Arab American University
Faculty of Graduate Studies

Assessment of Applying Lean Tools in Legal Services: Hussam Attereh Group for Legal Services as a Case study

By
Sewar Qais Abdulhadi

Supervisor
Dr. Nidal Dwaikat

This thesis was submitted in partial fulfillment of the Requirements for the master's degree in Quality Management

Jan- 2021

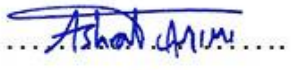
I

Assessment of Applying Lean Tools in Legal Services: Hussam Attereh Group for Legal Services as a Case study

By

Sewar Qais Abdulhadi

This thesis was defended successfully on 2/1/2021 and approved by:

Committee members	Signature
1- Supervisor: Dr. Nidal Dwaikat	
2- Internal Examiner: Dr. Ashraf Al-Mimi	
3- External Examiner: Dr. Yahya Saleh	

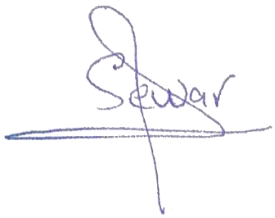
Declaration

I declare that I have developed and written this Master's thesis completely, and it is generated by me as a result of my original thesis and has not been submitted elsewhere for any other degree or qualification. Moreover, I have not used any sources or means without citing them in the text, otherwise, they are referenced.

Name: Sewar Qais Abdulhadi

Date: 2-1-2021

Signature:



Acknowledgment

I would like to confirm my sincere gratitude to **Arab American University** represented by the Faculty of Graduate Studies for the high quality of education that provided me with the required knowledge and tools to accomplish my master thesis. The greatest credit is to my supervisor Dr. **Nidal Dwaikat** for his unlimited support and cooperation until the end of this study. I would also like to pass my deepest thanks and appreciation to **the staff of Hussam Attereh Group** especially the employees of the **Quality Department**, and my deepest appreciation to company partner Mr. **Fahed Attereh** for his support and cooperation that greatly helped in accomplishing this study.

I also sincerely thank my friends **Lara Debes**, **Hiba Arafat**, **Nagham Jadalla** , and **Masa Qamhia** who motivated me to strive toward my goals.

The first and the last gratitude to **my parents** and **family** who taught me to keep pursuing my goals and dreams to the last breathe. At last but not at least, all thanks and appreciation to my friends Miss. **Tharwat Arafat** and Mr. **Sari Taha** for their unlimited support and encouragement.

Sewar Abdulhadi
Nablus, 2020

Abstract

This study is an executive piece of thinking, which seeks to connect the basic concepts of lean and its use in the legal context. All law firms may benefit from understanding lean in aspects of law wherever they come under the process improvement spectrum. Traditionally, the manufacturing sector has followed a lean management approach to enhance operations through the recognition and disposal of all sources of waste. Encouraged by the successful integration of lean principles in service industries, this study provides an investigation into the applicability of lean management principles to improve business operations in Hussam Attereh Group for Legal Services (HAG). To this end, an inductive approach by conducting semi-structured interviews at HAG was followed in this study. Besides, the researcher used the quantitative method based on the SERVEQUAL questionnaire and it distributed to 25 clients of HAG. More specifically, a pertinent literature review was conducted to identify lean management principles and methodologies that might be applicable. The findings of this study show that there is very little literature that discusses the application of lean thinking in the legal service sector. Moreover, this study demonstrates the level of satisfaction of the clients of HAG is high. Although the implementation of lean management is limited to specific processes. VSM can be applied in the service sector as well as the manufacturing sector. The results show that VSM is a very helpful tool to identify the waste and non-added value activities of legal services that couldn't be identified by other tools. Nevertheless, the concept of lean can be implemented in the legal sector in a way that contributes to increasing profit and improving efficiency. It concludes with suggestions for further work.

Keywords: Lean methods, seven type of waste, Value stream mapping, Quality, Service sector, TQM , ISO 9001, Law firms, Efficiency, Performance, Customer satisfaction.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

1.1 Overview

The term ‘’Quality’’ has different meanings for various beneficiaries such as; suppliers, lawyers, employees, and patients, it is agreed that the aim of providing customers with the highest quality is possible. Therefore, how to achieve this goal remains a question that needs answering. Offering the best quality services is a challenging task, particularly for lawyers who face many competitive challenges in today's law firm (Esteban-Ferrer and Tricás 2012). Quality improvement (QI) is an organized process that aims to make a change in the procedure by collecting, analyzing data, and continuing by making some adjustments to reach the desired goal. However, every QI project is different from another but it has the same general principles and challenges of creating effective and sustainable changes.

Many scholars such as Deming, Juran, and Crosby discussed the importance of quality improvement and how businesses are capable of implementing the quality process improvement in each business function, to make sure that every single step in the company is monitored step by step with full accuracy and a care such as quality function deployment. Success begins from inside the company as well as outside in which the customer is a primary component in this process. Therefore, meeting customer’s needs and desires is the main driver to improve the quality of the service/product provided, so that companies aim to gain customer satisfaction (Johnson 2015).

Consequently, companies whether small, medium, or large always try to find ways to improve their processes by implementing process improvement and quality tools. There are many improvement methods and tools used to improve quality, reduce costs, increase

profit, and competitiveness in the market efficiently and effectively. However, each tool has a specific function in the process improvement such as PDCA Cycle, Six Sigma, Lean Management, TQM, VSM, Pareto chart, cause and effect diagram, etc. Moreover, implementing ISO 9001 standards can ensure that companies are meeting the requirements of the quality management system, hence improve their processes. Eventually, implementing such tools can enhance the level of customer satisfaction.

Today, the service sector constitutes the largest proportion of the economy in the world and that's due to the importance of the service sector in the economies of developed and developing countries (Chait and Carraher 2000). This thesis examines the quality improvement processes at HAG since the services it provides, such as consultations and legal advice, constitute an integral part of many aspects of life in Palestine.

There is a very important impact of applying quality improvement processes in legal firms by using improvement methods; however, this also keeps the competition in the market, which leads to achieving efficiencies and effectiveness at work. Moreover, it tells the client that you are listening, achieve lawyer satisfaction, and it promotes teamwork.

1.2 General Background on Hussam Attereh Group for Legal Services (HAG)

HAG is a leading law firm established in 1979 that specializes in representing large Palestinian firms and financial institutions. HAG has broken new ground by becoming the first legal firm in Palestine to have been accredited as ISO9002. The company is dedicating its foreign customer base, ranging from leading international firms and financial corporations to private firms, to offer creative legal advice (Group 2014).

The legal advisors of businesses have foreign expertise and comprehensive knowledge of their clients' business environments. They offer commercially valid, solution-oriented legal counsel, which has given the firm a worldwide reputation for its consistency and reliability. The firm strives to ensure that its clients are offered the highest possible standard of service. This client service goal has been its core objective to provide clients with straightforward and accurate commercial guidance from their lawyers. As a prestigious firm, it represents its clients in its field of interest with intimate and direct attention. Their clients admire their attention to detail and responsiveness.

They are results-oriented like their clients. Their mission is to deliver desired outcomes in a timely and economic way. Quality and efficiency are their key goals. They undertake to offer unsurpassed service. This means aspiring to deliver outcomes that fit the priorities and budgets of their clients. It also represents responsibility for all the needs of its clients. They coordinate with other experts, including accountants, financial consultants, investors, and others so that the expectations and desires of their customers are completely fulfilled.

It is important to consider client desires and expectations. However, today's law firms have to provide a unique combination of legal and market experience with the complexity of industries growing. As an expansion of the law firm's conventional position. HAG analyzes and informs clients on evolving local demands, legal and financial patterns, and provides them with realistic strategies that can be applied to meet those business goals (Group 2014).

1.3 Problem Statement

From a theoretical perspective, lean methods are expected to enhance operational efficiency by streamlining procedures and increasing continuity of processes. Shah and Ward (2007) claimed that Lean bundles provide a significant contribution to plant operational efficiency. Taking this concept a step further, some researchers report that Lean methods favor the whole corporation if shown as a system together (Womack and Jones 1996b). The main point is that reducing defects and inefficiencies in organizational procedures, employing all of the Lean methods, would result in an improvement in the efficiency of the firm (Alsmadi, Almani, and Jerisat 2012). Thus, continuous process improvement using lean principles has been well-developed in literature and practice for manufacturing firms, especially in the automobile industry such as Toyota. However, for service firms especially in Palestine, using lean principles for continuous improvement was not well studied, particularly in the legal service sector. One of these legal service firms is HAG which has uneven workforce distribution that leads to low productivity and inefficiency in the workplace which resulted in wasted material, energy, effort, money, time such as waiting for client approval, waiting for instruction or assignment, waiting for files to arrive. Hence, it has a lack of supervision over staff transportation which costs the company a significant amount of money. The company has a delay in filing lawsuits due to external and internal factors which resulted in a delay to customers that has to lead to having more complaints and impacts on the company's effectiveness and customer satisfaction.

More specifically, HAG encounters the following problems:

1) Lack of staff training on the system

2) Long lead time

3) Non-compliance with work procedures by lawyers

4) Low productivity

5) Overstaffing

6) Wasting time and effort

7) Transportation waste

Therefore, implementing continuous process improvement tools can significantly tackle these issues. Therefore, this study is expected to contribute to the body of knowledge by applying the concept of process improvement at legal services using lean principles by conducting a case study at HAG.

1.4 Importance of the Study

This study provides a deep understanding of quality improvement methodology implementation on critical processes at HAG, where the importance lies in the lack of previous studies that discussed the continuous improvements in law firms in Palestine. Therefore, law firms have to improve their quality service and eliminate waste and variation in their processes to face the high competition in service provided by other legal offices in the market. This study will be a reference for achieving these goals for legal offices and firms in Palestine

HAG five departments for their legal services: Insurance Department, Trademarks, Collection Departments, Banks, and Individuals. Each department must cover its expenses, salaries of its employees and lawyers, in addition to profits so that one section does not affect the others and the loss of any department is borne by the department only.

Recently, the accounting department in HAG discovered that the insurance department is losing; there is no profit from this section. They have seven lawyers in the insurance department which is a large number compared with other departments which usually are comprised of four lawyers each. Additionally, it invests time and effort into lawsuits that do not yield the desired profits in return.

Due to high competition in the market and the new client perception of service quality, a good firm is deemed as the one which recognizes its problems and starts to resolve them. HAG strives to offer the highest quality services in the market. Hence, it has to improve their productivity and offer competitive prices by reducing time and effort, avoiding wasted resources, increasing the quality of the work, offering training for employees, following ISO 9001 as well as improving team communication. These goals can be achieved through the implementation of an improvement methodology that grants the staff the required experience by employing improvement tools.

1.5 Research Objectives

This research aims to examine the effectiveness of Lean principles and tools in improving productivity, efficiency, and effectiveness of the workplace in HAG in Nablus-Palestine. Other service organizations can also benefit from this research in improving their productivity, efficiency, and effectiveness of the workplace.

1.6 Research Questions

The below-discussed literature on the implementation of quality improvement processes proves that there is a gap that needs to be bridged, namely shedding light on the quality of processes in law firms. Therefore, this study examines the following research questions:

Main Question: What are the most significant waste reduction tools that can be implemented at HAG? From this question, the following sub-questions could be derived:

Sub Q1: What are the critical processes that need to be improved at HAG?

Sub Q2: To what extent does the applicability of using Lean tools in HAG?

Sub Q3: What is the degree of customer satisfaction with the services provided by HAG?

To answer these questions, this study attempts to improve the company's productivity and effectiveness by applying lean principles to critical processes in the HAG.

1.7 Thesis Structure

This master's thesis is organized in monograph format due to the nature of the research questions, which means it follows the traditional thesis chapters. The thesis consists of five main chapters. Each chapter plays a crucial role in interpreting this study. Table 1 summarizes the thesis structure of this study.

Table 1 Thesis Structure

Section of thesis	What does it imply?
Chapter 1	present the introduction, the research problem, objectives, significance, research questions, company profile
Chapter 2	provides critical analyses to previous studies, theories, concepts, models, Frameworks and methodologies.
Chapter 3	Presents the methodology applied in this study such as the research philosophy,

	research approach, and methods for collecting data, and data analysis techniques. It also discusses the validity and reliability aspects of the conducted research.
Chapter 4	presents the empirical data collected through interviews, case study, and Company's information. And discussion upon the basis of the research results
Chapter 5	This chapter conclude the thesis by outlining the contribution and limitations of this research. It end with recommendations and suggest directions for future research.

Chapter 2: Literature Review

2.1 Overview

This chapter summarizes some of the published articles regarding the adopted methodology and implemented tools in addition to other related topics. It includes TQM (Total Quality Management) in the service and legal sector, continuous improvement (Kaizen), PDCA Cycle (Plan Do Check Act Cycle), ISO (International Organization of Standardization), Lean concept, Lean thinking in the service sector, categories of waste, an overview of VSM (Value Stream Mapping), Pareto chart, and previous studies on

critical success factors. This will help in gaining enough knowledge to help in improving the efficiency and the productivity of the workplace in Hussam Attereh Group.This chapter is divided into four sections, the first one presents the theoretical background about the TQM concept in the service and legal sector, the second one presents previous studies on continuous improvement (Kaizen) , the third one presents Lean concept, methodology, and Lean tools such as VSM, and the forth one presents critical success factors.

2.2 Total Quality Management Concept

In the seventies, total quality management (TQM)'s concept and philosophy were established when the evolution of quality took a turning point from quality control to quality strategy to address the growing concern about quality. Today several companies are adopting TQM to provide goods and services to improve their market outcomes and meet their corporate priorities and goals. (Zatzick, Moliterno, and Fang 2012).

TQM aims at continual improvement in the cost, reliability, consistency, productivity, deficiency, and efficiency of a business as a whole. TQM emerged from several specific areas of strategy and improvement. It requires the collaboration of all members and their relevant business roles in the organization to generate products and services to satisfy consumer needs (Chuang, Chen, and Tsai 2015).

TQM is a collection of thoughts and ideas on quality improvement, often referred to as a "management philosophy." Its main objectives are to satisfy clients and to survive on the market (Neyestani and Juanzon 2016). Quality experts (gurus) certainly played the important role in transforming the concept of quality from a merely technical system into an entire knowledge known as overall quality with management consequences for

production (Maguad 2006). After the Second World War, Deming and Juran worked with Japanese industries. Then, Crosby, Feigenbaum, Ishikawa, and others had established this powerful management technique to enhance the quality of the industries. In the 1980s-1990s, several national and international quality awards(QAs) were created in order to provide methods for implementing TQM based on TQM guru theories (Neyestani and J. Juanzon 2016). Table 1 summarizes some gurus of TQM as reported in Bahri (2012).

Table 2: TQM Gurus (Bahri 2012)

Pioneer	**Year**	**Quality Management**
Taiichi Ohno	1988	Devised the seven waste (Muda)/(Lean principle)
Ishikawa	1962	Continuous improvement/ Cause and effect diagram
W.E.Deming	1950	14 Principles in Quality, 7 deadly sins and diseases / PDCA
AV. Feigenbaun	1961	Concept: Make it right for the first time (One Basic TQM)
Philip B. Crosby	1979	Top Management in Quality, 14 steps for quality improvement
Joseph M. Juran	1988	Cost of the quality, SPC Quality, and Juran's quality triangle

(Deming 1986) worked on the quality improvement of statistical samples and introduced the concept of "Variance" to Japanese and a systemic approach to difficulties which was eventually known as the Plan, Do, Check, Act (PDCA Cycle). By implementing the Pareto Principle as the basis for statistics, Joseph Juran expanded the set of tools for producing quality and organizational quality products (Juran and Godfrey 1998). The concept of quality cost has become popular with Philip Crosby (Crosby 1979). Feigenbaum is a guru business that defines "Absolute quality management" as an

effective mechanism for combining sustainable development, quality-maintenance and quality-improvement activities among the different groups in an enterprise to achieve the maximum economic standards of marketing, manufacturing, output, and operation, to truly satisfy customers (Feigenbaum 1991). Kaoru Ishikawa is regarded as the author and first advocate for root cause study and quality control (QC) cycles of the Cause-and-Effect Diagram by several researchers (Ishikawa 1981). Taiichi Ohno was an industrial and business Japanese engineer. He is regarded as the father of the Toyota production system, the inspiration behind Lean Manufacturing in the United States. As part of this system he developed the seven waste (or muda in Japanese) (Ohno 1988). These scientists are considered the main builders of TQM philosophy, and most of their work has the roots of the TQM concept.

2.2.1 Total Quality Management in the Service Sector

The service sector has been one of the strongest growth sectors in the world and faces enormous pressure to improve its product and service quality, to compete and obtain a competitive position in the marketplace (Talib, Rahman, and Qureshi 2011). The quality issues also ought to be discussed to fully appreciate the interactions between best practices that may enhance the efficiency of the organization (Talib et al. 2011).

TQM is both a theory and a collection of main concepts and procedures that tackle continuous quality improvement and consumer service by quality management (Brah, Wong, and Rao 2000). One of the main activities of the TQM implementation plan is continual improvement and creativity in the quality of services. It helps minimize lead times in delivery, rising rework, and excessive slackness and cycle volatility, thus continuously improving market efficiency and reducing other non-value-adding activities

(Hyland et al. 2000). The best way to enhance operational efficiency according to TQM theory is to continually enhance performance (Corbett and Rastrick 2000).

It has also been noted from the last several years that TQM has been a way of thinking in the service sector. The service sector accounts for over two-thirds of the overall gross domestic product (GDP) and labor force in industrialized countries such as the United States, the United Kingdom, Germany, Canada, and Australia and continues to expand exponentially (The World Bank Group, 2010). TQM is commonly utilized across computer technology, hospitality, health facilities, schooling, finance, leisure services in numerous service organizations to enhance consumer satisfaction and has become a continuous effort. In service organizations, the power of TQM adoption rests in its best practices. A significant body of literature supports the belief that quality activities improve corporate efficiency and customer satisfaction (Gustafsson, Nilsson, and Johnson 2003); (Lemak and Reed 2000); (Prajogo and McDermott 2005) as well as contributing to effective adoption of TQM in the organization. Likewise, the works of (Gustafsson et al. 2003), (Kureshi, Qureshi, and Sajid 2010), (Karuppusami and Gandhinathan 2006), and several others, centered on the partnership between quality standards, production efficiency, and market results. Such findings usually endorse the hypothesis that quality activities are related to quality results.

2.2.2 Total Quality Management in Law Firms

(Bigliardi and Galati 2014) states that TQM is a major strategic asset in the world today, which can contribute to a range of market strategies such as consumer loyalty, superior emphasis on staff and motivation, reduced resources surplus, and improved business efficiency. TQM is thus becoming increasingly important for the success of law

firms as a potential way of enhancing the quality and productivity of legal services and functional delivery (Kubaso 2016). Many legal institutions are directing their efforts toward TQM implementation for reducing costs and overall enhancement in the quality of the service rendered. Most legal entities are concentrating their attention on the introduction of TQM to reduce costs and enhance overall service quality.

