



Excellence in Practice Hand Out

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People Powered Lean

Right People, Right Skills, Right Numbers, Right Time

Summary:

ESCO Covington, a heavy manufacturing plant significantly improved its production efficiency by 23% representing a 1st year direct cost reduction of \$285,600 using the Lean Manufacturing Improvement Process integrated with a Human Capital Management System named **People Powered Lean**. In March 2004, the time from the production manager generating a labor requirement to first day was 10.3 weeks costing \$2,008/new hire with a 59% 1st year attrition rate. In six months, the project team analyzed, designed, developed, and piloted a modernized team mate acquisition program names People Powered Lean (PPL). PPL features a modernized hiring process; a scenario based interview/skills assessment; a "world class" first day; a common skills training program; a production cell training program; a first 90 day coaching and feedback process; and a PPL management system focused on reducing the new Team Mates time to competency in their first job and reducing 1st year attrition. The overarching goal was to create new Team mate engagement from first contact leading to improved business performance. In 2006 PPL reduced the time from 9.3 weeks to 1 week; reduced the cost of hire to less than \$500 and decreased its 1st year attrition rate from 59% to 6% while reducing overall attrition by 31%. Most importantly overall production efficiency was improved 23% from 29.42 hours/product to 23.98 hours/product.

People Powered Lean Purpose:

The original purpose of People Powered Lean was to analyze, design, develop, pilot, implement, and continuously improve a "Human Capital Management System" providing the Production Manager with the right people, with the right manufacturing skills, in the right numbers, at the right time, to improve the plant business performance measured in labor hours per product

Resources Committed:

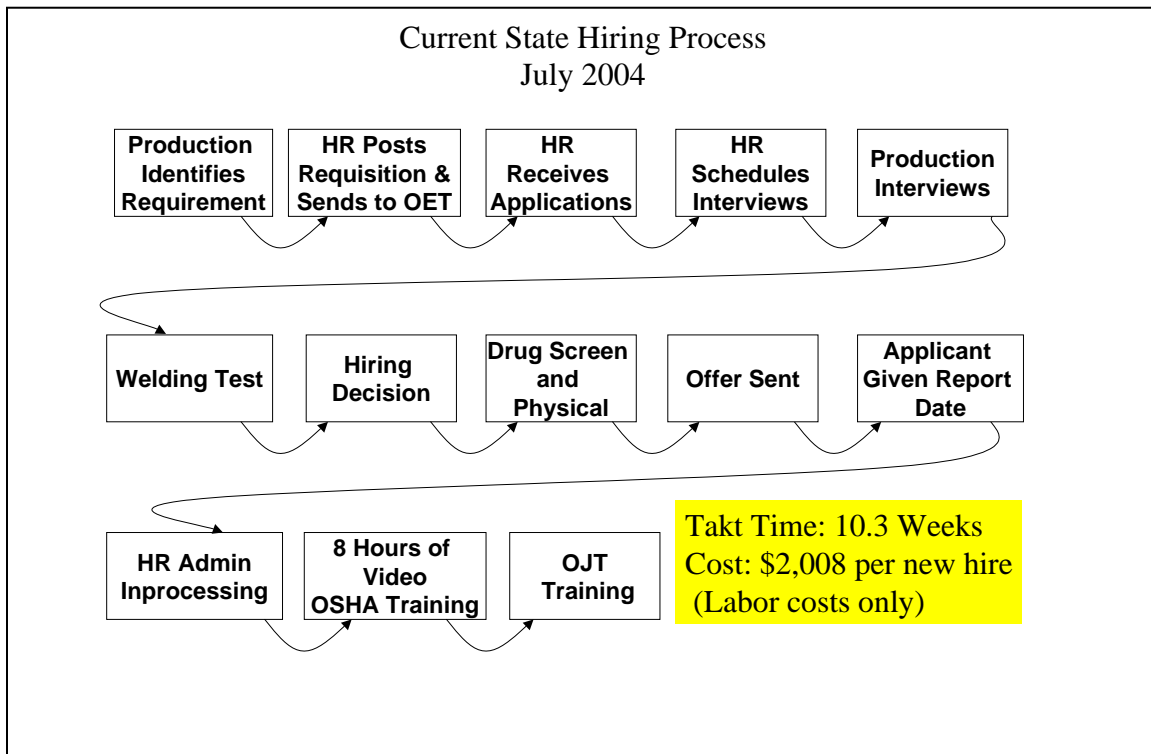
During the analysis every plant leader was involved in developing the "current state" map, the Opportunities for Improvement, and the design of the Future State. Every one of the Senior Managers was involved in validating the Future State design and development along with being a part of the Executive Review Board that met monthly. Training Modernization Group "TMG" a Human Capital Management Consulting company, located Virginia brought the expertise, data capture, training development, and Program Management skills to support the analysis, design, development, and piloting of the system. Once the pilot was complete, TMG transitioned the Program Management back the Plant Staff for full implementation and continuous improvement.

