

The Impact of Training and Development on Organizational Performance

by

Timothy Utley

Final Project

Presented to the Faculty of the Graduate School of

Saint Mary-of-the-Woods College

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Leadership Development

Saint Mary-of-the-Woods College

February 15, 2020

Saint Mary-of-the-Woods College
Graduate Program in Leadership Development


Date: February 15th, 2020


We hereby recommend that the Final Project submitted by:

Entitled:

Be accepted in partial fulfillment of the requirements for the degree of
Master of Leadership Development.

Advisory Committee:

Lamprini Pantazi, Ph.D. 

Jennie Mitchell, Ph.D. 

We certify that in this Final Project all research involving human subjects
complies with the Policies and Procedures for Research involving Human
Subjects, Saint Mary-of-the-Woods College, Saint Mary-of-the-Woods, Indiana
47876

Abstract

While training and development are among the most important elements for the effective and efficient functioning of any organization, manufacturing companies still struggle to engage effective training methods. This aspect is associated with numerous challenges that include the proper understanding of the importance of training in enhancing the relationship between the company and the workforce, the existence of a dispersed workforce, different learning habits within the organization, lack of engagement, engaging training that is irrelevant, and the associated costs. Manufacturing jobs are high in demand and employee training and development is crucial to employee retention, learning, performance and overall wellbeing. These are among the most important facets to the effective functioning of an organization. In most cases, organizations are judged based on their employee turnover rates which directly translates to learning performance and wellbeing. This study examines the importance of training and development in the manufacturing industry through conducting literature review of the key aspects of training and development and examining the feasibility of training and development programs in an organization.

Keywords: Training, development, employee retention, employee turnover, employee satisfaction, employee performance

Table of Contents

I.	INTRODUCTION	6
i.	Problem Statement	7
ii.	Justification	8
iii.	Key Assumptions	8
II.	LITERATURE REVIEW	9
i.	Training Purpose, Process, and Outcomes	10
ii.	Why Training?	11
a)	<i>Employee Learning and Performance</i>	12
b)	<i>Employee Behavior</i>	12
c)	<i>Employee Satisfaction and Wellbeing</i>	13
d)	<i>Employee Retention</i>	13
iii.	Importance of Training	14
iv.	The Training Process	15
a)	<i>Identifying Training Needs</i>	16
b)	<i>Training Plans and Implementation</i>	16
c)	<i>Training Evaluation and Feedback</i>	16
v.	Organizational Leadership Related to Training	17
vi.	Common Challenges Experienced in the Manufacturing Industry	18
III.	RESULTS	19
IV.	ANALYSIS AND INTEPRETATION OF THE RESULTS	23
V.	PROJECT FEASIBILITY	24
i.	Project Description	24
ii.	Competitive Landscape	43
a)	<i>Strength</i>	44
b)	<i>Weaknesses</i>	44
c)	<i>Opportunities</i>	44
iii.	Operating Requirements	45
iv.	Recommendations and Findings	46
v.	Constraints	47

VI.	CONCLUSION.....	48
VII.	RESEARCH RESTRICTIONS	51
VIII.	FUTURE RESEARCH.....	51
IX.	REFERENCES	52

I. INTRODUCTION

Manufacturing jobs are in high demand, and employee training and development are crucial to employee retention, learning, performance, and overall wellbeing. While some organizations have a specific training department, human resource departments also play a major role in establishing effective training methods to help strengthen the workforce. Employee retention, learning, performance, and wellbeing are considered immensely important to the effective functioning of the different sectors of the economy. In most cases, organizations are judged based on their turnover rates of the employees, which directly translate to learning, performance, and wellbeing (Ali, Huang, Ali, & Li, 2017). The rate of turnover is directly related to the performance of the organization. For example, low turnover ensures that the organization retains employees through providing them with the most suitable environment which in turn increases the performance of each of the employees (Dietz & Zwick, 2016). All aspects of organizational leadership require crafting and properly executed strategy. Strategy is a set of actions that a company's managers perform and initiate to compete with rival competitors. Doing so helps to promote a superior standing while also maximizing profit. It is true that strategy helps the organization reach goals and objectives, but strategy also plays a crucial role in the long-term success of the organization, supporting growth and the wellbeing of the employees (Thompson, Peteraf, Gamble, & III, 2016).

Training and development are among the most important elements of employee retention within an organization.

Training is defined as the effort of organizations that help foster learning among employees. Development, on the other hand, entails the effort engaged in organizations to ensure

the broadening of individual skills for future responsibility. This implies that both concepts revolve around the continuous effort that is designed to improve the competence of the employees and organize performance with the aim of improving capacity and performance (Huang & Su, 2016). While organizations may have specific departments for training and development of employees, human resource departments play a crucial role in the training and development of employees. The proper functioning of an organization, regardless of its size, is based on the staffing and their efficiency in the delivery of specific tasks. Specific skills, ability, competence, and knowledge are crucial to the effective functioning of an organization. Even so, most of these elements are not taught in formal education (Hassan, 2016). This means that employees require extensive and continuous training to ensure they have the necessary skills, knowledge, and competence to ensure they can bring a substantive contribution to the company growth. For employees to be both effective and flexible, they must acquire and develop skills and knowledge (Younas et al., 2018). As identified in numerous studies for employees to feel valued in the organization, they need to see management commitment towards their training needs.

i. **Problem Statement**

While training and development are among the most important elements for the effective and efficient functioning of any organization, manufacturing companies still struggle to engage effective training methods. This aspect is associated with numerous challenges that include the proper understanding of the importance of training in enhancing the relationship between the company and the workforce, the existence of a dispersed workforce, different learning habits within the organization, lack of engagement, engaging training that is irrelevant and the associated costs (Gan & Yusof, 2019). The lack of understanding of the importance of training

and development in organizational development and success is the most dominant challenge and is commonly associated with other challenges (Andriotis, 2019). For example, when an organization fails to understand why the training is necessary, they implement programs that fail to engage the employees often wasting time and finances.

ii. **Justification**

Training and development are among the most important elements that ensure the effective functioning of the organization. However, organizations have ignored their importance, developing other incentives to ensure employee retention, and reduce turnover rates. Based on the importance of training, to both the organization and the employees, it is important to engage training and development programs or processes. Some of the key benefits include enhanced relationships between the organization and the employees which in turn results in other aspects such as employee satisfaction, and increased employee retention rates. (Ali et al., 2017).

iii. **Key Assumptions**

As identified, training and development play a crucial role in the overall functioning of an organization. This study was guided by several assumptions that include:

- i. The importance of training and development in employee retention, satisfaction, low turnover rates, performance, and wellbeing. It is expected that effective training and development positively impact on these elements, which in turn ensures organizational development and employee success.
- ii. Organizational management, specifically through human resource management, is crucial in ensuring an effective training and development program. Human resource management is directly connected to the functionality of the employees. The department connects the employee with the organization. This means that it is the

- role of the management to ensure that all requirements of the employee, including satisfaction, development, and wellbeing, are met through programs such as training and development programs and initiatives.
- iii. Training and development are directly related to the development and success of the organization. It is understood that employees dictate the development and success of the organization. As identified in numerous studies, employees even determine the profits made by an organization. This means that motivated employees positively impact the development and success of the organization. These aspects are achieved through reduced turnover rates, high morale and satisfaction levels, positive behaviors among the workforce, and the enhanced ability to have a positive work-life balance.

II. LITERATURE REVIEW

Training and development are integral concepts in the growth and success of the manufacturing industry. In the rapidly changing phase of the manufacturing industry, there are numerous opportunities and challenges facing different organizations. With the existence of such an environment, these dynamic organizations must be competitive to survive with the existing competition. The existing challenges, including competition, exert great pressure on management which have the responsibility of implementing changes as per the requirement of the organization (Younas, Farooq, Khalil-Ur-Rehman, & Zreen, 2018). To survive the existing competition, organizations sometimes need to change their policies, rules, and regulations, which directly translate to the functionality of the organization. Organizations in the manufacturing industry face tremendous pressures for competing for a talented workforce, and employees with advanced technological skills, for the constant improvement of production methods, and also

competition for employees who are able to achieve work-life balance (Umamaheswari & Krishan, 2016).