Nevertheless, the aspects of quality in the legal field are not so well understood. In turn, it is often accepted that client satisfaction is a key measure of the efficiency of the legal sector and most law firms provide incentives for improving the provision of legal services through introducing TQM (Iacobucci and Trebilcock 2014).

The concept of outcome assessment from the client's point of view is challenging for law firms to accept or recognize, and most have resisted the proposal that they survey customers to assess outcomes (Abraham et al. 1993). However, it is the joint opinion of Altman Weil Pensa consultants that quality management is not feasible in the legal field without clear feedback from the customer (Bower, 1993). Some organizations are dealing with a survey comparable to the surveys on client satisfaction used in restaurants and hotels (Bower, 1993). In the legal profession, TQM is a concept of consistency as meeting or fulfilling clients' requirements and standards. The expectations of consumers involve not only outstanding goods and services but also efficiency, response, courtesy, and quality. To fulfill these demands, priority must be paid to job processes/systems and preparation for employees. (Abraham, Spencer, and Monk 1998).

The strategic management of law firms is focused on external and internal variables affecting the decision-making process and on two assumptions maintained by each of these variables. The first principle is what service to offer and to whom. The second

discusses how the service is provided and when. Those two actions should be made indirectly or directly according to (Hopewell 2001). Either tacit or explicit, the decision must rely on the resources that the legal firm needs to acquire and execute to provide a service product capable of offering a viable and profitable strategic marketplace for the firm. Besides, considering the financial limitations that law firms will work under, consumer preferences must be fully recognized by all of the firm's staff and the necessary resources defined to meet such demands. In the one side, it is widely acknowledged in the literature in total quality management that meeting the desires and requirements of the customer offers a strategic advantage for firms (Woodward 1994). Strategy growth reports frequently emphasize the value of a customer-centric strategy, (Bowman and Schoenberg 2008), to creating new value for customers and false foot competitors (Hamel 1998). In relation to this concept, (Hunter 2010) claims that the need for modern efficiencies from clients would set patterns in the legal industry. In addition, Wilkins (2010) states that the legal profession study has focused its attention on the evolving relationship among the law firm and its corporate customer.

Quality Function Deployment (QFD) has historically been seen as a method for looking for consumer needs (listening to the customer's voice) and applying functionality against technological specifications (the organization's voice) such that the product or service creation phase is focused on customer satisfaction. Taking this perspective into consideration, strategic quality control in the legal sector can be interpreted as the process of learning from customers and aligning their preferences with the services that lawyers should fairly deliver, centered on the tangible and intangible tools that law firms have acquired and improved (Esteban-Ferrer and Tricás 2012).

2.3 Continuous Improvement

Continuous Improvement (CI) is a theory defined by Deming clearly as improvement efforts that maximize performance and minimize failures (Juergensen, 2000). Another concept of CI is a process of centered and constant gradual progress through organizations (Bessant et al. 1994). Yet it widely views CI as just an offshoot of current management programs such as TQM or as a whole different solution to innovation development and strategic success in today's industry (Oakland, 1999; Caffyn 1999; Gallagher et al., 1997). According to Kossoff (1993), overall efficiency can be obtained through actively following CI through the participation of people at all levels of the organization.

2.3.1 History and Evolution of CI

The origins of current development systems can be traced back to efforts implemented in many organizations in the 1800s, where managers promoted employee-driven changes, and compensation schemes were placed in motion to compensate workers who bring in significant progress in the company (Schroeder and Robinson, 1991). In 1894, the program of the National Cash Register included reward schemes, opportunities for employee development, and improvement of labor-management relations. Scientific management received a great deal of attention during the late 1800s and early 1 900s; this includes the development of ways to help top management analyze and solve quality issues utilizing analytical techniques based on tightly-
controlled time trials to obtain effective piece rate and labor standards.

Later, after the Second World War, the US government developed the "Training within Industry" program to improve industrial production on a global level. This involved

training on work procedures, a curriculum intended to teach managers about the value and strategies of CI procedures. This system was later implemented by management scholars such as Deming, Juran, and Gilbreth in Japan and by the US powers present there since World War II ended (Robinson, 1990). Ultimately, the Japanese created their own concepts, and quality assurance, which was originally used in the production sector, had evolved into a much wider concept, being a management method for performance improvement affecting everybody in an institution (Imai 1986). Whereas in the past CI programs demonstrated the use of various job management concepts, current CI is synonymous with structured and systematic methodologies. These CI initiatives are often more popularly identified with the implementation of the TQM campaign, which has acquired influence in Japan thanks to Edward Deming, and which usually the entire organization, or a significant part of it, becomes interested and reform.

2.3.2 Kaizen

Kaizen 's theory has generated great interest among scholars, as it improves the company's productivity and enables minimal effort to produce high-quality goods. The concept of Kaizen has been discussed by several researchers including (Daniels 1996), and (Reid 2006), etc.

According to(Imai 1986), Kaizen is a process of continuous improvement involving all, both managers and workers. Broadly-described, Kaizen is a strategy to incorporate principles, processes, and methods in the wider image of customer-led leadership and people culture.

Teian (1992) identifies Kaizen as more than a tool for planning because it represents the day-to-day struggles taking place in the workplace and the way these struggles are

tackled. Kaizen may be extended to any field where change is required. Womack and Jones (1996) point to Kaizen as a lean mindset and layout a structured approach to helping organizations eliminate waste efficiently. They define waste as any human operation that consumes resources but does not create or improve the process. Most employees were able to identify various types of Muda in their work environment, but unfortunately, the problems they define is that they are the tip of an iceberg.

2.3.3 PDCA Cycle

Watson (1988) reports the roots of the Plan-Do-Check-Act (PDCA) cycle can be linked directly to the 1920s eminent Shewart statistics specialist. The guru Deming has updated the Shewart cycle as Plan, Do, Study, and Act. The Deming process is a continuous quality improvement method consisting of a sequential series for continuous improvement (CI) and an understanding of these four repetitive phases. The PDCA process is also regarded as the Deming CI spiral axis. The goal of the 'planning phase' is to estimate the outcomes for improvements. In a 'do phase,' the plan is implemented in controlled circumstances with small steps. The results are examined in the "study/check phase." The company eventually takes steps during the 'act period' to change the process. Figure 1 illustrates the PDSA cycle as reported in (Moen 2009).

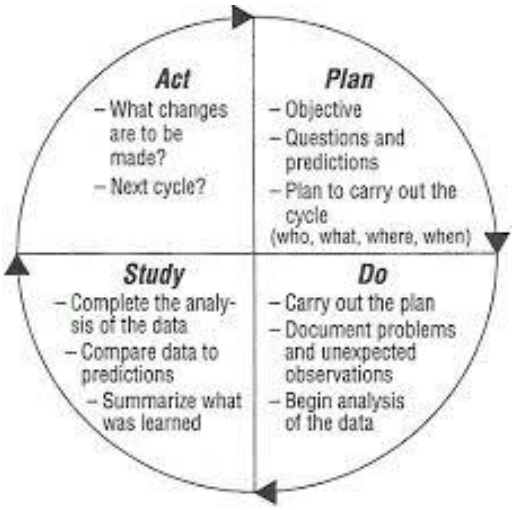


Figure 1: PDSA Cycle **(Moen 2009)**

2.3.4 International Organization for Standardization (ISO) Standards

Many business groups actively seek ways to improve their goods and services (Rubio-Andrada, Del Mar Alonso-Almeida, and Rodríguez-Antón 2011). The quality assurance method used by the organization to provide consumers with reliable goods and services was based on a set of criteria (e.g. ISO 9000), (Kanji 1998). The ISO 9001 standard can apply to all manufacturing and business types and all sizes of companies (Karthi et al. 2012). This has gained widespread interest in service organizations, due to its applicability to several organizations (Bhuiyan and Alam 2005). If development by sector in the three major world blocs is assessed for the three key fundamental sectors (industry, manufacturing, and services), it may be possible to see more clearly the generalized growth observed in service sector certifications. Several service sectors have experienced significant growth in ISO 9001 certificates in the countries comprising the EU27, the US, and Japan (education, health care, hotels, social facilities and programs, public administration and defense) (Heras-Saizarbitoria, Casadesús, and Marimón 2011).

Service company quality managers should be mindful that merely meeting the minimum criteria of a quality level is not adequate (Psomas, Fotopoulos, and Kafetzopoulos 2010). (Rodríguez-Escobar, Gonzalez-Benito, and Martínez-Lorente 2006) say the ISO 9001 certification is a sign that an organization has adopted a quality management system (QMS), but this does not guarantee the proper functioning of the system. The updated versions of the ISO 9001 standard (ISO 9001:2000, 2008) have become wider and require more flexibility for businesses, but does not always result in more effective systems (Rusjan and Alič 2010). Zelnik et al. (2012) note that experience has shown that it does not serve its function to obtain the certificate; it merely lays the foundations for the QMS's further growth. The ISO 9001 standard was developed to assist organizations not only in implementing effective QMS (Kuo et al. 2009) but also in implementing efficient QMS (Bhuiyan and Alam 2005).

2.4 Lean Concept and Principles

Womack and Jones (1996a) define Lean as the systematic removal of waste from all areas of the value stream by all members of the organization. Lean is often referred to as a mechanism for cutting costs (Achanga et al. 2006). According to Motwani (2003), Lean seeks to make companies more competitive on the market by raising productivity, decreasing the costs incurred due to the reduction of non-value-adding (VA) measures, and process inefficiencies. The Lean approach is based on the mapping and analysis of the process activities. It is value stream mapping, in lean terms (Womack and Jones 1996a; Worley and Doolen 2006).

Lean was promoted as a modern form of organizational change and development, especially as a tool for cost reduction (Achanga et al. 2006). Lean philosophy has proven

popular among manufacturing industry leaders and researchers (Bell and Orzen 2010) And is found widely in many service industries. Lean's root is the waste is detected and eliminated. The lean transition won't be effective unless the company has awareness of waste. A lack of awareness of waste is a major obstacle to Lean being implemented in the help of improving information systems (IS) (Bentley et al. 2008). Lean is structured to reduce waste from manufacturing to consumer relations, product development, supply chain, and factory management in any sector. Its goal is to integrate less human energy, less inventory, less time to produce goods, and less capacity to react to consumer demand while delivering products of the highest standard most effectively and economically possible. It is considered a manufacturing theory that will undeniably form the path to global manufacturing success if followed and carefully applied (Papadopoulou and Özbayrak 2005). The central aim of lean production is to provide a seamless network of high quality that delivers finished goods at the rate of consumer demand with little to no waste (Shah and Ward 2003).

The Lean concepts addressed by Womack and Jones (1996a) can not only be implemented in production but also service industries. The five principles are (Damrath 2012; Abdi, Sohrab Khalili, and Seyed Mohammad Seyed 2006):

1. **Value:** identifying the value to be given to the customers following their desires.
2. **Value stream:** identifying and enhancing the value chain by identifying all value-adding activities and non-value- adding activities that can and cannot be avoided.
3. **Flow:** making flow in a service process is not obvious because the service can not be regarded as a physical product, but the flow concept can be utilized to produce a service flow by reducing delay and stoppage.

4. **Pull:** Service response and delivery based on customer demand.

5. **Perfection:** striving to achieve perfection to achieve excellence through constant improvement and customer satisfaction.

2.4.1 Lean Methodology

Incorrect implementation of lean practices contributes to inefficiencies in the capital of an enterprise and decreases employee trust in lean practices (Marvel and Standridge 2009). Hence, it is very necessary to implement the correct technique at the right moment for the right purposes. The effectiveness of any specific management plan usually relies on the organizational features, which ensures that other organizations in their individual case do not or cannot adopt a similar collection of strategies (Shah and Ward, 2003). The current study into the implementation of lean strategies noticeably lacked consideration of business culture (Shah and Ward, 2003). Despite the great ability of lean process improvement strategies, there have been several cases of deficiencies due to the uncertainty about when and how to implement techniques in a `given context (Tiwari, Turner, and Sackett 2007). Implementing an inadequate lean approach for a particular scenario will sometimes contribute to a rise in a manufacturer's waste, cost, and processing time. Due to inadequate selection of lean philosophy, changes can disrupt the very process it meant for improvement. Hence, providing a structured approach to incorporate effective lean approaches focused on the detection of waste in production processes is essential. Nevertheless, few efforts were made to establish a systematic approach to incorporate the lean approaches that are necessary. As producers pursuing guidance for their expenditure in the introduction of modern lean approaches, they may

want to ensure that their investment choices are scientifically sound (Wacker 1998). A framework for applying effective lean approaches and appropriate methodology for evaluating quality improvement in performance is required.

Measuring performance is essential to consider the benefits of lean tools. Researchers had built several concepts and techniques to test lean results. Some studies assessed lean manufacturing by measuring profitability or operating performance (Kuhlang, Edtmayr, and Sihn, 2011; Zavacki, 2003; Leung and Lee, 2004; Marvel and Standridge, 2009). Measurement leanness and choosing the best measurement indicators for an appropriate system of application is very essential.

Some researchers (Wan, Chen, and Rivera, 2007; Wee and Simon, 2009; Kuhlang et al., 2011) assessed the lean output in production organizations by VSM. Wan et al (2007) assessed VSM 's overall leanness in terms of cost, time, and performance values but did not find development quality concerning business objectives. On the other hand, only the overall effectiveness of facilities was measured by Wu and Wee (2009), and the reliability as well as overall performance were not evaluated. (Fullerton and Wempe 2009) and Agus and Shukri Hajinoor (2012) used the modeling of structural equations (SEM) to develop the relations between various tools and techniques and lean production efficiency. They have carried out several questionnaires to verify the relationships. (Wan and Frank Chen 2008) presented the VSM, lean assessment methods, and lean indicators as the three foundations of evaluating leanness. (Wan et al. 2006) described qualitative, quantitative, and graphic approaches as the three tools for evaluating lean systems. Hon (2003) introduced four forms of measures representing all facets of corporate

organizations and the measures were: market value, financial, non-financial, and cost controls.

2.4.2 Categories of Waste

Waste relates to non-value-added activity occurring in a process flow. According to (Ohno 1988) only the operation required in the manufacture of goods is called a real job, otherwise, it's just waste. Waste can also be described as an object a consumer fails to pay for (Bhuiyan and Baghel 2005). Waste can be contained in individuals, systems, resources, data, and any aspect that is engaged in the value stream process (Bell and Orzen 2010) .Variations in categories of waste depend on the form of operation in the business and the field (Hicks 2007). Waste, namely inventory, and scrap, can physically be seen in a factory. In a workplace, wasting is well-known like lengthy meetings and unnecessary document usage, while waste can be found in long wait times and medical mistakes in the health field. (Ohno 1988) classified waste into seven groups based on his experiences in the automobile manufacturing process, including overproduction, inventory, waiting, transport, over-processing, motion, and defect.

1. **Overproduction**

To produce more than the consumer wants is wasteful, or to generate something too early until something is required. This raises the risk of defective products and the risk of making the wrong thing happen (Capital 2004). It appears to contribute to excessive lead times and storage periods. It often contributes to unnecessary work-in-process supplies contributing to the physical dislocation of activities and ultimately weaker coordination (Hines and Rich 1997).

2. **Defects**

In addition to actual defects that explicitly contribute to the costs of products delivered, these can involve mistakes in the documentation, late deliveries, manufacturing according to inaccurate standards, the usage of too many raw materials, or the processing of unwanted scrap (Capital, 2004). Rework may be required when a defect occurs; otherwise, the product will be scrapped. The generation of defects will not only waste equipment and workforce resources but will also create lacking materials, hamper workshop schedules, generate idle time at consequent work areas and extend the lead time for production (Rawabdeh 2005).

3. Inventory

It means having unneeded high rates of raw materials, finished goods, and work-in-process. Extra inventory results in increased cost of inventory investments, higher warehousing costs, and higher defect rates (Capital, 2004). It appears to improve lead time, prohibits issues from being detected easily, and reduces the capacity requirements. It is particularly necessary to reduce inventory due to faulty lead times to carryout effective purchases (Rawabdeh, 2005).

4. Transportation

It involves some material transfer that doesn't add value to the product, such as transferring materials between workstations. Transport between manufacturing stages contributes to extended cycle times, wasteful usage of energy and resources (Capital, 2004). Any activity within the companies may be called waste. Double handling and repetitive movement with the gap of contact between processes are likely to create loss and breakdown (Hines and Rich, 1997).

5. Waiting

It is idle time for staff or equipment due to bottlenecks or inadequate output processes on the manufacturing floor. It includes slight delays between unit processing (Capital, 2004). If time is used ineffectively, then there is the waste of waiting. This waste happens while the products are not being transported or worked on. This waste impacts both products and staff, waiting for any time spent. The job waiting period should be used for preparation or repair tasks that do not contribute to overproduction (Hines and Rich, 1997).

6. Motion

It requires any unneeded physical movements that distract them from the real production job. This may involve wandering across the manufacturing floor to look for a product, or even needless or difficult physical motions due to badly built ergonomics that slow down the workforce (Capital, 2004). This involves poor production layout, where providers have to stretch, bow and collect when such actions can be prevented (Rawabdeh,2005).

7. Over processing

It performs more manufacturing functions inadvertently than the consumer needs in terms of product appearance or functionality such as polishing or finishing in other commodity areas where the consumer does not see (Capital, 2004). Over-processing happens in cases when basic processes come up with unnecessarily complicated

solutions. The over-complexity discourages control and promotes overproduction by workers to recover major investments in complex machines (Hines and Rich, 1997).

2.4.3 Lean Thinking in the Service Sector

When lean manufacturing became more widespread during the 1990s, initiatives revealed lean principles used in service, and the concept of lean service began to be used in literature (Suárez-Barraza, Smith, and Dahlgaard-Park 2012). Qu, Ma, and Zhang (2011) describe lean services in the service sector as the implementation of lean thinking. The process that does not modify the physical characteristics and shape of products is known as a service process (Wei 2009). Lean service is needed to reduce the waste from service processes to minimize costs and provide consumers with quality results, as needed (Qu et al. 2011). Radnor et al. (2006) classified the eight wastes for services as:

- Delay
- Duplication
- Unnecessary Movement
- Unclear Communication
- Incorrect Inventory
- Opportunity Lost
- Errors
- People

2.4.4 Lean in Legal Services

The legal industry is one of a variety of services that may benefit from a lean-thinking strategy. Bellamy and Taylor (1996) based on the implementation of information technologies that incorporates the different components of the UK court system to

achieve 'energy savings and effectiveness growth' and 'speed, reliability, and timeliness enhancement of statistics'. Bellamy and Taylor (1996) suggested that waste could be minimized by the same strategy in operational cost and performance.