What sets this practice apart from other similar practices?

This practice adds to the state of the art by linking the Acquisition and On Boarding of new employees directly to the manufacturing process within a single system. This practice has integrated then synchronized ALL its business processes including HR and Training into a seamless whole with a Management Oversight System that gives the Plant Management the same oversight on their people programs that they have on their production systems. By directly linking the hiring process and incoming personnel training to the People Power Lean process we have been able to eliminate waste and enhance productivity. This process focused on getting the right people into the company. It also ensured those people have the right skills to support production; keeping a broad enough base of trained personnel so that they have back up employees for all critical positions; and ensuring that production leaders are provided employees when they need them to support production. This focus on Right People, Right Skills, Right Numbers, and Right Time is the essence of PPL and remains focused on improving business results showing Return in Investment.

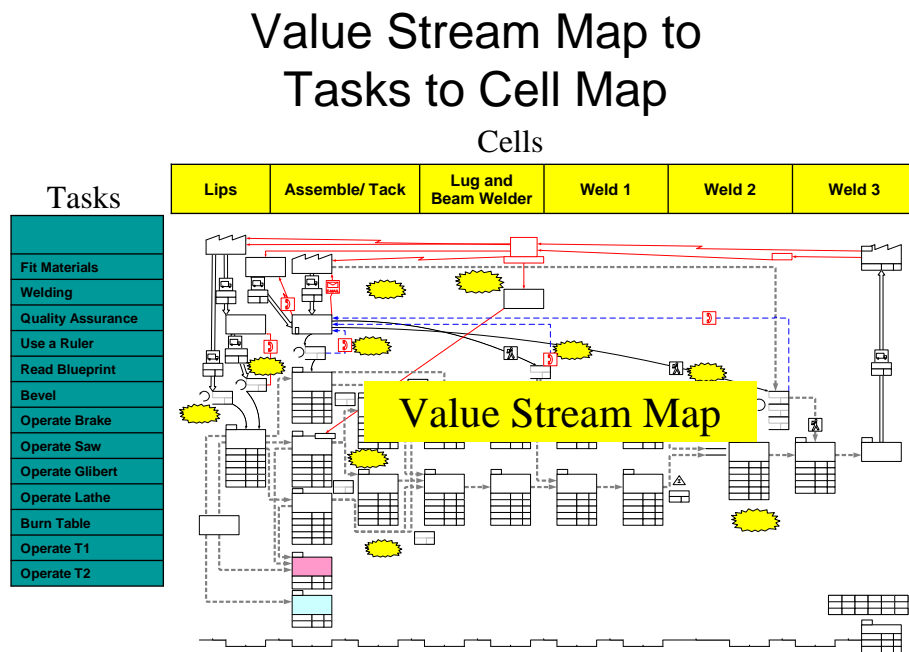
Issue/Goal:

The goal of People Powered Lean (PPL) was to support the plant’s Lean Manufacturing Improvement initiative named QVS (Quality, Value, Speed) by synchronizing and integrating the People side of the business with manufacturing. Since labor costs represented over 50% of the total production cost; the Plant manager knew that without taking on the people/labor side of the income statement they could never reach their overall business goals. PPL began with documenting the Current State Map of the Employee Acquisition Process shown below.