Studies from Uhrin et al. (2017) and Rodriguez & Walters (2017) provide that the success of an organization is primarily based on the quality of the workforce. As identified in the two studies, organizations face a huge challenge in ensuring the existence of a quality workforce (Uhrin et al., 2017; Rodriguez & Walters, 2017). This challenge includes the attraction of a quality workforce that primarily comprises of employees, recruitment of dynamic, intelligent and enthusiastic employees in the organization, the motivation of the already existing workforce and most importantly, the retention of the existing workforce which are all crucial in enabling the organization to maintain its status in the competitive market (Noe et al., 2017). Mulang (2015) suggests that training is an important tool that can enable organizations to gain and maintain their competitive markets in the industry. This aspect is based on the fact that training is an important parameter for enhancing the ability of the existing employees to achieve all the objectives of the organization (Mulang, 2015). Well-developed training programs, as identified by Mulang (2015), are crucial in ensuring that the workforce is able to conquer the existing goals for the effective functioning of the organization and also ensuring that it maintains its competitive advantage (Mulang, 2015).

i. Training Purpose, Process, and Outcomes

Hassan (2016), provides that training is a learning activity that primarily focuses on ensuring that employees or the trainee acquire better skills and knowledge that is required to perform a specific task. This means that training is constructed on the need for an effective sales force, increased productivity and safety, among others, all of which are important elements in the functioning of the organization. Studies have identified that training requires organizations to

develop proper training programs or strengthen the human resource departments (Hassan, 2016). Training is associated with increased employee motivation and commitment, which are crucial in employee retention. As Mulang (2015) argues, employees have the potential to build or destroy the company's reputation, which impacts on the profitability of the organization. Employees also have the potential to influence customer fulfillment and the nature of the products, an aspect that is based on the fact that they oversee most of the activities in the organization (Mulang, 2015).

ii. **Why Training?**

Training and development are identified as key facets that impact on both the individual and the organization. Gan & Yusof (2019) argue that the individual capability profiles of employees are related to the skills they gain from both training and development (Gan & Yusof, 2019). This means that the increased acquisition of skills among employees increases the competence, which in turn increase the individual income. Training and development also improve the opportunity for career development, an aspect that is part of the curriculum that enhances production within the organization. Training and development are identified as an important element in the improvement of labor productivity. When an organization engages training and development, they enhance the ability of the employees and the organization itself to deal with changes (Jha, 2016). This is crucial in enhancing the process of implementing important changes in the organization, which can be technical or strategic changes. Well trained employees are crucial in the improvement of the quality of the output from the organization (Memon, Salleh, & Baharom, 2016). Highly trained employees are more competent and more aware of their roles and significance within the organization, both of which are important aspects of enhancing productivity.

a) Employee Learning and Performance

Training primarily focuses on enhancing the skills and behavior among employees and improving their performance within the organization. The primary objectives of training and development include aspects such as enhancing the skills and knowledge of employees within the organization. The training process also ensures employees learn specific aspects of the organization, which are also crucial in skill and knowledge development (Umamaheswari & Krishan, 2016). Enhanced learning and performance from training are also based on the enhanced ability to set specific goals, conceptualize the roles of individuals as employees, enhanced efficiency, enhance motivation and develop the self-confidence of performing specific tasks set within the organization. As identified by McGoldrick & Tobey (2016), the following steps are beneficial to the training needs and assessment process:

- Step one: Conduct an external and organization scan.
- Step two: Collect data to identify business needs.
- Step three: Collect data to identify performance, learning, and learner needs.
- Step four: Analyze data.
- Step five: Identify potential training solution.
- Step six: Deliver data analysis feedback.
- Transition: Begin training design.

b) Employee Behavior

Training programs are identified as crucial elements in changing behaviors among employees. Through training and development, which as identified ensures skill development and enhanced knowledge among the workforce, employees develop positive behaviors that are characterized by reduced absenteeism, low turnover, increased morale, reduced grievances, and

even reduced strikes within the organization. In most cases, behavior is associated with enhanced satisfaction and motivational levels from the training process (Ali, Huang, Ali, & Li, 2017).

c) Employee Satisfaction and Wellbeing

Among the most common objectives of an organization is ensuring increased job satisfaction and wellbeing. This aspect is based on the understanding that job satisfaction directly translates to employee performance. Research by Wolter, Bock, Mackey, Xu, & Smith (2019) shows that employees often experience trends in their job satisfaction. These trends can be a greater indicator of employee turnover than the static satisfaction level. Hanaysha & Tahir (2016) provide that training is identified as an important process in enhancing teamwork and employee empowerment, which in turn is crucial in ensuring high levels of morale and motivation (Hanaysha & Tahir, 2016). Empowerment and teamwork, on the other hand, are identified as important aspects of ensuring job satisfaction, which enhances the wellbeing of employees. According to Ocen et al. (2017), satisfaction ensures that employees are able to balance their work life and personal life, which prevents challenges such as burnout (Ocen, Kasekende, & Angundaru, 2017).

d) Employee Retention

Employee retention is perhaps one of the most important aspects associated with training and development. Khandelwal & Shekhawat (2018) define employee retainment as the actions engaged in an organization to ensure that all the talented employees remain in the organization. This means that retention engages the intentional behavior from the organization that ensures that they produce the most suitable environment that ensures that employees are fully satisfied with working within the organization (Khandelwal & Shekhawat, 2018). Employee retention, as

identified by Srivastava et al. (2018), also focuses on the efforts from the management and the entire organization to ensure that they retain their employees, specifically the most productive employees, to accomplish the goals within the organization. Training is identified as a crucial element in ensuring employee retention. Training, however, relies on the aspects discussed above, which is enhanced learning and performance, which in turn enhanced the satisfaction and the wellbeing of the employees (Srivastava, Kumar, & Mohanty, 2018). One of the most important elements in career development is skill development.

Khandelwal and Shekhawat (2018) argue that employees are, in most cases, fascinated by an organization that constantly focus on their career development. This means that employees tend to choose organizations that constantly engage in processes that enhance career development, for example, training (Khandelwal & Shekhawat, 2018). This means that training is also an important tool for attracting employees. Srivastava et al. (2018) study shows that the most satisfied employees are those working in organizations that focus on enhancing their knowledge and skills, helps them in goal setting, conceptualizes the roles of employees, enhances their efficiency, increases their levels of motivation, helps them develop self-confidence, and also ensures they have a sense of recognition, which are all key roles identified in the above sections (Srivastava, Kumar, & Mohanty, 2018). Studies show that in most instances, while companies engage training and development to ensure that the workforce has the skills and knowledge to perform and meet specific goals in the organization, they also train to ensure that the employees are satisfied and want to remain in the organization, maintaining employee retention. (Torraco, 2016).

iii. **Importance of Training**

Other important aspects associated with training include:

- i. Training plays an important role in the recruitment process, which is also associated with its ability to attract quality applicants.
- ii. Training eliminates associated risks. This is associated with the fact that it ensures better economic use of equipment, resources, and materials through reducing and avoiding wastage (Andriotis, 2019).
- iii. Training acts as a monitoring strategy for employees within the organization.
- iv. Training enhances efficiency and productivity.
- v. Training improves the morality levels among the employees. This is associated with its ability to change behaviors among employees within the organization (Werner & DeSimone, 2012).
- vi. Training increases adaptability and loyalty among the staff, which is associated with the personal benefits of training and development programs, for example, enhanced morale among employees.

iv. **The Training Process**

In most cases, the training and development process engages the systematic approach, but there are other approaches that include the transitional model, the logic model, the national training award model, the Ashridge model, learning organization, and training as consultancy. The effectiveness of a training program has a pivotal point on the trainee and the organization. The logic model has been used throughout the years and provides a systematic way to assess relationships in an organization between each of the following components: program goals, investments, activities, customers, outputs, outcomes, and organizational structure (Brill, 2016). The systematic training model comprises of three to four key stages that include:

a) Identifying Training Needs

This stage is necessary for the identification of the training needs of employees. The manufacturing industry is characterized by diverse needs and roles among the employees. In identifying the training needs, the organization can identify the required overall needs and the specific employees in need of certain types of training. In identifying the needs, management engages four procedures that include the analysis of the job requirements, organizational analysis, performance appraisals, and human resource survey.

b) Training Plans and Implementation

The training process focuses on the techniques and the methodologies to be engaged in the training process. At this stage, management should identify the objectives for the training, the budgets and other associated costs and the duration for the training process. When it comes to establishing a training budget, upper management which includes human resource management, face critical decisions for allocating budget. Questions such as training relevance, who needs specific training, training duration, and training effectiveness all apply (Nelson & Quick, 2013).

