

MASTER OF SCIENCE IN MANAGEMENT

MICROELECTRONIC OBSOLESCENCE MANAGEMENT

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The ability of the Department of Defense to execute its mission is directly dependent on the capability to produce and maintain weapon systems. Rapid advances in technology have been instrumental to the development of highly efficient and capable systems. However, they have also increased the rate at which electronic part manufacturers change product lines, resulting in the Department of Defense's increasing dependence on obsolete electronic components. The objective of this thesis is to provide a viable tool for managers to eliminate, mitigate, and proactively manage the growing obsolescence problem. The thesis will define obsolescence, provide a comprehensive discussion of ongoing obsolescence initiatives, and provide a systematic approach to manage microelectronic obsolescence. The thesis will also explore and provide recommendations to address the increasingly common scenario where an ongoing weapon system production program receives little or no notification of a part going out of production.

KEYWORDS: Obsolescence, Obsolete Microelectronics, Microelectronic Obsolescence

MARITIME SHIPPING CONTAINER SECURITY AND THE DEFENSE TRANSPORTATION SYSTEM: PROBLEMS AND POLICY IN THE 21ST CENTURY

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The Defense Transportation System (DTS), led by the Military Traffic Management Command (MTMC), depends on the commercial maritime industry to provide movement of supplies and equipment around the world. The maritime shipping container is a critical asset in providing for this logistical support to the war fighter abroad. These 20- or 40-foot containers have become the backbone of the maritime industry, and will continue to proliferate as global commerce continues to expand. While the growth in the use of maritime shipping containers in the 21st century has accelerated the nation's economic trade substantially, it may also have become a significant problem. Containers are an indispensable but vulnerable link in the chain of global trade: approximately 90 percent of the world's cargo moves by container. Because of DoD's dependency on the maritime industry and these containers, it will and must continue to ride the wave of commercial practices, specifically in pursuit of better security throughout the maritime industry. In the wake of September 11, 2001, and with the new threats of WMD, the maritime shipping container may become a weapons delivery system. This thesis documented the need for security improvements for the maritime shipping container in protecting global commerce and DoD cargo shipments. Comprehensive reviews of government reports, books, articles, and Internet based materials, as well as interviews with MTMC personnel, have indicated that DoD is taking a series of measures to meet these challenges. DoD's Defense Transportation System and the commercial maritime industry will be challenged and tested by new policy requirements. MTMC has already adopted new business processes, cargo manifest requirements, and technological innovations that assure customers in-transit visibility and total asset visibility (ITV/TAV), including the Intelligent Road-Rail Information Server (IRRIS) system.

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KEYWORDS: Maritime Shipping Containers, Containers, Maritime Security, U.S. Maritime Policy, Public Policy, National Security, Homeland Security Department, Operation Safe Commerce

**THE DESIGNING AND DEVELOPMENT OF A “BALANCED SCORECARD” FOR THE
INTERNATIONAL PROCUREMENT DEPARTMENT OF THE PROCUREMENT
DIRECTORATE IN THE HELLENIC NAVY SUPPLY CENTER**

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The Balanced Scorecard (BSC) is a performance management model that has been successfully implemented both in the private and public sectors. It is a framework for translating an organization's mission into an integrated set of performance indicators. Kaplan and Norton (1996) developed a BSC model which has four generic perspectives: Financial, Customer, Internal Processes, and Learning and Growth. The objective of this research is to design a BSC framework for the International Procurement Department (IPD) in the Hellenic Navy Supply Center. Initially, the study analyzed the IPD's environment, mission, strategy, desired outcomes, critical processes, and key success factors. After clarifying strategy, desired outcomes, and critical performance variables, the study focused on identifying causal relationships among performance drivers, multiple objectives and desired outcomes. Finally, performance measures were developed for those performance indicators that need to be monitored and incorporated into the proposed BSC framework. The ultimate purpose of this study is to clarify and gain consensus about the IPD strategy and performance drivers and design a BSC model that aligns strategy and objectives and contributes to the IPD overall success, thus providing IPD with an innovative management control system.

KEYWORDS: Performance Measurement, Management System, Balanced Scorecard, Hellenic Navy Supply Center, HNSC, International Procurement Department, IPD

**AN EFFECTIVENESS ANALYSIS OF THE U.S. FEDERAL GOVERNMENT EXECUTIVE
BRANCH ETHICS POLICY AND PROGRAM**

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A Principle-Agent relationship exists between employees of the U.S. Federal Government Executive Branch and the American public, where the employees represent the agent and the American public is the principle. As public servants, whether elected or non-elected, Executive Branch employees are expected to make decisions and spend tax-payer dollars in ways that promote the overall interests of the American public. Public servants regularly encounter situations that would encourage them to place their personal benefit above public benefit. The Executive Branch seeks to minimize these potential conflicts and align the agent's interests with those of the American public through a very detailed and comprehensive ethics program. This thesis sought to assess the effectiveness of the program. Historical development of the program, as well as its current components, was explained. A random sample of Executive Branch employees were surveyed to assess their understanding of and compliance with the ethics program. Based on the responses provided in the survey, the researcher concluded that the Executive Branch ethics program is fairly successful in aligning its employees' interests with those of the American public. However, there are areas within the program that could be improved upon, and recommendations specific to these areas are provided at the conclusion of the thesis.

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KEYWORDS: Federal Ethics Program, Federal Ethics Policy, Office of Government Ethics, Historical Public Administration Ethics Policy

**JUNIOR RESERVE OFFICERS' TRAINING CORPS: A COMPARISON WITH OTHER
SUCCESSFUL YOUTH DEVELOPMENT PROGRAMS AND AN ANALYSIS OF MILITARY
RECRUITS WHO PARTICIPATE IN JROTC**

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This study seeks to identify successful youth development programs and the reasons for their success: to describe the Junior Reserve Officers' Training Corps (JROTC) and its achievements; to compare JROTC with successful youth development programs; to explore the impact of JROTC on military recruiting. The descriptive analysis and comparison of programs are based on an extensive review of previous research. The effects of JROTC on recruiting were examined through longitudinal data files obtained from the Defense Manpower Data Center, covering military enlistments from 1990 through 2001. The results show that JROTC is similar to a number of other programs in successfully promoting youth development. Nevertheless, no single program can match JROTC in its size, level of funding, and scope of accomplishments. Further, information on enlistments suggests that JROTC assists military recruiting in several ways: 85,000 graduates of JROTC joined the military in the period studied; the first-term attrition rates of JROTC graduates were consistently lower than those of all recruits; and the positive effects of JROTC were most noticeable among certain demographic groups. Further research is recommended to study added dimensions of youth development, various other effects of JROTC on recruiting, and the economic implications of the program.

KEYWORDS: Career Academies, JROTC, Leadership Development, Military Cadets, Military Training, Youth Development, Youth Development Programs

