

The Effects of Lean Management in Nonprofit Operations

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**Abstract**

Many nonprofits desire to serve the segment of society that is helpless or in distress, and this paper seeks to demonstrate that the implementation of Lean management into nonprofit operations aids a nonprofit in accomplishing its vision of service. The goal of this essay is to combine Lean management with nonprofit operations to develop a more sustainable method of managing nonprofit operations. This essay will be written from a Christian point of view, so partnership with the Church will be considered when discussing Lean operations. Lean management is effective in reducing waste and increasing efficiency in nonprofit operations; however, only through partnership with the Church will long-term results be realized, and a nonprofit see multiplication of its relief efforts.

## **Introduction**

According to the Forbes Nonprofit Council, there are nine challenges nonprofits have had to face, some of which are political and social unrest, long-term sustainability, talent retention and growth opportunities, and ongoing shifts and economic uncertainty (Nine Challenges, 2019). Due to the aforementioned challenges, nonprofit management needs to create an organizational structure that encourages a conduct among its employees of pursuing perfection in terms of waste reduction and innovation which in turn helps the nonprofit perform in a manner that is more efficient and effective in the marketplace. This essay will discuss the benefits of the Lean management style and its ability to aid in such an endeavor as described above.

Lean management is a philosophy characterized by operating processes such as Six Sigma, just-in-time inventory, and Total Quality Management. Each of these processes will be discussed in more depth throughout the essay; however, the effects of Lean management in nonprofits will be more thoroughly examined through the lens of the five principles of Lean management. Because of the God-bestowed responsibility given to the Church and its similarity to nonprofit operations, the Church will be considered in the discussion of Lean management and nonprofit operations. At the end of this discussion, this essay aims to demonstrate that implementing Lean management into nonprofit operations will allow an organization to operate within a region in a manner that is economically more viable and more impactful, realizing long-term results.

## **Nonprofits**

Nonprofits are defined as organizations that offer some social benefit and provide goods or services (Kenton, 2020). Some well-known examples of nonprofit organizations are

Samaritan's Purse, Habitat for Humanity, and Salvation Army. In each of these company's mission statements, a service is being provided to meet a need in society whether that need is physical, emotional, or spiritual. Nonprofit organizations have a tax-exempt status, which means they are exempt from federal income taxes (Morah, 2021), and are required to make financial and operating information public for donors to review (Kenton, 2020). Despite having some special tax advantages, nonprofits are like for-profit companies in that they must still pay employment taxes and follow state and federal workplace rules (Kenton, 2020).

### **Lean Management**

The principles that support the Lean philosophy can be traced back to the creators of the Toyota Production System (TPS) – Sakichi Toyoda, Kiichiro Toyoda, and Taiichi Ohno (Lean manufacturing, n.d.). The Lean philosophy focuses on eliminating waste of which TPS identifies seven – overproduction, waiting, transporting, inappropriate processing, unnecessary inventory, unnecessary/excess motion, and defects (Lean manufacturing, n.d.). According to Jose Chen and Chen-Yang Cheng, professors at universities in Taiwan, “The core objective of Lean is to create the best possible value based on using less equipment, time, space and human resources” (Chen & Cheng, 2018, p. 987). The philosophy behind this is that “customers will pay for value-added work, but never for waste” (Lean manufacturing, n.d., para. 11). When considering Lean management for a company's transformation, Eric Ries (2011) wrote, “The critical first question...is: which activities create value and which are a form of waste? Once this distinction is understood, the lean techniques can begin to be used to drive out waste and increase the efficiency of the value-creating activities” (p.181-182).

As mentioned above, the goal of Lean management is to create value for an organization's customers in eliminating the seven forms of waste identified by TPS while also increasing the sustainability of a company. To fulfill the goals of increased customer value and waste reduction, Lean management uses five core principles: identify customer values, focus on processes that create value, eliminate waste to create flow, produce only according to customer demand, and strive for perfection (Stevenson, 2021). Throughout the rest of this paper, nonprofit operations will be viewed through the lens of these five principles and three of the main processes of Lean management—Six Sigma, Total Quality Management, and just-in-time inventory—and analyzed in relation to research gathered from sources and case studies.

### **Six Sigma**

Six Sigma is one of the main processes in Lean management that aids in increasing the quality of a company's products or services and adding value to consumers and products. More specifically, "Six Sigma is a quality-focused concept that aims to satisfy customer needs; it [emphasizes] customer satisfaction and financial performance, reduces process variance and increases total participation" (Cheng & Chang, 2012, p. 431). Six Sigma was first pioneered by Motorola in the late 1980s when it found that Total Quality Management principles and other techniques and systems were not adequately assisting Motorola in meeting its goal of high profitability (Srinivasan et al., 2016). Many tools are held within the concept of Six Sigma such as voice of the customer (VOC), workflow diagrams, and DMAIC (define, measure, analyze, improve, control) that help pursue continual improvement and raise customer satisfaction (Cheng & Chang, 2012). Motorola's philosophy in implementing Six Sigma was to facilitate continuous quality improvement within its operations by adopting two principles – projects should be

chosen and achieved using DMAIC, and an infrastructure must be created that aids in training others in the Six Sigma methodology (Srinivasan et.al., 2016). By integrating Six Sigma into a company's operations, greater value can be added to customers through products and services increasing customer loyalty and strengthening the company's reputation.

