DEPARTMENT OF ECONOMICS, ENTREPRENEURSHIP
AND BUSINESS ADMINISTRATION

MASTER THESIS

Topic **The indicators for the effectiveness of business process improvement**

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Abstract

The topic, indicators for the effectiveness of business process improvement is broad and beneficial to several organizations. However, the available academic research on business process improvement is few and far between. This research aims to explore business process improvement, why it works, its importance, how it works and why these indicators are essential for an effective business process improvement. This paper will define and identify the different business process improvement methods, its development, the business process indicators and its application. This paper will discuss how these indicators can be applied to businesses and how it has lead to the development and growth of different companies. This paper will then put the topic of discourse into perspective via the utilization of Toyota. This paper will evaluate business process improvement methods of Toyota and how Toyota has grown through to become a major player in the global automobile Industry through the application of business process improvement. This paper is a three-part document; the first section explores the business improvement process, the following section discussed the business process indicators and the research methodology utilized in this paper. Finally, the paper explores the different business process improvement techniques and analyzes the implementation of business process improvement on Toyota.

1. Theoretical background of Business Process Improvement

1.1 Introduction to Business Process Improvement

Every organization (business or public) must take into account global trends in sustainable development(Karintseva,2021;Kubatko,2019;Karintseva,2020; Melnyk,2020; Melnyk,2017; Melnyk,2019; Tu,2022; The effects,2017; Veklych,2020.), digital transformation and industrial revolutions in order to plan its development(Disruptive,2021; Melnyk,2021; Melnyk,2019; Melnyk,2020; Melnyk,2022;).

Every organization was built based on an idea, and ideas flourished overtime during implementation. However, these ideas need to be improved to continue progressing or advancing to the next level. Business process improvement is the steps taken by businesses to augment performance ensure a happy clientele and upgrade the company level. Business process improvement is a business exercise utilized by the management of an organization to analyze the Company's position and find areas where the effectiveness, accuracy, and efficiency of the Company can be improved via different methodologies (Pratt, 2021). To effectively carry out business process improvement (BPI), the management of an organization observes and identifies the employee skills or modus operandi that needs augmentation to ensure seamless workflow, smoother operations, and the growth and development of the business in all ramifications. The successful operation inadvertently leads to its growth, and business growth goes hand in hand with demand; management must ensure an organization can live up to the growing demands of a company's goods and services. Organizations utilize business process improvement to discover the best ways to reduce process completion time and eradicate "speed bumps" and unnecessary processes. Apart from utilizing BPI to reduce process time, organizations use it to improve their quality of goods and services. Although

businesses engage in BPI for the overall wellness of their organizations, they do this with compliance with the government regulations and policies that govern the industry.

The customers of any organization are one of its priorities (Homburg, 2008); in the utilization of BPI to increase performance, an organization meets customers' demands and ensures their overall satisfaction. Although business process improvement involves detailed steps, it does not bring about methodical change; it ensures a drastic transformation in the performance of an organization. BPI is most important in today's digital age; the techniques of BPI helps organizations run smoother operations to maintain and trade up their position in their respective industries. Business process improvement is deemed successful when the requirements and needs of the businesses are the focal points of the processes to augment the processes until they yield the best outcomes. Managements of organizations that engage in business process improvement commence by identifying the organization's existing processes. The existing processes are then analyzed to spot areas that improvements are needed and the best methods to implement the improvements.

Indicators for the effectiveness of business process improvement are a phenomenon that is directly related to businesses, brands, and organizations regardless of their respective sizes. The objective of this study is to fully understand the workings of business process improvement and its impact on businesses. As aforementioned, the knowledge of the researcher does not matter if the information provided is not garnered from credible and verifiable sources (Regoniel, 2012); for this purpose, the research is guided by evidence backed up by secondary data to show the effect of business process improvement on organizations, companies and businesses.

1.2 Key Elements of Business Process Improvement

Although this discourse has elaborated the effectiveness and importance of business process improvement (BPI) and the different techniques businesses and organizations utilize; however, crucial elements are required for BPI or any of its techniques to be effective. There is an incessant need for organizations to improve as the world evolves and more rivals emerge in their respective industries (Kastelle, 2012); organizations must solidify an effective business process improvement method. Regardless of an organization's technique, target audience, products, and services, the improvement procedure must possess four elements (Explorance, 2013).

Identification of the need for a change is vital in carrying out business process improvement. Organizations can ascertain areas where change is needed via process audits; these will project the Company's existing or possible challenges. Via the audits, the team gets an insight on the best business process improvement to tackle the organization's issues. After successfully identifying improvement areas, an analysis of the status quo is required to determine what went wrong in the process; this helps the team ascertain what to avoid going forward. Regardless of the opinion of junior employees in an organization, no real impact can be made without the full support of management; after the analysis mentioned above, commitment and support of the organization's management to proceed. In their approach to management, the team must unequivocally convince management about the need and importance of business process improvement at the time. Finally, after completing the process analysis and management conviction, the team must come up with an effective improvement strategy to tackle the existing challenge or the challenge at hand.

1.3. Benefits of Business Process Improvement

The aim of business process improvement is to boost the efficiency and effectiveness of business processes. (Madhura Gaikwad, 2022)

a. **Cost Efficient**: Process improvement employs methods to recognize wasteful resource expenditure and to find effective solutions to produce the best process output. This allows businesses to save money that could otherwise be used for more essential issues.
b. **Increases Productivity:** The goal of process improvement is to eliminate unneeded actions from your process. It assists you in redesigning existing process with more efficient approaches.
c. **Client Fulfillment:** Business Process Improvement facilitates rapid workflows processes. This results in better operations and outcomes that add worth to your clients.
d. **Workforce Fulfillment:** We cannot consider making our clients satisfied unless our employees are happy. Process improvement allows you to provide your workers with clear, uncomplicated processes that are fruitful, simple, and convenient. It benefits businesses, commitment, and a quite well mechanism, which helps your team perform and keeps your staff motivated.
e. **Fun filled life:** Business Process improvements result in better operations, better business outcomes, and better lives. If anything happens at work while you are away, your team will deal with it by referring to the planning processes you invested in.

1.3 Methods for Improving Business Processes

Business process improvement is a powerful method for streamlining, automating, and optimizing your business processes. The following methods are used to carry out Business Process Improvement: (Madhura Gaikwad, 2022).

1. **Process Discovery:** Business Process Discovery is a set of techniques used to view, analyze, and adjust the underlying structure and processes that are a part of the day-to-day business operations. This method is about getting your "As Is" processes out of you and your teams head and down on paper (or digital) where you can see them, learn from them, and improve them. It allows you to collect all the components of business processes that include people, departments, protocols, procedures, resources, and technologies.
2. **System Improvement:** Business Process System Improvement is a collection of methods often used to view, assess, and modify the inherent processes and structures which are component of the daily operations is known as System Improvement. This approach focuses on obtaining the "As know how" mechanisms out of both you and your team's heads and onto paper (or digital) so you can see, learn from, and improve them. It encourages you to obtain all process improvement components such as individuals, offices, procedures, processes, infrastructure, and techniques.
3. **Process Documentation:** Process documentation is an elaborate outline on how to undertake a specific process. This approach describes each action required to finish the operation. By establishing a guide for each step of the process, it enables business marketing teams to avoid the unhappiness.
4. **Business Process Navigation:** Process navigation is the process of creating a workflow diagram of a process to clearly understand what it has in common with other processes. Describes all activities, roles, and business units related to the business process. A process map provides a visual

representation of your process that helps you plan how you currently work and provides the visualization you need to identify hidden inefficiencies and opportunities for improvement.

5. **Boost communication:** Communication is the essence of business processes. Without effective communication, a process is just a series of independent asynchronous activities. For this reason, improved communication is essential for process improvement. Effective communication indicates continuous improvement. Reduce ambiguity and promote clarity.
6. **Business process handover:** This is the activity of transferring people, responsibilities, or information from one person to another, from one system to another, or from one department to another. Successful transfer of this information is critical to smooth business processes.
7. **Improved system integration:** Systems are an essential part of processes, so improving system integration is essential to improving business processes. To avoid sticky situations, it is important to ensure that all systems and automation tools are efficiently integrated.
8. **Continuous Training:** Process documentation is essential for educating and educating employees who perform business processes. However, education and training exercises are an even more effective way to communicate and transfer knowledge within your company.

1.4 Limitations to Business Process Improvement

Although this discourse explores the effectiveness of business process improvement, it is imperative to note that Business process improvement comes with its limitations. After the perusal and careful study of several documents on Business process improvement it has been discovered that there are a few

disadvantages of business process improvement and these are realized when the business model of a firm is flawed. Certain approaches and systematic to attain business process improvement may not be effective in the progress of your business even after the implementation of business process improvement.

The purpose of business process improvement is to ensure heightened company progress via taking small steps according to an order of structure. The team of any organization's management must have a concise plan to ensure a watertight continuous improvement program is set up, the program must come with objectives. However, some organizations find it difficult to let go of the status quo due to the fact that these methods positioned the company where it stands, these organizations fail to recognize the fact that real improvement stems from destroying a previous mold and going through a new path.

Management short sightedness may stifle the effectiveness of business process improvement, the management of a business may seek to improve but limits itself a certain method that may seem comfortable and not too drastic, this causes such businesses to miss the opportunities that come with an effective business process improvement method. The human mind constantly forgets the uncomfortable situation that gave it comfort when the discomfort is overcome, psychologically there is no longer a need or desire to go through such discomfort again. Thought processes like that may cause a business to avoid any continuous improvement method that may seem uncomfortable.

The final limitation of business process improvement is execution, it has been established that business process improvement is only effective when the management of an organization embraces it wholeheartedly, however if business process improvement is not effectively implemented it will yield little or no results. Due to the fact that management and staff may not be used to the new method, objectives may be poorly communicated, management may be skeptical in the

execution of the new status quo and this affects the overall motivation of the team. Regardless of the motivation a staff member has, he or she will always feel motivationally stifled when the backing of management is non-existent.