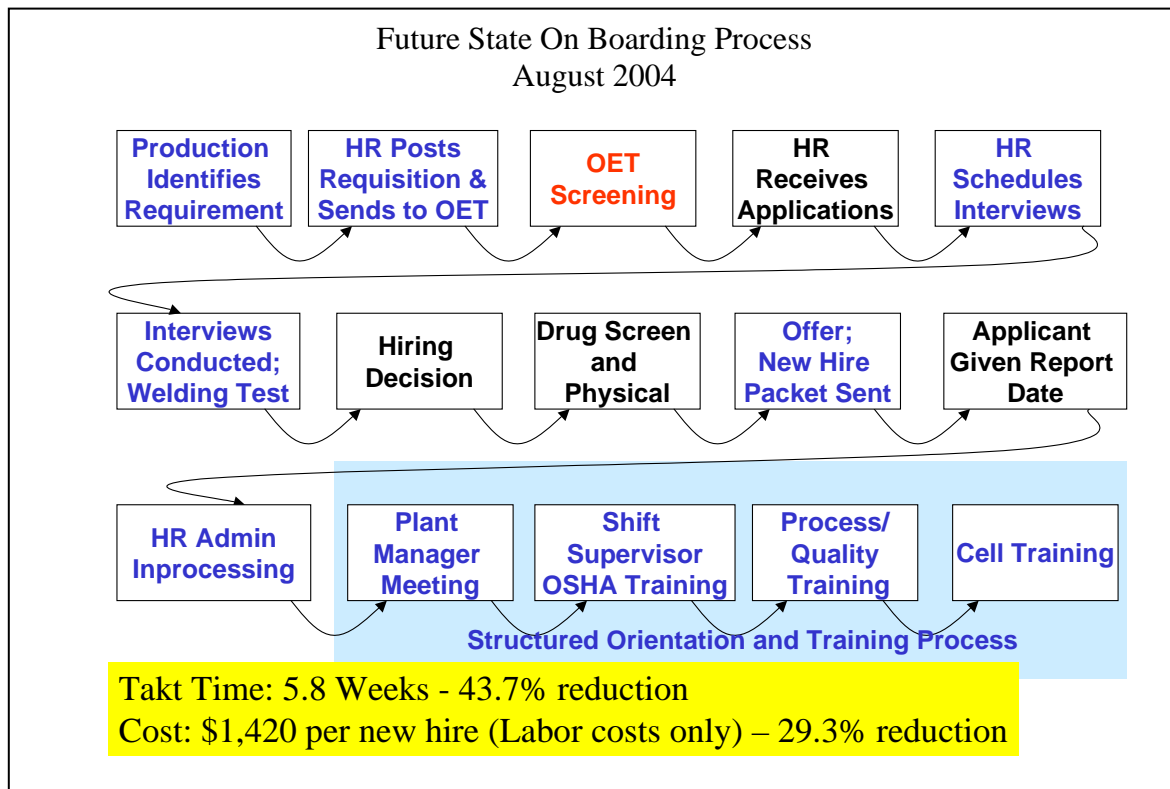


Design:

The practice began with the end in mind. First we had to map the current state, identify waste, generate opportunities for improvement, generate a future state incorporating the opportunities with highest Return on Investment, build a detailed plan of action and milestones, the execute the plan. We began by looking at an end-to-end solution, vice a piece meal approach. The ability to successfully move a person from applicant to competency required integrating every part of our business that touched the process. Once the end points were established the process was broken down into components (requisition, applications, skills assessments, hiring decision, drug screening, orientation, and training, etc.). After interviewing current employees (hourly and salaried) and reviewing the current state map, the question was asked; "What new hires behaviors are required to meet production needs in their first job? This question was important because in their current state, new hires expectations were to be able to complete the every production job, when in reality they needed to know the basics for their first job. The value stream map prepared in support of the Lean Manufacturing Improvement process served as the driving roadmap for the PPL process as well... if PPL did not support the improved manufacturing process then the team was creating waste that must be identified and eliminated. It was determined based on the Value Stream Map that new hires would always be placed in Weld 1 and 2, the most basic activities, so our team focused on creating a system that made them know where they fit on the Team and how to perform their first role on the team successfully.