### **Total Quality Management**

Another process that works alongside Six Sigma is Total Quality Management (TQM). TQM is a quality control method that includes all employees, taking a more global approach to quality in an organization (Cwiklicki, 2016). Total Quality Management was formulated through multiple evolutions of the quality management process as companies strived to perfect the TQM method. The transitions of TQM “demonstrate a logical consequence of an evolution in the approach to quality or, in other words, to customer satisfaction” (Cwiklicki, 2016, p. 59), which is part of the core objective of Lean management. TQM can be broken up into three main components. The first is composed of methods termed statistical quality control that uses numerical data found in histograms, diagrams, and other charts to inform the quality control processes (Cwiklicki, 2016). The second component involves methods that focus on analyzing the reasons for the occurrence of the problems and includes processes such as matrix diagram, cause-and-effect diagram, and others (Cwiklicki, 2016). The third main component is comprised of “methods whose main focus is to improve and...implement total, comprehensive management involving the entire organization...” (Cwiklicki, 2016, p. 60). When integrated with Six Sigma, TQM encourages continuous quality improvement and reduces the number of defects a company will have to correct.

**Just-in-Time**

The just-in-time (JIT) method ties in with Six Sigma and TQM in that it also focuses on customer satisfaction. Toyota describes JIT as “making ‘only what is needed, when it is needed, and in the amount needed’” (Just-in-Time, n.d.). When operating in JIT, companies implement processes such as production sequencing and Kanban. Production sequencing involves calculating the daily production requirement of each product so that there are no shortages or overproduction of a certain product (Lean thinking, n.d.). Kanban also helps to eliminate overproduction by using cards or containers that “contain information on the exact product or component specifications that are needed for the subsequent process step” (Lean thinking, n.d.). Through these processes, JIT management helps increase the efficiency of a company’s systems (Just-in-Time, n.d.) and ensures that the company is producing products or services tailored to what their customers desire. The JIT method is also known as a pull method, which means each step in the production line pulls from previous steps so that only what is needed is being moved through the production line (Ries, 2011). Learning how to do more with less is a skill that nonprofit operations could use to become more effective in their work. While TQM encourages continuous improvement and Six Sigma reduces the number of defects in a company’s products or services, JIT can be integrated alongside these processes to aid a company in finding what products or services their customers truly desire.

**Benefits of Lean Management in Nonprofit Operations****Identify Customer Values**

The first principle of Lean management is to identify customer values. There are two groups of customers of which nonprofits must be mindful – external and internal customers.



External customers are those who are receiving the benefits of the services provided by the nonprofit (Kramer, 2001). Internal customers are the donors supplying the money for operations as well as the employees and volunteers working within the nonprofit (Kramer, 2001). The ability to identify customer values is crucial to the effectiveness of nonprofit operations.

Nonprofit operations must be centered around the values of their external customers. Collaboration and coordination can assist a nonprofit in their efforts to understand their customer's values. In a study done on supply chain and logistics competencies in humanitarian aid, the following was written: "Coordination and collaboration are also important competencies that help in developing a good understanding of the local context and links to local social networks, and, in this way, they play an essential role in the effective delivery of aid" (Heaslip et al., 2019, pp. 698-699). A nonprofit cannot go into an environment or region and expect to make a lasting impact on the residents if they do not first put in the effort to understand the local culture and norms. Understanding the local context within which a nonprofit is working and fostering relationships among local organizations allows a nonprofit to not only more effectively reach its target customers, but also earn their trust and support.

When dealing with the internal customers, social loafing can become an issue that hurts the whole organization. Social loafing is mainly present during a nonprofit's commercialization process and is defined as the phenomenon that occurs when the number of employees or the nature of the workload increases, yet the contributions of individual members in a group decrease (Chen & Cheng, 2018). Individual motivation and levels of effort may diminish due to a growing number of members on a team or to a poor linkage between efforts and results (Chen & Cheng, 2018). Internal customers need to have a strong tie to the organization's mission and

receive satisfactory incentives to continue to be productive in their responsibilities. Being aware of the values of internal customers is just as critical as being aware of the values of external customers. If internal customers are not finding fulfillment and satisfaction in their work environment, then the quality of service that external customers receive will decrease.

### **Value Creating Processes**

Lean management is centered around creating value for its customers. In the operations of a business, there are certain processes that create value and others that do not and are deemed wasteful. These processes look different in every business. Often in nonprofits the value creating processes will be the services or the processes they use to create the products or services they provide to their customers. Two strategies will be discussed in relation to value creating processes: Six Sigma and innovation.