c) Training Evaluation and Feedback

This is the last stage and is identified as the most critical stage of the training process. This aspect, as identified by Huang & Su (2016), is based on the results that follow the training process. The main idea of this stage focuses on analyzing the effects of the training process and determine whether the goals of the training have been achieved. In most cases, management may use reactions that include the feedback from the participants which include the employees and the trainers, or examine the learning behaviors and results (Huang & Su, 2016). To measure the impacts, four key steps of evaluation may be used. These steps include reaction and planned

action, learning and confidence evaluation, behavioral impacts, and results. Reaction and planned action are based on the employees feeling towards the entire learning experiences. Learning and confidence evaluation focuses on measuring the increased or the change in knowledge before and after the training. The behavioral impact is based on the evaluation of the degree of applied learning to the specific aspects of the company. That is, are the trained employees using the training effectively? (Dietz & Zwick, 2016) The results, on the other hand, focus on evaluating the results achieved. For example, has there been any form of an increase in production based on the training that was provided?

v. **Organizational Leadership Related to Training**

Organizational leadership is important to the training process and its effectiveness in the organization. As identified in most studies, organizational leadership related to training is specifically based on human resource management; however, some organizations have specific departments for the training process engaged in an organization. Human resource management offers almost all elements of the training process that range from materials, ideas, supplies, the equipment's needs, and also financial requirements that are needed within the organization (Gan & Yusof, 2019). The proper management of individuals in an organization is identified as human resource management. Human resource management is identified as the main activity in the functioning of an organization and comprises of almost all aspects that ensure the effective functioning of the organization. This implies that human resource management engages elements that include management activities and decisions made in the organization, which influences the existing relationship between the employees and the organization. This also means that management, in most instances, settles the essential choices made in day to day activities that influence the relationship between the organization and the employees. Today,

most organizations realize that achievements primarily depend on the abilities and skills among the employees. Human resource management is at the center of the affairs of all employees within an organization. This means that as they focus on organizational growth and success, they focus on the relationship existing between the employee and the organization (Memon, Salleh, & Baharom, 2016). Managing diversity in the workforce isn't just a business need, ethics play a significant role as well. Studies suggest that integration and learning approach to diversity is beneficial for the employees and organization. Employees tend to be more engaged and display a sense of desire to learn from a diverse group of people for their growth and innovation (Rabl, del Carmen Triana, Byun, & Bosch, 2020). As identified, training and development is crucial in the construction and the strengthening of the relationship between employees and the organization.

vi. **Common Challenges Experienced in the Manufacturing Industry**

Some of the most dominant challenges include

- i. Hectic employee schedules. Employees are faced with a variety of challenges, some of which are not related to job duties. These challenges include family life, continued education, and finance can be challenges that require time and careful planning from the employees.
- ii. A dispersed workforce. Training can be difficult sometimes in this situation. Not having employees on-site alone is challenging when it comes to implementing effective training.
- iii. Different learning habits. As individuals, we all learn differently. Training programs must be designed to accommodate this variance. This diversity is identified as a

- common challenge in the training processes. Training programs will be less effective if it is assumed that all are equal in learning.
- iv. Lack of engagement. Engagement is critical for all learners. Engagement is important on three levels: cognitive, emotional, and behavioral. The behavioral change will be extremely difficult if learning engagement is not within the training program's design.
 - v. Training that isn't relevant. Irrelevant training only creates an obstacle for the employee. Specific training for specific roles will be more effective than generic-based training.
 - vi. Associated costs. The cost associated with a training is a definite strain; however, if the employee isn't trained properly, the cost of mistakes can exceed the initial cost of effective training. (Andriotis, 2019)

III. RESULTS

As evident from the already existing information, training and development are among the most important elements in the manufacturing industry. Training, as identified, revolves around a learning process that primarily focuses on ensuring that employees within an organization acquire all the required skills and knowledge to help them perform specific tasks. The primary facet to training and development is performance, which is evidently based on the enhanced skills and knowledge (Chaudhry et al., 2017). This aspect, as evident from the past studies, revolved around the ability of training and development to enable the organization to develop an effective workforce, increase productivity, increase safety, among other important elements. This primarily shows the impacts of training and development on the organization. However, the effects of training and development on the organization or the company are based

on the impacts training has on the workforce (Vivares-Vergara et al., 2016). Numerous studies identify four key aspects of the importance of training. As evident from these studies, the key aspects are employee-based. This means that while the entire purpose of training and development is to improve the productivity of the organization or provide a competitive advantage, the employee is the intended target.

The four primary purposes of training, as identified, include employee learning and performance, employee behavior, employee satisfaction and wellbeing, and employee retention. Each of these aspects, as identified, is directly related to each other. That is, a well-trained employee has skills and knowledge that increased his or her performance, changes his or her behaviors and attitudes, increases his or her satisfaction and wellbeing and eventually increases their need to continue working in the organization (Bjursell & Florin, 2018). The productivity, competitive advantage, and the functionality of an organization is determined by the capabilities of the workforce. Manufacturing entails numerous processes that are commonly characterized by hectic employee schedules, dispersed workforce, diversity, lack of engagement, and irrelevant training. Burnout is identified as the most dominant challenge associated with hectic employee schedules. In some instances, burnout is associated with the lack of enough training within the workforce. As identified, in some instances the manufacturing industry is characterized by a dispersed and diverse workforce. These aspects are commonly characterized by insufficient communication that is directly related to poor relationships between employees (Khan et al., 2016). Organizations also fail to identify the most important form of training for their employees. This, in turn, results to an employee engaging in training that impacts their productivity and their relationship with the organization negatively.

The purpose of training, as identified in the literature, focuses on employee learning and performance. One of the key elements in training is enhancing the skills and knowledge levels among employees. The training process ensures that employees learn specific aspects within their organization, which helps them understand their roles in specific positions (Khan, Haleem, & Kanwal, 2017). For example, training may focus on ensuring that employees learn how to operate any new equipment within the organization. Skill and knowledge development are directly related to self-confidence, which in turn improves the performance of the employees and shapes their behaviors and attitudes (Andriotis, 2019). Through training, which enhances skills and knowledge, employees tend to develop positive behaviors that are characterized by reduced absenteeism, low turnover, reduced grievances, reduced strikes, and increased morale. These aspects are directly related to increased employee satisfaction.

Among the most common objectives of any company is increased job satisfaction levels and wellbeing of the employees. In many organizations, management understands that job satisfaction and wellbeing directly translate to improved performance. Satisfaction and wellbeing are related to the ability of the employee to enhance teamwork and also empower employees, both of which are crucial in increasing morale and motivating the workforce (Kucherov & Manoknina, 2017). Empowerment is identified as a crucial element of increasing satisfaction. Training itself, along with other incentives, is an important aspect of enhancing job satisfaction. Increased satisfaction, as identified in the studies, directly translates to a healthy workforce. This means that through increased satisfaction levels among the employees, the organization can ensure their wellbeing (Bjursell & Florin, 2018). Increased skills and knowledge, improved behaviors and attitudes, and enhanced satisfaction levels and wellbeing are all identified as important elements in ensuring employee retention.

Almost every organization in the manufacturing industry focuses on retaining their skilled employees. With the existence of competition, organizations tend to lose their employees to other organizations, specifically those that are concerned about their employee welfare. For organizations to retain their employees they must ensure that they have a highly satisfied workforce and also ensure that they provide the most suitable work environment for their employees (Hanaysha & Tahir, 2016). A suitable work environment is primarily characterized by safety. In some instances, safe environments are characterized by skilled and knowledgeable employees that understand each aspect of the organization. For example, the safety of a machine is primarily determined by the existing knowledge regarding its functionality, complications, and its operational requirements. When employees fail to understand some of these key aspects, there is decreased safety, which may lower the confidence of the employees and, eventually, their morale.

Training and development are crucial in career development, which is important in employee retention. As identified, many individuals are fascinated by organizations that focus on their career development (Vivares-Vergara et al., 2016). This means that employees tend to choose organizations that may enhance their career development. These aspects mean that while organizations train their employees to improve their skills and knowledge to enhance performance, they also focus on ensuring they attract new skilled employees and also ensure they retain their most experienced employees.