Martins and Carvalho (2004) introduced the use of Lean Thought in Portuguese courts in recognizing exactly how court sensitivity could be improved. Their research centered on reducing wait time, inventories, transport, and overproduction, thus minimizing waste. There are, however, few instances of Lean being used in the legal sector beyond those examples (Hines, Martins, and Beale 2008). Table 2 summarizes the seven types of waste in Service and Manufacturing as reported in (Arfmann and Barbe 2014)

Table 3:Types of Waste in Services and Manufacturing (Arfmann and Barbe 2014)

7 types of waste in manufacturing	**7 types of waste in services**
Overproduction of products not ordered by clients	Duplication such as data re-entry, and similar
Waiting for the next stage in the process, machine, etc	Customer delay awaiting delivery of service
Transportation of products not needed to create value	Lost opportunity to hold or win clients by ignored them, unpleasantness
Over-Processing unnecessary quality steps within the process	Unclear customer communication or internal clarification cycles
Inventory that clearly waits for potential needs	Faulty inventory is not available and thus unable to supply
Unnecessary worker movement is not valuable for the product	Movements in the handling of orders, queuing clients multiple times
Default products which cannot be sold or reworked	Service transaction error including product damages in the service package

2.5 Value Stream Mapping (VSM)

VSM is one of the most effective tools used in lean management (Abdulmalek and Rajgopal,2007).VSM is a significant tool that helps managers to understand current opera tionalconditions and to realize opportunities for improvement in operational performance.

VSM is a symbol language and is used as a technique for the analysis of material and info rmation on flow (Jones and Womack, 2000).

McDonald et al., (2002) reported that one of the manufacturing industries was using enhanced VSM by simulation on a specific production line. A value stream is a set of all acts (value-added as well as non-value-added) needed to provide a product (or a community of goods utilizing the same resources) across the key flows, beginning with the raw material and finishing with the consumer (Rother and Shook 2003).

The main purpose of VSM is to define and take measures to minimize all forms of waste in the value stream (Rother and Shook 2003). Taking the perspective of the value stream involves focusing on the larger picture, rather than specific processes. VSM provides a generic basis for the manufacturing process and therefore encourages more informed decision making to enhance the value stream (McDonald, Van Aken, and Rentes 2002).

Since the lean principle originated in the automotive industry, prior VSM-related research is based on concepts and practical processes for the application of VSM in the manufacturing industries (Forno et al., 2014; Serrano, Ochoa, and De Castro, 2008). Several studies have recently been carried out using simulations to improve the use and analysis of VSM data in a dynamic business environment (Abdulmalek and Rajgopal 2007; Yang et al. 2011); Ali, Petersen, and De França 2015). Driven by VSM study in the automotive field, researchers in other industries have dedicated comprehensive study efforts to introduce VSM for increasing productivity. For instance, it was used as a lean approach to investigate waste, inefficiencies and non-value added phases in the cycle of product development (Mayrl, McManus, and Boutellier 2013; Schulze et al. 2013). It is

often used as a reliable management program to improve the efficiency of constructing supply chains (Arbulu et al. 2003), Sustainable construction (Rosenbaum, Toledo, and González 2014), and execution of house construction activities (Yu et al. 2009). VSM was also used to enhance health care productivity in a variety of service sectors (Doğan and Unutulmaz 2016; Michael, Naik, and McVicker 2013), and the process of sales (Barber and Tietje 2008).

2.6 Pareto Chart

The Pareto diagram is useful for non-numeric content such as 'origin,' 'form,' or 'classification.' It can also be used for prioritizing improvements in behavior and procedure, often used to define downtime and other waste. It uses bar charts to classify problems based on frequency, intensity, complexity, or source and shows them which issues are important (Benjamin, Marathamuthu, and Murugaiah 2015). It currently ranked the data from highest to lowest occurrence frequency (Karuppusami and Gandhinathan 2006). Vilfredo Pareto, an Italian economist, and social scientist developed this principle and carried out a study in Europe on wealth and poverty in the early 1900s. It is the concept of 'those who are vital and those who are trivial.' This theory has given the following interpretation to the 80/20 law. 80% of the consequences for many phenomena come from 20% of causes (Jayswal et al. 2011 ; Murugaiah et al. 2010).

2.7 Critical Success Factors (CSF)

(Cooper 2008) described CSFs as "the limited variety of areas in which reports if they are effective, will ensure valuable competitive organizational performance". Critical success factors are key to a program's success, and if the expectations associated with these factors are not fulfilled, the implementation program will often lead to failure

(Cooper 2008). "The CSFs are "those few items that need to go well to achieve success," according to (Boynton and Zmud 1984). The CSFs are the actions and procedures that management should monitor in order to accomplish the aims of the enterprise (Brotherton and Shaw 1996).

Any enhancement program entails an organization's high spending, investment (Ranjan and Bhatnagar 2008), and significant risk (Umble, Haft, and Umble 2003). It is therefore important to specify the variables that will decide the performance of the execution and eliminate the possibility of failure. If these CSFs are not illustrated , not only will there be a major gap in the performance attained, but also sacrifices in terms of commitment, time and resources (Coronado and Antony 2002). The critical success factors are important elements that manager or management must overcome in order to ensure that 'things must go well' for a project or operation in order to meet management goals and market progress.

The role of CSFs in lean implementation has been considered by several scientists. Each of the CSFs is discussed below:

- **Employee involvement and participation**

The employees' resistance to change is one of the most common obstacles during lean implementation, as Almanei, Salonitis, and Xu (2017) have pointed out. It is shown that employee education and training are the key tools for reducing resistance. Good communication, teamwork, and the provision of services are other ways of change an overall shortage of resources (Antony 2014).

- **Effective leadership**

Other research on leadership importance in lean implementation are conducted (Dombrowski and Mielke 2013; Alefari, Salonitis, and Xu 2017). Dombrowski and

Mielke (2013) find that after some time, most slender implementations have reached a stagnating stage. The "15 Rules to Sustainable Lean Adoption" suggested therefore that they applied the five essential elements of lean leadership by "deducting them from various theories and realistic findings and studies results":

- Improvement culture

1. Constant improvement includes consistency from the leader.

2. The Continual Improvement Process should be encouraged by leaders but does not explicitly interfere in problem-solving.

3. Defects will always occur - the consequences should be minimized.

- Self-development

4. The first step in (self) improvement is self-awareness.

5. The status quo appears to be internalized after a promotion.

6. Lean leadership calls for multiple talents and activities.

- Qualification

7. Leaders must become superfluous in their real jobs.

8. All employees should be independently developed

9. Learning has to be completed in short periods.

- Gemba

10. Decisions are fact-based.

11. Action and understanding is the place of Gemba.

12. The Gemba squad operates only on a limited percentage of the leader to employees

- Hoshin Kari

13. Long-term objectives for short-term objectives are never discarded.

14. The aiming method also assesses the development of employees.

15. To achieve perfection, it is important to devise correct intermediate targets.

In the study by Alefari et al. (2017), in which they refer to the theory of (Dombrowski and Mielke 2013), the value of these rules has been approved. They affirm the value of commitment to inefficient operation of the top management framework and lean implementation as a business philosophy not as a waste-reducing toolbox.

- **Top management support and commitment**

The encouragement and engagement of upper management is a very common obstacle in the adoption of Lean. This CSF was one of the significant critical factors that were considered. As Achanga et al. (2006) reported "The effective execution of any concept within an organization depends on good leadership ethos and commitment of management support." Since the implementation of any project takes time, it is often said that often top management is focused on creating strategies for short-term problems rather than enforcing leans.

Furthermore, Panizzolo et al.(2012) argue that "Top management running the business is committed to developing and engaging employees and stakeholders both with the long-term goal of adding value for consumers and community in general". In addition, the ideology of the top leadership must be continued. Since Kaizen (continuous improvement) is one of the cornerstones of Lean, and thus implementation cannot be accomplished without a long-term effort and management patience.

- **Training and education**

Without a deep understanding of the application of every management system, each organization has different options, regardless of Lean scale can be used, send employees to courses to receive certification from Lean Six Sigma Institute, or to use internal tools to experiences of employees who have worked at other businesses where Lean is working. Awareness is important in any situation and a crucial success driver. In almost every paper on Lean Adoption, awareness, skills, and education were listed as a key CSF. However, there are various explanations of why the application of information is incredibly necessary.

Instead of strictly and immediately adopting lean techniques, training and education, like any of the change programs, is typically a starting point for this process. This is because this practice will facilitate and improve the interaction between management and workers for lean (Hu et al., 2015a; Alkhoraif, Rashid and McLaughlin, 2018).

However, in many cases, internal resources will not be adequate to build a critical mass of expertise needed to deploy the lean. In many cases, the resources of most companies are inadequate to offer such training. Consultants' expertise or external learning may therefore be the solution (Alkhoraif, Rashid and McLaughlin, 2018), but consulting and external training also need far more financial resources.

- Organizational culture

In the literature review offered by Alkhoraif, Rashid, and McLaughlin (2018), the topic of organizational culture is often discussed concerning CSF. CSF was listed 21 times, while top management support and involvement was the second most frequent term listed 10 times. One significant explanation is that culture tends to be the widest

trend of all the 10 CSFs mentioned in the study. Furthermore, because culture refers to informal and formal norms and comportments and especially to social interactions among individuals in organizations (Mercadal, 2018), it also means that other CFS such as communication or leadership plays a role in organizational culture. The other explanation is that Lean-part is not only a technique or a set of methods but rather a Kaizen philosophy (Continuous Improvement) theory, (Sigala 2010).

- **Financial capability**

In small and medium-sized enterprises, the general lack of resources is a very common concern. This main aspect is not a common concern for large enterprises as they are planned more carefully for investment and strategy than small and medium-sized enterprises. In most situations, leaning asks for preparation or support from a consulting agency. It was suggested that SMEs are afraid that financial resources may be needed to employ consultants they do not have. Another part is that they would deem "unnecessary loss of resources" to be temporary production stops for training employees (Achanga et al., 2006). Achanga et al. (2006) claim that financial inadequacy is a significant challenge in the effective adaptation and application of Lean in small and medium-sized enterprises.

- **Supply chain integration**

The convergence of the supply chain is a key element of success implementation of the idea of output of "Just-in-Time." It leads to reducing waste such as storage, labor, and space costs. The incorporation of the supply chain is, however, an external mechanism that depends on relationships with business partners. This may thus be an obstacle to the option of lean implementation in companies. But without cooperation among people, it is

not necessary to operate effectively with the business and provider. Companies should be interested in Lean adoption in this respect through their retail supply chain partners (Alkhoraif and McLaughlin 2018).

- **Direct or good communication, personal experience and technical factors**

The explanation that these three main success factors are combined is that they are the least discussed and defined in literature reviews and in general in previous studies. Communication can also be categorized as a cultural aspect and personal knowledge can be categorized as education and training. However, the dismantling into smaller CSFs allows one to consider the issue more thoroughly, however, little evidence is available for those CSFs (Alkhoraif, Rashid and McLaughlin, 2018).

2.8 Summary

In this chapter, a summary of previous studies identified the methods adopted and tools used. Previous studies on Lean methodology practice and its tools have demonstrated how successful this methodology is in improving the efficiency and the performance of industrial enterprises. However, little studies have been found on lean implementation in law firms. Finally, critical success factors were established to be taken into account during the implementation of Lean methodology.

Chapter 3: Research Methodology

3.1 Overview

Researchers generally vary from discipline to research goals, topics and other factors in their ways of conducting their scientific research. This diversity leads to various approaches and methods used for scientific research and studies. There is thus a specific definition and consideration of philosophical concepts such as research designs and

research strategy during the scientific study (Darlaston-Jones 2007). Such terms define the attitudes, perceptions, and beliefs underlying a particular phenomenon. Since this can affect the research strategy from design to the summary such core principles and paradigms must be identified using adequate research methods to gather and analyze empirical data to prevent researchers from engaging in research (Flowers, 2006).

Traditionally, the study is categorized as three principal forms of work: 1) exploratory, 2) explanatory, and 3) descriptive. Exploratory study is commonly used when the problem statement is lacking in theoretical sustain (Sullivan, 2001). According to White (2003), exploratory research involves addressing a new issue/topic/subject, little of which is known so that the idea of research cannot be formulated very well at the beginning. Based on this logic, this study can, for the following reasons, be considered exploratory research: 1) it aimed to explore the effectiveness of lean methodology and tool on critical issues in HAG, and 2) Lack of adequate theoretical support and literature that discussed continuous improvement in law firms in Palestine.

Explanatory research methods include testing or verifying ideas or dismissing existing theories. It is a common type of research when the research question is supported theoretically or when the debate in the literature is well-reinforced (Sullivan, 2001).

Descriptive research is defined as “Research that attempts to describe existing conditions without analyzing relationships among variables” (Wallen and Fraenkel 2001, p. 517).

3.2 Research Approach

In general, research is classified into two approaches: quantitative and qualitative (Guba and Lincoln 1994). Sullivan (2001) suggests that the differences between the two approaches are mainly dependent on two factors: (1) the depth of our knowledge in a

specific subject and (2) the assessment by the researcher on the nature of the phenomenon being examined. According to Sullivan (2001), the qualitative approach is generally suitable where little theoretical support is provided for a phenomenon, and therefore a precise theory cannot be developed. On the other hand, the quantitative approach is adequate for situations where a phenomenon has enough theoretical support. The quantitative approach generally follows the paradigm of positivism as far as objectivity and causality are concerned. That is since quantitative work requires the collection of quantifiable statistics and analytical data analysis. (Bryman and Bell,2018). Also, quantitative research can measure and analyze causality of factors, test hypotheses, and theories, or develop and verify models. (Guba and Lincoln, 1994). The qualitative study, however, is usually pursuing the model of perception, as it has a non-objective or inductive viewpoint (Bryman and Bell, 2018). The qualitative study depends on observing and interpretation the circumstance or phenomena and provides a deep perception of the phenomenon or situation (Guba and Lincoln, 1994).

3.3 Case Study Research Method

In recent years, the acceptance of the case study in the field of operational management research has increased as a research approach (Ketokivi and Choi 2014). According to (Rowley 2002,p.16), case studies “are widely used because they may offer insights that might not be achieved with other approaches. Case studies have often been viewed as a useful tool for the preliminary, exploratory stage of a research project, as a basis for the development of the ‘more structured’ tools that are necessary for surveys and experiments.”

Despite the accusation that the case study approach has both objectivity and rigor, the emphasis on design and application will override any objectivity or rigor (Rowley, 2002). In this regard, the reliability and validity problems of a case study are significant. As already mentioned, this study used the case study method. There are three reasons: (1) the research problem is exploratory; (2) the types of issues devised in the study; and (3) the types of empiric data required to seek evidence. These motives are explained as follows:

1- The main objective of this thesis is to explore the effectiveness of Lean principles and tools in improving productivity, efficiency, and effectiveness of the workplace in HAG. This form of study goal has an exploratory dimension, which allows it to be easier to explain the phenomena in detail (Stake 1995). In this relation, "the case study is a research strategy, which focuses on understanding the dynamics present within single settings" (Eisenhardt 1989,p.534). Therefore, the case study is the best method for this kind of research.

2- Multiple methods of data collection are given for the case study approach (Eisenhardt 1989,p.534). Welch and Patton (1992) points out that using multiple methods of data collection increases the credibility of data. This technique also provides the chance to utilize triangulation with different forms of data collection (Yin 2003). Such triangulation from different outlets enhances the integrity of the building methodology for research.

Schell (1992) describes four simple case studies forms with two criteria of design: number of cases and number of sources of data. As shown in Table 3, Type 1 concerns the situations where there are a single case study and a single unit of analysis. Type 2 concerns the situations where there are a single case study and multiple units of analysis,

which are embedded in that single case. Type 3 is concerned with situations where there are multiple cases but only a single unit of analysis. Type 4 is concerned with the situation where there are multiple cases and multiple units of analysis. Table 3 summarizes the basic types of design for case studies as reported in (Schell, 1992).

Table 4: Basic types of design for case studies (Source: Schell, 1992, p. 7)

	Single case designs	Multiple case designs
Single unit of analysis	Type 1	Type 2
Multiple units of analysis	Type 3	Type 4

This study used the qualitative and quantitative approach; it follows both "Positivism" and "Interpretive" views, as it aims to improve the productivity, efficiency, and effectiveness of selected processes by reducing waste and variation of quality processes at HAG. This is achieved through the implementation of the Quality Improvement methodology. Plan-Do-Check-Act (PDCA) Cycle and lean principles are also followed to reach the target improvement such as; value stream mapping, cause and effect diagram, 5S. Improvement methods are certainly of great significance in today's global economy as they can improve organizational efficiency (Ablanedo-Rosas et al. 2010; Vanichchinchai and Igel 2011). They are necessary to the improvement of processes (Spring et al. 1998), and to the relative advantage of the organization (Garrido, Martin-Peña, and Garcia-Muiña 2007; Gupta, McDaniel, and Herath 2005). Some with early adoption of methods of change produce better business results in terms of customer satisfaction and company efficiency and it is for this reason that most large companies have begun to incorporate these techniques as a matter of practice (Fotopoulos and

Psomas 2009). In this regard, law institutions in the West Bank can benefit from the results of this study.

3.4 Data Collection and Analysis

Both qualitative and quantitative data were collected by different means. Qualitative research focuses on human interaction observation and analysis of the situation or phenomenon and provides a profound understanding of the situation or phenomenon (Guba and Lincoln 1994). In this study, mixed research methods for collecting and analyzing data are used to address the research questions including semi-structured interviews, observations, and documentation analysis. Semi-structured interviews provide reliable and qualitative data, as well as they provide flexibility to probe for details or discuss issues. Therefore, the interviews are the most effective method for collecting data in a qualitative approach (DeJonckheere and Vaughn 2019). The Interviews target the upper-level management, the employees in the quality control department, lawyers, customers, and the accounting department in HAG. Each interview takes between 60 to 90 minutes. The minimum sample size was determined in a range between 12-15 interview participants (DiCicco-Bloom and Crabtree 2006). The thematic approach is used in this study as an inductive tool for data analysis. By triangulating data, the study attempts to provide ‘a confluence of evidence that breeds credibility’ (Eisner 1991, p.110).

Moreover, as mentioned by (Parasuraman, Zeithaml, and Berry 1985), A quantitative approach moves from a wider viewpoint into the research problem and is organized and formulated reasonably well. Accordingly, The SERVEQUAL questionnaire was used in this study to measure the level of customer satisfaction of HAG clients. As noted by

(Lee-Ross 2008), the SERVQUAL tool is divided into 22 items for both perceptions as well as expectations, and these are based on five dimensions which are tangibles, reliability, responsiveness, assurance and empathy. The findings obtained were analyzed and assessed systematically by using statistical techniques (SPSS).

