

Ohio State Supply Chain Logistics Research

These five Ohio State professors from Fisher College will discuss their supply chain logistics related research. An abstract of each professor's state-of-the-art research is below. Bios can be viewed by clicking on their names.

Supply Chain Relationships: [Michael Knemeyer](#)

My research is especially focused on the factors that impact the effectiveness of companies working in coordination across the supply chain to fulfill consumer demand. For instance, I am interested in finding ways that companies can more effectively structure their supply chain relationships in order to develop and commercialize new products and services. Similarly, I am interested in how supply chain relationships evolve over time and how companies can effectively deal with potential changes that might occur in these relationships.

Supply Chain Relationship Pegging System: [WC Benton](#)

Maintaining a competitive advantage is a major survival factor. The advent of supply chain management has led to a more complicated operating environment. Not only does the individual firm have to maintain their competitive edge, the entire supply chain must be competitive. *Competitive* and *industrial ranking* can be used a tool for achieving continuous improvement in the industrial supply chain. This research presents the various phases of a competitive ranking system in order to determine how supplying firms evaluate manufacturers as customers.

Mathematical Modeling and Supply Chain Management: [Keely Croxton](#)

My research focuses on two primary topics: mathematical modeling in logistics and supply chain management. Using mathematical models to address logistics problems is important because it provides analytical tools for optimizing decision-making. Supply chain management is also a rich research area because it is a relatively young concept, and is still being developed by both researchers and practitioners. Both streams aim to address managerially significant issues through leading-edge thought and rigorous research methods.

“Normal” Supply Chain Disruptions: [Peter Ward](#)

Supply chain disruptions are very costly and far too common. Examining what we have learned from the study of truly disastrous disruptions provides some insights into the underlying causes of the more mundane, everyday supply chain disruptions that plague most businesses. This examination also suggests some countermeasures.

Managing Supply Chain Risk, Inventory and Out-of-Stocks: [Walter Zinn](#)

My research interests revolve around the general issue of managing risk in supply chains. Most publications address the issue of setting safety stocks to meet a pre-determined customer service objective. A recent paper looks into the management of catastrophic risk. I am also looking at how service failure (i.e. out-of-stocks) impacts inventory management. Two papers discuss consumer reaction to stockouts while a third looks into the relative effects of stockout avoidance and remedies.