

QHS Methodology for Business Intelligence With CRM in Warehouse Services and Foreign Trade Logistics

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ABSTRACT

Business-oriented companies in the foreign trade supply chain that involve the phase of Merchandise Warehouses and Logistics Services as an added value; They generate, due to their highly specialized nature of the context of global trade, security control implications through risk control systems and integral security of all the processes of the services of the value chain. For the purposes of this study, a research proposal is made through an eclectic methodological proposal combining the QHS methodology and elements of the Business Intelligence methodology, to analyze the information variables of various sources of information of a company; With a multidimensionality approach to find correlation of success in the achievement of operational performance indicators, productivity, and customer satisfaction levels, under a systemic approach.

Keywords: QHS methodology, Business intelligence, Supply chain, CRM, Warehouse and Logistics

INTRODUCTION

Innovation processes represent a strategy for strengthening business operations in the value chain of foreign trade and international logistics, generating challenges in applied research processes through postgraduate projects specifically master's thesis in administration, developed with the purpose of designing proposals for improvement through initiatives of Mexican Standards (NMX) to be used as a guide to good practices in the Administrative and operational management, contributing to the optimal performance of the main performance indicators in companies dedicated to supply chain services, highlighting customs agencies, cross-border transport of goods, warehouses and international logistics.

The proposal of Mexican Standard (NMX) for companies of warehouses of goods and provision of logistics services of international trade is presented in Figure 1, representing the roadmap of the strategies to be developed and the eclectic actions of the application of the QHS Methodology that considers the experience of focus groups of the representatives of the society; as

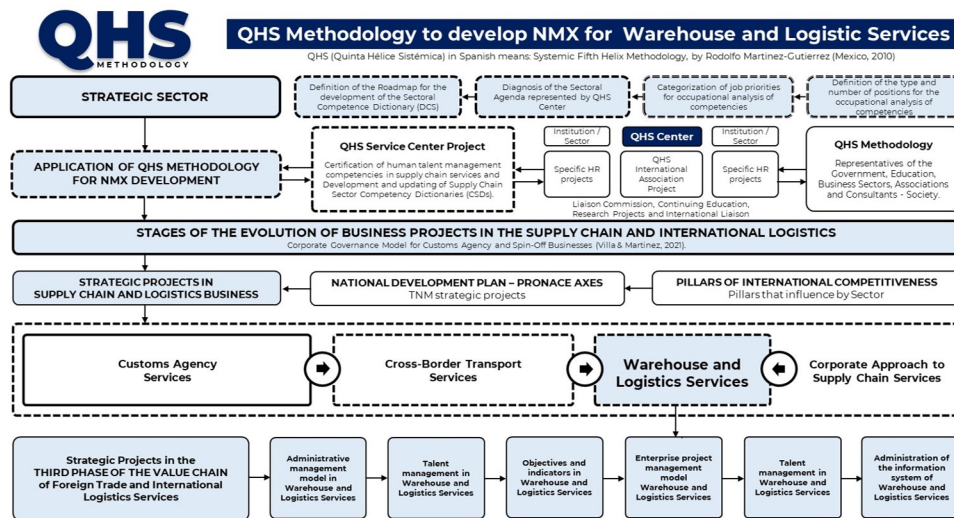


Figure 1: QHS methodology (adapted from Martínez, 2010).

are specialists from government, academia, companies, associations-business chambers and specialized consultants involved in Customer Relationship Management (CRM) models and Business Intelligence models that integrate information from Databases and their systematization into performance indicators.

The referential support that aroused the interest to develop actions of research projects and improvement initiatives for the warehouse and logistics services sector began with the publication of the Mexican Standard NMX-R-026-SCFI-2016, which represents an alternative State of the Art in the referential context of good practices in companies in the supply chain of foreign trade.

QHS Methodology and Business Intelligence an Eclectic Strategy

For conceptual purposes, the strategy developed involves the combination of styles and tools of the QHS Methodology which focuses on identifying and developing the variables for in-depth interview processes and instruments with key questions are applied to the different sectors that are linked to the companies under study; in this case the companies specialized in Warehouses and Logistics services for foreign trade, in such a way that interviews are carried out with specialists from the Government, Academia, Companies, Associations-Business Chambers and specialized Consultants, and on the other hand complementary instruments of support of the Business Intelligence Methodology are proposed; as is the case the phases of Planning, Requirements and Analysis, Design, Construction and Deployment. This is linked to the approach of the Corporate Governance Model for Customs Agencies proposed by Garcia and Martínez (2021) that considers the integral model of the value chain of the supply chain and international logistics. The services of Warehouse of goods and Logistics represent great challenges in the performance indicators for customers, in terms of satisfaction levels

Table 1. Methodological elements for creating research instruments.