3.4.1 Direct Observations and Field Visits

Direct observation is one of science's oldest and most popular qualitative analysis methods (Trochim and Donnelly, 2016). The purpose of this technique is to search for more evidence to support interviews and historical documents. According to Trochim (2001, direct monitoring provides a separate perspective in which a researcher observes definite situations or persons or processes without having been observed in the context. This technique was used for the field study direct observations were used to illustrate the process of work, to understand the process and to look for the data eventually.

3.4.2 Interviews

An interview is a deliberate dialog between two or more individuals (Keaveney 1995). Interviews can be highly-formalized and structured, using a standardized question (often called an interviewer) for each participant or informal and unstructured conversations. There are intermediate roles between them. Therefore, one typology widely utilized is the degree of formality and design, which may categorize interviews as one of:

1. Structured interviews

Recent studies have shown that selection interviews can be accurate in a structured form (Harris 1989; McDaniel et al. 1994). Campion, Palmer, and Campion (1997, p.656) defined structure as “any enhancement of the interview that is intended to increase

psychometric properties by increasing standardization or otherwise assisting the interviewer in determining what questions to ask or how to evaluate responses".

2. Semi-structured interviews (SSI)

The SSI is meant to classify subjective reactions to individuals to a specific circumstance or phenomena. This uses an interview guide/schedule which is fairly comprehensive, which can be used where adequate empirical information is accessible regarding an experience(s), but subjective awareness is missing (Morse and Field 1995). The questions in these interviews concentrate on each participant's answers, which are the SSI framework. Participants are encouraged to address some open-ended questions and the researchers will discuss these responses. The semi-structured element of this technique is this structure and flexibility of replies. It makes it unique between interview methods to the extent that the subject remains responsive to the interviewee (Bartholomew, Henderson, and Marcia 2000).

3. Unstructured interviews

Punch (2005) described unstructured interviews as an opportunity to understand people's complex behaviors without imposing a prior alignment that may limit the area of investigation. In the study of people's work and usage of knowledge, unstructured interviews may be quite helpful. This is especially useful for studies aiming to recognize trends, build models, and guide the design and application of knowledge systems. For example, Alvarez and Urla (2002) used unstructured interviews during the introduction of the enterprise resource planning (ERPs) program to produce information specifications.

The participants were asked to provide open-ended answers to questions during the interviews to reflect their experiences and views on several questions. The key in an interview is to understand the significance of the statements/answers of interviewees (Kvale 1996).

To avoid any confusion or interpretation of the answers, the interviews were recorded and then transcribed. Voice recordings can also offer infinite possibilities for a given interview and can thus prevent researchers' bias and errors (Saunders, Lewis, and Thornhill 2009).

3.4.3 Documentary Evidence/Archival Records

Documentary data is a research method requiring the analysis of facts and data in documented records of the firms, including notes, reports, daily updates, and annual reports. We also review archival documents such as delivery notes, organizational maps, business plans, and operating processes. This approach provides the ability to facilitate the analysis of the interview.

3.5 Data Analysis Process

In descriptive qualitatively approaches, data collection and analysis are conducted simultaneously, adding to the depth and quality of data analysis like other qualitative methods. Nevertheless, all the data is often normal until it is reviewed to decide what is known (Chamberlain et al., 2004)

3.5.1 Content Analysis and Thematic Analysis as Qualitative Descriptive Approaches

Recent results Sandelowski and Barroso (2003) suggest a spectrum of the degree of data transition from explanation to perception during the analytical data phase. In

comparison to the established theory or hermeneutic phenomenology, a higher degree of interpretative sophistication is needed, researchers that choose to employ a fairly low degree in interpretation should use qualitative analytical methods such as the definition of phenomenology, content analysis, and thematic analysis.

Thematic analysis as an independent qualitative descriptive approach is mainly described as "a method for identifying, analyzing and reporting patterns (themes) within data" (Braun and Clarke 2006, p.79). It was also presented as a descriptive qualitative tool that provides researchers with essential skills to carry out many other types of the qualitative study. In this way, the thematic analysis would be more known to the qualitative researcher as an independent quality analysis approach (Vaismoradi, Turunen, and Bondas 2013).

3.6 Research Quality: Validity and Reliability Measures

The quality of research is a crucial step in the research process. Study consistency is primarily associated with validity and reliability. Validity is commonly referred to as the excess of the measurements that a research or concept or construct measures. Reliability is identified as "the degree of consistency with which instances are assigned to the same category by different observers or different occasions" (Silverman 2013, p.302). Several quality criteria were proposed to assess the quality of the case study methods in qualitative terms., construct validity, content validity, internal validity, external validity, and reliability are the most common quality criteria.

3.6.1 Validity and Reliability in this Study

Various data sources inside the case company were available. This method requires data to be triangulated as it plays a critical role in validating the findings. The application of data triangulation in interviews, business records, field trips, and findings in pursuit of proof chains, for example, improves the quality and precision of the study.

3.7 Data Collection and Analysis

As mentioned in Chapter 1, the main research problem is divided into the main question and three research questions. Each research question is addressed by its research methods. Therefore, this thesis employs a multiple-method research approach to answer these emerging research questions. This combination of different research methods stems from the nature of each respective research question.

This study have employed the research case-study method. The empirical case-study method is suitable for framing and consciousness (Sodhi and Tang 2014), which suits the purpose of this study.

12-15 people were interviewed from different departments, where the researcher interviewed the partners in the company, the secretary, lawyers, the employers of the quality department, and the accountants in the company. The researcher interviewed people with these designations to maximize the utilization of information collected through the interviews.

As shown in Appendix (A), the interview comprised three sections in which a set of certain questions were asked in each section. More specifically, Section (I) included the interviewee's general information such as job position/title, name, years of experience,

contact information, etc. Section (II) included general questions about the company such as number of employees, annual revenues, main services, services facilities, contact information, etc. Section (III) included more specific questions to give a clear picture of the company and the problems it faces by analyzing the answers to these questions, which aim in the first place to give answers to the research questions. In total, the interview manual comprised 34 questions (i.e., 10 general questions belonging to sections I and II, and 24 to sections III).

3.7.1 Data Analysis

Interview scripts have been coded to develop themes and categories with a thematic analysis approach. Thematic analysis is defined as the process of encoding qualitative information to identify patterns that can be used to describe, organize or interrupt aspects of phenomena (Boyatzis 1998). Topics are generally induced by raw data or by deductive theory or earlier research. In this study, the themes were identified inductively on the basis of the data from the semi-structured interviews. The emerging themes were coded according to common tags / labels as shown in Table 4.

Table 5: Common tags/ labels

Main theme	**Description**	**Label/tag**
Key performance indicator	How the company is affectively achieving their goals by applying high KP's	Customer focused
Sources of waste	The ability of the company to avoid wastes	Defects/duplicates /transportation/ motion
Quality improvement	The ability of the company to make critical improvement on their	Methods

	process.	
Company delivery performance	The ability of the company to meet customer requirement	Customer satisfaction / delay/ lead time
Company effectiveness	The measure of the quality services provided by the company	Lost customers / validity
Sharing of information	The extent of honesty between the client and the company	Un clear communication
Workforce planning	The ability of the company to hire employees without additional cost	overstaffed / cost

This step increases the study's external validity by allowing common facts to be identified and thus reduces the subjectivity in the analysis of data. The findings of the research are summarized and discussed in the next section, based on the analysis of the empirical case study.

3.8 Summary of Research Methodology in this Study

This analysis began with a research problem, then an overall theoretical literature review to define, critique, and propose a specific research gap. In the next step, the qualitative and quantitative approach was performed by interviews, observations, and distributed surveys to obtain empirical data. The last steps included analyzing the data by thematic analysis and SPSS program, and finally making a conclusion. Figure 2 illustrates the summary of the research methodology.

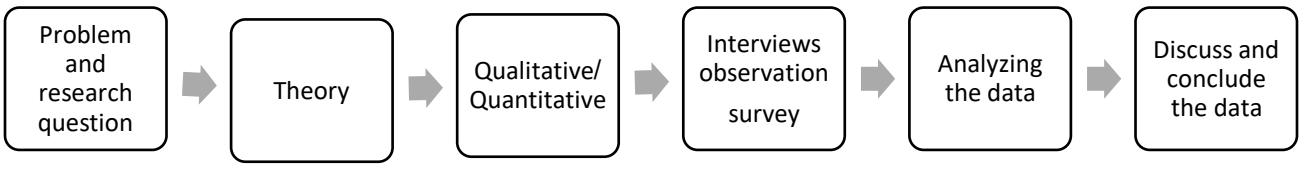


Figure 2 Summary of Research Methodology

Chapter 4: Findings, Results and Discussion

4.1 Findings and Results

The study explores the most effective waste reduction tools that could be implemented at HAG and how the employment of lean methodology might play a role in the critical processes that need to be improved. For answering the research questions, the study had the following findings:

1- Throughout the study period, face-to-face interviews were conducted with the company's employees. The following tables (Table 5 and 6) and graphs (Figures 2 to 7) show details about the company's performance over the past ten years.

Table 6: The company's performance over the past ten years

Year	Number of Employees	Number of clients	Number of cases	Number of case procedures	Number of consultations	The number of responses to consultations	The number of legal services	Number of procedures on legal services
2010	10	13	16	186	0	44	7	20
2011	16	214	1101	3962	0	0	1	0
2012	18	67	342	4925	0	0	42	42
2013	18	47	454	5493	0	0	259	885
2014	20	66	450	7360	0	0	286	830
2015	21	56	439	8049	776	1303	139	557
2016	23	79	582	10821	1160	2168	138	319
2017	24	149	700	13467	1217	2526	177	581
2018	26	71	570	16113	1133	2436	178	655

2019	26	83	778	18201	894	1722	176	866
2020	26	35	326	11508	446	893	68	557

Table 7: Services statistics according to customer distribution

Item	**Corporates**	**Individuals**	**Total**
No. of clients	341	558	899
No. of cases	4497	1260	5758
Number of consultations	5591	35	5626
Legal services	1049	421	1471
The sum of all services	11137	1716	12855

