

## WEB-BASED TALENT MANAGEMENT SYSTEM WITH ANALYTICS FOR DEL MONTE INC.

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### ABSTRACT

This capstone project addressed critical inefficiencies within the talent management system at Del Monte Philippines, Inc. (Bugo Cannery), specifically targeting the management of training records, data duplication, and the selection of training participants. Employing a developmental systems approach within an Agile framework, leveraging Kanban for enhanced adaptability and continuous improvement, the project implemented key enhancements. These included the development of a structured training record module, the integration of robust data validation mechanisms, and the optimization of training participant selection processes. User Acceptance Testing, which incorporated a System Usability Scale (SUS) assessment, yielded a high usability score of 85.0. Furthermore, functional testing validated the system's adherence to specified requirements. The resulting optimized talent management system is anticipated to streamline HR processes, improve operational efficiency, and cultivate a more engaged workforce, directly supporting Del Monte Philippines' present and future strategic goals.

**Keywords:** Talent Management System, Del Monte Philippines, Agile Methodology, Kanban, Training Optimization, Data Integrity, System Usability Scale (SUS), Workforce Engagement.

## 1. INTRODUCTION

In the contemporary, technology-driven business landscape, robust talent management systems are indispensable for achieving organizational success. Del Monte Philippines, Inc. (Bugo Cannery) identified a critical need to refine its existing system to accommodate its growing workforce and evolving strategic demands. Effective talent management, as posited by Al Aina et al. (2020), focuses on harmonizing employee competencies with organizational goals, thereby fostering sustained performance and competitive advantage. Specifically, this project targeted inefficiencies within the company's training record management, data redundancy, and participant selection processes, aiming to enhance both system efficiency and user experience.

The core objective of this project was to engineer an optimized talent management system for Del Monte Philippines, Inc. (Bugo Cannery), designed to streamline the processes of talent requisition, identification, and development. By incorporating sophisticated analytics and user-centric design principles, the system sought to bolster data accuracy, cultivate heightened employee engagement, and establish a resilient talent pipeline. As Madan (2020) underscores, strategic talent management is pivotal for driving employee engagement and overall organizational performance. This project endeavored to operationalize these strategies through a customized system optimization, tailored to meet the specific needs of Del Monte Philippines, Inc.

Furthermore, the project's development and implementation considered the importance of continuous improvement and adaptability within talent management systems. Given the dynamic nature of the business environment, it is essential that these systems remain agile and responsive to changing needs. Integrating feedback

mechanisms and regular system evaluations, as suggested by Collings et al. (2021), ensures that talent management practices remain effective and aligned with organizational goals. This project, therefore, aimed not only to optimize the current system but also to lay the groundwork for ongoing enhancement, ensuring long-term value for Del Monte Philippines, Inc.

## 2. IMPLEMENTATION METHOD

This project employed a developmental systems approach, utilizing Agile methodologies, specifically the Kanban framework, to guide the development and implementation of the optimized talent management system. The research methodology emphasized iterative development, continuous feedback, and collaboration with stakeholders.

### *Software Development Methodology:*

The project utilized an Agile approach, incorporating Kanban principles for workflow visualization and task management. This methodology facilitated iterative development, allowing for continuous adaptation based on stakeholder feedback and evolving requirements.

### *Data Gathering Tools:*

**Group Interviews and Focus Groups:** To gather insights from diverse perspectives and understand user needs, group interviews and focus groups were conducted with Del Monte Philippines employees and management.

**Workplace Observation:** Direct observation was used to document existing processes and identify areas for improvement within the talent management workflow.

**Document Analysis:** Relevant documents, including training records, policy manuals, and existing system documentation, were analyzed to understand current practices and identify data gaps.

### *Sources of Data:*

**Databases and Online Repositories:** Existing databases and online repositories were utilized

to gather relevant information and data for system development

### 3. RESULTS AND DISCUSSION

The optimized talent management system underwent rigorous testing, including System Usability Scale (SUS) assessment (see Table 1) and functional testing (see Table 2).

**System Usability Scale (SUS):** The system achieved a SUS score of 85.0, indicating "Excellent" usability. This score demonstrates the system's high user-friendliness and effectiveness.

**Functional Testing:** Functional testing confirmed that the system met all specified requirements. Table 2 presents the results of the functional tests, demonstrating the system's ability to perform key tasks, including login, training record input, training viewing, talent pool analysis, and system exit.

**Table 1. System Usability Test Result**

Item	Participant	P1	P2	P3	P4	Average
1	I think that I would like to use	5	4	4	4	4.2
2	I found the system	4	3	3	3	3.4
3	I thought the system was easy	5	2	5	5	4.2
4	I think that I would need the	1	1	1	2	1.4
5	I found the various functions	5	3	5	4	4.4
6	I thought there was too much	1	4	2	3	2.2
7	I would imagine that most	3	2	4	5	3.8
8	I found the system very	2	3	2	4	2.4
9	I felt very confident using the	4	5	4	5	4.6
10	I needed to learn a lot of	4	5	2	3	3.6
SUS Raw Score X		22	16	22	23	21.2
SUS Raw Score Y		12	16	10	15	13
SUS Final Score		85	80	80	95	87.5

**Table 2. Functionality Test Results**

S. No.	Functionality	Function ID	Test Cases
1	Log in the System	F3.2	T1/Pass
2	Employees Training Input	F3.4	T2/Pass
3	View Trainings	F3.5	T3/Pass
4	Analyze Talent Pool	F3.6	T4/Pass
5	Exit the System	F3.7	T5/Pass

The positive feedback from users and the successful completion of functional tests highlight the system's effectiveness in streamlining talent management processes. The optimized system reduces manual workload, enhances data accuracy, and improves the overall user experience,

contributing to a more engaged and efficient workforce.

### 4. CONCLUSION

The deployment of the refined talent management system at Del Monte Philippines, Inc. (Bugo Cannery) has proven to be a significant advancement, showcasing its capacity to revolutionize talent management strategies. The system's high System Usability Scale (SUS) score, coupled with positive functional test outcomes, substantiates its user-friendliness and operational efficiency.

By rectifying issues such as inefficient training record management, redundant data entry, and suboptimal participant selection, the system has effectively boosted productivity and employee engagement, aligning with the principles of effective talent management practices (Collings et al., 2021).

Furthermore, the system's strategic alignment with Del Monte Philippines' present and future goals ensures its enduring relevance and efficacy. To maintain this alignment and adapt to evolving organizational requirements, ongoing monitoring and evaluation are imperative. This approach, as suggested by research on continuous improvement in talent management (Aina et al., 2020), will guarantee the system's sustained contribution to the organization's success.

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