At the center of the training and development process is the management of an organization. Human resource is identified as the primary department that connects the employee to the organization. This aspect explains why training and development are, in most cases, devolved to the human resource department (Andriotis, 2019). Human resource management

determines almost all aspects of the training programs. These aspects include materials, ideas, supplies, equipment needs, and financial requirements. Human resource management recognizes that the success of an organization is primarily influenced by the abilities of the employees. This means that they are responsible for the type and the effectiveness of the programs engaged in the organization (Werner & DeSimone, 2012). With its impact on employee and organizational relationship, the human resource management should ensure that the workforce within the organization is highly satisfied and motivated to help ensure there is high performance, all which are aspects that are defined by training and development.

IV. ANALYSIS AND INTEPRETATION OF THE RESULTS

As evident, training and development programs are crucial to the development and success of the organization. Training entails efforts from the organization to ensure that employees acquire enhanced skills to perform specific tasks in the organization. Training and development programs focus on enhancing skills among employees to ultimately improve performance. Even with this, performance is also directly related to the improved morale and motivation that is also crucial to enhanced performance. Enhanced performance, on the other hand, reflects the increased production in the organization, which ensures development and success. This aspect is based on the ability of the employee to meet the set objectives enabling the organization to meet its mission and goals. With this, the organization can develop a competitive advantage that is also crucial in its growth and development.

The systematic approach is an important strategy in implementing training and development programs. This aspect is based on knowing that the core elements are crucial to the training and development programs. These core elements, as identified, include identifying the needs, planning, delivery and evaluation. It is important to understand that regardless of the

evaluation results, the outcomes of the programs should be assessed hierarchically. The training and development process comprise of other key constructs which are evident in the systematic approach (Andriotis, 2019). These constructs include reactions, learning behavior and the results. Reaction is based on the training process and reaction to the program content, learning is based on skill acquisition and knowledge, the behavior is based on behavioral change associated with the training process, while the results are based on improvements in both individual and organizational outcomes. Training and development are also based on context, input reaction and the outcomes. Context in this case revolves around the factors that call for the training (training needs). Understanding the training needs is crucial as knowing this can help eliminate the probability of irrelevant training which eliminates one of the probable weaknesses that face training and development programs. Input is based on the design and the delivery of the training activities (Vivares-Vergara, Castro-Sarache, & Narajo-Valencia, 2016). The reaction focuses on the achievements of the engaged activities, while outcome focuses on the achievements gained from the activities engaged. Each of these aspects show that the success of training and development is based on the outcomes. The positive outcomes are based on how positively the training and development processes have impacted the trainees. An important facet in the effectiveness of training and development programs or processes is the training environment. The organization should ensure that they provide the most effective environment to ensure that the process meets its objectives and goals.

V. PROJECT FEASIBILITY

i. Project Description

This project focuses on depicting the importance of training and development and the behavior of employees in the organization. The study proposes that in order to meet all the

objectives, missions, and goals of the organization, they should develop a proper training and development program that focuses on meeting the needs of the employees in order to ensure performance. Organizations in the manufacturing sector focus on ensuring maximum production and ensuring they have a competitive advantage over other organizations (Gan & Yusof, 2019).

Training and development are among the most important aspects of ensuring maximum performance, which in turn provides the organization with a competitive advantage.

Performance entirely depends on different aspects of the workforce that include skills and knowledge, behaviors and attitudes, and satisfaction, and motivation. This project breaks down these elements depicting their importance in the functionality and success of the organization (Mulang, 2015). As depicted, each of these aspects is crucial to the success of the organization.

To understand the importance of training and development, the study provides some of the challenges that organizations face, specifically those that affect the employees. The following is an example of a training program utilized by management in the pharmaceutical industry:

Responsibilities:

It is the responsibility of the affected department management and Quality Assurance (QA) management to ensure this procedure is followed.

Management is responsible for:

- Determining employees' training requirements.
- Ensuring that the necessary training is available to all employees.
- Ensuring training is provided to all employees and contractors to ensure knowledge of and adherence to applicable Current Good Manufacturing Practices (CGMPs) and skills for the performance of all assigned job functions prior to the execution of assigned tasks.

Management can utilize the Department Tasks Due report on the Controlled Reports server for visibility to their employee's overdue tasks.

- Reviewing their employee's training curriculum bi-annually and documenting it on A-FRM-02-01-005, *Curriculum Review Form*.

Employees are responsible for:

- Knowing and understanding their curriculum requirements.
- Maintaining training compliance for all assigned job functions.
- Ensuring they are trained on appropriate skills and tasks prior to executing job tasks.
- Utilizing A-SOP-03-01-001, *CGMP Documentation Practices* when completing training documentation.

Training Department (TD) personnel are responsible for:

- Coordinating training programs for all employees.
- Working with Management to determine training requirements for all company positions.
- Maintaining the accuracy of the curricula structure for all company positions in TD.
- Review company-wide curriculum as needed.
- Assessing company-wide training needs and the quality of training delivered.
- Creating and providing company-wide training, as needed.
- Entering data from completed training documentation into TD.

Designated Trainers are responsible for:

- Verifying they are trained on relevant materials or have a Trainer Designation Form in place prior to delivering training.
- Documenting training on the appropriate form.

- Supporting area Management in the coordination/tracking of training requirements for compliance.

Document Management is responsible for:

- Archiving training documents for retention, per A-SOP-03-01-025, *Record Retention Policy*.
- Training records are managed in TD. Functions of this module include management of individual employee training records, assignment and management of curricula, course management, and assessment tracking.
- Training Curricula
- Employees must have established job descriptions and curricula assigned and approved by Management.
- Employee's training curriculum is housed in TD.
- Employee's training curriculum is created collaboratively with the area management and a Training Department representative.
- The initial set up of the employee's curriculum is documented on A-FRM-02-01-006, Curriculum Set Up Form.
- The Curriculum Set Up Form will be stored by Document Management with other training related documentation.
- Curricula are reviewed bi-annually by Management and recorded on A-FRM-02-01-005, Curriculum Review Form.
- If curriculum updates are required beyond the scope of the Curriculum Review process, then submit requested updates via the Curriculum Request Form, Employees may access the Curriculum Request Form via the company web.

- Curriculum Request Forms should be processed within 10 working days upon receipt.
- Authors of new documents, courses, and assessments must work with the area management and a Training Department representative to identify the job positions and skills upon which the new task will reside.
- This identification will be completed on the Review and Approval Form via the Training Request eForm so that the new task can be added to the appropriate curricula at the time of release.
- If an employee is required to know GMP critical information and/or perform GMP critical tasks, an assessment (PBA or WA) shall be assigned to accompany a document (SOP) on the employee's training record.
- An assessment should be created if the document (e.g. SOP) content is GMP critical. Authors should contact a member of the training department for assistance with determining if an assessment is required and if it should be performance based or written.
- Core Training Requirements
- Core curricula requirements will be completed within 30 days of hire or prior to performing activities in a specific core curriculum SOP.
- Training required every 12 months +/- 2 months will include, but is not limited to:
 - CGMP
 - Training Compliance
 - Manufacturing has a 98% training compliance goal for the overall curriculum.
 - The following document types are included in the calculation of this goal:
 - Client AM (Analytical Methods)

- Client FRM (Forms)
 - Client SOP (Standard Operating Procedures)
 - Client VAL (Validation)
 - ENG-GDL (Engineering Guidelines)
 - ENG-POL (Engineering Policies)
 - ENG-STD (Engineering Standards)
 - POL (Policy)
 - SAF (Safety)
 - SOP (Standard Operating Procedure)
 - TNG (Training)
 - VAL (Validation)
 - WI (Work Instruction)
- The following document types are excluded in the calculation of this goal:
 - DEPT (Departmental Procedures)
 - PBAs (Performance Based Assessments)
 - WA (Written Assessments)
 - Also excluded are personnel who have not been employed in their position for 90 days.
 - Manufacturing has a goal of 98% compliance to the identified CGMP training requirements.
 - The following are the CGMP training requirements included in the calculation of this goal.
 - A-SOP-01-01-009, Working in a CGMP Environment
 - A-SOP-03-01-001, CGMP Documentation Practices

- A-TNG-01-01-071, CGMP Overview
 - A-TNG-01-01-145, CGMP Annual Training
 - A CV will be created for employees as indicated by their training requirements and will be saved in a secured Training folder for continuous review.
- CVs will be created via the CV template maintained by the Training Department.
Employees may access the CV template via the company web.
 - Non-manufacturing employees or Contractors will submit a resume as indicated in their training requirement and it will be saved in a secured Training folder.
 - Training Course Materials and Assessments
 - Training materials will be created via the TNG template.
 - Approved training course materials and assessments should be retained in the system.
 - Training assessments must be reviewed when changes are made to the applicable document/course.
 - Answer keys for all effective assessments will be retained in a secure location. Required Personnel will have access to view answer keys for grading purposes.
 - If updating a TNG, WA or PBA, the author and a representative from Training Department will evaluate the need for training on the revision.
 - If no training is required then the justification should be documented in the Changes and Justifications section of the TNG, WA, PBA.
 - Quality of Training and Documentation
 - All training documentation will be reviewed for compliance per A-SOP-03-01-001, CGMP Documentation Practices, prior to its entry into TD.

