

# Preface

Human performance technology (HPT) is a systematic approach for improving performance that takes into account organizational, environmental, and causal analyses in order to make data-driven decisions regarding intervention design, implementation, and evaluation (International Society for Performance Improvement, 2013). Principles of HPT are used in a variety of different industries to solve problems, assist with qualitative improvement initiatives, and identify future business opportunities. Performance improvement technologists take the entire organizational environment into account when developing strategies and interventions to address an organizational need.

This casebook is a collection of 16 teaching case studies that are intended to provide educators, students, and practitioners with an opportunity to see how principles of learning design of human performance technology have been implemented in various contexts and industries. Like most fields, students are taught best practices but are not always privy to understanding the challenges that can occur when attempting to implement these best practices in the real world. Lack of resources, organizational buy-in and timing can all hinder performance, requiring practitioners to work creatively to implement solutions within a limited timeframe. Often times, performance improvement technologists are tasked with implementing multiple interventions (instructional and non-instructional) at the same time. The success of any intervention is dependent on whether or not it meets the needs identified during the initial assessment of the perceived performance problem.

It is in the intent of this casebook to provide those with an interest in learning design and human performance technology a repertoire of cases where human performance improvement initiatives were employed. Each case provides insight as to how analyses were carried out, the design of interventions, and how organizational culture contributed to the performance problem being addressed. The goal of this case book is to provide educators, students, and practitioners with in-depth case studies, showcasing real-life applications of HPT in a variety of different industries

and contexts, that can be used for instructional purposes in human performance technology and performance improvement courses. The cases featured in this book address how projects were implemented within the following industries: higher education, manufacturing, government, healthcare, and non-profit sectors.

Topics addressed within the case studies include the following:

- Conducting performance analyses
- Solving business problems
- Identifying and selecting performance improvement interventions
- Implementing instructional and/or noninstructional interventions
- Implementing change management strategies within organizations
- Employee development
- Instructional design
- Changes in workflow procedures
- Performance support systems

## **BOOK OBJECTIVE**

The overall mission of this book is to provide educators in the field of human performance technology, organizational development, educational technology, and business management with a compilation of case studies based on real-life experiences that can be integrated within their classes utilizing a problem-based instructional technique. The goals for this case book are to 1) provide relevant cases that demonstrate how principles of learning design and HPT have been employed within organizations, 2) provide examples of how learning design and HPT has been utilized in a variety of different industries, and provide a combination of examples that address business problems, quality improvement initiatives, and business opportunities.

This case book includes 16 cases from educators and professionals in the performance improvement field who have applied human performance technology standards and principles in a variety of different contexts to solve performance problems. Each case highlights the challenges encountered in conducting analyses, designing interventions, and identifying strategies to implement performance improvement plans.

## **AUDIENCE**

The target audience for this book consists primarily of educators and students in the field of human performance technology. The cases included in this book could be of benefit to courses within business management, performance improvement, organizational development, and instructional design and technology programs. Each case consists of a real-life unique problem or opportunity that was addressed, as well as a detailed account of the steps taken to arrive at a solution. It is the intent of this casebook that educators will be able to utilize this book as a supplemental text to build upon the theoretical textbooks addressing the topics of HPT and provide students with examples of how principles of HPT have been applied to solve real problems in a variety of different organizations and contexts. The cases included in this book can be used as both individual and group assignments in face-to-face and distance learning environments.

## **ORGANIZATION**

This book contains 16 cases that span across a wide variety of contexts, including higher education, manufacturing, government, hospitality, and non-profit sectors. Topics range from strategies employed during performance analyses, instructional and noninstructional solutions, and performance support systems. Each case presents a unique performance problem along with a detailed account of the steps taken to arrive at a solution.

Chapter 1 guides us through process consultants used to conduct a gap analysis in the automotive industry. Using a structured performance mapping process, the team documented the unconscious competence of in-role experts. A gap analysis of all performers objectively identified, quantified, and prioritized curriculum and performance support needs. This case study follows the journey of an organization that adopted this evidence-based process and now executes the gap analysis every third year to ensure continued relevance amid organizational and industry changes.

