

Training Needs Assessment for Warehouse Employees

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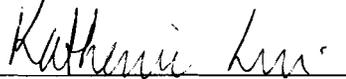
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ABSTRACT

Warehousing has been traced back to the 1700's and it coincides with the westward expansion (Pomeranz, 1996). Over the years warehousing has seen many changes. With a goal for companies to reduce slack and to stream line inventory by moving to more modern practices such as just-in-time inventories it looked like warehousing was going to be superseded. "The goal to streamline inventory is still intact, but warehousing has not only survived, it has picked up steam as a strategic logistics tool" (Saxena, 2005, p28). Many things have allowed warehouses pick up business. One of those things has been the result of manufacturing moving to Asian markets. Another reason has been their ability to justify their existence by finding better ways to meet the needs of their customers. In order to ensure better customer service warehouses have worked on their efficiency and accuracy. There are many ways to become more efficient; such as, order picking, operator training, and warehouse layout just to name a few. The purpose of this study is to perform a needs assessment to determine if training

deficiencies exist and if so what objectives should be covered in order to develop the competencies that the warehouse employees need.

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Chapter I: Introduction

An important issue effecting warehouses today is competition in the marketplace. With all of the choices that consumers have the marketplace has become very competitive. In an effort to contend with their competition warehouses have had to make many changes in order satisfy their customer's needs. Some changes include updating processes, technology and warehouse procedures. Ray Gillen, author of the article *Distribution Centers Leap Ahead with Upscale Training* stated that "Warehousing and distribution centers have been transformed in recent years by an explosion of technology, changing how business is conducted"(Gillen, 2001, p62). Training is important and the need for training is growing as a result of more modern technologies being used and the need for skilled workers in the warehousing industry rising. Warehouses most commonly use training to implement warehouse management systems and to cross train employees on several tasks rather than to a discrete task. Warehouses may also use training for mobile equipment operation such as fork trucks.

Training has long been an issue for companies even more so for smaller facilities mostly because of the cost and the times associated with training. Smaller employee operated companies can not afford the lost time from production and do not have the number of employees required for people to be training during working hours without loosing production (Carnevale, 1990). A training needs assessment will help to make sure that time and money are not wasted on inefficient training and it will provide the training department a proposal showing the need for training (Nowack, 1991). With small training budgets and the need for skilled employees it is important that the training be focused and

appropriate. A training needs assessment will be able to identify if there is a need for training and what training objectives should be covered.

The warehouse facility that is currently being researched is small, there are only 14 employees. The warehouse is located in south central Wisconsin and is a small part of a large warehousing company that is a third party logistics provider. The company's headquarters is located in the Midwest and they deal mainly in automotive logistics, some of their clients include General Motors, Subaru Indiana Automotive Inc., and DMAX LLC. The company was established in 1996 and is steadily growing with the intention of positioning themselves as the leading automotive logistics solution provider in the industry. Of the warehouses 14 employees at the facility twelve are operators, one is a supervisor and one a warehouse manager.

Statement of the Problem

The research problem will determine if training deficiencies do exist. If training deficiencies exist the common training needs will be identified. The manager of the warehouse decided that in order to become more competitive they need to make some changes. The warehouse has identified some performance problems based on the results of some daily audits; the root cause had not been identified. The most significant performance problem is kit carts received at the production facility do not contain the correct stock and amount of stock. The manager of the warehouse said that audits done during the month of August showed that the average number of kit carts a week with errors was 29 carts (personal communications, February, 2007). Kit carts are assigned to a specific assembly job related to the production of the vehicle. The carts are organized with a specific number of parts that will be used to build a certain number of vehicles

with a specific build criteria based on each vehicles build options. When a kit cart does not contain the correct stock or the correct amount of stock a parts request form is filled out and faxed to the warehouse. A parts request form identifies the part number, and how many are needed in order to correct the error. The manager also stated that the average weekly parts requests sent from the production facility to the warehouse for the month of August were 48. As a result of the kit carts not being assembled correctly many forms of waste are generated. The waste of correction as a result of rework that needs to be done because the incorrect parts were distributed, waste of motion as a result of extra motions, such as travel, walking and searching which is done when carts run short of parts or the parts are wrong and the correct ones need to be ordered and delivered. Some other forms of waste are material movement, waiting, inventory and processing. When the kit carts are not properly stocked a lot of material movement is generated, other kit carts are pulled ahead and special deliveries have to be made to replace the incorrect stock. At times waiting is involved when we don't have another cart to pull ahead on. As a result of the kit carts being wrong so often bank inventories of parts have been created at the assembly plant. This generates a lot of extra parts and disrupts stock counts, an in addition redundant and unnecessary processing.