- For any corrections that are considered obvious errors (i.e. spelling error, write over, wrong date format, etc.) or corrections that can be confirmed/verified through a validated source or system, TD administrators may perform the correction during the review process following the requirement for good documentation practices.
- In the event, a TD Administrator makes a correction in this manner, the correction will be made, signed, and dated with “(TD)” following the correction.
- For corrections that are not obvious or cannot be verified through a validated source or system, the training is not yet valid, and the employee will not receive certification in the task until the corrections are made on the original form. The TD Administrator will compile the list of corrections required and provide this information to the employee to have the correction made.
- Training documentation should be corrected within 10 working days of employee notification.
- To maximize the quality of training and retention of information, employees may train to a maximum of 10 procedures per day.
- Accessing Training Reports
- Employee Training Record report will be accessed by clicking on the Employee Training Record report link on the homepage of the company web page.
- Other training reports are available for viewing by all employees through the company web.
- Controlled Reports – will display all reports that are controlled and have the controlled report statement at the bottom of the report.

- Non-Controlled Reports – will display reports that can be exported into various file types and have the non-controlled report statement at the bottom of the report.
- Training Documentation
- All hard copies of training documentation will be filed by Document Management and stored according to A-SOP-03-01-025, Record Retention Policy.
- Hard copy training documentation should be entered by the TD within 10 working days upon receipt.
- Types of Training:
 - Self-Training – The reading and acknowledgement of a new or revised document. Your signature, whether on A-FRM-02-01-001, Self-Training Form or electronically in the Training Portal, means that you acknowledge you have read the procedure and will apply its contents as it pertains to your job functions.
- During initial training of the document, the employee must read the document completely. For subsequent revisions the employee should review the changes and justifications and read the revised portions of the document.
- Employees with Training Portal access – Employee will provide an electronic signature within the Training Portal in MES Production (via the Self Certify function).
- Employees may also utilize the Self Certify button in the Documents tab of MES Production to provide an electronic signature. The Self Certify button will only be available for documents that are assigned to the employees training curriculum in TD.
- Employees without Training Portal access and/or in the event the Training Portal cannot be accessed – employee will complete A-FRM-02-01-001, Self-Training Form.

- The following document types may require self-training at a minimum, but are not limited to, SOP (Standard Operating Procedure), WI (Work Instruction), DEPT (Departmental), SAF (Safety).
 - E-Learning Courses – electronic and self-paced training
- The employee will complete an e-learning course and return a printed certificate of completion to the Training Department for processing in TD or self-train per the Self Training Section of this procedure, whichever is applicable per the instructions in the E-Learning Course.
 - Classroom Courses – Course material will be delivered by a Designated Trainer, or outside instructor
- If there is no assessment required, the Designated Trainer/instructor will deliver the material to the employee and document class attendance on A-FRM-02-01-003, Classroom Training Form.
- If there is an assessment required, the Designated Trainer/instructor will administer and score the assessment and then notify the employee of any documentation corrections to be made or of failed assessments.
- Failed assessments will require retraining and be corrected until a passing score is achieved.
- The Designated Trainer/instructor will forward the passing assessments, and/or A-FRM-02-01-003, Classroom Training Form, to the Training Department for processing in TD.
- For revised classroom courses, the document author and a Training Department representative will evaluate the need to retrain. TD Administrators may certify an employee to the revised task if the employee has been trained on the previous version if

no retraining has been deemed necessary as a result of the evaluation. The Training Department representative will consider the following when evaluating the need for retraining:

- Administrative change such as punctuation, reference change, rewording for clarity.
- Impact on understanding of content, process or how a process is to be executed.
- If the task is performed routinely and satisfactorily.
 - Written Assessments
- For revised Written Assessment - the document author and a Training Department representative will evaluate the need to retrain. TD Administrators may certify an employee to the revised task if the employee has been trained on the previous version if no retraining has been deemed necessary as a result of the evaluation. The Training Department representative will consider the following when evaluating the need for retraining:
 - Administrative change such as punctuation, reference change, rewording for clarity.
 - Impact on understanding of content, process or how a process is to be executed.
 - If the task is performed routinely and satisfactorily.
- When performing a manual recertification, the TD Administrator will determine if the task has a lifecycle period other than the default of 3 years. If the task has a lifecycle period that is different than the default, then manual recertification will have to be done on the date of the previous certification in order to maintain the re-certification timeline.

- Example: If a revised WA has a lifecycle period of 365 days then the manual certification date will have to be the same as the certification date of the previous version.
- If the employee fails a Written Assessment, the employee will correct the assessment until a passing score is achieved. The employee may seek out the document author or a member of management for clarification if necessary.
 - Performance Based Assessments
- Self-Training with Performance Based Assessment – Performance Based Assessments are in place when it is necessary for employees to demonstrate competency in the performance of job-related tasks.
- The author of a new Performance Based Assessment must work with managers and a Training Department representative to ensure training on the assessment is provided to all required employees.
- A minimum of 2 weeks training period should be allowed between approved date and effective date.
- Prior to entering On the Job Training the employee must:
 1. Read the corresponding document completely.
 2. Complete A-FRM-02-01-001, Self-Training Form, or provide electronic signature in the Training Portal, acknowledging that they have read and will apply its content as it pertains to their job functions.
- Employee must be accompanied by a trained employee while performing a task.
- Both the on-the-job trainer and trainee will sign as the Performer on the batch record or manual logbook.

- The Trainee will add a circled T next to their initial set/signature when documenting the performance of a task on the batch record or manual logbook. The circled T will not be required for e-logbooks.
- Once the employee is confident, they can perform the procedure as stated in the document and all pre-requisites are complete, a Designated Trainer will administer the Performance Based Assessment.
- Employees must achieve a passing score (100%) on the Performance Based Assessment.
- Employees must have a trained status to the PBA prior to signing as a Verifier on the batch record.
- Aseptic Technique related PBAs only – the Recorder on the batch record will be trained to the Assistant level prior to signing as the recorder.
- For revised Performance Based Assessment – the document author and a Training Department representative will evaluate the need to retrain. TD Administrators may certify an employee to the revised task if the employee has been trained on the previous version if no retraining has been deemed necessary as a result of the evaluation. The Training Department representative will consider the following when evaluating the need for retraining:
 - Administrative change such as punctuation, reference change, rewording for clarity.
 - Impact on understanding of content, process or how a process is to be executed.
 - If the task is performed routinely and satisfactorily.
- When performing a manual recertification, the TD Administrator will determine if the task has a lifecycle period other than the default of 3 years. If the task has a lifecycle

period that is different than the default, then manual recertification will have to be done on the date of the previous certification in order to maintain the re-certification timeline.

- Example: If a revised PBA has a lifecycle period of 365 days then the manual certification date will have to be the same as the certification date of the previous version.
 - Batch Record & FRM Documentation Training
- Prior to signing as a performer or verifier on a batch record or associated FRM, Manufacturing personnel must complete the following training requirements:
 - All training requirements for the task(s) or process(es) associated to the batch record or FRM step.
- The remaining training requirements do not apply to personnel assigned to positions of Manager or higher.
- The following requirements apply to personnel in the specified departments:
 - Drug Product Primary – Team Leads, Manufacturing Associates and Manufacturing Operators only.
- Upstream and Downstream only: Process Overview classroom training for the associated client project.
- Exception – Column Packing and Unpacking will not require Process Overview classroom training.
- Manufacturing Sciences personnel, or designee will develop and deliver the classroom training for all client projects.