#### ***Six Sigma***

Six Sigma is just one of the few ways in which organizations can monitor the quality of their services or products and customer satisfaction. In a study done on the Assistive Devices Service Center in Taiwan, Six Sigma and the DMAIC method were used to correct problems in their production process (Cheng & Chang, 2012). According to the case study, the implementation of Six Sigma into the production process reduced transfer and delay times and helped raise the process cycle efficiency of two of their production processes by 27% and 28% (Cheng & Chang, 2012). In relation to the customer, Six Sigma increased the speed at which technicians could locate components they needed which provided customers with quicker service and increased customer satisfaction (Cheng & Chang, 2012).

***Innovation***

Innovation is another means by which nonprofits can continue to enhance their value creating processes. According to a study on business model innovation (BMI), social and economic value can be created through the application of market, network, and experimental learning to innovation within the organization (Weerawardena et al., 2021). Innovation based off market, network, and experimental learning along with an effectively managed structural reconfiguration can aid nonprofits in effecting “new and value-adding changes to their business model components...and thus facilitate social and economic value creation” (Weerawardena et. al., 2021, p. 764). Although innovation is a great way to continue increasing the value of customers, a major challenge is the ability to engage in the development of new ideas while also managing internal operations efficiently and effectively (Dover & Lawrence, 2012). It is in this balance of innovation and commitment to vision where discipline plays a significant role. To operate in a Lean management style, employees need to be managed with a discipline that energizes their support of the organization’s values while also creating the potential for ideas that challenge those values (Dover & Lawrence, 2012). In this way, innovation is occurring from the lowest to the highest levels of the organization, all with the purpose of increasing the effectiveness of the organization’s processes within its specific mission field.

**Eliminate Waste**

There are several ways in which a nonprofit can work to eliminate waste from within operations and management structure to allow for greater flow of communication, services, and ideas. Sometimes changes in operations need to be made, quality control measures need to be put

in place, or external factors need to be controlled. In this section, funding, supply chain management, and Six Sigma will be analyzed as methods to eliminate waste to create flow.

### ***Funding***

For nonprofits, funding is a critical aspect of their operations; however, it can also represent a source of inefficiency (Nunnenkamp & Oehler, 2012). Fundraising activities have even been seen to pull resources away from the charitable services for which the nonprofit was created to perform (Nunnenkamp & Oehler, 2012). To reduce the chance of a nonprofit leaving its original mission in search for funds, nonprofit organizations can use an ex-post funding approach. The ex-post funding approach does not wait for the full sum of funds to arrive before starting on a project. The nonprofit will use their initial funds to start a project and then take their results to donors giving the donors an incentive to continue backing a particular project (Devalkar et al., 2017). The ex-post funding method will be expanded upon in a later section.

### ***Supply Chain Management***

Supply chain management (SCM) is “the management of the flow of goods and services and includes all processes that transform raw materials into final products” (Fernando, 2020). SCM is also another method in which nonprofits can implement Lean methodologies to increase the efficiency of their organization and add value to their customers. The lack of effective SCM can prove detrimental to nonprofit operations. In 2004, when communities near the Indian Ocean were hit by a tsunami, “forty-two percent of [humanitarian aid] organizations responded...using assessments without expert logistics input, resulting in both a failure to anticipate bottlenecks in the supply chain and a poor evaluation of beneficiaries’ needs...” (Heaslip et al., 2019, p. 686). Supply chain issues extend beyond this one isolated incident. As much as 30 percent of aid

delivered in some post-crisis situations is identified as wastage (Heaslip et al., 2019). A solution proposed for the lack of SCM is competency-based training. The competency-based training method focuses more on the employees' knowledge, skills, and abilities; as well as their behavior patterns (Heaslip et al., 2019). Competency-based training helps ensure that the right people are in the right positions, and that they clearly understand the standard to which they are accountable (Heaslip et al., 2019). A training method like competency-based training allows an organization to better manage their supply chain from beginning to end.

### ***Six Sigma***

Six Sigma has been a popular method used to reduce the amount of waste within organizational processes and increase the value of products or services. One of the major leaders in Six Sigma was Jack Welch, former CEO of General Electric (GE). When challenged on the benefits of Six Sigma, Welch responded, "But what's the end result? More new products than anyone else, the highest quality with highest shares ... and [operating] margin continues to expand in a brutal economy" (Conversation, 2001). The results seen in manufacturing companies such as GE are not isolated to only for-profit companies, although the results may look different for a nonprofit company.

In one case study done on a medical clinic, inefficient patient cycle time was proving detrimental to their customers. Because of the low-income status of many of the patients the clinic served, long patient visits could be extremely off-putting as patients often had to sacrifice time out of their workday to come to the clinic (Kovach & Ingle, 2019). On average, the patient cycle time was 68 minutes, but could range from 0 to 267 minutes (Kovach & Ingle, 2019). As a solution to the inefficient cycle times, the Six Sigma methodology was implemented and

specifically targeted the highest probability causes of waste in the clinic visit process (Kovach & Ingle, 2019). Because of the implementation of Six Sigma, the average patient cycle time decreased by 22% and patient visits increased by 27% (Kovach & Ingle, 2019).