Research Objectives

The objective of this research project is to conduct a training needs assessment which will allow for the collection and analysis of data regarding the training needs within the warehouse. The study will look at the training procedures used at the warehouse along with the information being presented, the times and locations that it is

presented. The desired outcome is to identify if training deficiencies do exist and, if so, to identify the common training needs.

Purpose of the Study

The purpose of this study is to perform a training needs assessment to find out if training will improve the warehouses performance problem and if changes need to be made with the warehouse's training procedures. The completion of this training needs assessment and the results generated will provide data which should insure whether or not training would be appropriate to fix the performance problem. If the assessment found that there was a need for training it would also insure that the training exercises are focused and appropriate. The training needs assessment is important because some problems are often perceived as training problems when they are not, and no organization can afford to do training for the sake of training.

Assumptions of the Study

Respondents are truthful when responding to the survey questions.

Definition of Terms

Needs assessment: "a process for pinpointing reasons for gaps in performance or a method for identifying new and future performance needs" (Gupta, 1999, pg4).

Third Party Logistics Provider: "is a firm that provides outsourced or "third party" logistics services to companies for part or sometimes all of their supply chain management function (Wikipedia, n.d.)

Kit cart: a packaged collection of related materials supplied on a cart (Jeff Clark, personal communications, 2007).

Methodology

Needs assessments are used as one form of an evaluation tool (Lee & Nelson, 2006). For this study the needs assessment will be used in the same way, the study will look at the training procedures used at the warehouse along with the information being presented, the times and locations that it is presented. The population being studied consists of operators who produce kit carts. A job profile will be conducted and used to develop a survey which will be used as the measurement tool. An analysis of the survey results will be interpreted, based on the results a conclusion will be made. If the results determine that there is a need for training the conclusion will consist of recommendations for training objectives.

Chapter II: Literature Review

A report, done by Georgia Tech, based upon a survey in which more than 150 warehouses participated showed that less than 30% of the warehouses are efficient and that a large proportion of warehouses are operating at or below 50% efficiency (2002). The manager of the warehouse that is being researched has identified that they have a problem with their efficiency; the largest issue affecting their efficiency is stocking kit carts. As a means to find out what in particular is affecting their ability to produce kit carts efficiently a needs assessment is going to be conducted. This chapter reviews what a needs assessment is, some benefits and roles of needs assessments, defines training, examines types of employer provided training and what makes training effective.

Warehousing

Warehousing has grown in the U.S. due to its ability to be used as a strategic logistics tool. As more and more companies continue to move their manufacturing facilities to Asia warehouses have become vital in an effort to control product availability and consistency in delivery. With manufacturing operations being located in Asia the distance between suppliers and consumers in the U.S. has grown thousands of miles. The distance, inadequate transportation infrastructures, and the multiple terrains being crossed have caused different forms of transportation methods to be used making delivery unpredictable. By establishing warehouses in the U.S. it has allowed companies to regain control over the availability of products and consistency of delivery (Saxena, 2005).

Needs Assessment

“Every employee’s performance can improve” (Dolliver, 1993). One of the ways an employee’s performance can be improved is by the use of tool called training, but

before training is initiated it is crucial that a training needs assessment be done. Contrary to many beliefs training can't fix everything, and unfortunately training is sometimes done just for the sake of training. Needs assessments are critical, they identify the potential causes of problems, determine whether the problem can or can not be solved with training and if it can be solved with training it will be significant in determining the training objectives (Lee & Nelson, 2006).