NOTE: Weld 1 and 2 are the same jobs on opposite sides of the product. Down the left side is the High Level Design of the production based topic areas to support production. This model linked every activity directly to production. If the skill could not be directly linked to the Value Stream Map through the Task Matrix it was not considered.



Consequently, the PPL team decided upon the following features: a modernized hiring process with an embedded Realistic Job Preview (shown in the future state); a scenario based interview/skills assessment; a “world class” first day; a common skills training program; a production cell training program; a first 90 day coaching and feedback process; and a PPL management system focused on reducing the new Team Mates time to competency in their first job and reducing 1st year attrition. The interview process was eliminated and replaced with a skills assessment rooted in common skills and first job task requirements. The goal was creating a situation where the employee and the company can determine if the employee has the skills and attitudes to be successful. A scenario based skills assessment was developed that included a plant tour, technical skills assessment, walking tour, attitude assessment, followed by an immediate contingent hiring decision. From there a new teammate skills development plan was prepared for execution on their first full day.

Process Notes:

1. OET is the State Office of Education and Training which pre-screens all applicants to ensure they meet the basic requirements for the job. Also, a web and paper based Realistic Job Preview was developed to answer all the perspective candidates’ potential questions about the job so that candidates were self removing themselves from the hiring process before completing an applications. OET staffs were trained on the RJP and were able to answer any questions then only provide applications to those who understood the job and met the minimum requirements.
2. HR removed themselves from the interviewing process because they added no value for entry level employees. Instead they trained Team Leaders who were

then allowed to conduct the scenario based interview and skills test to determine fit and began the key engagement relationship between the leader and the led. At the scenario based interview; the new Team Mate performs all the tasks they will perform on the first job. A skills assessment form is completed and agreed to by both the leader and the led. If the new Team Mate meets the minimum requirements the contingent offer is made "on the spot" by the Leader and Production Supervisor. Most importantly though, the Skills Assessment become the baseline for the new Team Mates development and initial training plan. Based upon the fact that Training Waste occurs when providing training on a task they already know, the Leader and the Trainer develop the Training Plan focused only on bringing the new Team Mate to competency in their first job.

3. When the offer letter is delivered the next day to the new team mate along with drug test and physical instructions is the complete new hire administrative packet with detailed instructions for completion prior to first day. The new Team Mate completes the packet at home prior to arriving for their "World Class" First Day.
4. "World Class" First Days are every Thursday and begin at 9 AM or after the leaders can get the day off then focus their energy in the new Team Mate. The goal is for New Team Mates to leaves after his first day thinking: "Wow! These guys really know what they are doing. I've talked to the Plant Manager and my Boss. I understand what **we** do here and how I fit in.' I know the how to work safely. OSHA Training (Plant Focused). I know what I need to do to be successful in this company. I have a hard hat and a locker with my name on it. I know I will get paid. I know what I need to do tomorrow. At the completion of the first day they are met by an HR representative that reviews their administrative packet and their Team Leader briefs them on their next day's events.
5. The next Monday they begin Common Skills Training or those things that every new Team Mate is required to know to be successful. The computer assisted training is rooted in the Individual Training Plan created by the leader and trainer between interview and 1st training day. The Subject Areas include: Unique Terms and Language; Use a Ruler; Cranes Safety and Operations; Equipment/Tools Operations and Maintenance; Visual Inspection; OSHA (Job Focused Round 2); and Quality Assurance
6. Upon completion of the Learner Based Training modules the trainer, the team leader and the new Team Mate meet together and the trainer briefs the Team Leader on the status of the Individual Training Plan and the new Team Mate begins Cell Training under the control of the Team Leader. Since the Common Skills were developed during Common Skills Training, this training is "just in time and just enough" for 1st job requirements. Team Leaders then enter a specified 30-60-90 Feedback process to assess performance and update skills development record on an almost daily basis during that critical first 90 days on the job.