### **Produce Only to Customer Demand**

As mentioned earlier, a nonprofit has two sets of customers (internal and external) with demands that the nonprofit must meet. Since donors are the suppliers of a nonprofit's funds, nonprofits need to be attentive to the donors' demands; however, a nonprofit cannot give up its original vision for the demands of its donors. A good way to accomplish this is fundraising under the ex-post funding approach discussed earlier. Under this approach, nonprofits will start a project with their initial funds, and present donors with results at each phase of the project so donors can see how effectively their funds are being used (Devalkar et al., 2017).

By following the ex-post funding method, nonprofits can determine if they are truly fulfilling the demands of their donors causing donors to increase their giving, or if the donors' demands are being unmet causing them to withhold funds from the organization. Nonprofits can benefit from the use of this method, not only because it functions as a JIT system where they only receive funds as they are required, but also because they increase the total amount of funds received at the end of the project (Devalkar et al., 2017). Initiating projects before all the funds are received have revealed the total expected utility "to be almost twice as much as the expected utility delivered when following a traditional approach and waiting for all funds to become available before implementation" (Devalkar et al., 2017, p. 1047). Through the ex-post funding approach, non-profits can find donors who are passionate about the nonprofit's vision. By

satisfying the passions of their donors, they are accomplishing their vision for the hurting and adding value to both sets of customers.

### **Strive for Perfection**

The last principle of Lean management is to strive for perfection. According to an article written in *Harvard Business Review*, as Lean techniques are applied to a value stream, “it dawns on those involved that there is no end to the process of reducing effort, time, space, cost, and mistakes while offering a product that is ever more nearly what the customer actually wants” (Womack & Jones, 1996). Perfection can never be fully accomplished, but it is the philosophy that Toyota has integrated into the structure of its organization making it the reliable and efficient company that it is today. Striving for perfection can be accomplished in many ways, but the methods that will be studied in relation to nonprofits are risk management, performance quality, and the Kanban system.

### ***Risk Management***

Nonprofit organizations, especially humanitarian aid and development organizations are unique in that while most business sectors avoid volatile environments; nonprofits and their staff head towards the danger (Blyth, 2018). In organizations that deal with aiding people in volatile environments, cross-functional teams may be beneficial in assisting an organization to create a system of resilience. Because of the nature of nonprofits’ work, some members of the organization remain distanced from threats becoming hyper-sensitive to risk while others working in closer proximity to danger become desensitized to risk (Blyth, 2018). Having cross-functional teams can assist a security practitioner in managing the risk that is inherent with

certain nonprofit functions. As Michael Blyth (2018) puts it, “the success or failure of any system is governed by the interplay among the component parts within the system” (p. 73).

In a more general sense, nonprofits need to have contingency plans for economic downturns that affect the financial donations they receive. Contingency planning is especially important in nonprofits because not only do they suffer from shrinking resources during economic downturns, but they also see an increase in demand for their services (Arik et al., 2016). A debated determinant of a nonprofit’s ability to strategically respond to economic downturns is found in a more diverse portfolio of funds (Arik et al., 2016). Although the level of portfolio diversification differs per organization, it ties back to the ex-post funding methodology. In the ex-post funding approach, a nonprofit has two groups of donors – traditional and ex-post donors. Traditional donors contribute to a nonprofit in expectancy of the nonprofit delivering results, whereas ex-post donors contribute only against delivered results (Devalkar et al., 2017). Operating under the financial support of both donors, a nonprofit can rely on the initial funds it raised before implementing a project which allows it to reduce its dependence on a continued inflow of funds during the completion of the project (Devalkar et al., 2017). If it has no initial funds, it can start the project and begin to deliver utility earlier giving ex-post donors cause to continue funding later phases of a project (Devalkar et al., 2017).

### ***Performance Quality***

Implementing techniques such as Total Quality Management and Knowledge Management (KM) can help a nonprofit strive for perfection in their performance quality. Knowledge Management is defined as “the procedure of acquiring, saving, disseminating, and successfully using organizational knowledge” (Ashraf, 2016, p. 201). In a study done on the



effects of TQM and KM on corporate culture, it was found that both philosophies are significant for performance excellence within organizations (Ashraf, 2016). Knowledge Management helps reduce the costs incurred by the organization while Total Quality Management helps improve quality (Ashraf, 2016). One of the more well-known quality improvement methods under TQM is Kaizen. Kaizen means continuous improvement and often looks like “eliminating unnecessary activity, reducing excess inventory and using teamwork to fix problems when they arise” (Gale & McLain, 2018). Normally, the Kaizen method relies on low-level workers to generate innovation in company processes (Gale & McLain, 2018). When the TQM and KM methods are combined, they can “enhance performances to optimal level” (Ashraf, 2016, p. 210).

### ***Kanban***

Coming alongside management techniques such as TQM and KM, Kanban can help increase the productivity of an organization’s employees. The word Kanban means signboard or billboard and is a scheduling system used often in the production side of Lean management to “reduce the quantity of work in process and inventory” (Chen and Cheng, 2018, p. 988).