Needs assessments can fulfill a number of different roles. They are often used to identify the value that training or an education program will have on fixing a performance problem. The following functions were identified as being performed in a needs assessment (Lee & Nelson, 2006)

- Gathers data on perceived needs
- Identifies knowledge, skills, and behavior discrepancies
- Assists trainers, human resource development personnel, administrators, and instructors in developing relevant curriculum materials
- Gathers information that brings beneficial change to an organization or community
- Assesses organizational needs
- Promotes buy-in by participants

Needs assessments can produce important data, without performing a needs assessment the correct solution might not get implemented. Some reasons and benefits of performing a needs assessment are: (Gupta, 1999)

- Determine if the disbursement of money for the training is worth the return on investment

- Determine who and how many will benefit from the training
- Determine if the training will be used in the workplace
- Specific expectations and goals will be set for behavior and performance improvements
- Greater chance of achieving desired results
- Less of a chance of causing frustration that comes with using the wrong solution and failing to meet the desired achievements.

The content for a needs assessment can be gained through a use of a couple of different processes; they are a DACUM, interviewing, focus groups or research questionnaires and surveys. The DACUM process consists of a map or chart that identifies the competencies and tasks required to perform a job. The competencies and tasks are identified by individuals who either perform or supervise the job. Interviewing can be comprised of a couple of different methods, face to face or filling out of a questionnaire. Interviews can be highly structured, moderately structured or unstructured. Highly structured is face to face, moderately structured contains specific questions but is done in a conversational manner and unstructured contains no specific questions, but just a topic. Focus groups allow for information to be gathered in a fast and inexpensive manner and can consist of any number of people. They are lead by a mediator and often participants are surprised by how much they have in common. Focus groups allow for people to feed off of each other and share their feelings. Research questionnaires and surveys consist of a series of questions and used for the purpose of gathering information. Questionnaires and surveys are relatively inexpensive and don't normally require significant resources or effort to create (Lee & Nelson, 2006).

A needs assessment is compiled of a set of activities and procedures. There are a number of different needs assessment models that can be used to guide you through the process. Gupta (1999) identifies six needs assessment models:

- Human competence model
- Front-end analysis
- Organizational elements model
- Analyzing performance problems
- Training needs assessment
- Performance improvement by managing the white space

The human competency model was created by Thomas Gilbert. This model examines six principles believed to affect human performance; information, resources, incentives, knowledge, capacity, and motives (Gupta, 1999).

The Front-end analysis model was developed by Joe Harless. He based this model on the theory that training is not an end all solution, but through this analysis core problems can be revealed (Gupta, 1999)

The Organizational elements model was made by Roger Kaufman. This model is made up of five elements inputs, processes, products, outputs, and outcomes (Gupta, 1999).

The Analyzing performance problems model developed by Robert Mager represents a flow chart that covers five main areas and they are used to ask systematic probing questions. The five main areas are: describe the problem, explore fast fixes, check consequences, enhance competence, and develop solutions.

The Training needs assessment model created by Allison Rossett is a purpose-based model. In this model five types of information are gathered: optimal performance or knowledge, actual or current performance or knowledge, feelings of trainees and significant others, causes of the problem from many perspectives, and solutions to the problem of many perspectives. These five types of information are used to find a gap between an optimal and actual situation (Gupta, 1999).

The Performance improvement by managing the white space model was developed by Geary Rummler. Rummler's model is based on an examination of three levels of performance. This model is made up of five phases and uses fourteen steps to diagnose and develop a plan for implementing interventions for performance improvement. This is only an introduction to a few of the models that are available to assist in the process of needs assessments; there are many other models that exist. This model being used for this needs assessment will be explained later in chapter three.

As mentioned in this chapter a needs assessment can be used in a number of ways, there are a many reasons and benefits to conducting a needs assessment and many different models to use as a guide to conducting needs assessments.

Training

Training has long been considered significant and valuable. "Learning systems in the workplace are the first line of defense against economic and technical changes. The ability of the nation's employers to respond expeditiously to these changes determines, in large part, the nation's adaptability and competitiveness" (Carnevale, 1990, p.28).

