The supply chain world in general is replete with various process models, such as those developed by the Supply Chain Council (SCOR Model), CSCMP, various consultants, and many others.

But when it comes to truly global supply chain processes, the stock of existing process models quickly becomes a lot thinner. That in part led a couple of well-respected Stanford University professors (Warren Hausman and Hau Lee) to take a look at an end-to-end process model for global trade management, as well as the potential benefits from automating those process.

“The two or three process models that were available did not really have enough detail to enable them to be used for process improvements,” Dr. Hausman said on a recent videocast from Supply Chain Digest and The Supply Chain Television Channel,” that provided a summary of the research. (To view an on-demand version of that broadcast, go here: Global Trade Management Videocast with Stanford.)

To build the model, Hausman and Lee had to put some scope around where to begin and end. They decided to define the scope as follows:

1. **Pre-Export**: steps that initiate the global trade process, including import screening, negotiation of price, contract and payment terms, creation of purchase/sales orders, and export screening.

2. **Transport Arrangement & Export Declaration**: steps preparing for exportation, including arrangement of transportation carriers, obtaining approval from inspection agencies, export declaration, and preparation and transmission of security filings to US Customs and Border Protection (CBP).

3. **Transport & Import Declaration**: steps include international ocean or air transport of the goods, generation and submission of import documents, and import customs clearance.

4. **Post-Import Customs Clearance & Payment**: the final steps of the global trade process, including inland delivery from the border to the importer’s site, receipt of goods, review of landed cost, settling payment with the forwarder, broker and exporter, and filing for foreign exchange verification and tax refund if applicable.

They also picked a specific sector to analyze, which involved imported goods from Asia to the US in the apparel sector. However, Hausman believes in general the process model that was developed would be similar across most industries, and thus can provide a useful starting point for many companies.

All told, Hausman and Lee identified 106 discrete steps in a global trade management process. An example of the first portion of the process model is shown on the next page. The entire 106-step model available in the report, which is available for download from SCDigest: How Enterprises and Trading Partners Gain from Global Trade Management: A New Process Model for the China-to-US Trade Lane.
Opportunity for Automation?

The conundrum for many companies is that given this level of process complexity, the level of process automation for global trade management (import and export) has remained overall at relatively low levels versus other areas of the supply chain.

The Stanford research found ample opportunities for ROI for investment and improvement of global trade processes.

Hausman and Lee estimate, for example, that importers actively using Asian sourcing had an opportunity through automation to reduce their supply chain costs by a range of 0.6-2.2% of annual sales – a substantial level versus average corporate net profit margins. At an average profit margin of about 6%, such a decrease in costs would boost the corporate bottom line by 10-37% - enough to get any CEO or CFO excited.

Details of how those savings esti-
mated were derived are contained in the full study.

“The study has definitely shown there is a strong financial benefit for moving to IT-enabled global trade management,” Hausman says. “It’s there, there are enough dollars, and it is well documented. It’s not soft dollars, it’s hard dollars.”

Gene Tyndall of Tompkins Associates, another participant in the video cast panel, agreed.

“The numbers are there,” he said. “Those companies that get on this are going to win, that’s pretty clear. Those that don’t are going to continue to incur these large costs.”