulating an eventual Lean approach to the factory. All staff would be involved from the start of the Lean thinking process as a result of this as well.

- **Adhere to the "Buyer First" vision**

Production services should be of higher quality, and factories should pay more attention to their customers by putting their needs first at all times. Staff must be fully dedicated to doing this. Factories can develop a culture of the vision of putting customers first in this way.

- **Improve employee inspiration**

Motivated personnel are necessary for the implementation of lean since they will improve factory productivity and foster creativity. Most of the time, giving incentives to workers will motivate them. In order to accomplish this, the department should implement an employee recognition program, such as an "Employee of the Month" award, with the aim of enhancing teamwork and motivation among the staff. Additionally, by receiving a certificate from the industry, this might be transformed into an employee of the year. In addition, before the shipment of their purchases, customers ought to be given the chance to send a "Thank You" note to the employees who have been the most helpful to them throughout the course of production or their employment with the company.

- **Implement Lean methods and tools**

The 5S Lean technique would be utilized to analyze the workplace processes, allowing factories to implement cost-effective innovations. In order to enhance the appearance of management, it would be beneficial to have vouchers for both the suppliers and materials, along with customers waiting in the lobby. Process mapping is another useful Lean tool for defining processes. To standardize and streamline operations and improve customer satisfaction, it would be beneficial to define each department's role in the lifecycle of a product. To guarantee that waste is not piling up and improvements are made consistently, these techniques should be adopted and reviewed regularly.

- **Report equipment failures right away**

The personnel have to take this problem more seriously and notify any equipment malfunction as soon as it occurs. That can be accomplished by using the red-tagging approach to indicate the equipment's name, date, location and time of occurrence.

- **The acquisition of computers and establishment of documents**

This is important to improve Factory functionality. It will harmonize the method of recording data for raw materials and making appointments. And control of chemicals. To accomplish this and make the best use of the databases, staff training is crucial. The procedures will be made simpler, increasing patient satisfaction and lessening staff workload.

- **Streamline and standardize the procedures**

Standardization is necessary to make manufacturing processes in factories clear to both customers and staff. These procedures must be streamlined to avoid asking patients for the same information more than once, which will lighten the workload for the staff.

- **Increase the pay of employees**

To improve employees' motivation, which would foster greater creativity and production, it is crucial to raise compensation. We know that every factory expert who was questioned does a second job there to earn extra money. If payment isn't raised, AFLPL won't be able to retain its professional workforce.

- **Increase spending on production infrastructure**

AFLPL should enhance its production infrastructure investment to maintain itself in the face of rising demand for sophisticated facilities and manufacturing tools.

3.3 Limitations of the Study

The report's identified deficiencies include the following:

- ❖ Both the online and warehouse resources are subjected to quality management limits. This is due to the limited availability of scholarly resources. Indeed, the adoption of Lean principles for manufacturing is a relatively recent subject of study.
- ❖ Initially, our objective was to implement and distinguish the outcomes of implementing lean production in industries located in Bangladesh. However, due to

limited time, we could only focus on the implementation in AFLPL, situated in Dhaka.

- ❖ A comparison research was undertaken for this paper, using secondary data from several businesses. The conclusions would be more reliable, however, if additional data for healthcare included more detailed information about the measures taken to execute Lean. This is due to the fact that most of these publications prioritize the importance of reducing waiting time, achieving cost savings, along with other advantages.

The approach employed for data collection involved recording the data. However, due to the extended duration of the interview period in certain cases, the recruiter had no way to effectively employ this method to prevent interruptions during the interview.