Training can be defined as “providing employees the knowledge and skills needed to do a particular task or job, though attitude change may also be attempted” (Werner & DeSimone, 2006)

“Employers themselves provide 69 percent of the formal training they offer and buy the other 31 percent from outside providers” (Carnevale, 1990, p. 3). One type of employer provided training is on-the-job training. “On-the-job training is nothing new. Two out of three Americans say that everything they need to know to do their jobs was learned on the job – not through class room preparation to qualify for those jobs” (Carnevale, 1990, p. 23). This training can be structured as apprenticeship programs or unstructured through coaching. Coaching is where one person shows another person the best way that they know how to perform a job or task. Apprenticeships are a system of training a new generation of skilled practitioners through the use of on the job training. Apprenticeships date back to 1800 B.C. Formalized instruction is another type of employer provided training. Formalized training can come in the form of a classroom setting, and is designed and delivered lecture style or it can also be delivered through interactive video and computerized instruction systems. Employer provided training is motivated by the need to improve the company’s competitive edge. All companies conduct training whether they are large or small but the amount of training and the type of training is largely impacted by what is needed to support the culture and strategic goals of the company (Carnevale, 1990).

When training coincides with an organizations goals and strategic planning one of the most important benefits that the employer is looking for is higher employee

productivity (Lee & Nelson, 2006). Some other general benefits of employee training are:

(McNamara, n.d.)

- Increased job satisfaction and morale among employees
- Increased employee motivation
- Increased efficiencies in processes, resulting in financial gain
- Increased capacity to adopt new technologies and methods
- Increased innovation in strategies and products
- Reduced employee turnover
- Enhanced company image
- Risk Management

Training that is appropriate to the needs of an organization can add great value.

In order to make training effective it must be linked to both the individual on the job and ultimately the employer's bottom line. In the article "What is Effective Training" practitioners discussed training issues and what was needed in order for training to be effective. So, what does an organization need to do in order for training to be effective?

- It must support the business plan, including addressing the core competencies of the business
- The job environment and organizational practices need to reinforce training outcomes
- Knowledgeable management and self-directed learning need to be an integral part of your training/learning processes
- The organization needs to be a learning organization
- Training processes need to be effective and efficient

- The training effort needs to be properly staffed
- organized and managed
- Feedback systems to monitor business plans, performance problems and training results

The most effective training programs begin before and continue well after the course concludes (Laff, 2006).

Although there are many benefits to training, there also may be some downsides to training. The key is to identify what problems can be attributed to training deficiencies. Sometimes non-training interventions are necessary. If training is not going to fix the performance problem then the desired changes won't occur. When the desired outcome is not reached money is wasted and time is a lost.

Chapter III: Methodology

This chapter will describe the model used to conduct the needs assessment as well as give a description and explanation of the steps in the model. The book Instructional Analysis and Course Development by Lee and Nelson will be used as a guide and the study will be conducted following the model, Model Of Needs Assessment Process.

There are eight steps contained in this model and they consist of:

1. Identify the Purpose
2. Identify Information Needs
3. Identify Target Population
4. Collect Data
5. Analyze Data
6. Report Results
7. Apply/Use Results
8. Evaluate Outcomes

Identifying the purpose is essential to the needs assessment. It provides specific direction for planning and conducting the needs assessment, it should contain the topic or subject of the study, the end products or the information needed at the end of the study and the scope or limits of the study. The purpose of this needs assessment is to determine if training deficiencies exist. If it is determined that training deficiencies exist then it is important to identify what specific training the warehouse employees need in order to improve their performance and effectively stock kit carts.

The next step is to identify information needs. This step can be done by developing a model, flow chart, cause-effect diagram or affinity chart. The information

gathered should be specific and detailed enough to direct the rest of the assessment. A diagram was drawn for this needs assessment, the diagram drawn showed the process of kitting carts and identified what equipment and people were involved. The diagram acts like a tick sheet and visual picture so that nothing in the process gets by unnoticed.

The third step identifies the target population. The target population should include the best sources of information on the current and desired level of performance. This group might be made up of supervisors, engineers, instructors or operators. The population that has been identified to obtain information from for this need assessment about competency levels is comprised of the manager of the warehouse, the supervisor of the assemblers and the assemblers of the kit carts.

Collecting data is the fourth step in the process. This step involves three major activities: planning the data collection, selecting or developing the data collection instruments and collecting the data. Planning the data collection entails choosing which data collection techniques, samples, procedures and data collections schedules will be used. Selecting or developing the collection instruments requires developing the instrument that was selected to be used. Those instruments could consist of interviews, surveys, or focus groups. Collecting the data is the process of administering the instrument to the target population. The method chosen for collecting data for this needs assessment is a survey. Each employee along with their supervisor and the manager of the warehouse is going to have the opportunity to voluntarily fill out a survey. The survey was constructed with a variety of internal and external resources. Internally the warehouse manager provided a kit cart job description that provided the functions, responsibilities and competencies required to perform the job properly. Externally

research was done on how to create a needs assessment survey. The information found stated that the survey needed to have questions that pertain to lack of information, knowledge or skill, poor communication and lack of feedback (Lee & Nelson, 2006). A complete copy of the survey can be found in Appendix A.