Although it is mostly seen as a production tool, Kanban has helped management identify stagnation points in processes and minimize waste from procedures (Chen and Cheng, 2018). It has also been studied in a nonprofit case study and shown to improve the quality of service in the healthcare industry (Chen and Cheng, 2018). The implementation of Kanban in this case study was a solution to social loafing that was seen within the Assistive Technology Resource Center of a social welfare foundation. The results of Kanban in the nonprofit’s operations were reduced passive work attitudes, enhanced productivity, increased customer satisfaction, and increased employee satisfaction (Chen and Cheng, 2018). Because of the proven positive effects seen in a

nonprofit's productivity from the use of Kanban, it too can be used as a means by which a nonprofit can strive for perfection.

### **Case Study: Lean Principles in Habitat for Humanity**

Habitat for Humanity is a Christian organization that seeks “to put God’s love into action” by building “homes, communities, and hope” (Our mission, n.d., para. 1). Their vision is – “A world where everyone has a decent place to live” (Our mission, n.d., para. 2). Habitat for Humanity is active all over the world and adheres to a non-proselytizing policy which means that the service offered to people in need does not depend on their acceptance of Habitat’s Christian values and Habitat will not attempt to convert customers to Christianity (Our mission, n.d.). This section focuses on Habitat for Humanity in Birmingham, Alabama.

### **Identify Customer Values**

According to a study done by the Australian National University on the Schwartz theory of basic values, there are ten basic values held universally by humans (Values, 2020). Two of the values held are security (which includes safety, stability of society, and harmony) and power (which includes prestige, control, and dominance over resources) (Values, 2020). It is unclear whether homeownership alone satisfies an individual’s values of security and power (Haeffele & Storr, 2019), so Habitat appeals to these values by not only helping people build their own homes, but also by teaching them about personal finances, home repair, and homeownership (Haeffele & Storr, 2019). In the low-income housing community that Habitat for Humanity serves, “people, particularly children...are more likely to have disabilities, mental illnesses, or behavioral issues” (Haeffele & Storr, 2019, p. 17). By focusing on the values held by their customers, Habitat enables the people it serves to enjoy the benefits that come with maintaining

and owning a house which are better building quality and reduced neighborhood crime rates, better health for and less behavioral problems with children, and an increased activity in politics and community organizations (Haeffele & Storr, 2019).

### **Value Creating Processes**

An important aspect of Habitat's value creating processes is the fact that the processes are dependent heavily on the customer's effort. According to a study done on Habitat, "Habitat facilitates homeownership for those who are willing to work and are able to pay" (Haeffele & Storr, 2019, p. 23). As touched on in the previous section, Habitat understands that it cannot just build someone a house and turn their life around. The customer must also have the desire and discipline to better themselves and their family. When Habitat does create a home for a family, it often concentrates its efforts on certain streets or neighborhoods so many of the residents have had to work just as hard as their neighbors for the home they now own on their street or in their neighborhood (Haeffele & Storr, 2019). The byproduct of a value creating process such as this is a "community that shares a common identity" (Haeffele & Storr, 2019, p. 30). Many of the neighborhoods also experience "immediate connections and relationships" (Haeffele & Storr, 2019, p. 30). Lean management is a very customer centric approach, and Habitat's processes create value for customers by functioning in a manner that works only if the customer desires it.

### **Eliminate Waste**

The structure-conduct-performance (SCP) paradigm came from industrial organization economics, and has benefits in a nonprofit's pursuit of waste elimination. The basis behind the SCP paradigm is that companies "pursue strategies in response to market conditions, which alter...conduct to positively impact the level of profits earned" (Ralston et. al., 2015, p. 7). The

structure of the market that Habitat is working in is inefficient. The programs that the government provides in Birmingham offer nicer housing communities but no training to help people develop stable lifestyles (Haeffele & Storr, 2019). Habitat has structured itself in a manner that can take advantage of the market inefficiencies by keeping customers at the center of its vision and shaping the conduct of its employees so that its performance in the marketplace increases customer value and consumer demand.

Nonprofits, such as Habitat for Humanity, are better suited to deal with the issue of inadequate housing because of their hierarchical management structure (Haeffele & Storr, 2019). If a nonprofit's management structure contains feedback mechanisms that aid the organization in solving the challenges they lay out in their vision and mission statement, then "nonprofit initiatives will be more responsive and adaptable than public bureaucracies" (Haeffele & Storr, 2019, p. 20). Habitat for Humanity uses feedback mechanisms in their operations that allow them to eliminate waste from within their processes and focus their energy on the customers they can help the most. One of Habitat's major forms of feedback is their extensive application process (Haeffele & Storr, 2019). The application process includes home visits, a financial review, and workshops among other requirements (Haeffele & Storr, 2019). Not only is the application process extensive, but it also is determined by the pace of the applicant (Haeffele & Storr, 2019). In this way, Habitat for Humanity can ensure that they are only working on projects with customers who truly desire to better themselves and who are ready to take on such an endeavor.