- When new batch records or FRMs are created or significant changes are made to current batch records, FRMs or client projects; the following department personnel will determine if training is beneficial.
- If training is conducted, Manufacturing Sciences/Technology personnel, or designee will provide the training to designated Manufacturing personnel. This training will be documented per the Documentation of Non-TNG Classroom Training section below.
- The training will be recorded on A-FRM-02-01-003, Classroom Training Form.
- For Process Overview training: Input “Process Overview”, the client project number, and the department (Upstream or Downstream) in the Title/Description field. NA the Mark appropriate box and record number and Version # field.
- Job relevant (e.g. professional certifications) training taken outside of the company can be stored in the employee’s training file and/or TD.
- The employee may contact their department management to inquire about training given outside of the company.
- The employee may deliver a copy of the certification of completion to the Training Department for processing in TD.
 - Retraining
- Tasks in TD will have a 3-year lifetime, unless otherwise specified, which means that task will require training every 3 years by the document owner.
- The need for retraining at the end of the 3-year period will be determined by area management and a Training Department representative. TD administrators may certify an employee to the task if the employee has been trained on the previous version if no

retraining has been deemed necessary as a result of the evaluation. They will consider the following when evaluating the need for retraining:

- Impact on understanding of content, process or how a process is to be executed.
 - If the task is performed routinely and satisfactorily.
- For tasks that do not allow self-training (TNG, WA, PBA) – When such a task is promoted to another version or the 3-year lifetime expires, the document author and a Training Department representative will evaluate the need to retrain. TD administrators may certify an employee to the revised task if the employee has been trained on the previous revision and the change was purely administrative (e.g., change for punctuation, reference change, rewording for clarity, etc.) and doesn't impact understanding of the content, process, or how a process is to be executed. Additionally, if the task is being performed routinely and satisfactorily then retraining will not be required after the 3-year lifetime expires.
 - Management determines competency and retraining of all employees returning from work absences < 6 months. Work absences equal to or > 6 months require an employee to be trained on all current versions of the required procedures prior to performing required tasks.
 - Retraining associated with CAPAs/Deviations/ Laboratory Investigation Reports (LIR)/ Microbiology Investigation Report (MIR).
 - Record training on A-FRM-02-01-003, Classroom Training Form.
 - Mark the appropriate box. Then enter the number.
 - Enter N/A, initial set and date in the Version field.

- Enter the specific SOP or Batch Record number along with version, etc. related to the retraining, or describe what was covered in the retraining, in the Title/Description section.
- Submit form to Training Department for processing in TD when all participants and instructor have signed and dated.
 - Continuous Improvement (CI) Retraining
- If a retraining session is necessary for heightened awareness of a process or procedure then document training on the A-FRM-02-01-003, Classroom Training Form.
 - Enter N/A, initial set and date in the Number and Version Number fields.
 - Record “CI – [enter specific reference to the topic/SOP/etc.]” in the Title/Description field.
 - Submit form to Training Department for processing in TD when all participants and instructor have signed and dated.
- Designated Trainer Qualifications
- Designated Trainers should attend A-TNG-01-01-047, Becoming an Effective on the Job Trainer.
- Classroom Training – Trainers must be designated via A-FRM-02-01-004, Trainer Designation Form, which is signed by the area management and states that the employee has demonstrated competency in the information or task through experience and performance.
- Performance Based Assessments – Trainers will be designated via A-FRM-02-01-004, Trainer Designation Form.

- Prior to submitting a justification of their expertise, Designated Trainers must be trained in the current version of the governing document.
- A-FRM-02-01-004, Trainer Designation Form, will be approved by the trainer's area management, as well as a representative from the Training Department.
- Designated Trainers will be qualified to train on future versions of Performance Based Assessments upon completion of their training on the updated version of the corresponding SOP.
- Completed A-FRM-02-01-004, Trainer Designation Form, will be turned into the Training Department for processing in TD.
- Gowning Qualifications\
- Prior to going into the manufacturing area unescorted personnel must complete the gowning qualification as outlined in A-SOP-09-02-002, Gowning Qualification.
- Quality Control Analyst Qualifications
- Quality Control personnel must reference A-SOP-09-02-005, Quality Control Training & Qualification Program, for specific requirements for achieving a qualified status on testing procedures.
- All Non-employees and Contractors training curriculum will be determined by both the Sponsor and a representative of the Training Department and based on the job responsibilities of the Non-employee.

As identified in the problem statement, organizations struggle to understand and engage effective training, an aspect that challenges the performance in the manufacturing industry, and challenges other aspects such as employee retention. This project also proposes the implementation of the systematic training program. The model, as identified, is effective as it

engages three key steps that primarily focus on the development of the employees. These stages include identifying training needs, engaging the training plans and implementation, and evaluation and feedback. As identified, a primary challenge of training in the manufacturing sector is irrelevant training (Hassan, 2016). This model allows the organization first to identify the most challenging aspects of the organization, which helps develop programs specifically designed to cope with these challenges. The program also allows for evaluation and feedback. This means that the organization can monitor the success of the program, based on both employee and organizational performance. The organization can also gather feedback from the employees regarding the benefits of the program, specifically how it has impacted their development.

The primary purpose of this project is to enhance the knowledge on the importance of training and development programs, and the importance of the systematic model as an effective approach for the implementation process. Training and development programs are both time and cost consuming, an aspect that explains the resistance from organizations to implement the process. In some studies, scholars have suggested that organizations engage other incentives rather than training, due to the involved cost and time (Ali, Huang, Ali, & Li, 2017). However, as identified, training and development programs are crucial to the development of an organization. The organization is the first beneficiary of the process. Regardless of the cost and time consumed, the result is entirely beneficial to the organization. Training and development are crucial to enhancing the skills and knowledge of the workforce. Trained employees have the skills and the knowledge to effectively, efficiently, and timely perform their tasks. In a manufacturing company, for example, trained employees may possess the skills and knowledge to effectively operate specific machines which may increase production. As identified, the

systematic model is easy to implement, as it entails three to four key steps that specifically evaluate the effectiveness of the program (Andriotis, 2019). This means that when implemented, the tool helps the program achieve its intended goals, which in most cases are enhanced employee performance, which directly impacts on the organization. Well-skilled employees, as identified, positively impact the organization through performance. With this, they enable the organization to reach its goals. This, in turn, enables the organization to reduce other unnecessary resources that may be utilized. While training involves other costs and more time, it eventually reduces the resources needed within the organization. For example, well-functioning machines require proper handling (Gan & Yusof, 2019). Skilled employees can handle these machines, reducing the extra resources that may be required in repairing or even excessive maintenance. Each of these aspects directly reflects on the economic feasibility of training programs (Mulang, 2015). Through enhanced organizational performance and proper management of resources, organizations are able to gain a competitive advantage, which presents key economic benefits.

ii. Competitive Landscape

Like all forms of the project, it is important to examine the competitive landscape to determine its effectiveness and impacts based on the objectives. The competitive landscape is crucial in the decision-making processes associated with the project. As identified training and development directly impacts on numerous aspects of the organization, that include employee satisfaction, efficiency and overall performance of the organization. This section will address the strength, weaknesses, opportunities and threat of training and development as a strategy to improve the performance of an organization. The SWOT Analysis:

a) Strength

Training and development in an organization positively impact on numerous aspects of the organization which eventually results in improved performance of the organization. Training and development results in learning and performance, enhanced employee behavior, increased employee satisfaction and wellbeing, and improved employee retention, which may result from reduced turnover (Ali, Huang, Ali, & Li, 2017). Each of these aspects is crucial to the functioning of the organization. As identified in the previous sections, the performance of an organization is primarily based on the performance of the employees. This implies that training and development programs positively impact on employees which impact on the performance of the organization.

b) Weaknesses

The primary weakness associated with training and development programs includes employee diversity and leaning habits, lack of engagement and irrelevant training. Diversity of employees determines how different individuals perceive the training process. Employee diversity requires the implementation of better approaches to the training process. Learning habits also impacts on the training and development (Gan & Yusof, 2019). Different employees have different learning habits which may impact on the perceptions towards the training. Irrelevant training, on the other hand, is influenced by the human resource management. Irrelevant training results in wasted time and money.

c) Opportunities

Training and development programs are an opportunity for the enhanced performance of the organization. The organization should view the process based on the impacts it will have on

the organization. However, the effectiveness of the program is based on developed objectives. An additional opportunity involves the ability to attract exceptional talent to the organization with an effective training and development program.

d) Threats

Some of the most dominant threats to the program include employee perceptions and attitudes towards training and development. In case the employees are not determined to undergo the training and development processes, they tend to impact on the effectiveness of the process (Noe, Hollenbeck, Gerhart, & Wright, 2017). Training and development are an employee-oriented process which means that lack of devotion impacts its effectiveness.