Analyze Data is the fifth step, this step is comprised of choosing a data analysis process that supports the type of data collected and how the results will be used. For this needs assessment the survey data needs to be analyzed in a way that will be able to identify the competencies needed for warehouse employees to properly kit carts.

In step six the results are reported. Some common methods for reporting the results are written and oral reports. One or both methods can be chosen. Oral reports guarantee that the data is received and written reports can be utilized as a record of the process used and a way to document the results. For the purpose of this needs assessment a written report will document the results of the study.

The seventh step consists of applying the results given in step six. Decision makers need to consult each other and use the results to make decisions on how the information is going to be used. For this needs assessment the results will be used to determine if training deficiencies exist. If training deficiencies exist it will be important to decide what objectives should be covered and what methods of training will be used. There is some need for urgency when applying the results because the work environment is so dynamic. The results from the needs assessment can lose some of their legitimacy if they are not used in a timely manner.

Evaluating the outcomes is the eighth and final step of the Model of Needs Assessment Process. This final step includes evaluating any steps that were implemented

as a result of the needs assessment. In relationship to this needs assessment this step is beyond the scope of the project and therefore will not be performed.

Subject Selection and Description

The training needs assessment took place starting in July of 2006 and finished in March of 2007. Determining the population was trouble-free. There is only one warehouse facility that directly impacts the production of the kit carts. That warehouse employs fourteen employees, twelve operators, one supervisor and one warehouse manager. All of the employees were chosen to be involved in the needs assessment.

Instrumentation

The method chosen to collect data for the assessment was in the form of a survey questionnaire. The survey was comprised of 17 questions, they were all multiple choice. The survey instrument collection process was done during the month of February 2007. An identical survey was given to each employee. Multiple choice questions other wise known as close-ended questions were chosen in hopes that there would be less of a need for extensive coding and fewer non responses to questions. The questions were designed to be answered with little effort and the number of questions was limited so that the survey could be answered within twenty minutes.

Data Collection Procedures

The surveys were handed out individually to each employee by the researcher. Employees were given three days to answer the survey, the employees were instructed to place completed surveys into a locked box that was then emptied by the researcher at the end of the three days period.

Data Analysis

After the completion and the collection of the survey the researcher evaluated the responses. The assessment process was analyzed using statistics by question. Frequency of the responses was determined and a corresponding percentage was calculated. The results are broken down by question and can be found in chapter four. .

Limitations

This study may be limited due to:

1. Subjectivity of the participants, their perception of what they need training on.
2. Data collected during the needs assessment due to changes in the workforce.
3. Not all members of the workforce chose to participate in the study which could cause bias in the answers of the survey.

Summary

This chapter covered a description of the research, the subject selection and description, the instrumentation, data collection procedures, data analysis methods used and limitations of the method used.

Chapter IV: Results

This chapter will discuss the findings of the study. Data was gathered through the use of a 17 question survey to determine if training deficiencies exist and if so what objectives should be covered in order to develop the competencies that the warehouse employees need to perform in a more efficient manner. Seven of fourteen warehouse employees chose to participate, which is a response rate of fifty percent. The data analysis will start by looking at the individual results of each of the multiple choice questions.

Item Analysis

The objective of this study was to conduct a training needs assessment which would allow for the collection and analysis of data regarding the training needs within the warehouse. The study looked at the training procedures used at the warehouse along with the information being presented, and the times and locations that it was presented. The desired outcome was to identify if training deficiencies do exist and, if so, to identify the common training needs. The survey was split into four sections; demographics, training, communication and knowledge and skill. The first three questions in the survey asked demographic information which was used to gain some background information on the participants.

Question one asked about the number of years that they have been employed at the warehouse. The warehouse has been open for ten years. There was distribution in each group, and the responses were evenly dispersed across the four categories.

