



Supply Chain Management

Postgraduate Dissertation

Inventory Management in Heavy Industry: The Case of Greece

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Inventory Management in Heavy Industry: The Case of Greece

Abstract

Inventory management is a critical aspect of operations in the heavy industry sector, essential for efficiency and cost-effectiveness. This dissertation, focused on the Greek heavy industry sector, aims to deeply analyze current inventory management practices, identify challenges, and provide strategies for enhancement and cost reduction. The research approach is quantitative, with data gathered from employees in various heavy industry companies in Greece.

The dissertation comprises a thorough literature review, examining the importance of inventory management in the heavy industry sector, the unique challenges and requirements associated with inventory control within heavy industries, and the state of inventory management in Greece's heavy industry. It also examines the global landscape, analyzing successful inventory management strategies implemented in heavy industries worldwide, and explores the potential implementation of digital solutions in inventory management in the context of the Greek heavy industry.

In terms of methodology, the study employs stratified random sampling to select participants from various heavy industry companies in Greece, ensuring representation across different heavy industry segments. A structured questionnaire, encompassing both closed-ended and Likert scale questions, is used to collect data on current inventory management practices, challenges faced, and opinions on potential improvements. Data analysis involves descriptive statistics to profile respondents, and key findings are analyzed and summarized. Ultimately, the study aims to provide strategic recommendations for optimizing inventory processes in Greece's heavy industry sector, based on a comprehensive understanding of the current state and global best practices.

Keywords:

Inventory management, heavy industry, digital solutions, strategic recommendations, cost reduction

Περίληψη

Η διαχείριση αποθεμάτων αποτελεί κρίσιμο παράγοντα για την αποτελεσματικότητα και την αποδοτικότητα κόστους στις λειτουργίες του τομέα βαριάς βιομηχανίας. Αυτή η διατριβή, επικεντρώνεται στην ελληνική βαριά βιομηχανία και έχει ως στόχο να αναλύσει σε βάθος τις τρέχουσες πρακτικές διαχείρισης αποθεμάτων, να εντοπίσει τις προκλήσεις και να παράσχει στρατηγικές για βελτίωση και μείωση κόστους. Η ερευνητική προσέγγιση είναι ποσοτική, με δεδομένα που συλλέγονται από εργαζομένους σε διάφορες βαριές βιομηχανικές εταιρείες στην Ελλάδα.

Η διατριβή περιλαμβάνει μια διεξοδική ανασκόπηση της βιβλιογραφίας, εξετάζοντας τη σημασία της διαχείρισης αποθεμάτων στη βαριά βιομηχανία, τις μοναδικές προκλήσεις και απαιτήσεις που σχετίζονται με τον έλεγχο αποθεμάτων εντός της βαριάς βιομηχανίας και την κατάσταση της διαχείρισης αποθεμάτων στον ελληνικό βιομηχανικό τομέα. Εξετάζει επίσης το παγκόσμιο τοπίο, αναλύοντας επιτυχημένες στρατηγικές διαχείρισης αποθεμάτων που εφαρμόζονται σε βαριές βιομηχανίες παγκοσμίως και διερευνά την ενδεχόμενη εφαρμογή ψηφιακών λύσεων στη διαχείριση αποθεμάτων στο πλαίσιο της ελληνικής βαριάς βιομηχανίας.

Όσον αφορά τη μεθοδολογία, η μελέτη χρησιμοποιεί στρωματοποιημένη τυχαία δειγματοληψία για την επιλογή συμμετεχόντων από διάφορες βαριές βιομηχανικές εταιρείες στην Ελλάδα, εξασφαλίζοντας εκπροσώπηση από διαφορετικά τμήματα βαριάς βιομηχανίας. Ένα δομημένο ερωτηματολόγιο, που περιλαμβάνει ερωτήσεις τόσο κλειστού τύπου, όσο και κλίμακας Likert, χρησιμοποιείται για τη συλλογή δεδομένων σχετικά με τις τρέχουσες πρακτικές διαχείρισης αποθεμάτων, τις προκλήσεις που αντιμετωπίζονται και τις απόψεις για πιθανές βελτιώσεις. Η ανάλυση δεδομένων περιλαμβάνει περιγραφική στατιστική για την ανάλυση των συμμετεχόντων και τα βασικά ευρήματα αναλύονται και συνοψίζονται. Συνολικά, η μελέτη στοχεύει στην παροχή στρατηγικών προτάσεων για τη βελτιστοποίηση των διαδικασιών διαχείρισης αποθεμάτων στον ελληνικό βιομηχανικό κλάδο, βασισμένων σε μια ολοκληρωμένη κατανόηση της τρέχουσας κατάστασης και των βέλτιστων πρακτικών που χρησιμοποιούνται παγκοσμίως.

Λέξεις-κλειδιά: Διαχείριση αποθεμάτων, βαριά βιομηχανία, ψηφιακές λύσεις, στρατηγικές προτάσεις, μείωση κόστους

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