2. Methodological issues of Measuring Business Process Improvement

2.1. Indicators for Measuring Business Process Improvement

Managing and improving business performance can be difficult, especially if you don`t know what you want your team to achieve. With so many factors to consider when running a business, it`s important to set goals and indicators to understand your overall business performance (Christine, 2020). Process performance indicators, also known as KPIs (Key Performance Indicators), focus on how tasks are performed by measuring performance and whether individual goals are being achieved (Pierre, 2016). Key performance indicators (KPIs) are a method of defining and measuring an employer's overall performance and success. Each employer may have one-of-a-kind KPIs relying at the commercial enterprise development dreams they need to achieve. KPIs have come to be an fundamental part of commercial enterprise operations, making it clean for commercial enterprise proprietors and bosses to apprehend how their organizations, processes, and crew individuals are appearing over time (Christine,2020).

Improving business processes means less downtime and a more profitable business. Every time you implement a new process, you should define some key performance indicators (KPIs) to make sure your company and your employees are meeting the right standards. For example, speed is not always the best predictor of productivity. If you run a medium-sized business, missing one or more goals can completely destroy your goal. It's important to track your successes along the way so you don't fall into failure (Kayla, 2019).

This improvement should be measured by an indicator (usually expressed numerically) that represents the progress of the process in whole or in part. Strategic process performance indicators are used to show whether a business is achieving goals known as strategic objectives set by senior management. A widely used tool for determining these goals is the Balanced Scorecard (Pierre, 2016).

Analysis is based on concrete data, so knowing how to monitor performance indicators is essential for improving corporate decision-making. This makes processes more efficient and allows managers to develop more innovative strategies. Businesses can use strategic indicator, degree pinnacle control goals, and pressure non-stop improvement. With those indicators, a commercial enterprise can higher recognize if and what methods are turning in price to customers (Sydle, 2022). Process indicators can be useful in a variety of industries, such as human resources, manufacturing, information technology, finance, and others. They are usually expressed as a ratio or in a percentage (Indeed, 2021).

Indicators used to measure effective business process improvement (indeed, 2021)

1. **Process effectiveness indicator:** A process effectiveness indicator measures the comparison between the expected and actual results of a process. Businesses strive for 100% effectiveness which means that the actual results are what we expect. Time, cost and quality are valid factors. The indicator helps a company or a business owner to access the achievement of the business. This indicator helps the business to determine if the business is moving positively towards the achievement of the established goals and objectives. With this indicator, a business can be able to know when to make or apply some changes in the running of the business and ensure that the business makes desired profit and development. This indicator is very important for the development and growth of any business that desires growth.

The formula for this indicator is: Value-Added Time / Cycle Time.

2. **Production time indicator:** The production time indicator measures the time it takes to complete the production of one unit before creating the next

unit. For example, a Juice production factory may state that his orange juice production time is 21 seconds. That means you can start producing a new batch every 21 seconds. With this indicator, a manufacturing company will be to understand if their established production time for a unit of their product is well utilized. Through this indication, a company will understand if they lag behind in production time and be able to make the necessary corrections and improve their production time to ensure quick delivery of the goods and services to their customers. This indicator is important because it helps companies to improve their production time and ensure that every section of their production team works effectively.

The formula for this indicator is: Net Time Available for Production/ Customer's Daily Demand.

3. **Production rate indicator:** The production rate is the amount produced in a given period of time. Production rate focuses on how quickly a firm can produce the expected goods rather than how much goods it can produce. This indicator works in alliance with production time indicators because they both have to do with ensuring quick and fast production of goods. With this indicator, a manufacturing company will be able to determine the number of units of item they can produce over a given time. This indicators helps a company to be able to calculate the production time rate and it helps the company to give a specific delivery time to their customers without making errors or delays in time of delivery

The formula for this indicator is:

Production rate = number of units produced / production time per unit

4. **Defect rate indicator:** Defect rate measures the number of defects that occur throughout the production cycle. This number is usually expressed as a percentage and indicates the number of units or products that have failed quality control testing. This indicator helps a company to calculate the defects and

understand where or if the percentage of defects increases or decreases. With this indicator in place, a company will be able to figure out when there is problem with their production and try to correct it immediately to ensure an effective and efficient production. This indicator helps a company to reduce defect and also improve in their quality of production.

The formula for this indicator is:

Defect Rate = Total Units Produced / Total defects

5. Rotation time indicator: Rotation time is the time it takes to complete the entire time period from start to finish of the process. Depending on the process, rotation time can be measured in hours, days, or years. For example, production and shipping rotation times for a clothing line might include other minor processes for purchasing and receiving raw materials, manufacturing, and shipping. All these minor processes are included in the duration of the cycle. This indicator is very important because it helps a company to determine, calculate and understand the time duration of its entire process and it also helps to determine time of production and delivery.

The formula for this indicator is: The formula for this indicator is: Process time + Inspection time + Movement time + Queue time (per product).

6. Completion time indicator: Completion time measures the time it takes to fulfill a customer's request, from order to delivery. We often measure delivery times from the perspective of the customer rather than the manufacturer. This may involve many business processes such as: rotation time. For example, a customer who orders shoes from a shoe manufacturer may receive an email informing him that it will take 20 days for him to process the order. This means that from the moment he clicks the submit order button, it takes him 20 days to find the product, fill out the order, ship it and get it delivered. This indicator help to determine how fast a company can deliver production from the time of order from

a customer. This indicator also works in alliance with production time and production rate indicators.

The formula for this indicator is: Expected time = (optimistic + (4x most likely) + pessimistic) / 6. The production managers work with team members to estimate optimistic, most likely, and the pessimistic periods for the production completion.

7. **Productivity indicator:** Productivity indicators measures how much of a process can be completed in a given amount of time. It is usually displayed as a ratio showing the amount produced and the resources put into it. Productivity helps compare two people, techniques, or processes. This indicator is calculated as the ratio of output volume to input volume. This indicator helps to measure how efficiently a company uses production inputs such as labor and capital within the firm to produce a given amount of output. For example, if a warehouse picker says he can pick 5 bottles of water in 1 minute, the ratio is 5.1. Another picker can pick 4 bottles of water per minute, but the ratio is 4.1. By comparison, the first warehouse picker is more productive than the second warehouse picker. This is because the first picker can pick more products in less time.

The formula for this indicator is:

Productivity = Output / input

8. **Efficiency indicator:** Efficiency is the relationship between input and output. It is the speed of doing something right, or the best way to do something with limited resources available. Efficiency measurements can tell you how much waste there is in your production rotation. For example, if a tailor is trying to determine the efficiency of the process of sewing a shirt, the tailor can compare the time it takes to sew the shirt from purchasing material needed for the sewing to delivering the shirt, to the entire process. This is indicator helps a company to

determine their production time and result. With this indicator, a company can be able to know what best to do at any given time of their production.

The formula for this indicator is:

Efficiency = production time / total processing time.

9. On-time indicator: On-time indicator measures whether a process can be completed within an outlined specific time. For example, if a producer promises a one month delivery, we use punctuality to determine the productivity and efficiency of the process in meeting that specific outlined date. This indicators works in alliance with the production time and production rate. Once a company is able to determine it production time and production rate, then the company can easily determine the on-time delivery. With this indicator a company can easily determine its production and delivery time. This indicator helps a company to deliver to their customers at the expected and specific times. This indicator helps to measure the time it takes a driver to deliver a package. It helps determine how long it will take for drivers to complete deliveries and return to the company. This indicator helps to assess the likelihood of fulfilling an order within the specified delivery date. It helps to ensure that customers' satisfactions are met.

The formula for this indicator is:

100 – [(No. of late deliveries * 100) / Total no. of deliveries] = % of on-time deliveries

10. Profitability indicator: Profitability measures the relationship between sales and the total cost of production. This indicator help accompany to determine their profit after production and sales. Through this indicator, a company can evaluate its progress and determine if it's on a path of growth or not. This can also be calculated in ratio and know as profitability ratio. The profitability ration is of two categories, namely: margin ratios and return ratios. Margin ratio offers multiple perspectives on a company's ability to convert sales into profits, while

return ratio offer multiple ways of looking at how well a company is generating profits for its shareholders. Examples of profitability ratios are profit margins, return on assets (ROA), and return on equity (ROE).

The formula for this indicator is:

Profit = Total Revenue - Total Cost

Gross Profit margin = Gross profit/net sales

Net Profit margin = Net profit after tax/Net sales

Return on assets = Net profit after tax/total assets

Return on equity = Net profit after tax/shareholders equity.

11. Quality rate indicator: Quality rate measures the inverse of the defective rate and indicates the number of units or products that meet quality standards. This indicator acts in the same capacity with defect rate indicator and both are used to measure quality of production, quality of goods and services provided by a company. The indicator helps a company to be able review and improve in the quality of their production to be able to meet the required quality standard and to maintain their market position. This indicator helps a company to single out products that do not meet the required standard before sending out the quality assured products to the market. It helps company to know when there is need for them to improve and make necessary changes in their production and services they provide to the general public.

The formula for this indicator is:

Quality rate = (total number of quality units / total number of units produced) x 100.

For example, if a plastic manufacturer produces plastic tubes, and the company produces 1,500 tubes, 1,350 of which are of high quality, you want to

know the percentage of tubes that meet a specified standard. In that sense, the quality rate is 90%.

12. Capacity indicator: Production capacity measures the maximum number of items or units that can be produced in a given period of time. Unlike productivity or production rate, this indicator shows the best possible performance when everything is working accordingly. The capacity indicator is very important for a production company as this will enable the company to figure out its production capacity and be able to accept customers order based on its expected output of production. This indicator helps for better planning of production schedules, resulting in shorter lead times.

The formula for this indicator is: Machine Capacity Rate * Time.