Table 4.1 - Years Employed at Warehouse Facility	Frequency	Percentage
Less than 1 year	2	29%
1- 3 years	1	14%
3-5 years	2	29%
5-10 years	2	29%

Question two allowed for the participants to be grouped by educational level. The results of this question will be particularly important for determining the level at which written training and communication should be administered. The large majority of the respondents fell in the high school graduate group.

Table 4.2 - Educational Background	Frequency	Percentage
Some high school	2	29%
High School graduate	4	57%
Associate Degree	1	14%
Bachelors Degree		
Masters Degree		

The third question asked about the length of time the respondents have been at their current positions. Similar to question one there was distribution in each group, and the responses were evenly distributed across all of the categories.

Table 4.3 - Length of Time at Current Position	Frequency	Percentage
0-3 months	1	14%
3-6 months	1	14%
6-12 months	1	14%
1-3 years	2	29%
4-5 years	1	14%
More than 5 years	1	14%

The next series of questions investigated aspects of the warehouses training regimen and the training preferences of the employees. Question number four asked if the respondents had received job specific training. 100% of the respondents replied that they had received job specific training.

Table 4.4 - I Received Job Specific Training	Frequency	Percentage
Yes	7	100%
No		

Next the respondents were asked when the last time was that they had received job specific training. This information will be linked to question number three to compare

how long they have been at their current position. Two-thirds of the respondents fell into the category of having received training in the last three months.

Table 4.5 - Last Time I Received Job Specific Training	Frequency	Percentage
Within last 3 months	4	67%
Within last 6 months	1	17%
Within last 9 months	1	17%
Within last year		

Question number six asked what sources of training are currently used. This question will help to identify if there is training along with the methods that are used for training. It is possible that if they are training that maybe they are not receiving results because the training method does not fit the type of training they are trying to implement. Everyone who participated in the survey acknowledged that there is some form of training being used. The percentage was close to being evenly distributed between the two types of training that were acknowledged as being used.

Table 4.6 - Sources of training currently used	Frequency	Percentage
None		
Verbal	4	44%
Hands on	5	56%
Other		

Question seven asked what the participant's preferred learning style or method of training is, this question is going to be cross referenced with question number six to make sure that the employees desired method of training matches the method being used. The preferred method of learning is hands on with face to face being the next preferred method of training.

Table 4.7 - Preferred Learning style/method of training	Frequency	Percentage
Face to Face	3	33%
Just in Time		
Hands on	6	67%
Computer Tutorial		
Audio recordings		
video tapes		
workbook		

Question eight was used to find out what influences the employees participation in training. The results of this question will help with being able to motivate employees to take a more invested interest in training. The distribution among all of the different groups shows that there are many things that influence the respondent's participation in training.

Table 4.8 - Factors that influence participation in training	Frequency	Percentage
Time Notification	3	
Lack of Monetary support	1	
Time not convenient	2	
lack of training notification	1	
lack of interest in topic	2	

Question nine investigated whether or not the participants think the environment they work in will support training. Support is crucial for any training to be successful; if employees don't think that the learning is going to be supported they might be reluctant to participate. The responses were really spread out, making it hard to make a determination as to whether or not the environment would support training. There was almost even distribution with most categories having a 29% response rate.

Table 4.9 - Will Current Company Environment Support Training	Frequency	Percentage
Strongly Disagree		
Disagree	2	29%
Neither Disagree nor Agree	2	29%
Agree	2	29%
Strongly Agree	1	14%

Questions ten through thirteen pertain to the communication structure within the warehouse. Question ten asked if the participants have an individual deployment plan. The purpose of this question was to find out about the communication between the employees and the warehouse about each others goals. It is important for the goals of the employees to be aligned with the goals of the organization. Unanimously everyone who participated in the survey said that they do not have an individual deployment plan.

Table 4.10 - Have an Individual Development Plan	Frequency	Percentage
Yes		
No	7	100%
Don't know what a Professional Development plan is		

Question eleven asked whether or not the participants received performance feedback. This question is intended to find out if there is any form of communication going on about individual performance. The responses were very unevenly spread, over three-fourths of the respondents said that they receive performance feedback. Only one person said that they disagree that they have received performance feedback.

