Warehouse Management Program Based on a Multi-Price Inventory Model for Lien Cong Co., Ltd. in Nghe An

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***Abstract*—The thesis applies a multi-price inventory model to warehouse management at Lien Cong Co., Ltd. in Nghe An. It reviews C# programming and the economic inventory model, analyzes warehouse inputs and outputs, and designs a program that uses the model in the selected company case. The source conclusion describes this design as the project's main result, without establishing a comprehensive operational database or measured cost savings. The present paper summarizes the model-based application and the scope supported by the manuscript. Real stock records and comparative evaluation would be needed to assess the program's practical value.**

***Index Terms*—warehouse management, inventory control, C#, SQL Server, multi-level pricing, report generation**

I. Introduction

Materials and warehouse work requires traceable receipts, issues, and stock balances. The thesis examines an organization's existing workflow and the information needed to support its selected task. It identifies a practical task, selects functions to study or build, and explains why the task matters to the organization concerned. The evidence for the project is its requirements analysis, design material, and described implementation. Intended advantages are distinguished from effects actually established in the manuscript [1]. Published articles on the methods and subject of this project provide context for this English summary [9]. Published books on the methods and subject of this project provide context for this English summary [10].

II. Methods

The student analyzed the selected case, described the relevant records and procedures, and prepared the design or program functions reported in the thesis. The design links input records to the updates, searches, reports, or other functions relevant to the task. Functional descriptions, diagrams, interfaces, and source conclusions are used where present to identify completed work. The manuscript is not treated as evidence of an additional user trial or dataset that it does not document [1].

Supervisor: Nguyễn Việt Hùng.

III. Results

The thesis reviews C# programming and the mathematical inventory model with multiple price levels, then analyzes warehouse inputs and outputs for Lien Cong Co., Ltd. in Nghe An. The original conclusion says the student designed a warehouse-management program applying that model. It does not establish a complete database, every required warehouse function, or integration of several programming languages. The source presents the work as a design and developing application with remaining limitations. No measured stock reduction, cost saving, or real company deployment is documented [1].

IV. Discussion

The thesis reviews C# programming and the mathematical inventory model with multiple price levels, then analyzes warehouse inputs and outputs for Lien Cong Co., Ltd. in Nghe An. The original conclusion says the student designed a warehouse-management program applying that model. The reported functions can be interpreted against the original organizational need, but implementation alone does not establish every intended benefit. The contribution is a model-based student program and a warehouse-workflow analysis. A fuller database, field trial, and comparative inventory measurements would be required before claiming that it improves actual stock management. Reconciliation with a complete set of physical and recorded stock movements would test practical accuracy. The source provides a case study and a basis for later verification of completeness, reliability, and use [1]. Earlier ICTU undergraduate work by Vương Thị Thảo addressed inventory management with multiple price levels [8].

V. Conclusion

The author applied a multi-price inventory model to a warehouse-management case at Lien Cong. The thesis documents theoretical review, input and output analysis, and a designed program using the model. The original conclusion does not present a comprehensive production system or measured economic benefit. The contribution is a model-based student program and a warehouse-workflow analysis. A fuller database, field trial, and comparative inventory measurements

would be required before claiming that it improves actual stock management [1].

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