### **Produce Only to Customer Demand**

Demand for the services of Habitat for Humanity is evident among the people of Birmingham. The city of Birmingham had a 31% poverty rate between the years 2010 – 2014

while the national average was 13.5% (Haeffele & Storr, 2019). Government programs that aid low-income citizens in attaining housing have missed the mark (Haeffele & Storr, 2019). As mentioned previously, these programs offer nicer housing communities but no training to help people develop stable lifestyles, leaving a gap into which Habitat can step in and fill (Haeffele & Storr, 2019).

Just because there are high poverty rates and ineffective government programs does not mean that every person or family living in poverty demands Habitat's services. To sift through customer demand, Habitat's extensive application process comes into play again. By making customers go through the application process and give of their time and energy during the construction of their home, Habitat can discern what the customer truly desires and how strong the demand for Habitat's services is. One of the requirements made by Habitat for Humanity is a minimum of 300 sweat equity hours to be performed by the customer in the construction of their home (Haeffele & Storr, 2019). Habitat uses these sweat equity hours not only to determine one's desire for homeownership, but also to "teach homeowners additional skills and build their confidence in being able to maintain a home" (Haeffele & Storr, 2019, p. 27).

### **Strive for Perfection**

The last Lean principle found in Habitat for Humanity is striving for perfection. As exemplified by Toyota, perfection is a philosophy that must permeate even the lowest levels of an organization or company. When the philosophy of perfection is integrated into a company's organizational structure, it will trickle down into the conduct of the company which then increases the value customers receive from the performance of the company. In striving for perfection, organizations should often inspect what they expect from their employees and/or

customers. One way Habitat for Humanity has done this is by setting standards for who can become a homeowner under them. To be a potential homeowner, one must “make between 25 to 30 percent of the area’s median income, meet credit score or creditworthiness requirements...take classes on homeownership, home repair, and personal finances; complete sweat-equity hours...and make monthly payments on their at-cost, no-interest mortgages” (Haeffele & Storr, 2019, p. 23). By requiring potential homeowners to meet such strict standards, Habitat for Humanity is inspecting what they are expecting out of their investment into their customers’ lives.

Outside of the requirements Habitat puts on potential homeowners, the nonprofit is also structured in a manner that eases its ability to accomplish the goals set out in its mission statement. Habitat for Humanity Birmingham operates through a decentralized organizational structure which allows it to be more flexible (Haeffele & Storr, 2019). This flexibility along with an accountability mechanism and access to local knowledge enables nonprofits like Habitat to improve the housing condition of the poor better than public housing initiatives (Haeffele & Storr, 2019).

Whether Habitat for Humanity realizes it or not, Lean management principles have shaped how successful they have been in providing housing to low-income families. Habitat saw the demand in Birmingham, understood the values of its customers, focused on value creating processes that added value to its customers while reducing waste in operations, and strived for perfection in both how it handled customers and how it chose which customers it accepted into its program. The flexibility that it has achieved through the management of its people and processes has led to few foreclosures and few delinquent debts among its customers (Haeffele &

Storr, 2019). Habitat for Humanity Birmingham is a good example of how a nonprofit can eliminate waste and increase the impact of their services; as well as how the organizational structure of a nonprofit and its feedback mechanisms can succeed where government efforts have not (Haeffele & Storr, 2019).

### **Consideration of the Church in Nonprofit's Lean Management**

Connecting with the Church can aid in a company's strategic response to market structure as well as its organizational structure in ways like supply chain reliability, increased community engagement, and accountability. A partnership like this with the Church will also impact the conduct and performance of a company within its market. At the same time, partnership with nonprofit companies can give Churches an outlet through which they can prove their faith to the world around them. Part of the Lean methodology is managing a company's supply chain effectively so that a company can limit the number of resources it requires to operate at any given time. Lean management influences supply chain sustainability through certain social practices, one of them being engagement with the local community (Bagherian & Gershon, 2020). Community engagement is where the Church can be a useful asset to the nonprofit market segment. Acts 2:42-47 describes the Church in this manner:

And they devoted themselves to the apostles' teaching and the fellowship, to the breaking of bread and the prayers. And awe came upon every soul, and many wonders and signs were being done through the apostles. And all who believed were together and had all things in common. And they were selling their possessions and belongings and distributing the proceeds to all, as any had need. And day by day, attending the temple together and breaking bread in their homes, they received their food with glad and

generous hearts, praising God and having favor with all the people. And the Lord added to their number day by day those who were being saved. (*English Standard Version*, 2002)

The Church was organized in a way that benefits its members spiritually, emotionally, and physically. The beneficial results of such an institution overflow not only into the lives of those who adhere to the Christian faith but to the secular world as well: the lame and sick were healed (Acts 3:1-10; 5:12-16), a centurion's family received salvation (Acts 10:23-48), and the orphans and widows were supported and cared for (Acts 6:1-6; James 1:26-27). The Church is a great and powerful resource for those willing to partner with it.