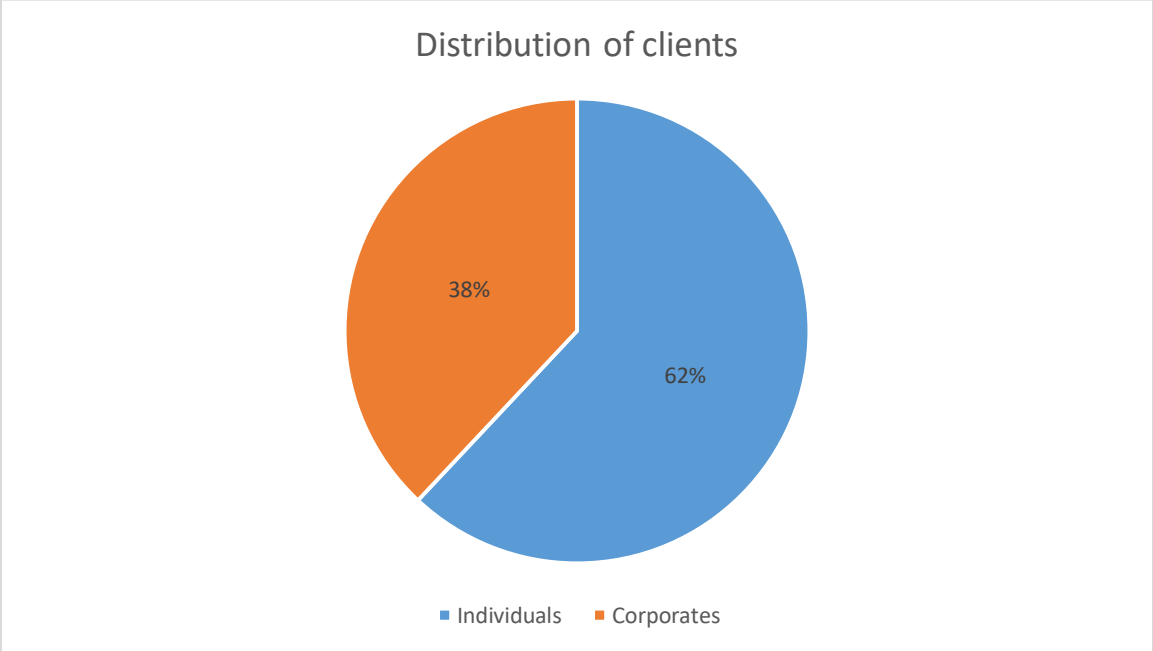


Figure 2: Distribution of clients

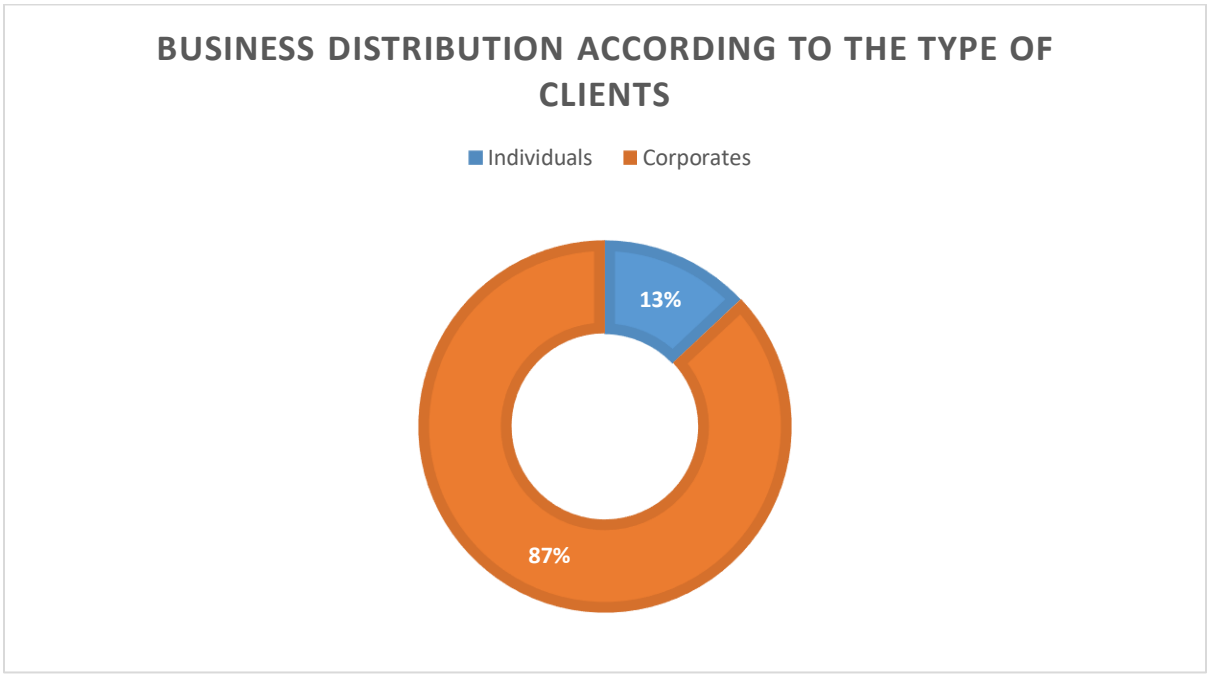


Figure 3: Business distribution according to the type of clients

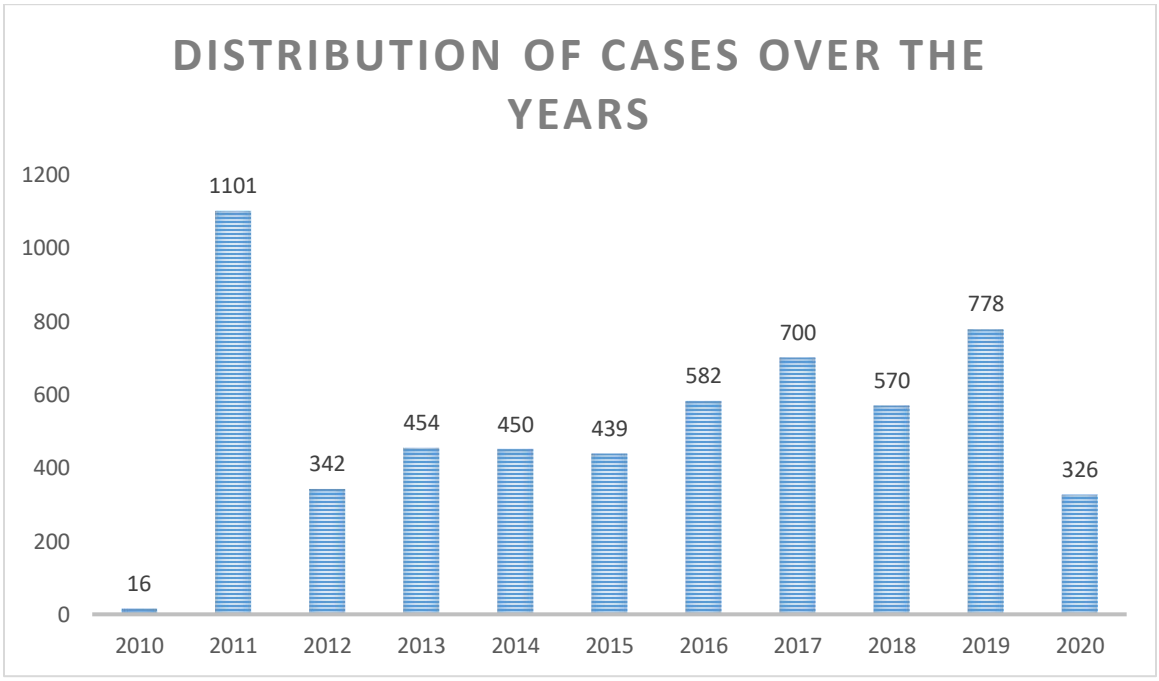


Figure 4: Distribution of cases over the years

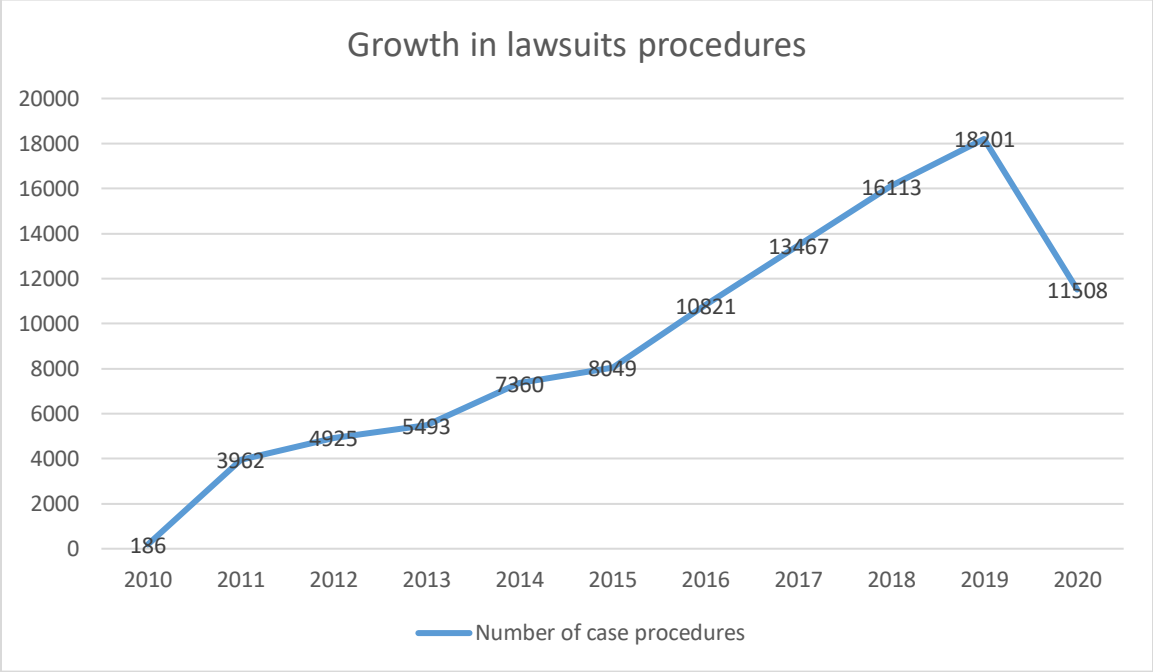


Figure 5: Growth in lawsuits procedures

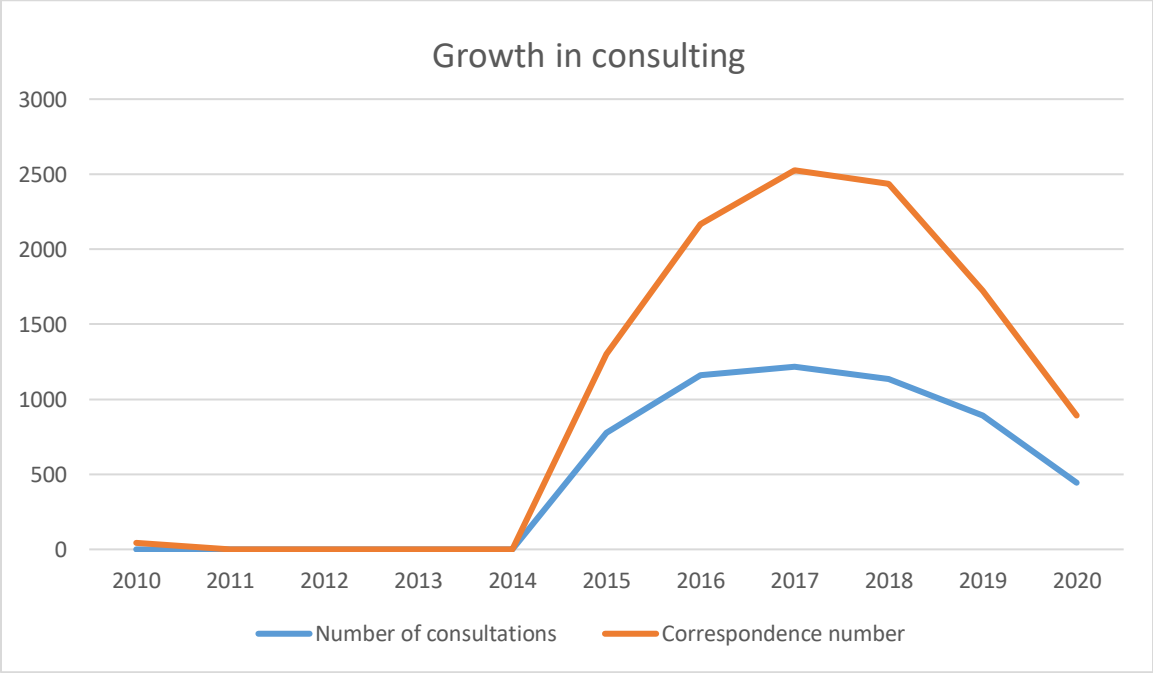


Figure 6: Growth in consulting

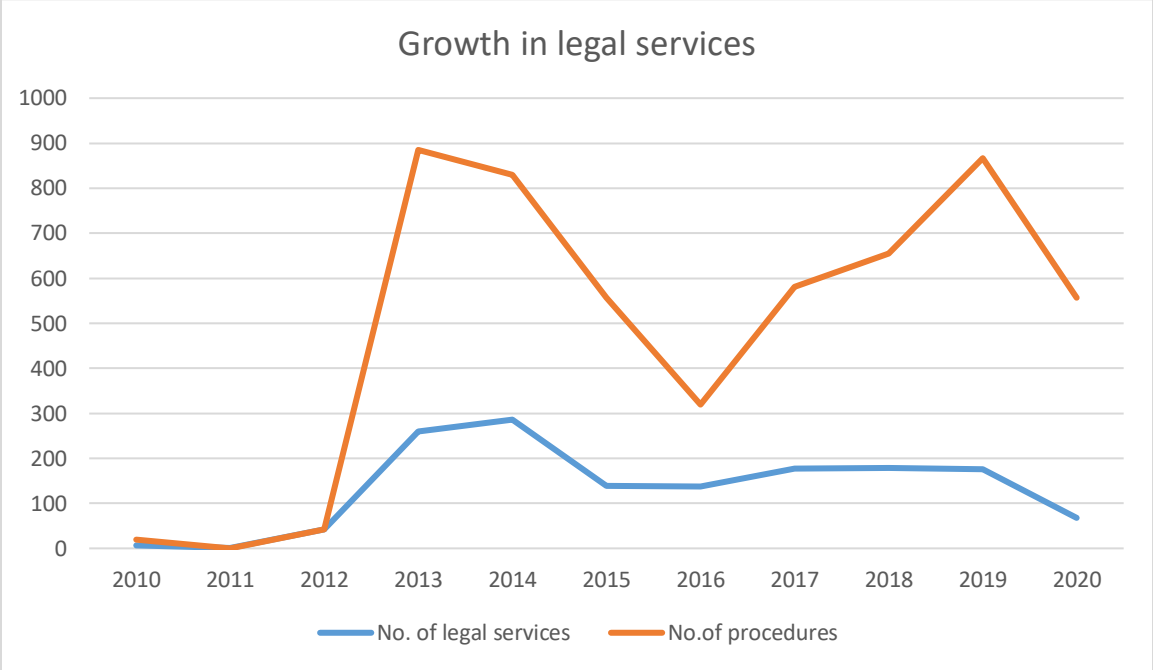


Figure 7: Growth in legal services

As manifested by the tables and graphs above, there was a steady increase in the number of employees and clients during the last ten years. The number of procedures for both legal services and consultation also rose substantially. However, every organization seeks to maximize efficiency and provide the best customer service by nature, through documenting legal firm processes and procedures, which demonstrate the law firm's operations and business policies. Among the interviews, conducted by the researcher, with the employees in the quality department, one employee said that increasing the number of procedures of law cases processes results in improving efficiency and providing faster response to customers. In other words, adding documented law office procedure makes it easier to delegate tasks and train new employees, which contributes to shortening delays and boosting customer satisfaction.

2 - The number of business cases, legal services and consultation provided for corporates is higher when compared to those provided for individuals. This might have demonstrated an increasing need for resources such as lawyers, papers, processes, time, and effort.

3- Some employees lacked prior knowledge of the law, while some had gained knowledge exclusively from their practical experiences in HAG.

4- Based on an in-depth analysis of the interviews, it is recognized that there is waste in the company resources, which could be categorized as follows:

- Defects in Data Entry: a range of errors that relates to electronic data entry was detected. Upon their return from court work, lawyers occasionally entered data that is either incorrect or incomplete, while clients often sent incomplete forms, or fail to send them in due time. This consequently resulted in a waste of time, as the legal staff frequently had to rectify such errors by contacting those clients by phone.
- Overproduction: Mixed authority, which arises from multiple partnerships, often caused overproduction waste. Overproduction of hard copies, for instance, was a frequent observation. A ten-page document was produced when one page would have sufficed to yield a concise description.
- Delays and Excess Processing: Governed by the uncertain nature of law firm business, delays could be mainly traced to external factors, such as those that relate to the arbitrary postponement of lawsuits by the court. There is also a noticeable lack in judges at the national level, rendering the filing procedures a longer and more bureaucratic process.

- Motion: HAG has a well-organized workplace in which employees can easily find requested files, minimizing waste of time and space.
- Excess capacity: Capacity issues are most conspicuous in the department of insurance. To keep pace with the number of lawsuits received, a large number of lawyers are needed. This posed a knotty problem since the department costs more than what it gained in return.
- Waiting: This type of waste originates from time wasted in anticipation of client payment or settlement of lawsuits. Influenced by cultural factors, payments are characterized by informality, resulting in unreliable payment. In the interviews that were conducted with the accounting department, employees repeatedly complained about inconvenience in the billing process, as clients almost invariably deferred payment, and thereby caused waste in time and money.
- Transportation: By nature, legal processes entail frequent movement between office and court, often back and forth, and even between cities, on occasions, for purposes concerning the attainment of judge signature. Additionally, there is a near-absence of any consistent scheme that regulates lawyer court visits or rather assigns them to other tasks, resulting in time waste.

5- As reported by the employees in the accounting department, there is a consensus that the department lacks a sufficient number of employees, which logically increases the burden that falls on each one. This consequently led to a slower workflow and created a degree of inaccuracy in accomplishing reports that are ordered by upper management.

6- Based on the analysis of the company's expenses, many were unjustifiable. There was a tremendous waste of print papers, as employees habitually printed them for personal usage or unwarranted purposes. More notably, there was a waste in both general and administrative expenses, such as telecommunication bills, as assessment demonstrated that these bills are actually higher than expected from required calls.

7- Before 2019, legal services were not systematically assigned to specialized departments. The whole staff had to deal with every service regardless of its type. Therefore, a comparative analysis of the various types of legal services before 2019 is untenable. As of 2019, the company decided to allocate legal services to a specialized department. These departments are the Insurance department; Execution and Collection Department; Banks, Corporate and individuals, and Intellectual Property Department. This provided a thorough understanding of the cash flow of these departments as separate entities.

8- When it comes to the most frequent lawsuits in HAG, the researcher applies the Pareto chart to help determine which lawsuit is significant as shown in figure 8 below:

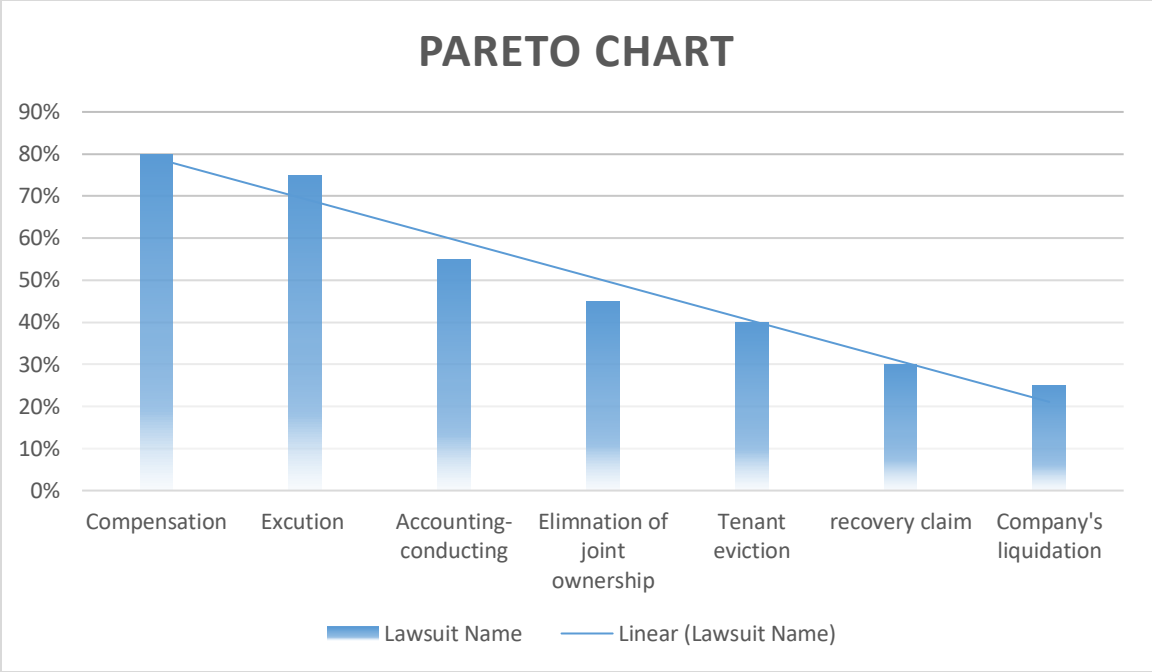


Figure 8 Pareto Chart

The Pareto chart illustrates that the Compensation and Execution lawsuits demonstrate around 80% of the company's revenue gathered by 20% of HAG's clients, which means that these cases are significant to HAG and require a lot of effort, time, and money from lawyers and employees.

9- According to the analysis of the Pareto chart in the previous point. The researcher decides to take one lawsuit process and create a value stream mapping to define the wastes by measuring the cycle time between the procedures. Figure 9 demonstrates the VSM of the current state of the Execution lawsuit process.

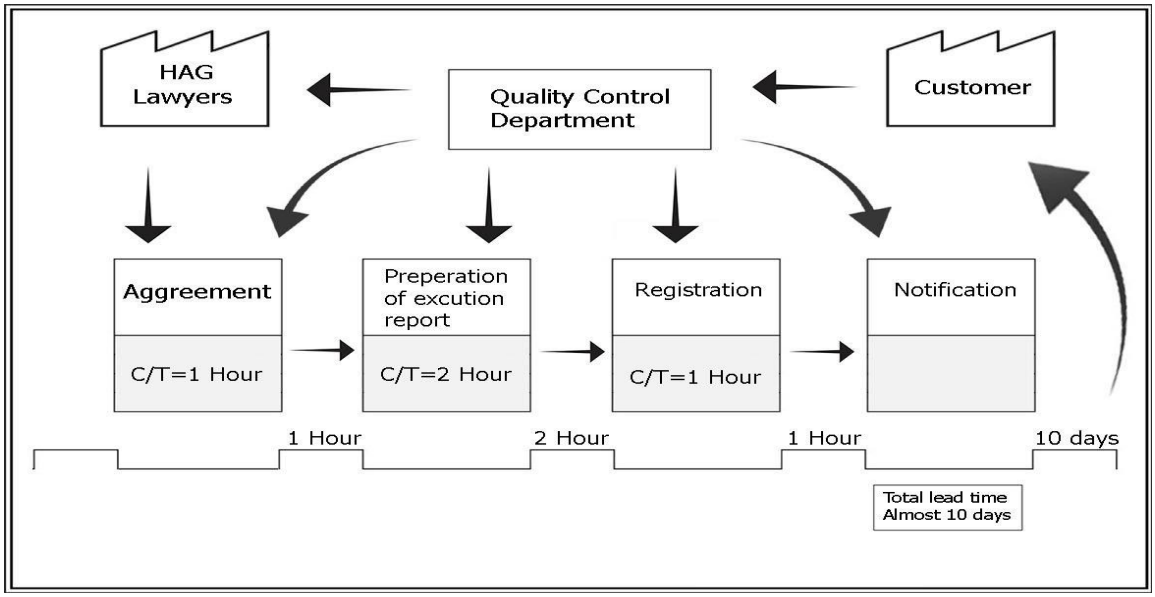


Figure 9 Value stream mapping of the check execution case process

Figure 9 illustrates a VSM for a current state of the check execution case process in HAG in order to analyze and improve the information flow of the service provided by the company. The results shown as follows:

The execution lawsuit process is multistep. First, the client comes to the office to negotiate and settle on a fee rate, after which he signs a power of attorney and a fee agreement, and the company receives the check from him thereafter. In most cases, the duration of this session does not exceed an hour. Secondly, the execution report is prepared in almost two hours. Then, it takes an hour to register the execution report, upon which it is tagged with a number in the court. Once the registration is granted, the case needs to notify the person that is being perpetrated against, while the notification from the court takes from seven to ten days. Upon notification, the offender is offered an opportunity to pay or propose a settlement within seven days starting from the day he was notified. In the case that a settlement is presented, it is usually studied and the client is notified, and if the client agrees and the settlement is appropriate, the reconciliation is

registered. Alternatively, in the case that the defendant does not present a settlement, imprisonment or confinement against his funds as required shall be requested.

As the case involves the court, the litigant and the lawyer, there is no pre-specified timeline for any particular case. Generally, in case the executor is committed against to pay the settlement of the execution of a check, of an amount of 100,000 Shekels, for instance, the expected time frame is approximately three years.

After analyzing the VSM for the procedures of the check execution process, we can determine the waste in failure to follow up, for example. There are external, uncontrollable factors that contribute to delay in execution lawsuit. For instance, delay in informing the opponent would waste time for the client, while delay in issuing a detention order would waste time for the company.

10- To measure the customer satisfaction of HAG clients, the researcher distributed the survey to 30 clients; the response rate from the survey was 83.3% (25 out of 30 surveyed clients). The majority of respondents with 56% were from Nablus. Most of the cases related to respondents were Insurance and execution lawsuits with 44% Insurance, 32% Execution, 24% others; 48% of them had their case closed, while 52% of their cases are still pending.

It was found that most of the surveyed clients are male; 72% male to 28% female. 76% of the clients heard about the HAG through friend recommended. 68% of the respondents have not obtained legal services from another law firm previously while 32% have obtained legal services from another law firm; 28% of them felt distinguished in the service provided by HAG, While 4% of the respondents felt neutral.

The level of satisfaction of the clients related to quality dimension is analyzed using a five point likert scale where 1=strongly disagree, 2= disagree, 3=neutral, 4= agree, 5= strongly agree.

- Reliability consists of 4 questions.
- Tangibility consists of 4 questions.
- Responsiveness consists of 4 questions.
- Assurance consists of 4 questions.
- Empathy consists of 5 questions.

The overall gab for tangible is positive 0.83, this demonstrates that the perception of HAG's client is slightly more than they expected. For instance, they have a professional appearance beyond their expectation with a gab of 0.56. Moreover, the employees of HAG have good communications skills and access to the HAG office is easy as shown in table 8. Besides, In terms of the reception area for the clients, there is a high positive gab of 1.16.

Table 8 The level of Satisfaction relative to the Tangibles Dimension.