13. Cost effectiveness indicator: Cost effectiveness is a specific efficiency indicator to track the costs spent in order to reap the benefits. Cost effectiveness can be measured in monetary factors such as price per unit and price per service. This indicator is useful for decision making. It is essential in identifying the most economically efficient ways to reach your goals. In general, this indicator can be used to discuss the economics of a project or production. Unit price of production helps a company to determine the final cost of pricing a product. This indicator provides a price basis for calculating the impact of various production items on the final cost. The total cost of production includes data collection from various production factors. These factors include; labour, materials and infrastructure, etc. This indicator can also be used to measure non-economic factors such as health position.

The formula for this indicator is: Total Manufacturing Cost / Number of Units Produced.

14. Competing capability indicator: This indicator measures the relationship between a company and other companies in the market. This is usually

measured by market share, which indicates how dominant a particular company is in the market. The indicator helps a company to define how it will compete in the market for relevance and market leadership. With this indicator, a company can understand the market movement, price competition, customer's reaction to be able to understand and determine when to increase and reduce price to retain and manage their customers. This indicator is most essential in a marketing company that is really interested in profit improvement.

The formula for calculating market share is:

Market Share = (Company Sales / Total Market Sales) x 100.

For example, if a clothing company earns $200,000 this year and the total industry revenue is $1,000,000. That means that the company has about 20% of the clothing industry's market share.

15. Worth indicators: Worth measures how much the customer thinks the product is worth compared to the asking price. This indicator helps to understand that the price of goods differs at different location and situation. A product can have good or bad value depending on factors such as location, need, and competition. This indicator helps a company to understand if their location of business is in the right position and if their product is worth the allocated price. With this indicator, a company can easily determine if they are competing well in the market and how their customers react to their products. Companies gather their statistics for this indicator through their customers and it helps them to make the good decisions for the development and growth of the company. For instance, the price of a bottle of water in a supermarket can be $0.5; the same bottle water can cost $1 in a night club and can cost $2 in a five star hotel.

16. Return on investment (ROI) indicator: Return on investment indicator measures a business rate of return on the number of investments made. The ROI indicator helps to measure the profitability on the investments of a

company. This is used to understand the profitability of an investment. This indicator helps a company to understand how much profit or loss an investment has brought when money is invested in the company. The return on investment is simply the ratio of the net profit or loss of an investment divided by its cost. This indicator shows whether you're generating enough revenue to spend on a particular business process. The ROI indicator is important for use cases where success is measured by return on invested capital. ROI indicator helps to calculate and measure investment valuations, compare investment projects, and analyze individual businesses. If the net ROI of an investment is positive, the investment is probably worth it. ROI indicator is measured in percentages and can be easily compared with returns from other investments, allowing different types of investments to be compared to each other. ROI helps a company to evaluate and understand if their business is profitable or not. ROI is based on key indicators such as Return on Assets (ROA) and Return on Equity (ROE).

The formula for ROI is:

ROI = [(Total Sales - Total Investment) / Total Investment] x 100.

For instance, if my trading company invested $1,000,000 in a trading business and made a profit of $6,000,000 at the end of a quarter, it means that their ROI would be 500%.

17. Inventory turnover indicator: Inventory turnover indicator evaluates the relationship between consumption and inventory. This is very essential for retailers and e-commerce businesses. The inventory turnover indicator is also known as the inventory turnover ratio. It indicates how many times a company has turned over its inventory over a period of time. Higher inventory turnover lead to greater efficiency, but this depends on the type of business. The higher the ratio, the better. Low inventory turnover can be a sign of overstock, also known as poor sales or overstock. Low inventory turnover might mean low

customer satisfaction. On the other hand, high inventory turnover indicates good sales. Alternatively, it could be the result of an inventory shortage. On the other hand, high inventory turnover indicates good sales. Alternatively, it could be the result of an inventory shortage. A fruit store may have a high inventory turnover rate, while an electronics store may have a low inventory turnover rate. To calculate the average number of days it takes to sell their inventory, a company can divide the number of days in a period by their inventory turnover rate. Inventory turns helps a company to make better pricing, manufacturing, marketing, and purchasing decisions. Inventory turnover measures how effectively a company is using its assets. The speed at which a company can turn inventory is an important measure of business performance. For instance, if a boutique has 150 clothes in monthly inventory and sells 1,350 clothes per annum, this simply means that their inventory turnover is 9. So the boutique turned its inventory back by 9 times.

The formula for Inventory Turnover is: Cost of goods sold/ Inventory.

Fig 2.2.1 *An illustration of the* Balanced Scorecard (Pierre, 2016).

monetary process performance
Profitability Margin (Net/Gross) Current receivable stock turnover sales growth

Customer help process performance
internet promoter rating Average help decision time client retention level marketplace share

Advertising process performance
Number of certified leads variety of internet site traffic common leap fee Exchange rate mailing list growth

Trading process performance
Number of new customers reached % of net sales Average conversion time Increase the revenue Sell products effectively

Business process performance
Employee Satisfaction Score Absorption rate Yield rate Evaluation of production quality

Fig.2.2.2 An Illustration of Business Process performance improvement indicators samples (Christine, 2020)

How to set up business process performance indicators (Pierre, 2016)

a**.** Select indicators: determine which metrics make sense for your business and the strategy for doing so.

b. Designate objectives to each indicator: For each metric, assign a goal. This way, there will be tips.

c. Designate a person responsible for each indicator: identify those who must monitor these processes and continuously evaluate strategies.

d. Explain the connections between the different indicators: Discover how process performance indicators interact with each other and whether they help improve results.

e. Systematically track results: Continuously monitor metrics to see if goals are being achieved.

How to monitor business process performance improvement (Christine, 2020).

1. Configure Process Performance Management Console: When it comes to performance monitoring, visualization is key. To help you and your team monitor your KPIs to improve business processes, you need to come up with a method for the whole team to easily check their individual and team goals. You can choose to design your own KPI business improvement dashboard using spreadsheets or any dashboard software that allows you to customize what you display.
2. Regularly check the relevance of procedure overall performance indicators. To make certain that your KPIs are applicable and regular together along with your employer and its development, it's far crucial to assess them regularly. This will assist you make certain that the dreams you put to your commercial enterprise help your dreams for growth, improvement, and integration.

3. Regularly check the adequacy of the overall performance indicators of the procedure. To ensure that your KPIs are applicable and relevant to employers and their development, it is important to evaluate them regularly. This will help you ensure that the dreams you set for your business venture will contribute to your dreams of growth, improvement and integration.

2.2. **Research Methods** for **Measuring Business Process Improvement**

The basis of every research journey is the researcher's ability to decide on a research method. The researcher studied, analyzed, and considered several research methods to craft the structure of this document. Regardless of a researcher's knowledge, it is imperative that the information provided in any research content are all authentic and backed up by credible and verifiable sources. The case study research method stood out amidst the others because it guarantees access to a wealth of information from credible sources garnered over the years. Indicators of the effectiveness for business process improvement is a topic that deals with the improvement of business practices to ensure business growth, and a plethora of businesses have practiced while others have pioneered and applied these Indicators of the effectiveness for business process improvement with both categories recording groundbreaking results. Toyota stood out amongst the case studies researched due to its longevity in its industry; the automobile giant has reportedly attained new heights over the years due to business process improvement methods; apart from the Company's involvement in business process improvement, it has pioneered one that went on to become a popular choice for organizations over the years. The researcher's use of Toyota as a case study played a pivotal role in the trajectory of this discourse; the researcher first studied Business process improvement and Indicators of the effectiveness for business process improvement to understand the research topic and effectively comprehend its role and effect on

Toyota's business model. Research can either take a generic or narrowed down path; the former discusses the topic broadly while the latter discusses the topic with a clear perspective.

2.3. Method of Data Collection

Business process improvement has been effective as a concept for decades, and many businesses have utilized it for the augmentation of their organizations. This vast implementation has led to the availability of various data in offline libraries and online websites. Due to this wealth of first-hand knowledge, the researcher collected data for this discourse via secondary data. The information derived via secondary data is verifiable by credible media sources, articles, journals, and Toyota's official website. As aforementioned, many organizations have utilized these indicators of the effectiveness for business process improvement, but the researcher chose Toyota due to its decades in the business world, automobile industry, and its affiliation with more than one BPI technique (Soliman, 2020).

Data Analysis

Data analysis determines the credibility of a researcher's information to ensure its accuracy. The researcher utilized secondary data to craft the content of this discourse; this led the researcher to utilize grounded theory to understand the research topic and its effect on the case study. Grounded theory is a data analysis method that allows the researcher to understand the actions and reactions of industries, individuals, and organizations in different eras.

3. Management Recommendations and Policy Implication for Business Process Improvement

3.1. Business Process Improvement: Understanding the Discourse

In order to effectively understand a research topic, it is imperative that one looks beyond the surface. Although business process improvements are strategies established by businesses to ensure the development of a business and there are several methods that make the business process effective. These methods were established at different times across different eras. An understanding of the business process improvement methods sheds more light on the research and gives it a clearer trajectory.

Business process improvement is achievable via the implementation of different techniques. Any organization's technique in its business improvement process depends on its position and projection.

1. **Six-sigma:**

   Six-sigma is a BPI technique that involves quality control tools utilized by businesses to rid themselves of any shortcomings and ensure the upshot of their profits. Bill Smith developed six-sigma in the 1980s during his time at Motorola; it is a data-driven process that utilizes data to analyze errors or shortcomings in an organization. Manufacturing defects are significantly reduced, and there is a focus on cycle time improvements (Narasimhan, 2002). Six sigma works primarily with statistical improvements to improve the processes of businesses; practitioners of this technique prefer qualitative measurements instead of qualitative markers. The success or failure of a business process is vehemently realized by six-sigma, and it has proven effective over the years. The effectiveness of six-sigma over the years has made it a training and certification program; the course educates students on the technique’s core principles. The certifications attained from the certifications

programs are classified like martial arts levels; the practitioners of the six sigma certification program range from white to black belt. Apart from being an ideology and a certification program, six-sigma is a philosophy that states that accurate measurement and optimization of every business is possible. Over the years, the technique has developed a life of its own due to its accuracy; it applies to virtually every industry in the business world.