Strengths	Weaknesses	Opportunities	Threats
Improved performance	employee diversity	Skillful workforce	Negative employee perceptions
Learning and performance	Differing leaning habits	Enhanced satisfaction	Lack of employee devotion
Enhanced employee behavior	Lack of engagement	Enhanced retention and reduced turnover	Lack of understanding of the importance of training and development
Increased employee satisfaction and wellbeing	Irrelevant training	Improved employee wellness	
Improved employee retention		Enhanced performance	

Table 1: SWOT analysis table

iii. Operating Requirements

The success of training and development programs is based on several aspects that include financial resources and the devotion from the employees. In the manufacturing industry, the success of training can be dependently based on the amount of allocated finance to the program. For example, some training and development processes are based on the use and

effective operation of new machines and technology. For the process to be successful, the organization needs to allocate funds for these types of equipment, as well as provide the most effective protective equipment to the trainees. As identified, the success of training is based on attitudes and perceptions of employees (Umamaheswari & Krishan, 2016). Devoted employees provide a higher potential for success of the training program. Training investment constitutes to a powerful signaling perception that is key in showing employees that the organization values them. This means that investments, specifically the funds allocated to the training programs and processes, directly impact on motivation and commitment of the employees to the organization (Ocen, Kasekende, & Angundaru, 2017). Investments in training and development enhance the commitment and the need of the employees to undergo the process. According to the 2018 Training Industry Report, training expenditures, including payroll and spending on external products and services, declined 6.4 percent to \$87.6 billion. Outside spending on products and services rose from \$7.5 billion to \$11 billion and other training expenditures such as travel, facilities and equipment, decreased from \$44.5 billion to \$29.6 billion. Meanwhile, training payroll increased almost 13 percent to \$47 billion. In 2018, on average, companies spent \$986 per employee compared to in 2017 companies spent \$1,075 per employee (Freifeld, 2018).

iv. Recommendations and Findings

As evident, training and development positively impact on employee performance which in turn, impacts on organizational performance. However, the effectiveness of the program is also influenced by its weakness and threats that include irrelevant training and employee commitment determined by employee perceptions and attitudes towards the program. Effectiveness of the program is greatly influenced by the operating requirements. As identified, investments influence the commitment and perceptions of employees towards training programs.

Investments and commitment are directly related to each other. This aspect is based on the fact that training has a positive impact on employee attitude. In cases where employers develop a structured and formal approach to training, they enhance the potential to progression, rewards and recognition.

v. Constraints

- a) Time – As identified, training engages a lot of time. This is identified as a primary challenge to the effectiveness of training programs. Organizations have provided that training and development programs are time-consuming, which explains why some training programs are not effective.
- b) Cost – Costs are also a primary challenge to the effectiveness of the training programs. Each program, either off the job or on-job, requires enough resources. When organizations do not invest properly in training programs, it tends to impact on the effectiveness of the program.

vi. Budget

Organizations rely on training to strengthen the bottom line and budgeting for training purposes is often a challenging task for some organizations. Although Catalent Biologics does not have a fixed budget for training at this particular location, the 2018 annual report shares some information regarding budget and profitability.

Catalent delivered another year of strong financial results in fiscal 2018 and made important progress on key elements of their growth strategy, including expanding the biologics franchise, accelerating investments in the long-cycle businesses, and refining the global network of 35 facilities to optimize overall company performance. As a strategic

partner to some of the world's most innovative healthcare companies, Catalent shipped more than 200 new prescription and consumer health products for the customers, including nearly a dozen cancer treatments, as well as respiratory, cardiovascular, and other medicines meeting critical patient needs. Catalent also launched a broad range of new consumer health products for customers and markets around the world. Catalent growth investments included the \$950 million acquisition of a premier, Indiana-based provider of biologics development and manufacturing services, as well as the ongoing expansion of its biomanufacturing capacity at the facility in Madison, Wisconsin.

The company delivered strong revenue growth of 16% in 2018 at constant exchange rates, with consolidated revenue reaching \$2,463.4 million. Catalent delivered \$550.7 million in adjusted EBITDA² in 2018, an increase of 20.0% against the prior year at constant exchange rates. The adjusted EBITDA margin was 22.4% in the current year, and adjusted net income per diluted share was \$1.75. As a result of this strong performance, the cash provided by operating activities was \$374.5 million, up 25.0% from 2017, which was actively redeployed, including in growth-generating capital expenditures and the strategic biologics acquisition (Catalent Biologics, 2018).

VI. CONCLUSION

As evident, training and development are among the most important elements in ensuring the performance of organizations in the manufacturing industry. The manufacturing sector is a demanding industry that requires high performing employees. The jobs in the industry are also in high demand, which has resulted in increased competition that has been based on employee professionalism. Training and development have been key to the effective and efficient

functioning of employees; however, training and development remain to be a dominant challenge in the manufacturing sector. Training and development encompass numerous aspects that primarily focus on enhanced organizational performance that results from increased employee performance. Organizations, specifically through their human resource management department, should understand the importance of training and development as a need for employees and as a need for the organization. This should include understanding its impacts on the employees, implementation strategies, requirements and its impacts on the organization.

Training and development must be measured to understand the effectiveness of the training programs efforts. Unfortunately, the efforts and effectiveness of some training programs go unnoticed due to the lack of follow up and ownership of the training program. Some valuable topics can be utilized to measure the effectiveness of an organization's training program. The following list is not inclusive, but necessary to determine the value of organizational training programs:

- Increased retention.

If newly trained employees feel unsupported and not trained for the specific job, they are more likely to leave within their first 90 days. When you measure training success in this manner, higher retention points to a successful training program and will ultimately lead to a more informed and diverse employee staff.

- Improved morale

Employer satisfaction surveys can be a tremendous help to evaluate management and leadership programs. Surveys can at least give you some comparisons to measure success. It is always best practice to provide an electronic or even a paper trail to document results.

This will also provide a tangible document to build upon and help to improve the training effectiveness.

- Customer satisfaction.

Any organization can link training to customer service, which can be both internal and external. If the organizational training program impacts the customer in a positive way, which may include things such as on-time delivery, superior products, and safety, the training can be deemed as successful.

- Return on Investment (ROI).

ROI has long been a “catch all” metric. In some cases, it’s easy to define ROI, but in more cases it’s increasingly difficult. If you deliver soft skills training that produces both internal and external benefits, this can also be considered a positive aspect of employee training programs.

- Facilitator performance.

Facilitator evaluation is an important internal measurement. The results can come from learner and manager evaluations and must consider the facilitator’s presentation skills, knowledge of the subject, projection of organizational values, and flexibility. These traits are critical to also determining if the training was effective and value-added for the audience.

- End-user satisfaction.

The employees can often measure effectiveness quicker than anyone else, sometimes immediately after the training as well as when they put the immediate training into practice. The results can tell you if the material is value-added or simply non-value added (Stevens, 2018).

Chances are, if these measures are being met, the training program can be deemed effective keeping in mind that improvements to the program should always be a topic of discussion to continuously enhance the employee experience building the knowledge and skills for a successful organization.

VII. RESEARCH RESTRICTIONS

This research was limited by the lack of enough literature specifically covering the issues on investments and its importance of employee motivation and commitment. The information used for the study was specifically gathered from the literature review. In some instances, the literature was contradicting, which presented a challenge in finding the most reliable studies. This does not necessarily mean that the information from contradicting articles was unreliable. However, based on the specific objectives of the study, the information showed that the data may vary based from one researcher to another based on specific aspects of their study.

VIII. FUTURE RESEARCH

While there is information regarding the training and development, most studies focus on the impacts it has on the organization and impacts on employee turnover. This means that there is still limited information on the impacts training and development has on specific elements such as career development, motivation and even commitment of employees to the organization. It is also important to further study the approaches that impact on the training and development programs. Further research should be conducted on the pros and cons of the existing approaches and the impacts they have on employees. Studies should shift from the impacts of training and development on organizational performance to impacts on employee performance, which are primary to organizational performance and how it offers competitive advantage. Among the

most understudied aspects of training and development is the importance of investments on increased motivation and commitment. As identified, training and development should primarily focus on employee performance before considering organizational performance. This aspect is based on the fact that training and development programs may be ineffective based on the perceptions and attitudes of the employees. This means that further research should be conducted on investment and how it impacts on employee commitment to the training programs as it is key in determining the success of the programs in meeting the specific objectives and goals.