	Expected value		**Perceived value**		**Gap (P-E)**
Tangibles	Mean	Std	Mean	Std	
*The employees of HAG have **professional appearance.***	3.9600	0.73485	4.5200	0.71414	0.56
*The employees of HAG have **good communication skills.***	3.6000	1.11803	4.4000	0.57735	0.8
The access to HAG office is easy.	3.8400	0.98658	4.6400	0.48990	0.8
There is a reception area for clients at HAG office.	3.3200	0.94516	4.4800	0.50990	1.16
Gap for tangibles					0.83

The overall gab for the reliability dimension is positive 0.57. This means that the clients of HAG are highly satisfied with the services provided by the company, whether in terms of accuracy of data, continuous follow-up, or the good system used in the company of archiving the legal documents. It can be concluded that the clients depend on the company.

Table 9 The level of Satisfaction relative to the Reliability Dimension

	Expected value		**Perceived value**		**Gap (P-E)**
Reliability	Mean	Std	Mean	Std	
The employees of HAG are well-versed in the legal procedures.	4.0800	0.70238	4.4800	0.50990	0.4
There is a continuous follow-up of your case by the same lawyer.	3.9200	0.86217	4.4800	0.50990	0.56
The information provided by HAG are clear, up-to-date and accurate.	3.9600	0.84063	4.5200	0.50990	0.56
The legal documents are preserved and archived.	3.8800	0.92736	4.6400	0.48990	0.76
Gap for reliability					0.57

According to the responsiveness dimension, it is clear that the level of satisfaction for the clients is slightly high of a positive gab 0.87, from table 10 we can recognize that the employees of HAG are cooperative and willing to help their clients and provide prompt service. Moreover, they can deal with client's requests and complaints. It could be concluded that the responsiveness of HAG are much high than what the clients expect from them.

Table 10 The level of satisfaction relative to the Responsiveness Dimension.

	Expected value		**Perceived value**		**Gap (P-E)**
Responsiveness	Mean	Std	Mean	Std	
HAG provided its legal services quickly.	3.6000	1.00000	4.5600	0.50662	0.96
The lawyers and employees of HAG are cooperative.	3.4400	1.15758	4.4800	0.58595	1.04
I received the needed legal information or legal assistance form HAG.	3.7200	0.84261	4.5200	0.50990	0.8
Employees of HAG do not hesitate to respond any inquiries or questions.	3.6800	1.10755	4.3600	0.50990	0.68
Gap for Responsiveness					0.87

The overall gab for assurance is positive 0.79. Thus, it could be demonstrate that the quality of legal services perceived from HAG are beyond their expectation. They have the knowledge, experience, and courtesy. We can notice that employees of HAG provides its clients with the latest update supported by high positive gab 0.92 in table 11.

Table 11 The level of satisfaction relative to the Assurance Dimension.

	Expected value		**Perceived value**		**Gap (P-E)**
Assurance	Mean	Std	Mean	Std	
HAG's employees have good knowledge and experience.	3.8400	0.80000	4.6400	0.48990	0.8
HAG maintains the confidentiality of its clients and their information.	4.0000	0.81650	4.6800	0.47610	0.68
The fame of HAG gives me a feeling of security and confidence.	3.8400	1.06771	4.6000	0.50000	0.76
HAG provides its clients with the latest up-dates.	3.7200	0.89069	4.6400	0.48990	0.92
Gap for Assurance					0.79

The gab of empathy is negative - 0.304 as shown in table 12. The value is representing the level of satisfaction which is relatively low for the empathy dimension, as shown in

Table 12; the negative gaps occur in using legal terminologies by HAG that are difficult to understand for the clients, and there is a delay in filing lawsuits that impact the satisfaction of customers because of external factors that we previously mentioned. There is a positive gap in the relationship based on respect between the lawyers and clients, and they understand the client's need. Moreover, there are clear legal procedures by HAG.

Table 12 The level of satisfaction relative to the Empathy Dimension.

	Expected value		**Perceived value**		**Gap (P-E)**
Empathy	Mean	Std	Mean	Std	
HAG use legal terminologies that are difficult to understand.	3.8400	1.10604	1.6000	0.50000	-2.24
HAG has unified and clear legal procedures.	3.8000	1.00000	4.5200	0.50990	0.72
The lawyers of HAG understand the client's specific needs.	3.8800	0.83267	4.5200	0.50990	0.64
There was a delay in pursing your case from HAG side.	2.8000	1.22474	1.4800	0.58595	-1.32
The relationship is based on respect by the lawyer and employees of HAG.	3.9200	0.90921	4.6000	0.50000	0.68
Gap for empathy					-.304

The total gab score is positive as supported in table 13. The highest gab score is the gab for responsiveness 0.87, followed by the gab for tangibles 0.83, the gab for assurance 0.79, and the gab for reliability. These four dimensions are explained that the clients are satisfied with these aspects of legal services where the perceived value is high than the expected value of the clients. While the gap for empathy is the only negative gap, thus this aspect needs further improvement to gain customer satisfaction.

Table 13 The overall level of satisfaction

Service quality dimension	Gap
Gap for tangibles	0.83
Gab for reliability	0.57
Gab for responsiveness	0.87
Gab for assurance	0.79
Gab for empathy	-0.304
Total gab score	0.5512

We can conclude that the level of customer satisfaction with the services provided by HAG is extremely high around 92% of the respondents are satisfied. 88% of the respondents (Agree and strongly agree) are satisfied with the price of the services provided by HAG. 84% are satisfied with the waiting time to fulfill their services (52% agree, 32% strongly agree), while 16% of them felt neutral. For the explanation provided by the lawyers of HAG, we found that there is 4% of the respondents are not satisfied while 80% of them are satisfied, 16% were neutral. About the performance of the staff and the system used in the company, we found that 80% of the respondents are satisfied, 8% were not satisfied and the others' responses were neutral. 60% of the respondents were highly satisfied with the complaints handling mechanism by HAG.

4.2 Discussion

This section contains and analyzes the results in line with the previous studies, literature, and research questions. It also explains how this thesis supports research in the field of lean management, and the key advantages it may provide in addition to previous researches.

One of the difficulties of writing this study is the translation of the principles of enhancing the process in a legal context. After all, legal firms are not manufacturing automobiles or door industry. In this context, there is a unique, considerable variance: each firm, profession, lawyer, client, experience, corporation, lawsuit, evidence, judge, counsel, etc., are different. The translation of these principles from the productive environment to the legal field is why the term of legal lean was originally developed. Although the concept of Lean in law is simple, it is not easily applicable. However, based on the analysis and findings of this study, each service, whether litigation or transactions, involves a sequence of repeatable steps – even if there is considerable variance in each – in the end, each one is a procedure. There is, therefore, sufficient potential in each service, offering to apply lean ideas and tools to simplify and speed up the process.

Through the aforementioned previous studies, and based on the answers of the employees of HAG, five principles could be summarized and are found mandatory for improving processes in law firms:

1- Identifying the potential value from the client perspective: The client's viewpoint should be employed to assess whether an activity is an added value (activities which create features a client would be willing to pay for), or non-added value activities (activities which demand time and money, but don't beget an extra value for the client).

2- Reduction of waste and variability: That is, reducing or even entirely eliminating the eight kinds of waste. Because of increasing processes variability, they become more difficult to manage and operate which consequently uses up more resources. In such a case, the outcomes will often be beyond the appropriate range of the client.

3- Improving the flow of the client’s value: when a process is "flowing," its steps are connected so that it moves directly from a value-added activity to another without notable delay. This seamless approach helps the law firm to respond more effectively to the customer, and therefore genuinely meet with customers’ needs. In other words, the principle of pull is that a firm will directly generate value in response to the customer's actual demand. In order to better address customer needs, tight coordination of the whole process is mandatory.

4- Align and inspire staff: to achieve sustainable improvement, the company must strengthen teamwork in its processes. In the end, team members are leader extensions and an indication of leadership effectiveness. An integrated team means individual strengths are directed to reinforce effective teamwork, not only for the mere purpose of enhancing processes, but also to improve client services and customer care.

5- Constant improvement toward perfection: Generally, companies should create specifications to capacities and efficiencies, and develop a constant and fast business environment. without consistent improvement, the opportunity to compete and succeed will be lacking.

In fact, when we applied the lean tool, such as value stream mapping, the tool was difficult to apply to all services provided by HAG because of the multiplicity of and variation in the studied cases. Moreover, there is an additional variation in the time needed for each case, as the lead-time for some cases occasionally stretched to many years. This, as a consequence, posed several problems. For instance, due to the long life cycle of each case, there had been a lack of financial return for the company, and thus lawyers were not paid until the case came to a close, resulting in spending time, effort,

and resources in advance. According to interviewees' responses from the accounting department, it turns out that the insurance department, and the individuals, and the corporate department were the only divisions contending with this difficulty because the partners did not set out an exact value of fees earlier when lawsuits were filed, as they might have been unaware of the potential problem that transpired later.

A similar issue arose in the Collection and Execution Department, also due to vagueness concerning the agreement on fees (between the clients and the company), causing a clear minimization of the profit margin of this department. While underestimation of costs has led to minimizing revenue in the Bank department, other divisions, such as the Department of Intellectual Property, generated comparably higher revenue, mostly due to the short life cycle of the cases, in addition to possible cultural differences related to clients being foreign rather than local.

Due to the difficulty to create a value stream mapping for all legal services provided by HAG, which includes the time needed for the case from the first step when the customer comes to the company until the case is closed, the cases are ranked as shown in Table 7.

Table 14: Lawsuits ranking

Type of lawsuit	**Number of years it takes**	**Reason**
Elimination of joint ownership	1-10	A large number of partners
Accounting-conducting lawsuits	1-5	It needs an expert
Tenant eviction	1-4	Need a lot of evidence; Unspecified address of other parties
Company liquidation lawsuit	1-4	Need a lot of evidence; evasion of court

		notification
Compensation	1-3	It needs a medical committee approved by the Ministry of Health
Execution lawsuit	1-3	it needs reconciliation with the other party; change in address
Recovery claim	1	Unclear location

Table 8 below summarizes the eight type of waste in law firms.

Table 15: Eight types of waste in law firms

Type of waste	Description	Examples in legal services
Defects	Reworks, errors	• Missed deadline • Data entry errors • Incomplete forms • Incomplete drafts • Any omission on required processes or documents.
Overproduction	Processing more than what's required	• Producing too many copies of a document • Sending emails or reports more frequently than needed
Waiting	Waiting for an employee or client's input before proceeding to the next step	• Waiting for client's or employee's response • Waiting on emails replies • Waiting for document review • Slow computer processing
Non-Utilized talent	Not maximizing staff to their full potential or capacity	• Idle team member due to limited authority and responsibility • The employee assigned to the

		wrong job
Transportation	Un-necessary movement of items	• Excessive document hand-offs • Un-necessary movement of documents from one department to another
Inventory	Storing materials or resources more	• Holding on too many copies of documents • Files and documents waiting to be processed
Motion	Unnecessary movement exerted by people	• Un-necessary steps in a process • Longer time to look for a file because of disorganization
Excess processing	Unnecessary movement exerted by people	• Duplicating data • Using multiple systems to handle client data and documentation

In the light of the above discussion and according to (Bellamy and Taylor 1996), they state that waste could be minimized by the same strategy in operational cost and performance, and the legal industry is one of a variety of services that may benefit from a lean-thinking strategy.

In another study Martins and Carvalho (2004) introduced the use of Lean Thought in Portuguese courts in recognizing exactly how court sensitivity can be improved. Their research centered on reducing wait time, inventories, transport, and overproduction, thus minimizing waste. There are, however, few instances of Lean being used in the legal sector beyond those examples (Hines et al. 2008). TQM is thus becoming increasingly

important for the success of law firms as a potential way of enhancing the quality and productivity of legal services and functional delivery (Kubaso 2016).

In conclusion, the previous studies that were conducted regarding the use of lean in legal firms showed that the concept of Lean could be applied in the legal firm but not as much as in the industrial sector. This study supports the previous studies in their claim about lean management and that it can be used in legal firm such as HAG with some limitation of applying lean methods in the selected processes that it mentioned in the findings section.

Chapter 5: Contribution, Conclusions and Recommendations, Limitations and Direction for Future Research

5.1 Contributions

This study highlighted the definition and use of Lean tools in HAG. More specifically, by analyzing the conducted interviews, it was found that the company's employees were trying to improve certain processes, but they were not aware of the Lean tools and their potential impact on the efficiency of the services provided by them. Worth mentioning is that HAG is deemed as one of the highest valued and well-respected companies within the legal field. HAG benefits from the Quality Department, which functions to determine the root causes of quality problems by continuously gathering customer quality data, to facilitate company improvement, control and execute quality audit operations, and to help ensure customer needs are fulfilled when a new service is introduced. Despite this, there is still a pressing need to improve processes to reduce time and effort and increase the company's income.

5.2 Conclusions

This study concerns the field of lean tools implementation in the service industry, with a focus on law firms. Many companies did not succeed to implement lean seamlessly in service provision (Almanei, Salonitis, and Xu, 2017), especially that it is a unique process applied differently in different companies. Lean is an integrated socio-technical system that aims at eliminating waste by reducing supplier, customer, and internal variability (Almanei, Salonitis, and Xu, 2017). Previous research has mainly focused on lean implementation in the manufacturing sector, while studies conducted in law firms are limited. This demonstrates a disproportionate distribution in research made about lean waste in different sectors. Therefore, this study undertakes to analyze the variation that may arise between those sectors.

The practice of law is subject to pressure from various sources; Firstly, from an economic perspective, the number of licensed lawyers has recently soared, while other disciplines, which were once the sole province of lawyers, are threatening areas of practice. Secondly, courts conduct of delaying cases causes further pressure, because this conduct would result in delayed payments from clients, who link those payments to case closure. Thirdly, there is additional pressure from clients to expedite the cases that concern them, as well as the litigants in the case, and the delays they cause when they refuse to attend the court.

Unarguably, law practice is witnessing a profound change and will continue to do so, regardless of the nature of practice: whether it is an individual practice or a multinational firm. Amid these circumstances, lawyers have a choice to proactively manage the change.

For instance, TQM offers some valuable techniques to help manage the current change for the benefit of the profession.

This study has demonstrated that Lean Thinking could be applied to the legal sector. A simple internal Lean approach could be highly beneficial as a first step. In addition, while the sector appears to barely witness few if any, recent improvements, the Lean approach has the potential to bring major and rapid gains. It was noted that in the cases studied, there were no major modifications, although the nature of service-providing companies requires a greater extent of attention to people's needs when compared to manufacturing companies.

5.3 Recommendations

After viewing some of their problems, a recommendation to add a smart printer that shows the number of pages printed during a particular day was suggested. This recommendation, together with the reason for printing these papers, would contribute to minimizing paper waste. As for the increase in the fees of lawyers in the company, another recommendation was made; that is, the company's agreements with clients are based on the hour and not on a specific agreement every year, in addition to demanding a certain percentage upfront, as soon as the case is received. It is also recommended that they appoint an executive director of the company so that there is one reference for the employees instead of not knowing who to return when making the decision.

5.4 Limitations and Future Research

There have been several limitations in this study; first, there is limited data about the improvement processes in law firms in previous studies. Second, timing caused a serious difficulty in light of the Coronavirus crisis and having to meet the deadline in such unfavorable circumstances. For this, the study was limited to examine only one law firm, even though findings would have been more significant had the study managed to hold a wider range of interviews with partners, employees, lawyers of the company. Third, interviews might have had some limitations in data collection as it was restrained by matters of consuming time, so it would have been costly to collect more data, resulting in reducing the presupposed sample. Future research should be aiming at improving processes in the service sector, specifically legal services in law offices and firms, which currently witness a lack of academic interest as most studies focus on quality improvement in the manufacturing sector. Further research on process improvement in courts is encouraged since the area is liable to improvement on many levels. This could also help raise awareness and knowledge about the importance of quality improvement in law firms.

References

- Abdi, Farshid, Shavarini Sohrab Khalili, and Hoseini Seyed Mohammad Seyed. 2006. "Glean Lean: How To Use Lean Approach in Service Industries?" *Journal of Services Research*.

- Abdulmalek, Fawaz A., and Jayant Rajgopal. 2007. "Analyzing the Benefits of Lean Manufacturing and Value Stream Mapping via Simulation: A Process Sector Case Study." *International Journal of Production Economics*.

- Ablanedo-Rosas, José H., Bahram Alidaee, Juan Carlos Moreno, and Javier Urbina. 2010. "Quality Improvement Supported by the 5S, an Empirical Case Study of Mexican Organisations." *International Journal of Production Research*.

- Abraham, Steven E., Michael S. Spencer, and Eloise L. Monk. 1998. "Total Quality Management: Applicability to Law Firms." *International Journal of Quality and Reliability Management*.

- Achanga, Pius, Esam Shehab, Rajkumar Roy, and Geoff Nelder. 2006. "Critical Success Factors for Lean Implementation within SMEs." *Journal of Manufacturing Technology Management*.

- Agus, Arawati, and Mohd Shukri Hajinoor. 2012. "Lean Production Supply Chain Management as Driver towards Enhancing Product Quality and Business Performance." *International Journal of Quality & Reliability Management*.

- Alefari, Mudhafar, Konstantinos Salonitis, and Yuchun Xu. 2017. "The Role of Leadership in Implementing Lean Manufacturing." in *Procedia CIRP*.

- Ali, Nauman Bin, Kai Petersen, and Breno Bernard Nicolau De França. 2015. "Evaluation of Simulation-Assisted Value Stream Mapping for Software Product Development: Two Industrial Cases." *Information and Software Technology*.

- Alkhoraif, Abdullah, and Patrick McLaughlin. 2018. "Lean Implementation within Manufacturing SMEs in Saudi Arabia: Organizational Culture Aspects." *Journal of King Saud University - Engineering Sciences*.

- Almanei, Mohammed, Konstantinos Salonitis, and Yuchun Xu. 2017. "Lean Implementation Frameworks: The Challenges for SMEs." in *Procedia CIRP*.

- Alsmadi, Majed, Ahmad Almani, and Rula Jerisat. 2012. "A Comparative Analysis of Lean Practices and Performance in the UK Manufacturing and Service Sector Firms." *Total Quality Management and Business Excellence*.

- Alvarez, Rosío, and Jacqueline Urla. 2002. "Tell Me a Good Story: Using Narrative Analysis to Examine Information Requirements Interviews during an ERP Implementation." *Data Base for Advances in Information Systems*.
- Anon. 2006. "Dictionary of Nursing Theory and Research." *Choice Reviews Online*.

- Antony, Jiju. 2014. "Readiness Factors for the Lean Six Sigma Journey in the Higher Education Sector." *International Journal of Productivity and Performance Management*.

- Arbulu, Roberto J., Iris D. Tommelein, Kenneth D. Walsh, and James C. Hershauer. 2003. "Value Stream Analysis of a Re-Engineered Construction Supply Chain." *Building Research and Information*.

