A Case Study on the Application of a Human Performance Technology Model to a Sports Product Manufacturing Company

Kevin Nold

E. Kobena Osam

and

Meera Alagaraja

University of Louisville

Educational Leadership, Evaluation and Organizational Development

College of Education & Human Development

Louisville, KY 40292
A Case Study on the Application of a Human Performance Technology Model to a Sports Product Manufacturing Company

XYZ Inc. is a sports product manufacturing company that specializes in the production of cutting edge sports technology to athletes and trainers through research and development. Their ability to compete in the sports equipment market relies on the consistent production of high quality sports equipment, however a recent rise in customer complaints about faulty equipment threatens to damage their reputation and business. Therefore, the purpose of this case study was to apply the principles of human performance technology (HPT) using Rummler’s (2007) Result Improvement Process (RIP) model at XYZ Inc. to identify and provide recommendations to close the gaps in their current performance. The HPT approach was selected for this case study because research has demonstrated that it is an effective tool for analyzing performance problems because of its systems approach designed to capture information at multiple organizational levels (Dean, 1998; O’Driscoll, 2015; Wilmoth, Prigmore, & Bray, 2014) Furthermore, there is evidence from similar case studies validating the use of HPT to analyze organizational performance problems (Bobbert, Robinson, & Florence, 2007; Hayes, Godwin, Butts, & Martin, 2007).

Methods

In order to effectively assess the problems presented by XYZ Inc., there was the need for the use of a well-defined method or process to facilitate the collection and analysis of relevant sources of data. For this particular performance need, the Results Improvement Process (RIP) model outlined by Rummler (2007) was adopted. The RIP model consists of four phases that are:
Phase 1: Desired results determined and project defined
Phase 2: Barriers determined and changes specified
Phase 3: Changes designed, developed and implemented
Phase 4: Results evaluated and maintained or improved

Phase 1

Phase one began with a value assessment to determine if SCR Sports Inc. had some understanding of the problems at hand and to determine their willingness to address their performance problem with a performance improvement process. The value assessment revealed that SCR Sports Inc. had identified a 40% fail rate during the final quality inspections of their sports product.

Phase 2

Phase two consisted of determining the barriers that stood in the way of an error free process of assembling the sports product using the data sweep method. Data sweeps enable the identification of gaps in performance and allow for the necessary changes to be made to close performance gaps (Rummler, 2007). Two methods of data collection were employed in order to generate the information necessary to better understand the processes involved in the production of the sports equipment. First, three employees interviews were conducted to gain a more in depth understanding of the production process from an employee perspective. After the interviews, observations were conducted during production in order to gain a visual representation of the work processes involved in producing the sports equipment. Phases three and four culminated in results for the data analysis and implications of the study.

Results and Discussion
Data from the interviews confirmed that despite the provision of conducive work environment and access to production manuals and training, 40% of the final assembled products fail the final quality checks due to damages, resulting in an operating loss of $1,600 per equipment. The observation of the work process however revealed that some of the equipment was not being damaged during assembly, but was already damaged from the vendor in Germany. Specifically, it was found that weak seals, leaks, and bulging tube sections were among some of the problems and damages upon arrival from the vendor in Germany. Additionally, it was observed that employees were not using the production manuals during the assembly process, which partially explained some of the testing failures. Further inquiry revealed that the manuals were not being used because they were outdated.

**Conclusion**

The two main problems identified as impacting operational performance at XYZ Inc. were faulty equipment from vendors in Germany and outdated production manuals. The interventions recommended were aimed at closing the gap between the current state and the desired state of performance. The current state of performance was a 40% fail rate during the final quality checks and the desired state of performance is a 0% fail rate. To correct the damage issue from the vendors, changing the vendor was recommended. A manufacturing plant in Indiana was identified as a potential replacement for the German-based vendors. Alternatively, it was recommended that XYZ Inc. discuss the issue with their current vendors, review their production steps, and develop corrective measures to ensure the product is not damaged prior to being delivered to XYZ Inc. Finally
recommendations were made to revise the current production manual to reflect the updates necessary for error-free assembly of the sports equipment.
References


