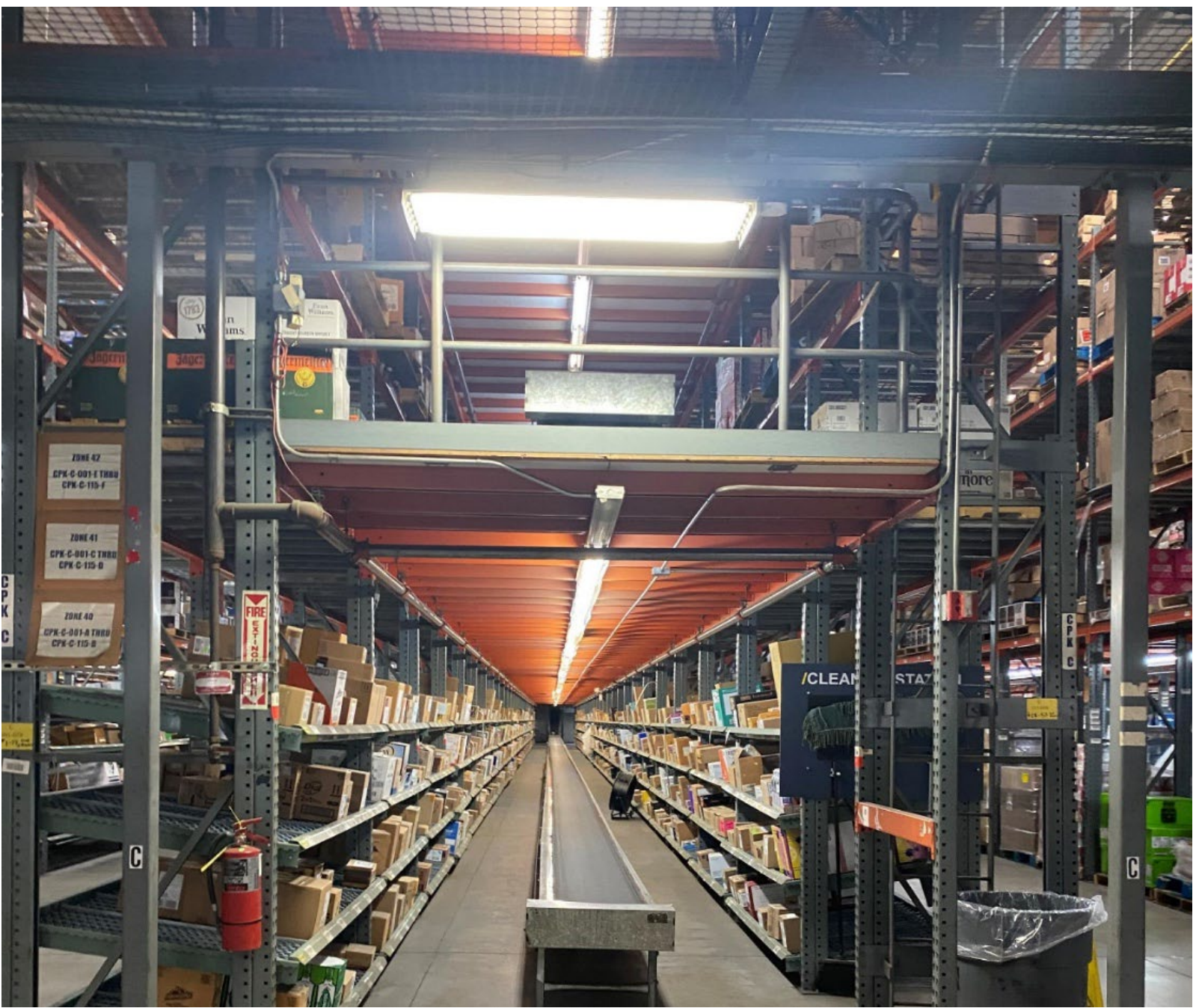


Abstract

The study explores the current situation of warehouse operations, distribution center, and distribution processes at NEXCOM and why the retailer is motivated to shift and improve processes with advanced technologies. The research examines specifics to the unique challenges and considerations when integrating automation and robotics faced by a government-owned entity, focusing on the decision-making process within the military retail context. A qualitative analysis and a case study of NEXCOM’s West Coast Distribution Center in Chino, CA will provide insights into these complexities. Additionally, the research will explore other alternatives to improve processes without the use of automation and robotics to aid in the decision-making process and evaluation of integrating and implementing automation and robotics.



Area Observed for Possible Robotics Integration at West Coast Distribution Center

Methods

- Case study with site-visit to West Coast Distribution Center in Chino, CA.
- Interviews were conducted with NEXCOM management.
- Literature review was conducted from existing qualitative body of knowledge.
- Validated results through respondent engagement based on interviews, site-visit, observation, and literature.

Results & Their Impact

- NEXCOM assessed to be successful at addressing the complexities for implementing automation and robotics.
- The research sought to contribute to the body of knowledge for concerns and challenges compared to counterparts in the retail private sector.
- Identified military retail has long-term financial objectives compared to short-term of the private sector.
- NEXCOM unique motivation to implement new technologies based on efficiency and space utilization.
- Private sector practices NEXCOM can consider:
 1. Good-to-person e-commerce model
 2. Streamlined cross-docking concepts.
- Concerns and challenges identified can be gleaned by other DoD organizations.