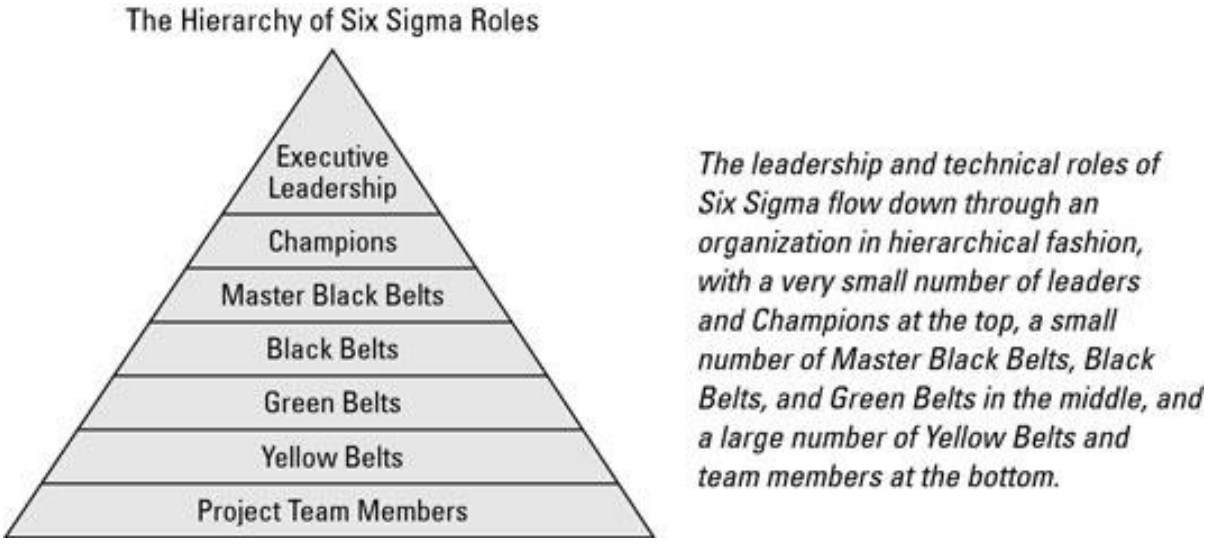

Fig 3.1.1 *An illustration of the six sigma hierarchy (Gyigi, Williams, DeCarlo and R. Covey, 2021)*

Individuals and organizations that utilize six Sigma adhere to an approach known as Define, Measure, Analyze, Improve, and Control (DMAIC). DMAIC, as it is generally called, is a method used as a mental framework by organizations; the DMAIC ideology states that a company's problem is solvable regardless of its magnitude. The steps of the DMAIC ideology proceed when a high-ranking six sigma member leads a team that defines a flawed process that needs to be rectified. The team then measures the previous performance of the process to identify the

cause or causes of the aforementioned flaw. Furthermore, each cause of the flaw is singled out and analyzed by the team to ascertain the root cause. Improvement commences from that point onwards as the team puts their proverbial heads together to ensure a better performance in the organization. Finally, the team works together to develop control of the process to avoid repeating the problem.

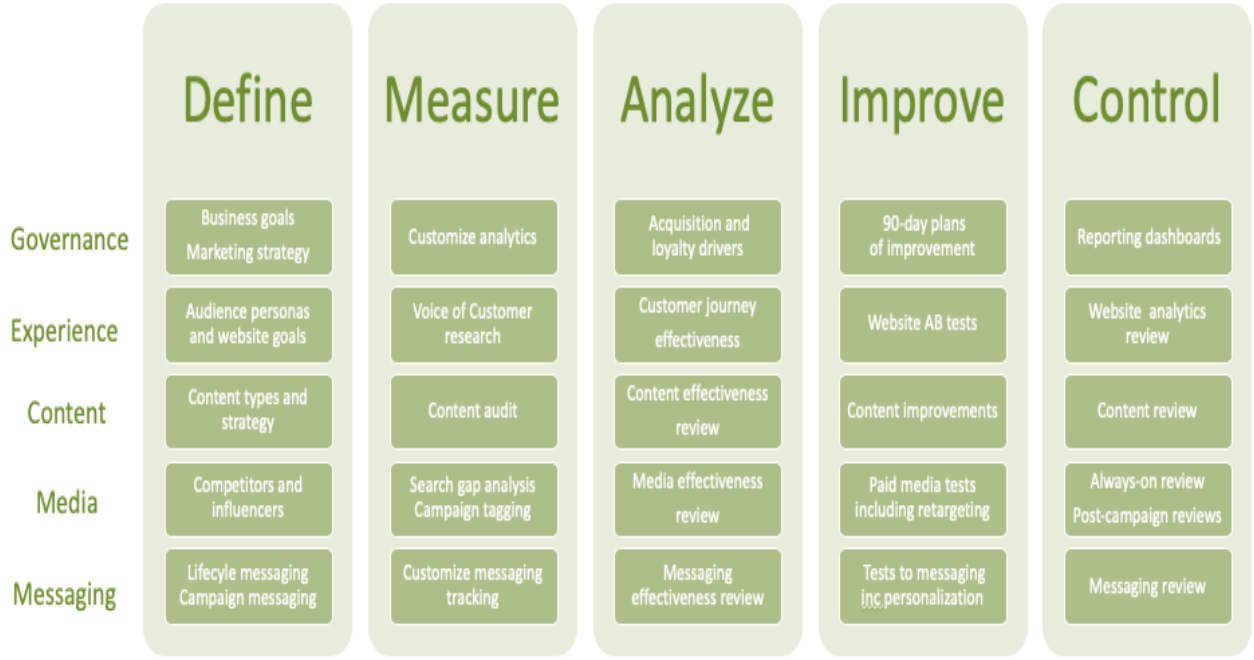

Fig 3.1.2 *An illustration of how the DMAIC strategy works (Chaffey, 2019).*

2. Lean management:

This technique is a BPI technique inspired by the production system of automobile giant Toyota; it was made formal in the Massachusetts Institute of Technology (MIT) by a team of researchers. The lean management BPI technique focuses on improving an organization's performance with particular attention to the quality and returns of the organization's output. This technique works by cutting down the time spent on redundant activities in an organization to improve processes. Although the purpose of the BPI techniques primarily focuses on the satisfaction of customers and the production of quality goods and services. Lean

management pays special attention to employees, ensuring they have the best working conditions. The origin of lean management dates back to the 1940s; it was a method used by the aforementioned Toyota; the Company reduced or eradicated processes that were redundant and had no impact on the final product, the technique worked seamlessly, the management team of 1940 Toyota attained remarkable improvement in profitability, productivity, cycle time, and efficiency. Toyota's discovery has since spread like wildfire across a plethora of industries; however, the term "lean" was coined by John Krafcik in 1988 when he penned an article titled "Triumph of the Lean Production System" (Krafcik, 1988).

Lean management has five core principles that organizations must follow to religiously ensure the best results (Martin, 2019). Management proceeds by identifying the value of the organization's products and services to ascertain areas that additions and subtractions are needed to attain the perfect products and services for customers; management must understand customers' needs for identification to be carried out correctly. The organization's management maps the value chain of the Company to put the business workflow into perspective; this makes it easy to spot invaluable and redundant steps in the business process. Following mapping an organization's workflow, management understands the value chain and creates a continuous workflow.

Fig 3.1.3 *An illustration of the lean management five steps thought process. (Womack and Jones, 1996)*

The creation of continuous workflow ensures that each team's workflow remains seamless; although this is usually time-consuming, it is effective when mastered and executed to perfection in the early stages. Ideally, uninterrupted workflow ensures production speed and quicker customer satisfaction; however, after creating a continuous workflow, a traction system is painstakingly built to ensure stability. In the traction system, production commences solely in the presence of demand, ensuring company resources are optimized, and employees are not overworked. Implementing the aforementioned four steps guarantees a watertight lean management system if effected correctly; however, the need to stay on top of the situation births the fifth core value of lean management. The team ensures to carry out continuous improvement processes to handle inevitable lapses.

Over the years, many tools have been developed for lean management to ensure the best results; the method has travelled from its origins in the automobile industry and transcended different businesses worldwide since its inception and adaptation.