- Arfmann, David, and G. Topolansky Barbe. 2014. "The Value of Lean in the Service Sector : A Critique of Theory & Practice." *International Journal of Business and Social Science*.

- Bahri, Syamsul. 2012. "Implementation of Total Quality Management and Its Effect on Organizational Performance of Manufacturing Industries Through Organizational Culture in South Sulawesi, Indonesia." *IOSR Journal of Business and Management*.

- Barber, Clifford S., and Brian C. Tietje. 2008. "A Research Agenda for Value Stream Mapping the Sales Process." *Journal of Personal Selling and Sales Management*.

- Bartholomew, K., A. J. Z. Henderson, and J. E. and Marcia. 2000. "Coded Semistructured Interviews in Social Psychological Research." in *Handbook of Research Methods in Social and Personality Psychology*.

- Bell, Steven C., and Michael A. Orzen. 2010. *Lean IT: Enabling and Sustaining Your Lean Transformation*.

- Bellamy, Christine, and John Taylor. 1996. "New Information and Communications Technologies and Institutional Change: The Case of the UK Criminal Justice System." *International Journal of Public Sector Management* 9(4):51–69.

- Benjamin, Samuel Jebaraj, M. Srikamaladevi Marathamuthu, and Uthiyakumar Murugaiah. 2015. "The Use of 5-WHYs Technique to Eliminate OEE's Speed Loss in a Manufacturing Firm." *Journal of Quality in Maintenance Engineering*.

- Bentley, Tanya G. K., Rachel M. Effros, Kartika Palar, and Emmett B. Keeler. 2008. "Waste in the U.S. Health Care System: A Conceptual Framework." *Milbank Quarterly*.

- Bessant, J., S. Caffyn, J. Gilbert, R. Harding, and S. Webb. 1994. "Rediscovering Continuous Improvement." *Technovation*.

- Bhuiyan, Nadia, and Nadeem Alam. 2005. "An Investigation into Issues Related to the Latest Version of ISO 9000." *Total Quality Management and Business Excellence*.

- Bhuiyan, Nadia, and Amit Baghel. 2005. "An Overview of Continuous Improvement: From the Past to the Present." *Management Decision*.

- Bigliardi, Barbara, and Francesco Galati. 2014. "The Implementation of TQM in R&D Environments." *Journal of Technology Management and Innovation*.

- Bloor, Michael. 2006. *Keywords in Qualitative Methods [Electronic Resource] : A Vocabulary of Research Concepts*.

- Bowman, Cliff, and Richard Schoenberg. 2008. "From Customer Understanding to Strategy Innovation: Practical Tools to Estalish Competitive Positioning." *Strategy, Innovation and Change Challenges for Management*.

- Boyatzis, Richard E. 1998. "Transforming Qualitative Information." *Sage Publications, Inc*.

- Boynton, Andrew C., and Robert W. Zmud. 1984. "ASSESSMENT OF CRITICAL SUCCESS FACTORS." *Sloan Management Review*.

- Brah, Shaukat A., Jen Li Wong, and B. Madhu Rao. 2000. "TQM and Business Performance in the Service Sector: A Singapore Study." *International Journal of Operations and Production Management*.

- Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology*.

- Brotherton, Bob, and Jane Shaw. 1996. "Towards an Identification and Classification of Critical Success Factors in UK Hotels Plc." *International Journal of Hospitality Management*.

- Caffyn, Sarah. 1999. "Development of a Continuous Improvement Self-Assessment Tool." *International Journal of Operations and Production Management*.

- Campion, Michael A., David K. Palmer, and James E. Campion. 1997. "A Review of Structure in the Selection Interview." *Personnel Psychology*.

- Capital, Mekong. 2004. *Introduction to Lean Manufacturing for Vietnam*.

- Chait, Herschel, and Shawn Carraher. 2000. "Measuring Service Orientation with Biodata." *Journal of Managerial Issues*.

- Chuang, Shuang Shii, Kun Shiang Chen, and Ming Tien Tsai. 2015. "Exploring the Antecedents That Influence Middle Management Employees' Knowledge-Sharing Intentions in the Context of Total Quality Management Implementations." *Total Quality Management and Business Excellence*.

- Cooper, V. A. 2008. "The Critical Success Factor Method: A Review and Practical Example." *CONF-IRM 2008 Proceedings*.

- Corbett, Lawrence M., and Kate N. Rastrick. 2000. "Quality Performance and Organizational Culture: A New Zealand Study." *International Journal of Quality & Reliability Management*.

- Coronado, Ricardo Banuelas, and Fiju Antony. 2002. "Critical Success Factors for the Successful Implementation of Six Sigma Projects in Organisations." *TQM Magazine*.

- Damrath, Felix. 2012. "Increasing Competitiveness of Service Companies: Developing Conceptual Models for Implementing Lean Management in Service Companies." *Masters Thesis, IMIM Politecnico Di Milano, Italy*.

- Daniels, Robin C. 1996. "Profit-Related Pay and Continuous Improvement: The Odd Couple." *Engineering Management Journal*.

- Darlaston-Jones, Dawn. 2007. "Making Connections : The Relationship between Epistemology and Research Methods." *The Australian Community Psychologist*.

- DeJonckheere, Melissa, and Lisa M. Vaughn. 2019. "Semistructured Interviewing in Primary Care Research: A Balance of Relationship and Rigour." *Family Medicine and Community Health*.

- Deming, William Edwards. 1986. "Out of the Crisis: Quality, Productivity and Competitive Position." *Massachusetts Institute of Technology. Center for Advanced Engineering Study*.

- DiCicco-Bloom, Barbara, and Benjamin F. Crabtree. 2006. "The Qualitative Research Interview." *Medical Education*.

- Doğan, Nuri Özgür, and Osman Unutulmaz. 2016. "Lean Production in Healthcare: A Simulation-Based Value Stream Mapping in the Physical Therapy and Rehabilitation Department of a Public Hospital." *Total Quality Management and Business Excellence*.

- Dombrowski, U., and T. Mielke. 2013. "Lean Leadership - Fundamental Principles and Their Application." in *Procedia CIRP*.

- Eisenhardt, Kathleen M. 1989. "Building Theories from Case Study Research." *Academy of Management Review.*

- Eisner, Elliot W. 1991. "Six Features of Qualitative Study." in *The enlightened eye : qualitative inquiry and the enhancement of educational practice*.

- Esteban-Ferrer, María J., and Jesús Tricás. 2012. "Applying QFD to Strategic Quality Management in Law Firms." *Total Quality Management and Business Excellence*.

- Forno, Ana Julia Dal, Fernando Augusto Pereira, Fernando Antonio Forcellini, and Liane M. Kipper. 2014. "Value Stream Mapping: A Study about the Problems and Challenges Found in the Literature from the Past 15 Years about Application of Lean Tools." *International Journal of Advanced Manufacturing Technology*.

- Fotopoulos, Christos B., and Evangelos L. Psomas. 2009. "The Impact of 'Soft' and 'Hard' TQM Elements on Quality Management Results." *International Journal of Quality and Reliability Management*.

- Fullerton, Rosemary R., and William F. Wempe. 2009. "Lean Manufacturing, Non-Financial Performance Measures, and Financial Performance." *International Journal of Operations and Production Management*.

- Garrido, E. Diaz, M. L. Martin-Peña, and F. Garcia-Muiña. 2007. "Structural and Infrastructural Practices as Elements of Content Operations Strategy. the Effect on a Firm's Competitiveness." *International Journal of Production Research*.

- Gibbert, Michael, Winfried Ruigrok, and Barbara Wicki. 2008. "What Passes as a Rigorous Case Study?" *Strategic Management Journal*.

- Gray, David E. 2014. *Theoretical Perspectives and Research Methodologies*.

- Group, Hussam Attereh. 2014. "No Title." Retrieved (http://www.atterehgroup.com/en/?page=one&cat=1).

- Guba, Egon G., and Yvonna S. Lincoln. 1994. "Competing Paradigms in Qualitative Research." in *Handbook of qualitative research*.

- Gupta, Atul, Jason C. McDaniel, and S. Kanthi Herath. 2005. "Quality Management in Service Firms: Sustaining Structures of Total Quality Service." *Managing Service Quality*.

- Gustafsson, Anders, Lars Nilsson, and Michael D. Johnson. 2003. "The Role of

Quality Practices in Service Organizations." in *International Journal of Service Industry Management*.

- Hamel, Gary. 1998. "Opinion: Strategy Innovation and the Quest for Value." *Sloan Management Review*.

- HARRIS, MICHAEL M. 1989. "RECONSIDERING THE EMPLOYMENT INTERVIEW: A REVIEW OF RECENT LITERATURE AND SUGGESTIONS FOR FUTURE RESEARCH." *Personnel Psychology*.

- Heras-Saizarbitoria, Iñaki, Martí Casadesús, and Frederic Marimón. 2011. "The Impact of ISO 9001 Standard and the EFQM Model: The View of the Assessors." *Total Quality Management and Business Excellence*.

- Hicks, B. J. 2007. "Lean Information Management: Understanding and Eliminating Waste." *International Journal of Information Management*.

- Hines, Peter, Ana Lucia Martins, and Jo Beale. 2008. "Testing the Boundaries of Lean Thinking: Observations from the Legal Public Sector." *Public Money and Management*.

- Hines, Peter, and Nick Rich. 1997. "The Seven Value Stream Mapping Tools." *International Journal of Operations and Production Management*.

- Hopewell, Barry. 2001. "Strategic Management of Professional Service Firms." *Long Range Planning*.

- Huffcutt, Allen I., and Winfred Arthur. 1994. "Hunter and Hunter (1984) Revisited: Interview Validity for Entry-Level Jobs." *Journal of Applied Psychology*.

- Hunter, E. 2010. "Richard Susskind, The End of Lawyers? Rethinking the Nature of Legal Services." *Human Rights Law Review*.

- Hyland, Paul, Robert Mellor, Eddie O'Mara, and Ramesh Kondepudi. 2000. "A Comparison of Australian Firms and Their Use of Continuous Improvement Tools." *TQM Magazine*.

- Iacobucci, E., and Michael J. Trebilcock. 2014. "An Economic Analysis of Alternative Business Structures for the Practice of Law." *Canadian Bar Review* 92:1.

- Imai, Masaaki. 1986. *Kaizen: The Key to Japan's Competitive Success*.

- Ishikawa, K. 1981. "What Is Total Quality Control : The Japanese Way ." *New York*.

- Jayswal, Abhishek, Xiang Li, Anand Zanwar, Helen H. Lou, and Yinlun Huang. 2011. "A Sustainability Root Cause Analysis Methodology and Its Application." *Computers and Chemical Engineering*.

- Johnson, Michael D. 2015. "Customer Satisfaction." in *International Encyclopedia of the Social & Behavioral Sciences: Second Edition*.

- Juran, Joseph, and A. Godfrey. 1998. *JURAN'S QUALITY HANDBOOK, 5th EDITION*.

- Kanji, G. K. 1998. "An Innovative Approach to Make ISO 9000 Standards More Effective." *Total Quality Management*.

- Karthi, S., S. R. Devadasan, R. Murugesh, C. G. Sreenivasa, and N. M. Sivaram. 2012. "Global Views on Integrating Six Sigma and ISO 9001 Certification." *Total Quality Management and Business Excellence*.

- Karuppusami, G., and R. Gandhinathan. 2006. "Pareto Analysis of Critical Success Factors of Total Quality Management." *The TQM Magazine*.

- Keaveney, Susan M. 1995. "Customer Switching Behavior in Service Industries: An Exploratory Study." *Journal of Marketing*.

- Ketokivi, Mikko, and Thomas Choi. 2014. "Renaissance of Case Research as a Scientific Method." *Journal of Operations Management*.

- Kuhlang, P., T. Edtmayr, and W. Sihn. 2011. "Methodical Approach to Increase Productivity and Reduce Lead Time in Assembly and Production-Logistic Processes." *CIRP Journal of Manufacturing Science and Technology*.

- Kuo, Tsuang, Tsun Jin Chang, Kuei chung Hung, and Ming yuan Lin. 2009. "Employees' Perspective on the Effectiveness of ISO 9000 Certification: A Total Quality Management Framework." *Total Quality Management and Business Excellence*.

- Kureshi, Nadeem, Faheem Qureshi, and Ali Sajid. 2010. "Current Health of Quality Management Practices in Service Sector SME A Case Study of Pakistan." *TQM Journal*.

- Kvale. 1996. "An Introduction to Qualitative Research Interviewing." *Qualitative Research*.

- Lee-Ross, Darren. 2008. "An Exploratory Study of the Contextual Stability of SERVQUAL amongst Three Retail Clusters in Far North Queensland." *Journal of Place Management and Development*.

- Lemak, David J., and Richard Reed. 2000. "An Application of Thompson's Typology to TQM in Service Firms." *Journal of Quality Management*.

- Leung, Samuel, and W. B. Lee. 2004. "Strategic Manufacturing Capability Pursuance: A Conceptual Framework." *Benchmarking*.

- Lincoln, Yvonna S., Egon G. Guba, and Joseph J. Pilotta. 1985. "Naturalistic Inquiry." *International Journal of Intercultural Relations*.

- Maguad, Ben. 2006. "The Modern Quality Movement: Origins, Development and Trends." *Total Quality Management and Business Excellence*.

- Marvel, Jon H., and Charles R. Standridge. 2009. "A Simulation-Enhanced Lean Design Process." *Journal of Industrial Engineering and Management*.

- Mayrl, Philipp, Hugh L. McManus, and Roman Boutellier. 2013. "Eliciting Product Development Knowledge Using Value Stream Mapping." *International Journal of Product Development*.

- McCutcheon, David M., and Jack R. Meredith. 1993. "Conducting Case Study Research in Operations Management." *Journal of Operations Management*.

- McDaniel, Michael A., Deborah L. Whetzel, Frank L. Schmidt, and Steven D. Maurer. 1994. "The Validity of Employment Interviews: A Comprehensive Review and Meta-Analysis." *Journal of Applied Psychology*.

- McDonald, Thomas, Eileen M. Van Aken, and Antonio F. Rentes. 2002. "Utilising Simulation to Enhance Value Stream Mapping: A Manufacturing Case Application." *International Journal of Logistics Research and Applications*.

- Merriam, S. B. 1988. *Case Study Research in Education: A Qualitative Approach*.

- Merriam, Sharan B. 1995. "What Can You Tell from an N of 1?: Issues of Validity and Reliability in Qualitative Research." *PAACE Journal of Lifelong Learning*.

- Michael, Claire W., Kalyani Naik, and Michael McVicker. 2013. "Value Stream Mapping of the Pap Test Processing Procedure a Lean Approach to Improve Quality and Efficiency." *American Journal of Clinical Pathology*.

- Moen, Ronald. 2009. "Foundation and History of the PDSA Cycle." *Associates in Process Improvement-Detroit (USA)*.

- Morse, J. M., and P. A. Field. 1995. "Qualitative Research Methods for Health Professionals." *Introducing Qualitative Methods*.

- Motwani, Jaideep. 2003. "A Business Process Change Framework for Examining Lean Manufacturing: A Case Study." *Industrial Management and Data Systems*.

- Murugaiah, Uthiyakumar, Samuel Jebaraj Benjamin, M. Srikamaladevi Marathamuthu, and Saravanan Muthaiyah. 2010. "Scrap Loss Reduction Using the 5-Whys Analysis." *International Journal of Quality and Reliability Management*.

- Neyestani, Behnam, and Joseph Berlin P. Juanzon. 2016. "Developing an Appropriate Performance Measurement Framework for Total Quality Management (TQM) in Construction and Other Industries." *IRA-International Journal of Technology & Engineering (ISSN 2455-4480)*.

- Neyestani, Behnam, and JosephBerlinP. Juanzon. 2016. "IDENTIFICATION OF A SET OF APPROPRIATE CRITICAL SUCCESS FACTORS (CSFS) FOR SUCCESSFUL TQM IMPLEMENTATION IN CONSTRUCTION, AND OTHER INDUSTRIES." *International Journal of Advanced Research*.

- Ohno, Taiichi. 1988. "Toyota Production System Summary." in *Toyota Production System: Beyond Large-Scale Production*.

- Panizzolo, Roberto, Patrizia Garengo, Milind Kumar Sharma, and Amol Gore. 2012. "Lean Manufacturing in Developing Countries: Evidence from Indian SMEs." *Production Planning and Control*.

- Papadopoulou, T. C., and M. Özbayrak. 2005. "Leanness: Experiences from the Journey to Date." *Journal of Manufacturing Technology Management*.

- Parasuraman, A., Valarie A. Zeithaml, and Leonard L. Berry. 1985. "A Conceptual Model Service Its Quality and Implications for Future Research." *Research Paper*.

- Pope, Catherine, Sue Ziebland, and Nicholas Mays. 2007. "Analysing Qualitative Data." in *Qualitative Research in Health Care: Third Edition*.

- Prajogo, Daniel I., and Christopher M. McDermott. 2005. "The Relationship between Total Quality Management Practices and Organizational Culture." *International Journal of Operations and Production Management*.

- Psomas, Evangelos L., Christos V. Fotopoulos, and Dimitrios P. Kafetzopoulos. 2010. "Critical Factors for Effective Implementation of ISO 9001 in SME Service Companies." *Managing Service Quality*.

- Punch, Keith F. 2005. *Introduction to Social Research: Quantitative and Qualitative Approaches*.

- Qu, Li, Man Ma, and Guannan Zhang. 2011. "Waste Analysis of Lean Service." in *International Conference on Management and Service Science, MASS 2011*.

- Radnor, Z., P. Walley, A. Stephens, and G. Bucci. 2006. "Evaluation of the Lean Approach to Business Management and Its Use in the Public Sector." *Research Findings*.

- Ranjan, Jayanti, and Vishal Bhatnagar. 2008. "Critical Success Factors for Implementing CRM Using Data Mining." *Interscience Management Review*.

- Rawabdeh, Ibrahim A. 2005. "A Model for the Assessment of Waste in Job Shop Environments." *International Journal of Operations and Production Management*.

- Reid, Richard A. 2006. "Productivity and Quality Improvement: An Implementation Framework." *International Journal of Productivity and Quality Management*.

- Rodríguez-Escobar, Javier Alfonso, Javier Gonzalez-Benito, and Angel Rafael Martínez-Lorente. 2006. "An Analysis of the Degree of Small Companies' Dissatisfaction with ISO 9000 Certification." *Total Quality Management and Business Excellence*.

- Rosenbaum, Sergio, Mauricio Toledo, and Vicente González. 2014. "Improving Environmental and Production Performance in Construction Projects Using Value-Stream Mapping: Case Study." *Journal of Construction Engineering and Management*.

- Rother, Mike, and John Shook. 2003. "Learning to See: Value Stream Mapping to Add Value and Eliminate Muda (Lean Enterprise Institute)." *Lean Enterprise Institute Brookline*.

