STONERIDGE INC.

Optimizing Logistics for Total Cost Reduction

STUDENT TEAM:

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Stoneridge Inc. (SRI) is a global auto parts manufacturer that produces control devices and electronic components for commercial, passenger, and agricultural vehicles. Projected to reach nearly \$900 million in revenue for 2018, SRI's rapid growth has led to convoluted supply chains. Recognizing the potential for waste within their logistics structure, SRI sought to optimize three problem areas within the firm by involving the Tauber Institute in its continuous improvement effort.

First, SRI sought to optimize its India-to-Lexington, OH supply chain segment, which was projected to have ballooning freight costs from expedited air shipments. The Tauber team leveraged learned academic models to redesign this route and developed an implementation plan to move freight from air to sea. The team's improvements are estimated to drive \$400K in annual savings.

Second, the team analyzed warehousing operations at the Lexington facility. Above capacity, the Lexington warehouse struggled with movement waste and safety concerns. Negotiating with outside suppliers, the team modeled the cost benefits of relocating warehouse operations and opportunity for safety improvements. Understanding the potential impacts on employee livelihoods, the team determined that labor reallocation would have a more positive impact on the bottom line than labor reduction. Excluding the potential additional revenue from newly free space—estimated at up to \$5 million—the team's model identified \$300K in annual savings.

Third, the Tauber team travelled throughout Europe, Asia, and the United States seeking consolidation opportunities for SRI's global freight. The team determined the greatest opportunity for savings is along Asia-U.S. routes. Analyzing these routes, the team negotiated consolidation services with third-party freight forwarders and identified a consolidation model for shipments from Taiwan to the U.S. Implementation should drive roughly \$100K in annual savings.

SRI's CEO pushed the team to both drive implementation of the \$2.4 million, 3-year savings and identify cultural improvements to better SRI. The team obtained financial approvals, established implementation frameworks, and outlined project team structures to begin implementation and facilitate a smooth handover to permanent employees. Drawing from roadblocks in their project, the team developed a series of out-of-scope recommendations to improve work agility, collaboration, and internal entrepreneurship, fostering positive, non-monetary change.