Faith-based organizations (FBOs), such as churches, play a larger role in health promotion and delivery for their community than many people realize, and have been found to be a useful asset in resource constrained settings (Ramírez-Johnson et al., 2014). They also work out of an ideology that defies the simplistic models of health intervention used today causing them to go above and beyond reasonable efforts to help those in need (Ramírez-Johnson et al., 2014). Specifically, the ideology that FBOs work out of is one that views their role as “pertaining to what God expects of you as well as what God wants you to do in favor of your neighbors” (Ramírez-Johnson et al., 2014, p. 1202). The analysis of the relationship between the Church and nonprofit organizations will be done out of the assumption that the Churches are functioning out of the commands and structure laid out in the Bible.

### **Identify Customer Values**

Partnering with local Churches is an effective way for nonprofits to connect with and understand the values of the local people they wish to serve; however, the authenticity of these



efforts is important to the success of a nonprofit in a region. Nonprofit engagement with local religious organizations should not be viewed as an opportunity to cover mainstream intervention with religion (Clarke, 2015), but as a partnership in which a nonprofit can connect to the value system of the community it is serving. In the context of development, authentic engagement with religion allows a nonprofit to utilize the value system of local communities with its inherent strengths and helps achieve positive outcomes within the community (Clarke, 2015). Connecting with the values of the local people also aids nonprofits in better integrating the voice of the customer (VOC) into their Lean structure so that the desires of the customers flow down through the nonprofit's conduct into their performance in the marketplace. The benefits of having the VOC integrated into the structure of an organization were seen in Habitat for Humanity Birmingham, and can be attained by more nonprofits through the local knowledge that can be gained through partnership with the Church.

### **Value Creating Processes**

In the nonprofit industry, value is added to customers through a nonprofit's assistance in helping the people they serve to better their lives. Similarly, bettering the lives of neighbors is also the mission of the church. In Matthew 22:39, Jesus commands his followers, "You shall love your neighbor as yourself" (*English Standard Version*, 2002); and later, in Acts 4:34-35, the early Church is seen operating in obedience to these commands: "There was not a needy person among them, for as many as were owners of lands or houses sold them and brought the proceeds of what was sold and laid it at the apostle's feet, and it was distributed as any had need" (*English Standard Version*, 2002).

It makes sense then that the Church can help nonprofits focus on processes that create value for their customers. In the context of Australian Aid to the country of Papua New Guinea, it was found that partnering with religious groups can help shorten the length of time required to achieve development outcomes because “religious groups have already made many community connections and have therefore reduced the asymmetric information problem that often exists between donor and recipient” (Clarke, 2015, p. 1465). Lean management is based heavily on continuous improvement and reduction of waste. By partnering with the Church, nonprofits can reduce the amount of time and resources usually needed to develop lasting relationships with the community, letting the Church be one of the delivery mechanisms in the supply chain. Partnering with the Church can also prove beneficial to the nonprofit, because now the nonprofit has relations through the Church with the region it is serving. The nonprofit can receive more useful information about the region and use that information to guide its future iterative processes.

### **Eliminate Waste**

A study done on faith-based organizations in Hidalgo, Texas, shows that factors such as number of years in the community, membership size, annual budget, and number of paid staff members are indications of the range of financial and human resources available for FBOs to utilize to meet the needs of the community (Ramírez-Johnson et al., 2014). These findings can be beneficial to nonprofit organizations in reducing the amount of waste in their supply chain. Instead of having to build a supply chain in a local region and risk allowing slack into the supply chain, a nonprofit can partner with a Church that is already doing effective work in the community and has a working supply chain.

In Papua New Guinea, Australian nongovernmental organizations (NGOs) developed a program called the Church Partnership Program (CPP) that replaced an old method of aid delivery they had used that produced negligible results (Clarke, 2015). The CPP was started on the knowledge “that in certain Pacific countries, the Churches have existing, functioning and well-regarded national networks and close links with local communities” (Clarke, 2015, p. 1463). The new CPP program was “a departure from the model of heavy dependence on technical advisors at huge costs” (Clarke, 2015, p. 1471). When the CPP model was used in Papua New Guinea, the Churches were able to access “all parts of the population in all districts of the economy” (Clarke, 2015, p. 1475). Not every nation will see this level of success; however, the established supply chains of Churches remain a good resource for nonprofits to utilize.

Models like the CPP do not reduce the responsibility placed on nonprofits. The CPP assumes that Australian NGOs will step in when demands for technical expertise arise beyond the Church’s ability (Clarke, 2015). Australian Aid also closely monitors the CPP to ensure the partnership is accomplishing certain outcome areas (Clarke, 2015). Within Lean management, the principle of inspecting what one expects is crucial to the successful implementation of new, innovative processes.