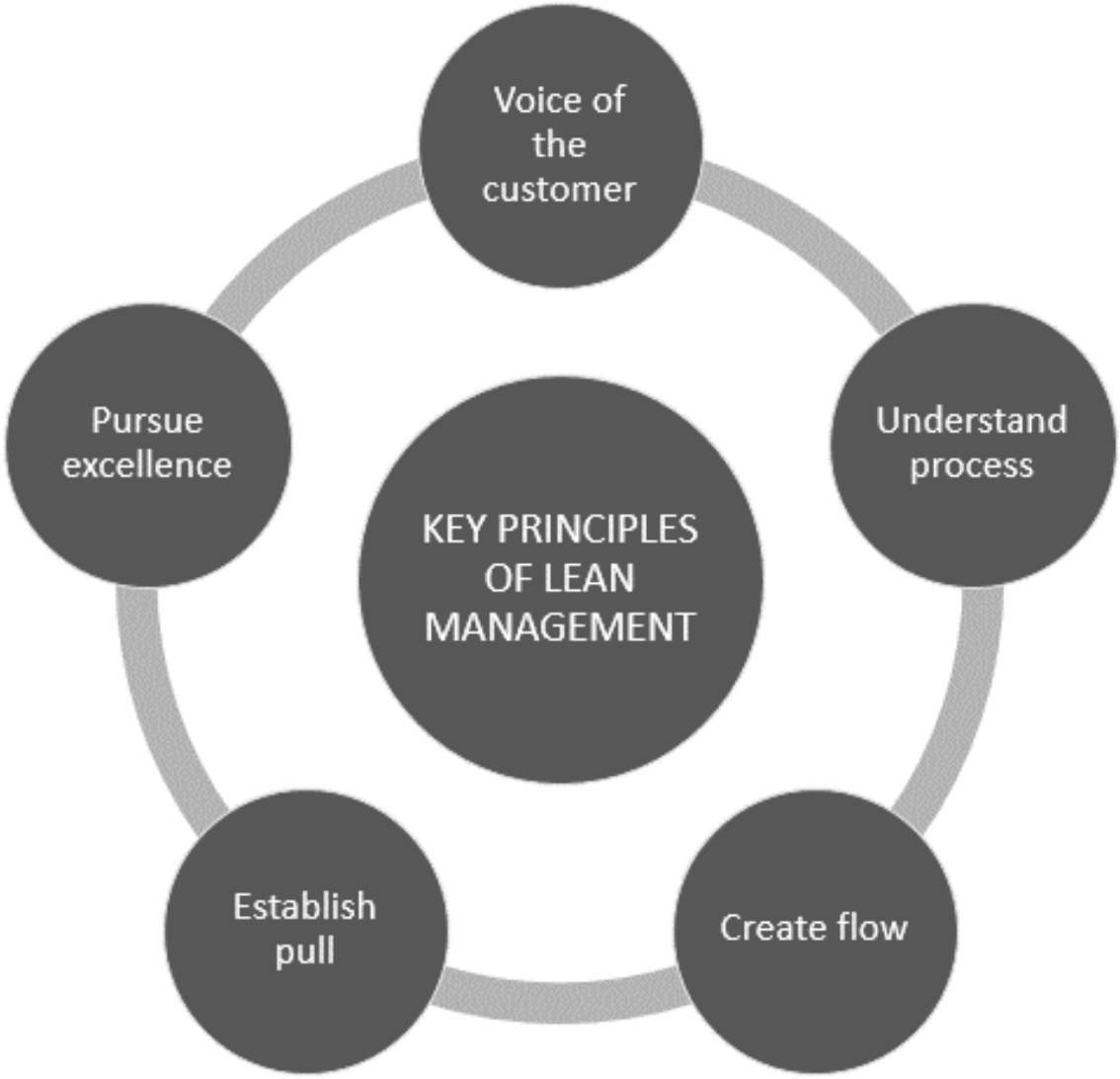

Fig 3.1.4 *An illustration of the key principles of lean management (Nowotarski, Paslawski and Wysocki, 2017).*

3. Lean six-sigma:

Lean Six-sigma is a unique BPI technique that combines lean management and six sigma techniques. In the implementation of this technique, a team-focused approach is utilized by management to attain performance improvement via the eradication of defects and waste in the bid to boost the overall state of an organization. The lean manufacturing-lean enterprise philosophy and the six sigma methods are combined in this technique to ensure the waste of company effort, resources, talent, and time are reduced on the path to top-tier organizational processes and production.

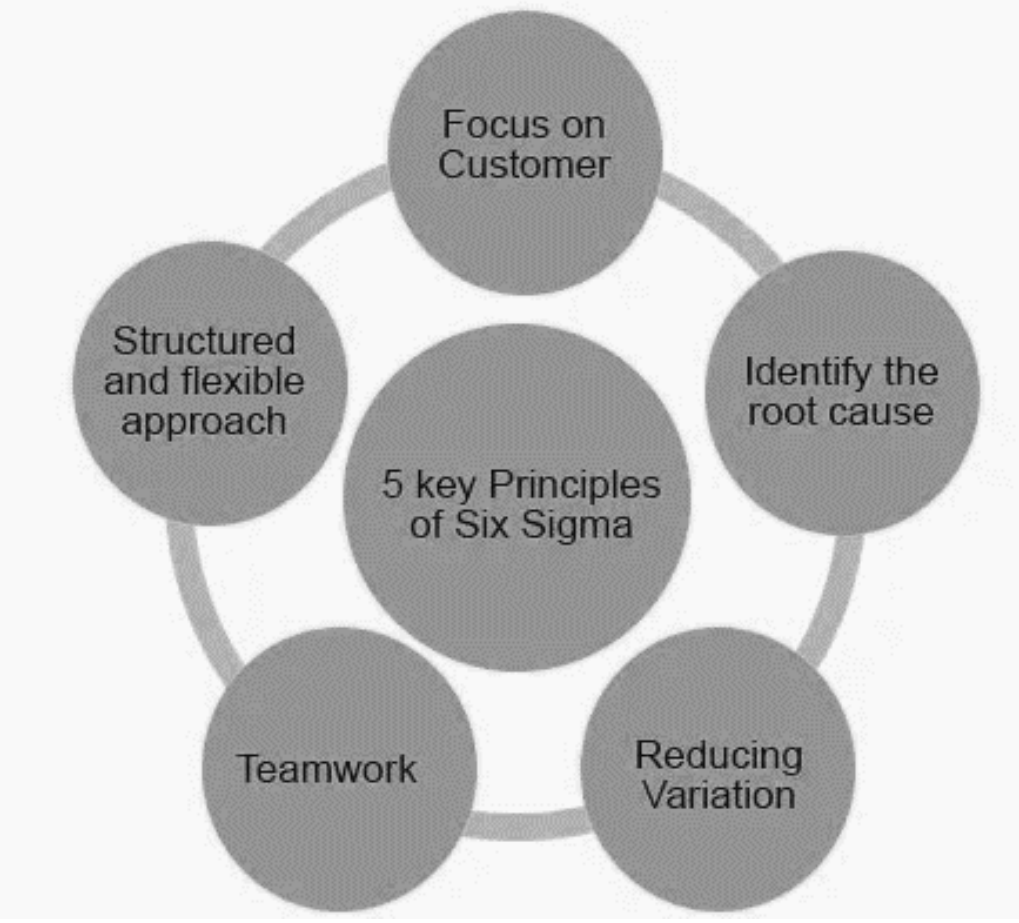

Fig 3.1.5 *An illustration of the five key principles of the lean six sigma BPI technique (Thakur, 2021).*

4. Agile management:

This method is regarded as one of the most aggressive methods of BPI; it is a technique that breaks down large projects into smaller tasks for easier manipulation and maximum productivity. Agile management enables speed in any work process; it creates a ruse that the work needs to be done smaller than it is; this enables teamwork effectively and seamlessly. Agile management allows the team or employees to take a second look at the current work and adjust their approach according to the trajectory of the work and the customers' preferences. Agile management was curated specifically for software development; however, the technique's success has since caused interest from other individuals and organizations from different industries. In software development, decisions to develop on an already existing technology are inevitable; this makes the final product slightly tricky to ascertain. Agile management is perfect for those uncertain periods as it accommodates ambiguity due to its flexibility. Four core values make up the agile management BPI and ensure its effectiveness. The first of the four values state that interactions between individuals hold a higher hierarchy than processes and tools; management must realize that regardless of the effectiveness of tools and processes, effective communication is essential in the smooth operation of any organization. The core values state that comprehensive documentation cannot overshadow the importance and functionality of working software; developers must have access to every technological equipment to work effectively. The overall purpose of any business narrows down to customers' satisfaction; organizations must consider and get their insights via surveys and questionnaires to get their contribution; this ensures the products and services serve their purpose. The final core value is quite imperative and may be tricky to the untrained eye; organizations are built on a structure, they have plans that guide their activities to ensure the best outcomes at intervals; however, the organization

must remain proactive and respond to change when necessary as opposed to sticking with the status quo, a plethora of organizations had to abandon their plans in 2020 when the covid 19 pandemic struck the world, companies like Tesla had to craft new strategies to continue production and distribution (Morgan, 2020).

Agile management was primarily developed to ensure swifter product releases via shorter production cycles. Via the short time frame, teams have windows to react to unforeseen but inevitable changes to meet clients' needs. There are a plethora of agile frameworks, with Kanban and Scrum being the most common; regardless of the framework, the same basic processes are followed to attain an effective result. Before implementing any framework, the team crafts a concise plan for the project to give them a clear perspective of where they are headed and how to get there. After successful creation of a concise plan, the team creates a product roadmap to ascertain the eventual features accommodated by the product; the product roadmap is quite imperative as it is the foundation of the product, although changes are inevitable, the roadmap makes it easier for the team to manipulate new methods when the need arises. The short development cycles in agile management are called sprints; features are released at the end of each sprint, plans are made for the periodical feature release after each sprint. Prior to the beginning of each sprint, a sprint planning meeting must be held by stakeholders to delegate achievable roles to individuals and teams during each sprint; the meeting also enables the team to craft methods the roles can be achieved in the shortest possible time. To ensure effective results, management has to hold daily stand-up meetings; these meetings are short and allow each team and member to deliver progress reports and how they intend to move forward to achieve the common goal. Sprint review and retrospective is the final process in agile management; at the end of each sprint, the team meets with the stakeholders to have the finished product showcased, after the review, a sprint retrospective meeting is held to

discuss the pros and cons of the sprint and decide on what can be done to make it better. The flexibility of agile management makes it a proper BPI technique for a plethora of organizations across various industries, and it has been effective since its inception.