Table 4.11 - I Received Performance Feedback	Frequency	Percentage
Strongly Disagree	1	14%
Disagree		
Neither Disagree nor Agree		
Agree	6	86%
Strongly Agree		

Question twelve asked how often the participants are receiving performance feedback. It is crucial that communication about performance is consistent. The results of this questions show that the frequency of participation is significantly different for each survey participant.

Table 4.12 - How often	Frequency	Percentage
None		
Daily	4	57%
Weekly	1	14%
Monthly	2	29%
Twice a Year		

Question thirteen asked what forms of communication are used; this will be compared with the preferred method of communication of the participants. No one responded in the category of none which means that there is some form of communication.

Table 4.13 - Forms of communication	Frequency	Percentage
Group Meetings	5	
News Letters	3	
None		
One on One Conversation	6	

The next four questions were used to gain information on competency level of the respondents as it pertains to performing their job. Each question specifically applies to one particular task of the job as a cart kitter. For all four questions the distribution of the respondents is spread across the many different levels of competency. Question fourteen identified the level at which the respondents felt they are able to identify the correct kit cart for the operation that the cart is being kitted.

Table 4.14 - Your Ability to Identify Correct Kit Cart for the Operations Being Kitted	Frequency	Percentage
Poor	2	29%
Adequate	1	14%
Average	1	14%
Good	1	14%
Excellent	2	29%
Not Applicable		

Question fifteen allowed the respondents to rate their ability to identify the correct plastic bins are needed in order for to kit the cart properly.

Table 4.15 - Your Ability to Identify the Correct Plastic Bins for the Operation Being Kitted	Frequency	Percentage
Poor	1	14%
Adequate	1	14%
Average	2	29%
Good	1	14%
Excellent	2	29%
Not Applicable		

Question sixteen allowed the respondents to rate their ability to identify the correct process for acknowledging that a kit cart is properly completed.

Table 4.16 - Your ability to Identify the Correct Process for Acknowledging that a Kit Cart is Completed	Frequency	Percentage
Poor	1	14%
Adequate		
Average	1	14%
Good	2	29%
Excellent	3	43%
Not Applicable		

Question seventeen allowed the respondents to rate their ability to identify the correct location for the completed kit carts.

Table 4.17 - Your Ability to Identify the Correct Location to Place Kit Carts After They Have Been Completed	Frequency	Percentage
Poor	1	14%
Adequate	1	14%
Average	3	43%
Good		
Excellent	2	29%

Chapter V: Discussion

A training needs assessment of a local warehouse was the focus of this study. The study was conducted in five phases that included research, planning, performing analysis, analyzing data, and preparing the report.

Preliminary data was gathered during meetings with the warehouse manager, supervisor of the workforce and by conducting a review of literature. Objectives along with the desired outcomes were put together and the survey instrument was designed. The questionnaires were distributed by the researcher to the fourteen warehouse employees. The results were tabulated and recorded with the use of tables. The data was then analyzed and assembled into this report. In this chapter the limitations, conclusions, and recommendations of the study will be shared.

Limitations

This study may be limited due to the subjectivity of the participants, their perception of what they need training on, and the data collected during the needs assessment as a result of changes in the workforce that may have happened as the study was being conducted. Also, not all members of the workforce chose to participate in the study which could cause bias in the answers of the survey.

Conclusions

The study did not produce results that allowed for determination as to whether or not training will improve the performance of the warehouse employees. However, conclusions can be made in the areas demographics, training preferences, and communication.

The demographic data provided the respondent's educational background. As a result of this data we were able to determine what the education level should be for instruction. The respondent's educational background was relatively close with 57% replying that they were high school graduates and 29% had some high school education, leaving only 14% with something other than high school educational experience. This data is good for instructional purposes because the respondent's educational level will effect how information is presented.

Analyzing warehouse training allowed the determination to be made about what the participant's preferred learning style or method of training is. 67% of the respondents replied that they preferred the method of hands on and 33% of the respondents preferred face to face.

Warehouse communication was analyzed to determine is there was a lack of communication. Based on the results of the survey it is clear that there is communication going on and that it is done with the use of three different methods, group meetings, news letters and one on one conversations.

The voluntary participation of the survey was a disappointment. Although there was 50% participation and for most surveys that response rate would be extraordinary, the researcher expected more people to respond. Possibly there was either bias because they were afraid or they are in denial.

Recommendations

The performance problem at the warehouse still exists. The following recommendations are related to the study and to future research in this area.