### **Produce Only to Customer Demand**

As mentioned above, partnering with churches is beneficial because of the close links they have with the community in which they reside (Clarke, 2015). Not only do they provide good supply chains through which aid can be delivered, but they also know the needs of the people of their community. In Hidalgo County, Texas, 39% of the residents do not have health

insurance or access to health services (Ramírez-Johnson et al., 2014). FBOs alone provide “weekly support via health initiatives to 17% of the Hidalgo County population...” (Ramírez-Johnson et al., 2014, p. 1202). Churches are already in the position that nonprofits hope to be in when serving a community. The churches see the needs of the community and meet the needs. If a nonprofit organization desires to follow the Lean principle of producing only to customer demand, partnership with the Church can aid the organization in its endeavor through the mutual sharing of knowledge and resources. Through the use of the acquired knowledge and resources, a nonprofit can also more easily fulfill the two commandments given by Christ – love God and love one’s neighbor (Matthew 22:37-40) – leaving a lasting impact on the individuals the nonprofit serves.

### **Strive for Perfection**

Previously, the various ways nonprofits can strive for perfection have been discussed: risk management, performance quality, and Kanban. This essay proposes that partnership with the Church will also aid a nonprofit in striving for perfection. When talking about leadership within the Church, Paul writes in Titus 1:7-9:

For an overseer, as God's steward, must be above reproach. He must not be arrogant or quick-tempered or a drunkard or violent or greedy for gain, but hospitable, a lover of good, self-controlled, upright, holy, and disciplined. He must hold firm to the trustworthy word as taught, so that he may be able to give instruction in sound doctrine and also to rebuke those who contradict it. (*English Standard Version*, 2002)

Having this kind of leadership managing a portion of an organization’s supply chain would be a great advantage to a company. Not only would the supply chain be stronger and more reliable,

but there would be greater accountability for the nonprofit having the Church involved in its operations.

In Papua New Guinea, the CPP was an example of an innovative delivery mechanism that also allowed Australian Aid to continue learning about what works (Clarke, 2015). The study done on the CPP concluded that religious organizations are useful as delivery mechanisms when effective aid utilization is a concern (Clarke, 2015). The CPP in Papua New Guinea was a very practical example of how partnership with local churches have the potential to aid a nonprofit in continually improving and learning, and the ability to increase the effectiveness of a nonprofit's supply chain.

### **Conclusion**

In conclusion, implementing Lean management into nonprofit operations will allow an organization to operate within a region in a manner that is economically more viable and more impactful, realizing long-term results. The Lean philosophy unpacked in this essay is that as the number of resources used in operations are reduced, inefficiencies and waste within operations can be uncovered and removed. When done in tandem with the Toyota philosophy of perfection, Lean management can positively impact the structure of a nonprofit organization cultivating a culture that expects the pursuit of perfection from its employees, processes, and operations which will benefit the nonprofit's performance within its marketplace. Some of the management techniques that are used within Lean management are Six Sigma, just-in-time inventory, and Total Quality Management. Each of these processes can aid a nonprofit in reducing operating costs and increasing the impact of their operations. Six Sigma was shown to increase the process cycle efficiency of an Assistive Devices Service Center production process as well as increasing

the consumer's satisfaction with their service (Cheng & Chang, 2012). Applying the JIT methodology to fundraising – fundraising under an ex-post funding approach – doubles the total expected utility delivered from a nonprofit's project (Devalkar et al., 2017). The integration of Knowledge Management and Total Quality Management have been studied and found to reduce the cost incurred by companies while improving the quality of their products or services (Ashraf, 2016).

Lean management is based on five core principles: identify customer values, focus on processes that create value, eliminate waste to create flow, produce only according to customer demand, and strive for perfection (Stevenson, 2021). Through the operations and success of Habitat for Humanity Birmingham, the beneficial results of nonprofits operating under a Lean philosophy are evident. Habitat was able to serve beyond the surface level needs of their customers and form personal bonds with them, eliminate waste in their value creating processes in the form of bureaucratic management and unmotivated potential homeowners, and tailor their services to the needs and desires of their customers (Haeffele & Storr, 2019).

Outside of traditional Lean management practices, partnership with the Church can aid a nonprofit in accomplishing the five principles of Lean management while having lasting effects and reducing the cost of operating within a certain region. Churches often have existing community connections (Clarke, 2015), and the length of time they have been in the community increases the range of financial and human resources from which they can pull to meet the needs of their community (Ramírez-Johnson, 2014). Working together with the Church can reduce the information problem that exists between donor and recipient (Clarke, 2015), putting the nonprofit in a better position to hear the voice of their customers. The opportunity to listen to the

customer is especially important in processes such as Six Sigma, because it guides the innovation that occurs within an organization and its processes. Churches also provide an extra level of accountability for nonprofits because of the leadership that the nonprofit will be integrating into their supply chain.

When a nonprofit implements the Lean philosophy into their company structure, program effectiveness, waste reduction, and process efficiency can be achieved; however, when the Church is integrated into operations to help a nonprofit better engage with local communities, redemption, salvation, and freedom can be offered to those whom the nonprofit is serving. In this way, not only can a nonprofit achieve the five principles of the Lean philosophy, but it can fulfill Christ's commandment to "go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything..." (Matthew 28:19-20, *English Standard Version*, 2002). When obeying the commands of Christ and partnering with a body of believers who are devoted to doing the same in discipleship and teaching, a nonprofit can have a much longer lasting and intimate influence on the people it serves.

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