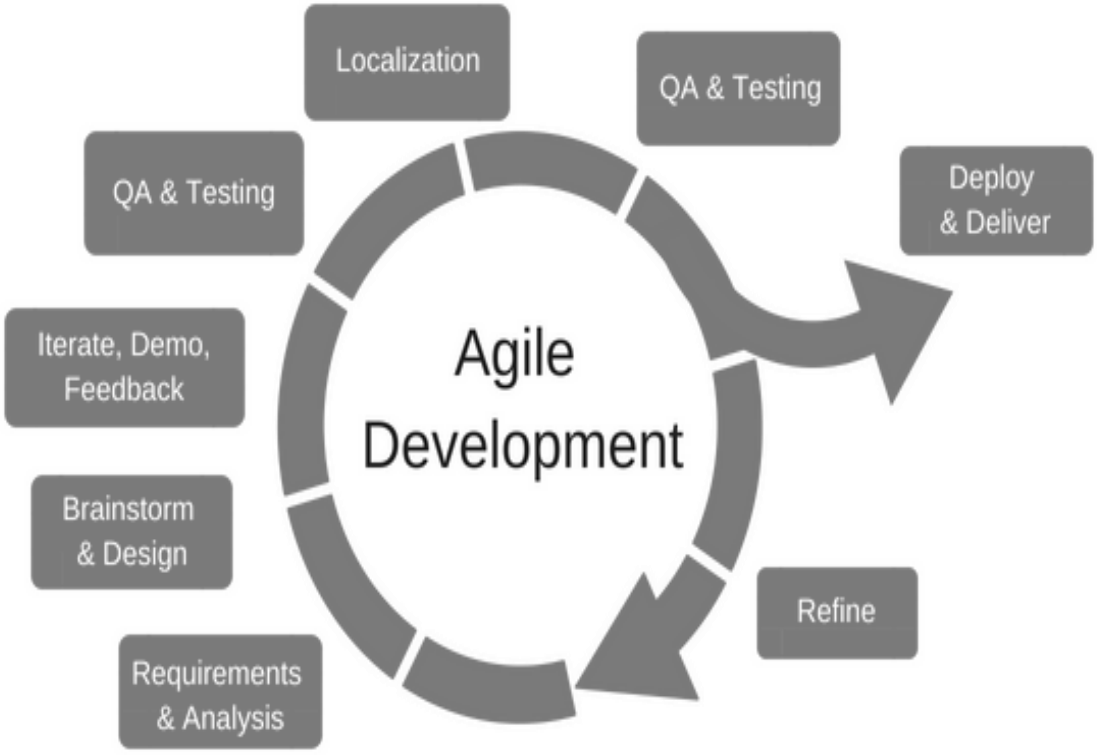

Fig 3.1.6 *An illustration of the swift process of agile development (Tabacchi, 2018).*

5. Total Quality Management:

(TQM) was curated by management consultant William Deming (Gundogan, 1996); it is a BPI technique that ensures customer experience improvement. Every production member, from the individuals in charge of paperwork to those in the production areas, is directly involved in total quality management. Although TQM shares many similarities with the Six Sigma improvement process, there is a fine

line between the two (Rodriguez, 2020). Total quality management, just like other BPIs focuses on an organizations' customers; it improves business operations incessantly to ensure customer satisfaction.

Fig 3.1.7 *An illustration of the management principles of Total Quality Management (TQM)* (Al-Qahtani, Alshehri and Aziz, 2015)

A plethora of business process improvement techniques was curated for a reason. Although William Deming developed total quality management for manufacturing, the principles of TQM have since been utilized by several other industries; TQM ensures long-term benefits via the provision of a cohesive vision

for remarkable change. The medicine, banking and finance, and other industries have since adopted TQM and have achieved impeccable results. The primary aim of TQM is to oversee the required tasks and activities needed to attain and keep the level of competence and performance with the operations and the overall state of an organization . Several organizations have utilized the total quality management BPI to remarkable success, but Toyota is one of the most prominent ones; the long-running automobile giant used TQM to implement its industry-famous "Just In Time (JIT)" inventory process. Toyota has utilized the TQM to ensure efficient assembling of its cars to meet its ever-growing demand worldwide.

6. Kaizen:

Kaizen is a unique BPI technique as the name gives away its Asian origins; the term "kaizen" means "change for the better," it is a philosophy that states that process improvement is a continuous activity and must be constantly carried to steer an organization forward. This technique borders its effectiveness around attentiveness; it operates methodically to attain the desired results. Kaizen operates with standardized work, quality control, just-in-time delivery, waste eradication, and proper equipment utilization to ensure faster productivity, employee care, and customer satisfaction. Kaizen is the ideal technique for companies with long-term plans; the technique ensures long-term results with methodical steps. Kaizen is an all-encompassing technique involving every part of the workforce, ranging from management to employees; employees can share ideas that they believe will move the organization forward. Toyota is known for its longevity in the automobile industry, and most of that is due to its use of the Kaizen concept.

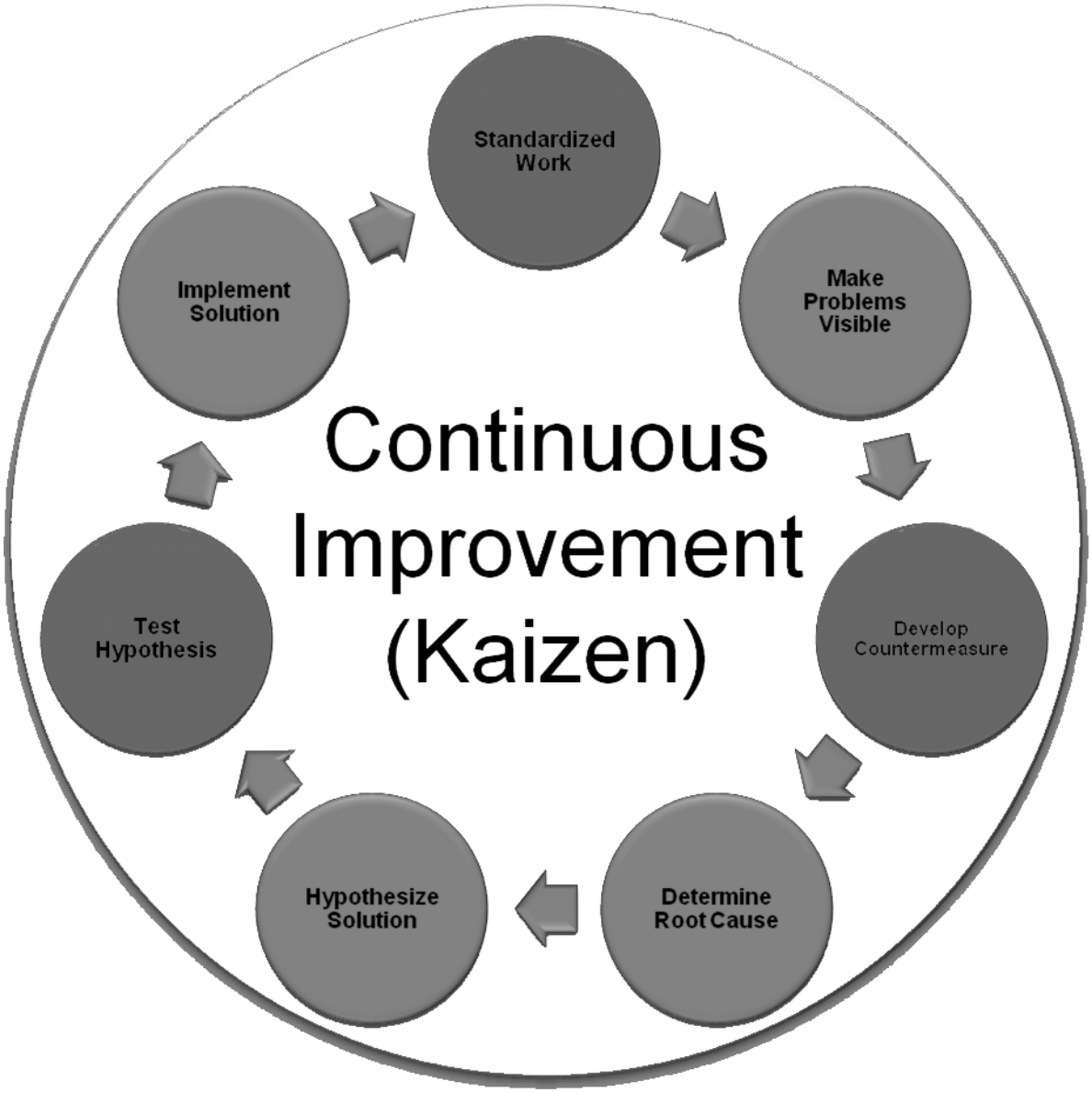

Fig 3.1.8 *An illustration of the Kaizen continuous improvement process (Womack and Jones, 1996)*

Kaizen's effectiveness depends on certain tenets; heightened morale, teamwork, quality, personal discipline, and improvement ideas. Three results are ensured by the tenets mentioned above; standardization, waste eradication, and good housekeeping. The Kaizen technique stands out because it becomes more of a

status quo than a fix-up, a plethora of organizations that utilize Kaizen have mastered it to the point that it becomes their modus operandi.

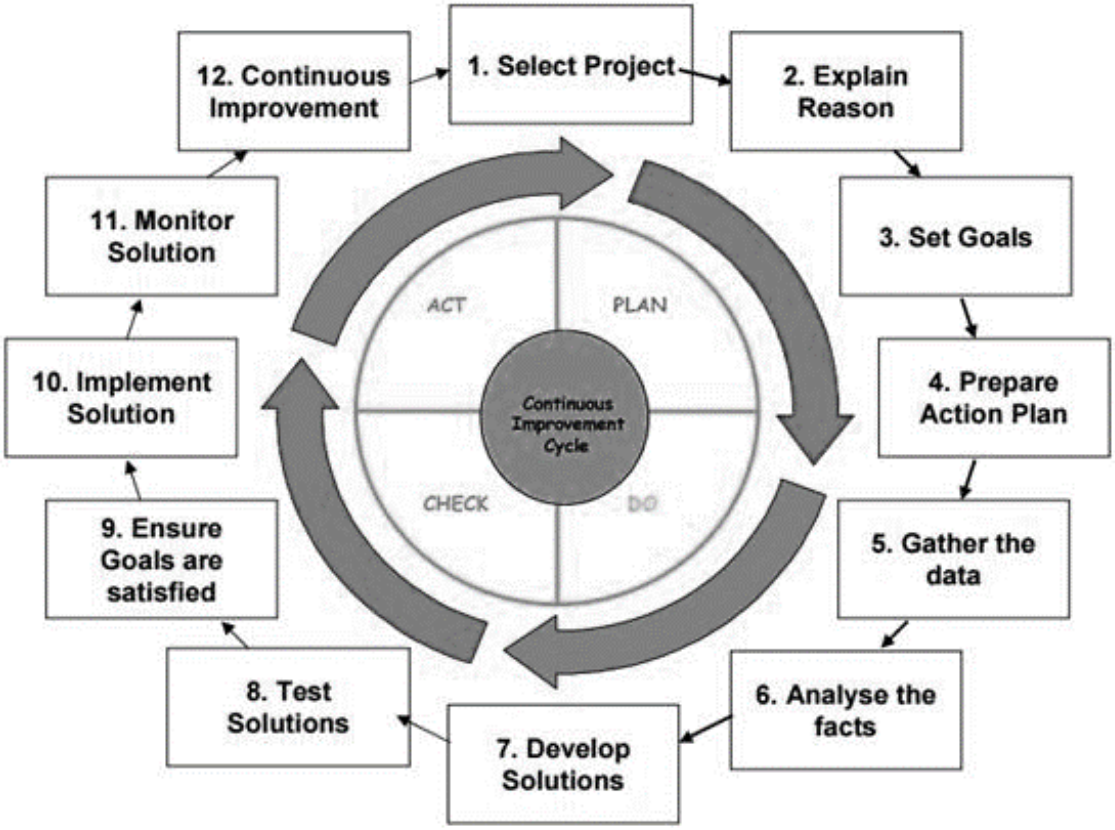

Fig 3.1.9 *An illustration of the PDCA cycle and Kaizen (Universal Class, 2021)*

Kaizen is a non-discriminatory technique that states that perfection is non-existent, and any strategy, position, and trajectory can be adjusted for the best outcome of an organization. Kaizen uses the PDCA cycle quite differently than other individuals and organizations; the PDCA cycle translates to "plan-do-check-act" in Kaizen. This means that an organization must map out the changes needed to tackle a challenge, then proceed to act on the mapped out plan; after the action, an evaluation of the plan is carried out; finally, management decides whether or not the new solution should become the status quo or should be adjusted.