Chapter 2 builds upon a case presented in the first edition of this book addressing performance gaps in a manufacturing company. In a previous chapter (Monaco & Schneider, 2015) the authors described the many installations of LIFTOR, our performance system to promote the safe and efficient operation of industrial forklift trucks. The original installation occurred in 1985, followed by installations at fifteen other sites. Not all of these installations have survived, but because the same problem existed and the same system was used to solve it, we can attribute the failures to

differences between the sites. Some sites failed because of systemic conflicts, but most of them failed after specific events occurred, such as new managers, new budgeting or contracting policies, or loss of support from corporate headquarters. In the current case, the authors describe how these failures came about, and how the more successful implementations surmounted them.

Chapter 3 explores demonstrates how the Human Performance Technology model was used to facilitate performance challenges in a higher education teaching and learning center. A team of instructional systems technology graduate students served in a consulting role on this project to help the TLC allocate resources and redesign processes on how support tickets were handled. The project team conducted performance analysis through extensive stakeholder interviews and extant data review to perform organizational, environmental, gap and cause analysis. Through these analyses, performance issues were isolated, the causes behind them were identified and concluded with the recommendation of interventions to the client.

Chapter 4 guides us through how a performance improvement specialist worked with a faculty fellow to improve training for faculty developing online courses at a higher education institution. Before discussing specific modifications to the training module, the group delved into the interpersonal aspects of the relationship between instructional designers and faculty members in higher education. They suspected that these relationship dynamics had something to do with the shortcomings of the existing training module, and they wanted to ensure that they addressed them in the new version of the training. The result was a set of recommendations sent to the Provost at NCC that aligned the modifications to the training intervention to the performance problems in the institution, while simultaneously accounting for the interpersonal aspects identified in their discussions.

Chapter 5 use the analogy of a journey throughout the context of a performance improvement scenario in higher education. Providing quality education for university students often includes a journey toward the best approach. This journey entails outlining the appropriate curriculum, finding the appropriate content, establishing dynamic learning objectives and aligning the course with student needs and learning styles. After these criteria are met, the university seeks and selects the most qualified faculty members to teach the course(s). When specialized credentialing requirements are involved, the University must take further steps to ensure that each course meets the standards of the certifying body. The context of this journey and enhancement of Davenport University's Global Project Management Program will include three parts: Course updates for certification; student pursuit of certification and future application of performance improvement principles.

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Chapter 6 describes how an experienced instructional designer and program manager, was hired to coordinate a new online graduate program at a large university. It was her responsibility to identify and implement solutions to the rapidly growing program's needs. Identifying problems, evaluating the need, thinking through a modification and implementation process, and considering the potential impact of change, are all important steps. In this case study, the instructional designer needed to identify the problems, determine a solution, and then implement that solution. After speaking with her new supervisor, she determined additional instructors needed to be hired to meet the growing program's needs. Although she did briefly analyze the situation and provide a potential solution, the solution she implemented needed further development to ensure it was implemented in an effective manner.

Chapter 7 demonstrates how lack of communication can have a significant impact on performance in a higher education institution. A substantial renovation to a historic college and building resulted in a state-of-the-art building, full of new technologies and possibilities for new kinds of technology-enhanced teaching. Technology malfunctions slowed adoption and exploration of these possibilities, but limited communication and training accompanied by institutionally-mandated scheduling system stagnated adoption and innovation further. This case explores these issues and how an unconventional training series has started a deeper conversation about these issues and promoted more pedagogical experimentation.

Chapter 8 provides an overview of how empathy, when shaped by authentic affinity or involvement with an organization can serve the needs assessment experience in a positive way. As part of the chapter, the authors describe their approach and highlight pertinent findings from the needs assessment, which focused on proactive opportunities to enhance outcomes in parent efficacy. The authors also detail accounts of participant experiences within the process, including their interactions with the practitioner and overall experience. Finally, the authors share practitioner reflections on the overall process.

Chapter 9 describes how Thomas Gilbert's Behavior Engineering Model was used to identify performance interventions for a sales initiative in an organization. The author suggests that it is critical to apply a holistic approach when approaching any human performance improvement initiatives. Sales within an organization is a human performance issue and recurring sales performance problems should be addressed by delving to the root of the human performance issues at hand. It is critical to consider not just the repertoire of human behavior, but also examine the supporting environment, to ensure it provides the necessary impetus to improving performance.