Type of Business	Elements of QHS Methodology	Elements of Business Intelligence
Merchandise Warehouses	Opinions of sectoral experts representing	<ul style="list-style-type: none"> • Data storage • Built-in analytics
International Logistics	<ul style="list-style-type: none"> • Government • Academy • Enterprises • Associations • Specialized consultants 	<ul style="list-style-type: none"> • Ad Hoc Reports • Control panels and interactive reports

of quality traceability, services, cost and delivery times, to maintain the level of reliability of companies with their customers and the image of credibility of their policies and objectives that support their business philosophy in an increasingly competitive international market.

Table 1 presents the strategy of the development of the instruments with the combination of styles and elements of the QHS Methodology (Gutierrez 2010, 2021) and the Business Intelligence Methodology, the approach of each element and its conceptual approach is initially considered; the first element is the Data Warehouse to support decision making and data mining generation. of the operations of the companies, the second concept is Embedded Analysis of information and aims at analysis to help frontline hierarchical personnel and the managers to make decisions through integration and online application, the data warehouse in an interactive way and with a summarized or contextualized approach. A third element is the development of ad hoc reports with graphic support of the indicators of administrative and operational operations in real time, so that you can have efficient feedback to make decisions and thereby identify business needs and ensure the continuity of the business plan. The fourth element is the generation of reports in interactive formats with performance metrics that reflect in control panels responsibilities and actions of improvement opportunity and do not affect the commitments of satisfaction levels of customer services.

DEVELOPMENT OF STRATEGIC PROJECTS AS AN INNOVATION TOOL IN THE WAREHOUSES AND LOGISTICS BUSINESS

The challenges of implementing actions of continuous improvement, change of paradigms, in the face of stereotypes in the types of businesses, especially those businesses that traditionally start as family businesses and over time are consolidated, usually go through a chronology of operational processes in the minds of the founders of the business, and little by little transmit the procedures of the different operations to the relatives that make up the company, As the years of operation go by, learning curves, operating styles, and an image of business philosophy are generated. Properly a business model is generated to later form a documented system with its performance indicators and the elements of systematic articulation that implies the link with all sectors of society, as is the case of the Government sector for the management

of authorization procedures and management with government agencies; in the case of the Academic sector for the processes of human resources that implies the management of the human talent of profiles of necessary positions of positions to be recruited and hired, in the case of the Sector Companies implies the analysis of the market and the companies that represent to be the competition of the business, the sector of Associations - Business Chambers represents the opportunity to have a common agenda for legal compliance and common interests, in the case of the sector of specialized consultants of the sector of Warehouses and Logistics Services, it represents the opportunity to have advisors to develop diagnostic processes, identification of gaps vs. objectives and business goals to develop continuous improvement projects.

Table 2 describes the strategic projects in the supply chain associated in the value chain of Warehouses of goods and Logistics Services; complementing the services of Customs Agency and Cross-Border Transport. The projects proposed from the Corporate Governance model, considers the development of Business Intelligence Model in the Supply Chain, Logistics Services for cross-border administration. In the International Logistics Services business, a Customer Services Model and the Administration of human talent management are proposed through certification of competencies in the supply chain.

Table 2. Corporate governance model for customs agency (Villa and Martinez, 2021).

Value Chain	Strategic projects in the supply chain business
Merchandise Warehouses	Supply chain business intelligence model Administration of cross-border logistics services
International Logistics	Customer service model in logistics services Certification of human talent management competencies in supply chain services

CONCLUSION

The challenge of proposing new alternatives of guides and good practices in operational and administrative management in business from the systematic and strategic approach leads to the creation of management systems models (Larenas, 2017), contributing to the establishment of management indicators (Bernard, 2018). The Mexican Standards (NMX) have become strategies of innovation and competitiveness in the different strategic sectors of Mexico, so the NNX-026-R-SCFI-2016 is a benchmark of good practices in the Customs Agencies (Larena, 2017), contributing to operational strengthening (Nava, 2019).

Learning curves contribute to the development of systemic models that integrate specialized talent management systems (Munger, 2022). Under the premise of “Knowledge generates knowledge” has developed the efforts of innovative proposals for postgraduate thesis projects of master’s degree in administration to contribute to competitiveness (Hernandez, 2012), likewise contributes to the models of specialized talent management and intellectual

requirements in integral competences (Perilus, 2021) not only knowledge competences, if not competencies of skills and abilities necessary in competencies of customer service, government relations, public relations, commercial, and under the focus of the proposal of this article, competencies for empowerment in design and administration of Business Intelligence Models (Madrigal, 2017) to successfully achieve the operations and administration of a business and its eventual Spin-Off. The business link with the academic sector is essential to update the professional profiles of the graduate, the relevance of academic programs and properly the suitable profiles in the job descriptions for the processes of specialized talent, as well as updating the consulting mechanisms in the strengthening of corporate management (Garcia & Martinez, 2021).

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Sincerely

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