3.2. Toyota and Business Process Improvement

Toyota is one of the longest-running automobile companies in the world today, and the organization owes most of its success to its business process improvement strategies. Toyota was founded in 1937 as the Toyota Motor Corporation; Kiichiro Toyota in Japan founded the Company (Chambers, 2008). Initially, Toyota was a division of the Toyoda Automatic Loom Works, a firm renowned for producing automobiles while also producing textile. Kiichiro Toyoda got his ideas from the United States while he planned the structure of his Company; he got most of the inspiration for his first cars after he visited America in 1929. The emergence of a Japanese automobile was needed at the time because Japan was at war with China. Toyota sailed on smoothly until the Korean war in 1950; the Company was barely hanging by a thread and could only manufacture 300 trucks that year. The United States came to the Company's rescue after ordering more than five thousand vehicles. Toyota made history in 1957 when it participated in the Round Australia Rally, which made it the first Japanese manufacturer to compete in motorsports; the Company's participation in motorsports that year was the beginning of what would become decades of participation at the event.

Toyota was named the most valuable automobile company by Forbes in 2017 due to its impeccable performance and record sales. On average, the Company produced and sold a corolla every thirty-seven seconds from 1996 until 2013; the rate did not dwindle in 2013; it increased significantly to selling a corolla every 27 seconds. The Toyota Corolla is one of the Company's most popular cars produced; the corolla was named the bestselling car of all time in 2012 and had grossed more than forty million dollars in sales that year. The twenty-tens was an outstanding decade for Toyota; the Company was named one of the "world's most admired

companies" in 2015, 2016, and 2017. Toyota also bagged the title of the "number one motor vehicle company" in 2015, 2016, and 2017. The MIT technology listed Toyota as one of the fifty smartest companies in the world; the Company wields more than one thousand patents. Toyota has been a consistent brand for almost a century, giving the company time to incur massive income; however, the Company gives back. Toyota is keen on the quality of its products; the Company invests a million dollars yearly in research and development to discover and create new methods to make customers happy.

3.3. Business Process Improvement and Toyota Development

Toyota has experienced immense success in its eight decades of existence; most of the Company's success is credited to its continuous business process improvement practices. Toyota engages in the Kaizen technique to carry out its business strategy, but the lean management technique stands out because it laid the foundation for its current success. Although the Company did not name the lean management strategy, they pioneered it, and it has become the Company's business model (Toyota, 1996). Over the years, several industries have been inspired by the lean management process. The way Toyota ensures efficiency and productivity is increased to maintain an endless production cycle in the bid to improve business. Toyota's philosophy states that businesses can be improved in endless ways as long as the organization keeps looking; this philosophy has ensured the Company retains its position in the industry over the years while producing groundbreaking automobiles via innovative technology.

Toyota's lean manufacturing started after the second world war, the Company's CEO Kiichiro Toyoda noticed that the Company's resources dwindled significantly, Toyoda set up a challenge to catch up to the United States in

manufacturing. The United States was ahead in production at the time; they had a mass production model; Henry Ford reduced the duration of car production to an hour thirty minutes from twelve hours. After meticulous observation, Kiichiro Toyoda noticed that the modus operandi would not exactly work in Japan; however, he tweaked the method to fit his Nationality; Japan had an efficient supermarket system at the time, so he created a system where production parts arrived "just in time" for assembly. Toyoda's "just in time" method meant that workers had access to parts only when required; specific products were also created to meet demand efficiently.

Eiji Toyoda and Taiichi Ohno oversaw the creation of the Toyota lean manufacturing system. The system was developed over two decades, from 1948 to 1975. Taiichi Ohno utilized two concepts to develop the Toyota Production System (TPS), later referred to as the lean management process. The idea of a "just in time" flow system and the jidoka system were the concepts formed to heighten efficiency and productivity. According to the Company (Ōno, 1978), Toyota has thirteen core pillars that make up their lean manufacturing system and ensure continuous improvement. The employees at Toyota have always been and continue to be an integral part of the Company's business improvement process. Toyota has always believed in the elimination of waste while ensuring the best and fastest production routes.

Poka-Yoke is the first pillar in the lean management process; the term translates to "avoid mistakes," it encourages employees to stop operations immediately after an error is noticed. *Hansei* is the second pillar; it translates to identifying and learning, it encourages management and employees to learn from previous mistakes and avoid a repeat. *Andon* is another pillar that translates to the automatic halting of productions; the team also ensures the problem's solution is detected to avoid a repeat. *Jidoka* means that any team member is authorized to

stop production in the case of an error; Toyota went a step ahead with this pillar by granting everyone access to this automated function. *Just in time* means that production parts arrive when they are needed; this keeps the workflow smooth and the work environment tidy; this is a psychologically effective step as reports have shown that the average human gets tired just by looking at the work to be done, however when one is unable to see how much work is left, they have the illusion that they are almost done. *Heijunka* is for record purposes and accuracy; it translates to the accurate number of parts required for production. *Kaizen* means that the right to implement change is not limited to anyone; employees can come up with suggestions that will move the organization forward and ensure continuous improvement. *Genchi Genbutsu* is a philosophy that states that a problem is easier to solve when it is visible. *Nemawashi* is an all-encompassing pillar that means that every team member must be involved in the decision-making process. *Kanban* is like the suggestion box in many organizations, but it works differently in Toyota; *Kanban* is a signboard that documents details between each production process. *Muda, Muri, Mura* means working as a unit for waste eradication. *Gemba* translates to transparency; the activity of every team member must be transparent from top to bottom for all to see.

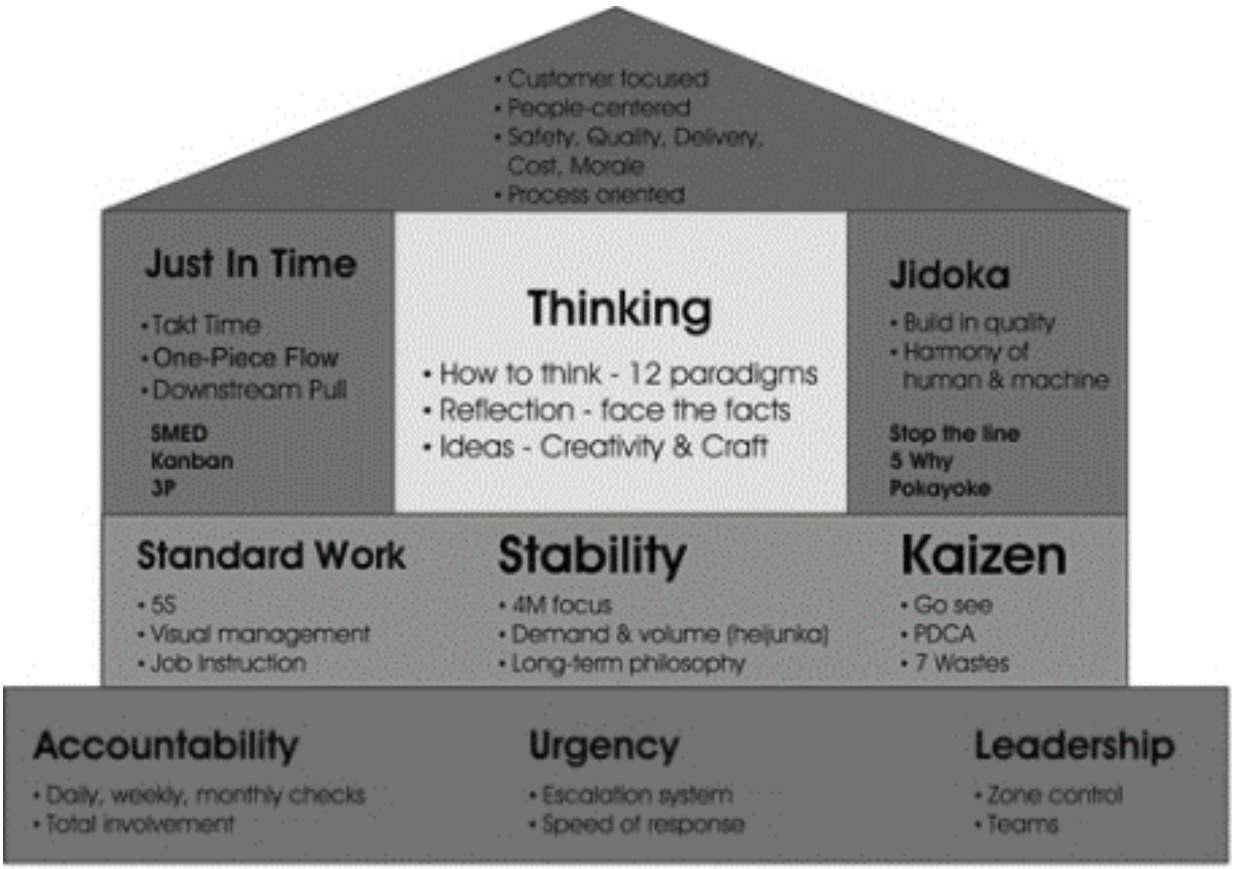

Fig 3.3.1 *An illustration of the Toyota lean manufacturing system (World, 2010).*

Professional ego and momentary success usually blinded most firms; they barely admitted or accepted their flaws, which led to the downfall of many. However, Toyota changed the game by proving that an organization will succeed when its weaknesses are recognized and improved upon. Kiichiro Toyoda took the smart route by studying its American competition, understanding their production improvement methods and crafting a new way that was best tailored to Japan, and it became a huge success. The aforementioned professional ego has always been absent in Toyota; the company's management in its early days went about activities with utmost humility and carried each member of staff along. Kiichiro Toyoda understood that everyone’s input was necessary, and the Company has imbibed

that mentally until this day. Toyota's success in the automobile industry has inspired many organizations and has led to many other success stories.