Chapter 10 takes a deep dive into how winning a prestigious construction contract in the country led to Ziggurat's loss of revenue, cash flow deficits, year-on-year losses, high financing costs, loss of banking, idling of resources, loss of credibility, and high employee turnover rate. Instead of these significant contracts providing a strong foothold in the construction industry, it destroyed Ziggurat and the recovery took a decade. Performance improvement is often the study of how to improve performance when discrepancies are confined to a silo or a subset of functions within an organization. But how do you get back to exemplary performance when you are boxed in and there is no way out?

Chapter 11 explores how a needs assessment was conducted at a middle school experiencing high rates of teacher turnover. Pamela Frost, an experienced instructional designer, was assigned to assess the situation and identify opportunities to improve professional development opportunities for the teachers. As a part of a needs assessment, Pamela gathered data to address needs pertaining to classroom management challenges, teacher attrition rates, and establishing relations with the local community. This case explores how Pamela gathered data and triangulated her findings to determine what interventions were needed.

Chapter 12 presents a story about an effort to address a threatening business problem for a company in an industry that relies on low-wage, minimally skilled employees. The industry is characterized by high-turnover that makes training efforts difficult. The designers and developers had to be flexible, creative and innovative in creating their project plan and instructional intervention. The dynamics of the organization were fluid. The team had to consider these dynamics in selecting their approach. They had to be comfortable with using approximations and assumptions in developing the inputs for their design and development decisions. Ambiguity and uncertain were constants for the team members.

Chapter 13 guides us through the challenges that many franchise restaurants experience addressing their workforce. While the current labor market is a dream for aspiring future employees, the low unemployment rate and the pervasive availability of hourly jobs makes it much more difficult in the quick service restaurant industry for employers. Hiring and retaining a solid team is a common concern across the industry; often it is easier to hire than to retain. Entry level employees are easily persuaded to work for a competitor for very little added pay. This current phenomenon requires organizations to find differentiating tactics to retain their workforce. This case study explores a franchise restaurant chain in its quest to become an Employer of Choice in this very competitive industry. Franchise consultants were hired to explore best practices. The authors detail how a benchmarking tool was used to secure the

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information as well as the outcomes of the study. Specific actions are cited that can improve the retention of hourly employees in the quick service restaurant industry.

Chapter 14 explores how an advanced aircraft company used performance improvement strategies to address quality and safety issues. Aerosector was tasked to build the composite leading edge portions of the wings. The leading edges initially took approximately 28 days to build, which was too long based on client needs. The parts were not meeting quality specifications. The defect rate of completed parts was over 30% when combining the repairable and non-repairable defects. In order for the shop to meet the needs of their client, Star Systems, they had to reduce the manufacturing time to less than 15 days and the defect rates to less than 0.5% for non-repairable defects and less than 2% for repairable defects. The Learning and Development team at Aerosector was engaged by the manufacturing team to provide a gap analysis and assist the manufacturing department.

Chapter 15 demonstrates alignment between human performance technology strategies and design thinking. The case provides a description of an insurance company in Hong Kong utilized principles of design thinking to develop customer interventions that were grounded in empathy and customer service. After implementing a pilot project in Hong Kong in 2018, the agents enhanced their abilities of social influencing, lead generation, and deal closing. Following the successful pilot project, the company continues to transform its business and leverage its social sales advantage in Asia.

Chapter 16 explores how two instructional designers adopted a systems approach for their performance analysis, with a major focus on learner analysis as a means to understand the underpinnings of the social system within the client organization, which more clearly revealed potential motivations of the learners. As a result, the two designers delivered an eLearning module that 1) combats an actual gap in knowledge and skill, 2) is relevant to the intended audience, and 3) is compatible with the organizational culture and infrastructure.

## **CLOSING REMARKS**

Organizations, regardless of industry, are in a never-ending search to improve performance and identify opportunities to expand their operations. Depending on the industry, project, and organizational constraints, there are many ways instructional designers and performance improvement technologists may approach any given project. This casebook, focusing on human performance technology decisions and learning design strategies, provides students with opportunities to see how principles

of human performance technology are applied in a variety of real situations. The cases featured in this book provide examples of various types of projects that utilized principles of human performance technology and how interventions were implemented in a variety of industries such as higher education, governmental, manufacturing, non-profits, and hospitality.

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## **REFERENCES**

International Society for Performance Improvement. (2013). *What is HPT?* Retrieved August 5, 2013, from <http://www.ispi.org/content.aspx?id=54>