IX. REFERENCES

- Ali, A., Huang, J., Ali, Z., & Li, Z. (2017). The Effects of Empowerment, Training, and Teamwork on Employee Job Satisfaction: Case of the Agricultural Manufacturing Sector in Khyber Pakhtunkhwa Province, Pakistan. *Advances in Social Science, Education and Humanities Research*. doi:10.2991/iceemr-17.2017.9
- Andriotis, N. (2019, November 28). *Training and Development Challenges and Solutions in the Workplace*. Retrieved from Talent LMS: <https://www.talentlms.com/blog/training-challenges-solutions-workplace/>

- Bjursell, C., & Florin, S. (2018). Mentorship programs in the manufacturing industry. *European Journal of Training and Development*, 42(7/8), 455-469. doi:10.1108/EJTD-05-2018-0044
- Brill, J. (2016, June 1). Logic Model Guides Agencies in Evaluating Training Program Effectiveness. *TD Magazine*, pp. 42-47.
- Catalent Biologics. (2018). *Catalent Annual Report*.
- Chaudhry, N., Jariko, A., Mushtaque, T., Mahesar, H., & Ghani, Z. (2017). Impact of Working environment and training & development on organization performance through mediating role of employee engagement and job satisfaction. *European Journal of Training and Development Studies*, 4(2), 33-48.
- Cremona, A. M., & Bux, T. (2016, July). Creating a Vibrant Organizational Leadership Pipeline. *Talent Development*, pp. 76-77.
- Dietz, D., & Zwick, T. (2016). The Retention Effect of Training – Portability, Visibility, and Credibility. *ZEW - Centre for European Economic Research Discussion Paper No. 16-011*. doi:10.2139/ssrn.2760328
- Esteban-Lloret, N., Aragon-Sanchez, A., & Carrasco-Hernandez, A. (2018). Determinants of employee training: impact on organizational legitimacy and organizational performance. *The International Journal of Human Resource Management*, 29(6). doi:10.1080/09585192.2016.1256337
- Freifeld, L. (2018, November/December). *2018 Training Industry Report*. Retrieved from Training: <https://trainingmag.com/sites/default/files/trn-2018-industry-report.pdf>

- Gan, J. L., & Yusof, H. M. (2019). The Relationship Between Training and Employees' Retention: A Review Paper. *International Journal of Entrepreneurship and Management Practices*, 2(5), 16-25.
- Hanaysha, J., & Tahir, P. R. (2016). Examining the Effects of Employee Empowerment, Teamwork, and Employee Training on Job Satisfaction. *Procedia - Social and Behavioral Sciences*, 219, 272-282. doi:10.1016/j.sbspro.2016.05.016
- Hassan, S. (2016). Impact of HRM Practices on Employee's Performance. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(1), 15-22.
- Higgenbotham, E. (2019, March 1). Bringing Manufacturing L&D Into the 21st Century: These e-learning solutions are initial steps toward a full-fledged strategy. *TD Magazine*, pp. 58-63.
- Huang, W., & Su, C. (2016). The mediating role of job satisfaction in the relationship between job training satisfaction and turnover intentions. *Industrial and Commercial Training*, 48(1), 42-52. doi:10.1108/ICT-04-2015-0029
- Jaiswal, P. (2016). Employee Satisfaction Towards Training and Development Practices with special reference to manufacturing units in Allahabad. *KrishiKosh*.
- Jeffrey, I., & Prasetya, A. B. (2019). The employee performance assessment and employee training, on employee intension. *Jurnal Aplikasi Manajemen*, 17(1).
- Jha, V. (2016). Training and Development Program and its Benefits to Employee and Organization : A Conceptual Study. *IJSRST*, 2(5).
- Khan, A. A., Abbasi, S., Waseem, R. M., Ayaz, M., & Ijaz, M. (2016). Impact of Training and Development of Employees on Employee Performance through Job Satisfaction: A Study

- of Telecom Sector of Pakistan. *Business Management and Strategy*, 7(1).
doi:10.5296/bms.v7i1.9024
- Khan, N. (2018). Does Training & Employee Commitment Predict Employee Retention? *International Conference on Management and Information Systems*.
- Khan, U. Z., Haleem, R., & Kanwal, S. (2017). Effect of training and development on employee attitude: A study on Karachi. *Center for Promoting Education and Research*, 3(4).
- Khandelwal, A., & Shekhawat, N. (2018). Role of Talent Retention in Reducing Employee Turnover. *SSRN*. doi:10.2139/ssrn.3186397
- Kucherov, D., & Manoknina, D. (2017). Evaluation of training programs in Russian manufacturing companies. *European Journal of Training and Development*.
- Mahalakshmi, R., & Murugesan, R. (2019). Effectiveness of multi skill training program in the manufacturing process. *AIP Conference Proceedings*. doi:10.1063/1.5112234
- McGoldrick, B., & Tobey, D. D. (2016). Assess Needs First, Train Second. *Talent Development*, 60-67.
- Memon, M. A., Salleh, R., & Baharom, M. (2016). The link between training satisfaction, work engagement and turnover intention. *European Journal of Training and Development*, 40(6), 407-427. doi:10.1108/EJTD-10-2015-0077
- Mulang, A. (2015). The Importance of Training for Human Resource Development in Organization. *Journal of Public Administration and Governance*, 5(1), 190-196.
doi:10.5296/jpag.v5i1.7505
- Nelson, D. L., & Quick, J. C. (2013). *Organizational Behavior*. Mason, OH: South-Western.
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage*. New York: McGraw-Hill Education.

- Ocen, E., Kasekende, F., & Angundaru, G. (2017). The role of training in building employee commitment: the mediating effect of job satisfaction. *European Journal of Training and Development*.
- Rabl, T., del Carmen Triana, M., Byun, S.-Y., & Bosch, L. (2020). Diversity Management Efforts as an Ethical Responsibility: How Employees' Perception of an Organizational Integration and Learning Approach to Diversity Affect Employee Behavior. *Journal of Business Ethics*, 531-550.
- Rodriguez, J., & Walters, K. (2017). The Importance of Training and Development in Employee Performance and Evaluation. *World Wide Journal of Multidisciplinary Research and Development*, 3(10), 206-212.
- Shah, C., & Anu, G. (2018). Training and Its Impact On Organization Effectiveness. *Journal of Management & Research*, 8(1), 94-102.
- Srivastava, V., Kumar, P. S., & Mohanty, A. K. (2018). Training And Development: A Tool For Retention And Productivity. *The Journal of Indian Management*, 8(3), 67-71.
- Stevens, D. (2018, April 10). *8 ways to measure the success of your training programs*. Retrieved from Dramatic Training Solutions: <https://dramatictrainingsolutions.com/8-ways-to-measure-the-success-of-your-training-programs/>
- Thompson, A. A., Peteraf, M. A., Gamble, J. E., & III, A. J. (2016). *Crafting and Executing Strategy; The Quest For Competitive Advantage*. New York: McGraw Hill.
- Torraco, R. J. (2016). Early History of the Fields of Practice of Training and Development and Organization Development. *Advances in Developing Human Resources*.
doi:10.1177/1523422316659898

- Uhrin, A., Bruque-Camara, S., & Moyano-Fuentes, J. (2017). Lean production, workforce development and operational performance. *Management Decision*.
- Umamaheswari, S., & Krishan, J. (2016). Work force retention: Role of work environment, organization commitment, supervisor support and training & development in ceramic sanitary ware industries in India. *Journal of Industrial Engineering and Management*, 9(3), 612-633.
- Vivares-Vergara, J. A., Castro-Sarache, W. A., & Narajo-Valencia, J. C. (2016). Impact of human resource management on performance in competitive priorities. *International Journal of Operations & Production Management*, 36(2). doi:10.1108/IJOPM-11-2013-0484
- Werner, J. M., & DeSimone, R. L. (2012). *Human Resource Development 6e*. Mason, OH: South-Western.
- Wolter, J. S., Bock, D., Mackey, J., Xu, P., & Smith, J. S. (2019). Employee Satisfaction Trajectories and Their Effect on Customer Satisfaction and Repatronage Intentions. *Journal of Academy of Marketing Science*, 815-836.
- Younas, W., Farooq, M., Khalil-Ur-Rehman, F., & Zreen, A. (2018). The Impact of Training and Development on Employee Performance. *Journal of Business and Management*, 20(7), 20-23.