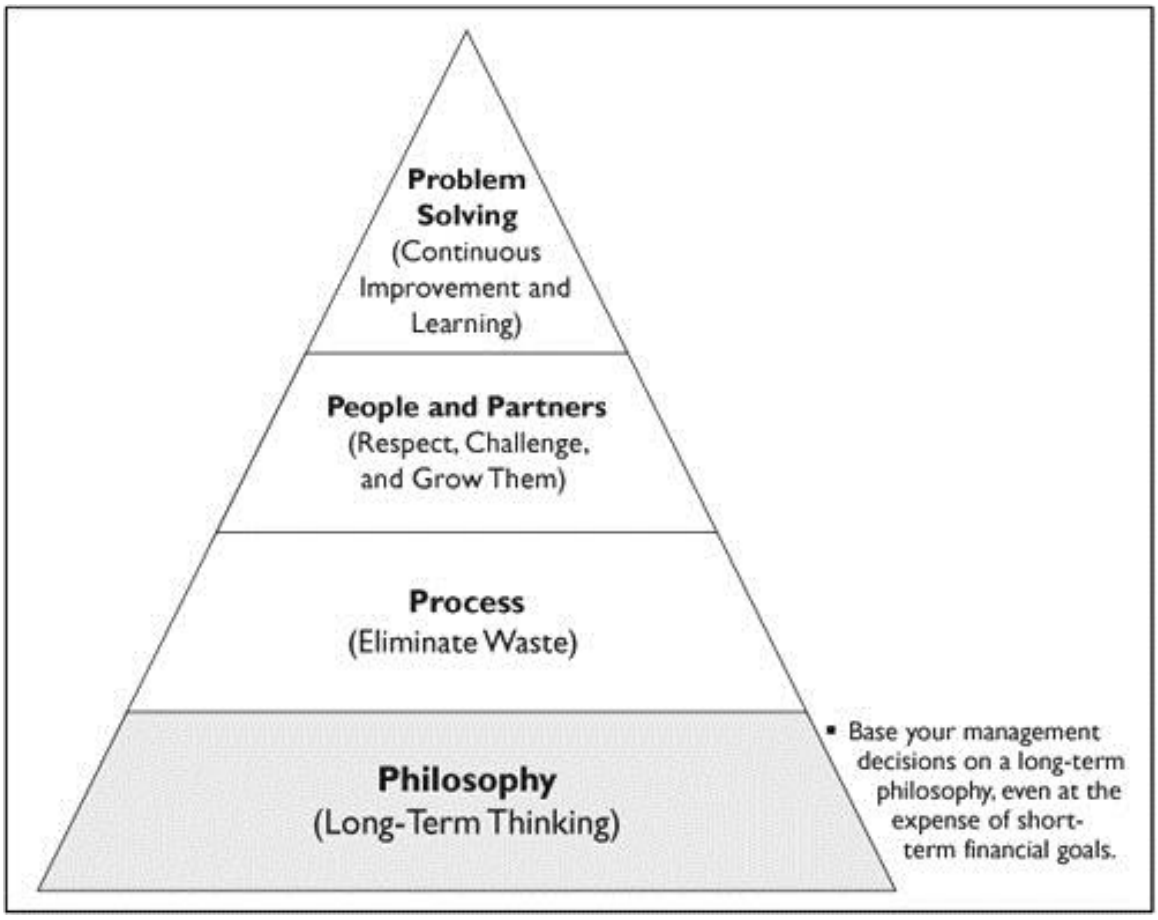

Fig 3.3.2 *An illustration of the Toyota Business philosophy (Oreilly, 2021)*

Toyota Business Performance Objectives (Pradeep,2022)

a. **Quality:** Quality is the right thing to do, and in relation to the automobile industry, quality means making a reliable product, building to the correct specifications, making all parts to specifications, being attractive and free from defects. It refers to making products without a focus on quality can reduce costs and increase operational reliability. Toyota incorporates multiple functions, along with engineering, design, purchasing, manufacturing, and after-income carriers to ensure maximum and best quality product and services. Toyota has built a solid reputation for

providing convenient products that demonstrate Toyota's strong commitment to convenience and performance.

b. **Flexibility:** This simply means the ability to change and improve processes. Flexibility in the automobile industry means the introduction of new models, a wide range of choices, the ability to adjust production volumes, and the ability to prioritize production. It implies the ability to change and introduce new models. Toyota operations offer customers a wide range of products. So far, the company has managed to achieve mass production in a relatively small number of different Toyota models. Today, Toyota's business activities are focused on redesigning the production model and establishing flexible and efficient production systems to meet changing market needs.

c. **Cost:** In this context, cost are related to operational productivity, and in the context of the automobile industry, cost can mean the cost of materials and services purchased technology and equipment costs, and labor costs. Reducing operating costs is a key business goal to improve productivity. As at today, Toyota manages to produce high quality cars at reasonable prices. The company has a number of initiatives to reduce operating costs, including value engineering, value analysis, and a value improvement program that has shifted its focus to local manufacturing capabilities to meet customer demand.

d. **Speed:** In the context of the car industry, speed is responsible for minimizing the time it takes a supplier to request a car of a selected specification and the time it takes for a component to be shipped to a maintenance point. By specializing in speed, supply to merchandise is quicker and cost efficient. Lean manufacturing, which Toyota calls the Toyota Production System (TPS), has succeeded in improving the actual speed of the production line to precisely meet the needs of the customer.

Toyota has rearranged the layout and cycle to increase the process speed and to improve simplicity.

e. **Dependability:** Dependability means punctuality and, in relation to the car industry, refers to the timely delivery of vehicles to dealers and the timely delivery of spare parts to maintenance point. Processes designed with dependability in mind provide reliable delivery of products and is cost efficient. Toyota's "just-in-time" production system focuses on reliable work to reduce costs. Its labor-intensive workforce and global manufacturing facilities enable Toyota to respond to demand in a timely manner.

Summary of Findings

This discourse focuses on business process improvement and the indicators for effectiveness of business process improvement, an ideology that ensures the continuous growth of businesses via certain best practices. Business process improvement is imperative in the advancement or corporations regardless of its size and essentially the advancement of economies. Several organizations and industries have experienced colossal growth via the implementation of business process improvement. During my research, I discovered that the automobile industry especially Toyota have experienced the benefits of business process improvement.

Business process improvement in an organization involves all members of an organization and it requires a synchronization of workplace activities to ensure the best result. Regardless of the business improvement method utilized by an organization, the organization is ensured astounding success as long as the core values of the business process improvement methods are adhered to. Chapter one of this discourse states my findings on the understanding of business process improvement, its methods, benefit, limitations and loopholes of business process improvement method. After painstaking research, it was discovered that BPIs have little or no loopholes except the organization that utilizes it fails to adhere to the required core values required for each method.

Organizations must understand its modus operandi, recognize where improvements are needed to ascertain the best business process improvement method for its development. Chapter Two in this discourse explores the different indicators for an effective business process improvement that are required to ensure the best outcomes for businesses regardless of the business model. In my research and study for the second chapter, I discovered that most of these business process indicators are very essential for the success, development and management

of every business. These indicators have been applied by most successful businesses and this has lead to the successful running and management of the business.

Chapter three highlights the different business process improvement methods, its development, modification and application. Business process improvement methods were mostly developed by industry experts, aspirants, and business owners who needed easier methods to carry out business practices and ensure better results than their rivals. Each business process improvement method was developed around core values that form pillars in which the proverbial house of a business process improvement method must stand.

A preferred case study for this discourse is, Toyota. Toyota is one of the longest running companies in the automobile industry, spanning over eight decades of active operation and retaining top position as one of the most valuable car brands in the world. Toyota's business model is based off an impeccable method from Henry Ford, an American counterpart; Toyota's head loved the company's business model but was limited by his nationality. However, he improvised and came up with the best way for the company to utilize the same method creatively. The improvisation gave birth to what is now called the lean management BPI method, a BPI technique that transcended the automobile company and inspired a plethora of companies and industries. As a matter of fact, the lean management method has been so connected with the company that it is referred to as the Toyota way. Meticulous study of Toyota's lean manufacturing method uncovered a BPI pattern, several companies discovered new BPI methods due to certain constraints they found themselves just like Toyota did while others modeled their businesses after Toyota with little tweaks tailored to their industries and business focus.
Regardless of the impeccable idea any business was built and based on, as it gains momentum, subtle or drastic adjustments may be required to move the firm to the

next level. Business process improvement methods have helped many organizations out of situations that have almost put them out of business or caused a significant dip in their revenue. Toyota is a long-running company in a highly competitive industry that not only used business process improvement effectively but pioneered techniques and created working principles around them. Regardless of the effectiveness of BPIs, several businesses have tried them without positive results due to a lack of concise, coherent, and proper steps in their execution.

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