- Rowley, Jennifer. 2002. "Using Case Studies in Research." *Management Research News*.

- Rubio-Andrada, Luis, María Del Mar Alonso-Almeida, and José Miguel Rodríguez-Antón. 2011. "Motivations and Impacts in the Firm and Stakeholders of Quality Certification: Evidence from Small- and Medium-Sized Service Enterprises." *Total Quality Management and Business Excellence*.

- Rusjan, Borut, and Milena Alič. 2010. "Capitalising on ISO 9001 Benefits for Strategic Results." *International Journal of Quality and Reliability Management*.

- Sandelowski, Margarete, and Julie Barroso. 2003. "Classifying the Findings in Qualitative Studies." *Qualitative Health Research*.

- Saunders, Mark, Philip Lewis, and Adrian Thornhill. 2009. *Research Methods for Business Students. Fitfth Edition*.

- Schell, C. 1992. "The Value of the Case Study as a Research Strategy." *ERS-RUPRI Conference: Exploring Rural Entrepreneurship*.

- Schulze, Anja, Philipp Schmitt, Mareike Heinzen, Philipp Mayrl, Daniel Heller, and Roman Boutellier. 2013. "Exploring the 4I Framework of Organisational Learning in Product Development: Value Stream Mapping as a Facilitator." *International Journal of Computer Integrated Manufacturing*.

- Serrano, Ibon, Carlos Ochoa, and Rodolfo De Castro. 2008. "Evaluation of Value Stream Mapping in Manufacturing System Redesign." *International Journal of Production Research*.

- Shah, Rachna, and Peter T. Ward. 2003. "Lean Manufacturing: Context, Practice Bundles, and Performance." *Journal of Operations Management*.

- Shah, Rachna, and Peter T. Ward. 2007. "Defining and Developing Measures of Lean Production." *Journal of Operations Management*.

- Sigala, Marianna. 2010. "Operations Management in the Travel Industry." *International Journal of Contemporary Hospitality Management*.

- Silverman, David. 2013. *Doing Qualitative Research: A Practical Handbook FOURTH EDITION*.

- Sodhi, Manmohan S., and Christopher S. Tang. 2014. "Guiding the next Generation of Doctoral Students in Operations Management." *International Journal of Production Economics*.

- Spring, M., R. McQuater, K. Swift, B. Dale, and J. Booker. 1998. "The Use of Quality Tools and Techniques in Product Introduction: An Assessment Methodology." *TQM Magazine*.

- Stake, R. E. 1995. "The Unique Case." in *The art of case study research*.

- Suárez-Barraza, Manuel F., Tricia Smith, and Su Mi Dahlgaard-Park. 2012. "Lean Service: A Literature Analysis and Classification." *Total Quality Management and Business Excellence*.

- Talib, Faisal, Zillur Rahman, and M. N. Qureshi. 2011. "An Interpretive Structural Modelling Approach for Modelling the Practices of Total Quality Management in Service Sector." *International Journal of Modelling in Operations Management*.

- Terpstra, David E., and Elizabeth J. Rozell. 1997. "Why Some Potentially Effective Staffing Practices Are Seldom Used." *Public Personnel Management*.

- Tiwari, Ashutosh, Chris Turner, and Peter Sackett. 2007. "A Framework for Implementing Cost and Quality Practices within Manufacturing." *Journal of Manufacturing Technology Management*.

- Trochim, W. M. K. 2001. *The Research Methods Knowledge Base*.

- Trochim, William M. K., and James P. Donnelly. 2016. "Research Methods: The Essential Knowledge Base." in *Research Methods: The Essential Knowledge Base*.

- Umble, Elisabeth J., Ronald R. Haft, and M. Michael Umble. 2003. "Enterprise Resource Planning: Implementation Procedures and Critical Success Factors." *European Journal of Operational Research*.

- Vaismoradi, Mojtaba, Hannele Turunen, and Terese Bondas. 2013. "Content Analysis and Thematic Analysis: Implications for Conducting a Qualitative Descriptive Study." *Nursing and Health Sciences*.

- Vanichchinchai, Assadej, and Barbara Igel. 2011. "The Impact of Total Quality Management on Supply Chain Management and Firm's Supply Performance." *International Journal of Production Research*.

- Wacker, John G. 1998. "A Definition of Theory: Research Guidelines for Different Theory-Building Research Methods in Operations Management." *Journal of Operations Management*.

- Wallen, N. E., and J. R. Fraenkel. 2001. "Educational Research ; A Guide to the Process." *International Education Studies*.

- Wan, Hung-da, F. Frank Chen, Subhash C. Sarin, Robert E. Taylor, and Philip Y. Huang. 2006. "Measuring Leanness of Manufacturing Systems and Identifying Leanness Target by Considering Agility." *Manufacturing Systems*.

- Wan, Hung Da, F. Frank Chen, and Leonardo Rivera. 2007. "Leanness Score of Value Stream Maps." in *IIE Annual Conference and Expo 2007 - Industrial Engineering's Critical Role in a Flat World - Conference Proceedings*.

- Wan, Hung Da, and F. Frank Chen. 2008. "A Leanness Measure of Manufacturing Systems for Quantifying Impacts of Lean Initiatives." *International Journal of Production Research*.

- Wee, H. M., and S. Simon. 2009. "Lean Supply Chain and Its Effect on Product

Cost and Quality: A Case Study on Ford Motor Company." *Supply Chain Management: An International Journal*.

- Wei, Jerry C. 2009. "Theories and Principles of Designing Lean Service Process." in *Proceedings of the 2009 6th International Conference on Service Systems and Service Management, ICSSSM '09*.

- Welch, Jill K., and Michael Quinn Patton. 1992. "Qualitative Evaluation and Research Methods." *The Modern Language Journal*.

- White, Adrian. 2003. "HOW TO GET A PhD: A HANDBOOK FOR STUDENTS AND THEIR SUPERVISORS." *Complementary Therapies in Medicine*.

- Wilkins, David B. 2010. "Team of Rivals? Toward a New Model of the Corporate Attorney-Client Relationship." *Fordham Law Review*.
- Womack, James P., and Daniel T. Jones. 1996a. "From Lean Production to the Lean Enterprise." *IEEE Engineering Management Review*.

- Womack, James P., and Daniel T. Jones. 1996b. "Lean Thinking: Banish Waste and Create Wealth in Your Corporation, Revised and Updated: James P. Womack, Daniel T. Jones." *Simon & Schuster*.

- Woodward, John F. 1994. "Building Total Quality — A Guide for Management." *International Journal of Project Management*.

- Worley, J. M., and T. L. Doolen. 2006. "The Role of Communication and Management Support in a Lean Manufacturing Implementation." *Management Decision*.

- Yang, Taho, Chiung Hsi Hsieh, and Bing Yuan Cheng. 2011. "Lean-Pull Strategy in a Re-Entrant Manufacturing Environment: A Pilot Study for TFT-LCD Array Manufacturing." *International Journal of Production Research*.

- Yin, R. K. 2003. "Case Study Methodology R.K. Yin (2003, 3rd Edition). Case Study Research Design and Methods. Sage, Thousand Oaks (CA)..Pdf." in *Case Study Research: design and methods*.

- Yin, Robert K. 2009. *Case Study Research : Design and Methods / Robert K. Yin*.

- Yu, Haitao, Tarry Tweed, Mohamed Al-Hussein, and Reza Nasseri. 2009. "Development of Lean Model for House Construction Using Value Stream Mapping." *Journal of Construction Engineering and Management*.

- Zatzick, Christopher D., Thomas P. Moliterno, and Tony Fang. 2012. "Strategic (MIS)FIT: The Implementation of TQM in Manufacturing Organizations."

Strategic Management Journal.

- Zavacki, John. 2003. “Lean Enterprise: A Synergistic Approach to Minimizing Waste .” *Quality Progress* .

- Zelnik, Matej, Matjaž Maletič, Damjan Maletič, and Boštjan Gomišček. 2012. “Quality Management Systems as a Link between Management and Employees.” *Total Quality Management and Business Excellence*.

- Zhang, Yan, and Barbara M. Wildemuth. 2009. “InterviewsUnstructured.” *Applications of Social Research Methods to Questions in Information and Library Science*.

Appendix (A): Interview manual

Introduction

This manual is intended to guide the interviewer into conducting a semi-structured interview where the researcher asks open- end questions. The objective of the interview is to gather qualitative data from Legal services staff in HAG. The questions are based on my master's thesis' perception of research issues. Any questions may be updated, rewritten, or otherwise restructured.

Opening clause

I would like to thank you for accepting our interview request. I would also like to thank you for taking the time to answer the questions raised during the interview.

Confidentiality clause

The data and information gathered are used for scientific research purposes only. Unless acceptable to, the name of the company and interviewees shall not be revealed or disclosed. Therefore, privacy will be our highest priority and responsibility. However, research results and analysis are published in research papers, master theses, and international conferences in form of academic journals.

Recording

This interview is recorded audio unless the person refuses to do so. The aim of the recording will be to help the researcher and the interviewees focus on a good interview, so that the former can always refer to questions. The interview is most importantly for the Process of transcription. In analyzing the responses, this helps avoid subjectivity and self-bias.

Length of the interview

The interview is expected to last between 30 to 60 minutes.

Section I: Interviewee's general information

Interviewee's name
Position (Job role)
Experience (years)
Tel./Mob.
E-mail
Date
Time

Section II: Company's general information
Company's name
Annual revenues
Number of employees
Main products
Tel.
Address
Website

Part 1: Understanding the nature of work within the case company

- How many employees work in the company? If the company has branches, where are these branches and how many are there?
- What are the departments in this company?
- What are the responsibilities of each department?
- What is the nature of their business and what kind of law files does it adopt?

Part 2:

1- Are there any areas in which you want more training?

2- What are the training priorities for your group?

3- What are some barriers/ challenges within your organization to further training ?

4- Could you try to describe the difficulties when performing your daily activities?

5- What kinds of strategies do you use to cope with the mentioned difficulties ?

6- Do you think that the development of the system that you use could contribute to improve the quality of your work ?

7- Could you tell me about the key procedure indicators that your company follows and how they implement it?

8- How many cases your company receives during the year?

9- Do have any problems facing the company in lawsuits?

10- What are the skills required from the applicant who's applying to the vacancy

11-Do the employees wear address code when filing law suits

12- How to deal with issues that are outside the framework of the company? Does the company respond to it with acceptance or rejection?

13- Are the fees that the company gets concerning the market, are they few, or many?

14- Who represents the client in front of the judiciary? The company or the employee of the company in his personal name?

15- Does the company bear the mistake of one of its employees in front the court?

16- Has the company ever been sued?

17- How the company measures customer satisfaction for the services that they provided?

18- How to control the operations inside the company before a defect occurs?

19- How to reduce the lead-time for delivery services to the customer?

20- Have you ever lost a customer and how did you deal in this situation?

21- What is the way to save customer data? Is it easily accessible quickly؟

22- Did you do any improvement in your company? What are the methods that you used?

23- What does the company do to increase their profits?

24- Does the company flexible for changes made in the company?

Appendix (B): Questionnaire

Dear Participant,

The researcher, who is currently enrolled in the Master Program in Quality Management at the Arab American University, Ramallah Branch, is conducting a study titled '' Assessment of Applying Lean Tools in Legal Services: Hussam Attereh Group for Legal Services as a Case study''.

This questionnaire is designed to gather the necessary data. The data you provide will help the researcher understand the service quality of Hussam Attereh Group for Legal Services and the impact of this quality on customer satisfaction. Because you are the one who can give a correct picture in this regard, please respond to the questions honestly. Completing the questionnaire takes no more than ten minutes.

Your responses will be dealt with as confidential. Your responses will only be used for the purpose of scientific research.

Thank you in advance. I appreciate your help.

Cordially,

Sewar Abdulhadi

Section One: General Information

Please circle the number of the appropriate response for you in respect of the following:

1. **The name of your governorate: ……**
2. **Gender:**

   1. Male 2. Female

3. **How did you know about Hussam Attereh Group for Legal Services?**

   1. Social media 2. Another legal office
   3. Through friend 4. HAG Website

4. **At which branch of Hussam Attereh Group for Legal Services you have submitted your legal case:**

   1. Nablus Office 2. Ramallah Office
   3. Gaza Office

5. **What is the type your legal case followed by Hussam Attereh Group for Legal Services?**

   1. Insurance case 2. Executive case
   3. Accounting conducting 4. Company's liquidation lawsuit
   5. Elimination of joint ownership 6. Other, please mention……

6. **Has your legal case been closed?**

   1. Yes 2. No, it is still pending

7. **Have you benefited from legal services by other legal firms previously?**

   1. Yes 2. No

8. **If your answer in the previous question was (YES), the legal services provided by Hussam Attereh Group were distinguished?**

   1. Strongly disagree 2. Disagree

3. Neutral
4. Agree
5. Strongly agree

Section Two: Service Quality					
Please respond to each item using the scale given below, and indicate your response number on the box by each item:					
Strongly Disagree (1)	**Disagree (2)**	**Neutral (3)**	**Agree (4)**	**Strongly Agree (5)**	
Statement				**Expected Quality**	**Perceived Quality**
Dimension 1: Tangibles					
1. The employees of Hussam Attereh Group for Legal Services have **professional appearance.**					
2. The employees of Hussam Attereh Group for Legal Services have **good communication skills.**					
3. The access to Hussam Attereh Group for Legal Services office is easy.					
4. There is a reception area for clients at Hussam Attereh Group for Legal Services office.					
Dimension 2: Reliability					
5. In general, the employees of Hussam Attereh Group for Legal Services are well-versed in the legal procedures.					
6. There is a continuous follow-up of your case by the same lawyer.					
7. The information provided by Hussam Attereh Group for Legal Services are clear, up-to-date and accurate.					

Section Two: Service Quality					
Please respond to each item using the scale given below, and indicate your response number on the box by each item:					
Strongly Disagree (1)	**Disagree (2)**	**Neutral (3)**	**Agree (4)**	**Strongly Agree (5)**	
Statement				**Expected Quality**	**Perceived Quality**
8. The legal documents are preserved and archived.					
Dimension 3: Responsiveness					
9. Hussam Attereh Group for Legal Services provided its legal services quickly.					
10. The lawyers and employees of Hussam Attereh Group for Legal Services are cooperative.					
11. I received the needed legal information or legal assistance form Hussam Attereh Group for Legal Services.					
12. Employees of Hussam Attereh Group for Legal Services do not hesitate to respond any inquiries or questions.					
Dimension 4: Assurance					
13. Hussam Attereh Group for Legal Services employees have good knowledge and experience.					
14. Hussam Attereh Group for Legal Services maintains the confidentiality of its clients and their information.					
15. The fame of Hussam Attereh Group for Legal Services gives me a feeling of security and confidence.					
16. Hussam Attereh Group for Legal Services provides its clients with the latest up-dates.					
Dimension 5: Empathy					
17. Hussam Attereh Group for Legal Services lawyers use legal terminologies that are difficult to understand.					

Section Two: Service Quality						
Please respond to each item using the scale given below, and indicate your response number on the box by each item:						
Strongly Disagree (1)	**Disagree (2)**	**Neutral (3)**	**Agree (4)**	**Strongly Agree (5)**		
Statement					**Expected Quality**	**Perceived Quality**
18. Hussam Attereh Group for Legal Services has unified and clear legal procedures.						
19. The lawyers of Hussam Attereh Group for Legal Services understand the client's specific needs.						
20. There was a delay in pursing you case from Hussam Attereh Group for Legal Services side.						
21. The relationship is based on respect by the lawyer and employees of Hussam Attereh Group for Legal Services.						

Section Three: Customer Satisfaction

Please respond to each item using the scale given below, and indicate your response number on the box by each item:

Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)

Statement	Satisfaction
1. I am satisfied with the cost of services of Hussam Attereh Group for Legal Services.	
2. I am satisfied with the waiting time in Hussam Attereh Group for Legal Services.	
3. I am satisfied with the services delivered Hussam Attereh Group for Legal Services.	
4. I am satisfied with explanation given by Hussam Attereh Group for Legal Services employees of the group legal services.	
5. I am satisfied with employees of Hussam Attereh Group for Legal Services.	
6. I am satisfied with the procedures to handle complaints, if any, in Hussam Attereh Group for Legal Services.	
7. I am satisfied with the physical facilities of Hussam Attereh Group for Legal Services.	
8. I am satisfied with the cleanliness of Hussam Attereh Group for Legal Services.	
9. I am satisfied with the location of Hussam Attereh Group for Legal Services.	

10. Briefly, mention your suggestions to improve the legal services provided by Hussam Attereh Group for Legal Services:

Thank You

الملخص

تهدف هذه الدراسة إلى ربط المفاهيم الأساسية للين واستخدامه في السياق القانوني. قد تستفيد مكاتب المحاماة من فهم اللين واستخدامه في جوانب القانون أينما يندرج ضمن نطاق تحسين العمليات.

في السنوات الماضية، اتبع قطاع التصنيع نهج اللين لتحسين العمليات من خلال التعرف على مصادر الهدر والتخلص منها. بعد النجاح الذي حققه مبدأ اللين في القطاع الخدماتي، تقدم هذه الدراسة بحثا في إمكانية تطبيق مبادئ اللين لتحسين عمليات محددة في مجموعة حسام الاتيرة للخدمات والاستشارات القانونية. تحقيقا لهذه الغاية، تم اتباع نهج استقرائي من خلال إجراء مقابلات في شركة حسام الاتيرة، الى جانب ذلك استخدم الباحث المنهج الكمي المعتمد على استبيان جودة الخدمة وتوزيعه على 25 عميل، بالإضافة تم اجراء مراجعة الادبيات والدراسات السابقة ذات الصلة لتحديد مبادئ إدارة اللين وادواته القابلة للتطبيق.

تظهر نتائج هذه الدراسة أن هناك القليل جدًا من الابحاث التي تناقش تطبيق اللين في قطاع الخدمات القانونية. علاوة على ذلك، توضح هذه الدراسة أن مستوى رضا عملاء شركة الاتيرة مرتفع. على الرغم من أن تنفيذ إدارة اللين يقتصر على عمليات محددة. يمكن تطبيق أداة اللين (خريطة تدفق القيمة) في قطاع الخدمات كما هو الحال في قطاع التصنيع.

تظهر النتائج ان أداة اللين المستخدمة (خريطة تدفق القيمة) مفيدة للغاية لتحديد الهدر وانشطة القيمة الغير مضافة للخدمات القانونية التي لا يمكن تحديدا بواسطة أدوات أخرى، حيث يمكن تطبيق مفهوم اللين في القطاع القانوني بطريقة تساهم في زيادة الربح وتحسين الكفاءة. وتختتم هذه الدراسة بمقترحات وتوصيات للعمل عليها في المستقبل.