1. A more in-depth survey should be used; the survey could be improved by adding some more specific questions that would provide more detailed information about job satisfaction, and training.
2. Have the survey administered by someone external to the organization.
3. Make a change in research practices such as choosing a different gap analysis method such as systems thinking.

Reference List

- Carnevale, A.P. (1990). *Training in america: the organization and strategic role of training*. San Francisco, CA: Jossey-Bass/Pfeiffer.
- Dolliver, Sarah K. (1993). To train or not to train?. *Supervision*, 54(10), 12.
- Gillen, Ray. (2001, August). Distribution Centers Leap Abroad with Upscale Training. *Transportation & Distribution*, 42(8), 62.
- Gupta, Kavita. (1999). *A practical guide to needs assessment*. San Francisco, CA: Jossey-Bass/Pfeiffer.
- Laff, Michael. (2006, June). What is effective training. *T+D*, 60(6), 12-13.
- Lee, Howard D., & Nelson, Orville W. (2006) *Instructional analysis and course development*. Homewood, IL: American Technical Publishers.
- McNamara, C. (n.d) *Employee Training and Development: Reasons and Benefits*. Retrieved January 2007 from website:
http://www.managementhelp.org/trng_dev?basics/reasons.htm
- Nowack, Kenneth M. (1991, April). A True Training Needs Analysis. *Training & Development Journal*, 45(4), 69.
- Pomeranz, Kenneth. (1996, September). An Inventory of Success. *World Trade*, 9(9), 112.
- Saxena, Rajiv. (2005, April). Warehousing remains vital. *Industrial Engineer*, 37(4), 28.
- Werner, Jon M., & DeSimone, Randy L., (2006). *Human resource development*. Mason, OH: Thomas South-Western.
- Wikipedia, the free encyclopedia. (n.d.) Retrieved January 2007 from website:

http://en.wikipedia.org/wiki/Third-party_logistics_provider

(2002, July). How good is warehouse performance?. *Modern Materials Handling*, 57(8), 1.

Appendix A

Needs Assessment Survey

1. Number of years employed at the warehouse facility.
 - Less than 1 year
 - 1-3 years
 - 3-5 years
 - 5-10 years

2. What is your educational background?
 - Some High School
 - High School
 - Associate Degree
 - Bachelors Degree
 - Masters Degree

3. How long have you held your current position?
 - 0-3 months
 - 3-6 months
 - 6-12 months
 - 1-3 years
 - 4-5 years
 - More than 5 years

4. Have you ever received job specific training?
 - Yes
 - No

5. When was the last time you received job specific training?
 - Within last 3 months
 - Within last 6 months
 - Within last 9 months
 - Within last year

6. What sources of training are currently used?
 - None
 - Verbal
 - Hands on
 - Other

11. What is your preferred learning style/method for training?
 - Face to face
 - Just in time
 - Hands on
 - Computer tutorial

Audio recordings
Video tapes
Workbook

12. What are some factors that influence your participation in training?

Time Notification
Lack of monetary support
Time not convenient
Lack of training notification
Lack of interest in topic

13. I think the current environment of the company will support training?

Strongly Disagree
Disagree
Neither Disagree nor Agree
Agree
Strongly Agree

7. Do you have an individual plan for professional development?

Yes
No
Don't know what a Professional development plan is

8. I receive performance feedback

Strongly Disagree
Disagree
Neither Disagree nor Agree
Agree
Strongly Disagree

9. How often?

None
Daily
Weekly
Monthly
Twice a year

10. What forms of communication are used to relay information?

Group Meetings
New Letters
None
One on One Conversation

14. How would you rate your ability to identify the correct kit cart for the operations being kitted?

- Poor
- Adequate
- Average
- Good
- Excellent
- Not Applicable

15. How would you rate your ability to identify the correct plastic bins for the operation being kitted?

- Poor
- Adequate
- Average
- Good
- Excellent
- Not Applicable

16. How would you rate your ability to identify the correct process for acknowledging that a kit cart is completed?

- Poor
- Adequate
- Average
- Good
- Excellent
- Not Applicable

17. How would you rate your ability to identify the correct location to place the kit cart after it has been completed?

- Poor
- Adequate
- Average
- Good
- Excellent
- Not Applicable

Other Comments: