IMPROVING THE CONSUMER GOODS IMPORTING PROCESS

The use of Global Trade Item Numbers (GTINs) and Global Product Classification (GPC) codes could dramatically enhance efficiency for government agencies, where in the case of toy and game products, product holds and exams could be reduced on average by 80%. Low-risk, highly repetitive products can be identified and admitted in advance of arrival and an ROI of $8 to every $1 invested can be realized. Similar benefits are likely for other consumer packaged imports.

BACKGROUND

GS1 supports the idea that e-commerce information can improve product visibility across borders, improve consumer security, and deliver significant cost savings to industry, government, national regulators, and customers alike. To examine this idea, the U.S. International Trade Data System (ITDS) Product Information Committee (PIC)\(^1\) conducted a series of pilot studies from July 2010 to September 2011,\(^2\) examining diverse product sets including toys and games, cut flowers, and meat and poultry.

The toy and game pilot examined the use of GTINs and GPCs in consumer goods importing. The pilot product set consisted of leisure, sports, and educational products intended for children. In 2010, over 850,000 entry lines of toys and games with a declared entry value of $14.5 billion were imported into the U.S. The Consumer Product Safety Commission (CPSC) is responsible for examining toy imports, and protecting the public against unreasonable risks of injury from consumer products.

The inspection process at international borders is a time consuming, costly, and often manual process. Today, the CPSC assesses information on incoming products via written document reviews. Relying on the Harmonized Tariff Schedule (HTS code) and the free-text commercial name for the product, the investigator decides which products potentially present the highest risk to consumers, and targets certain products for examination. Consumer product admission is on a “green-light, red-light basis,” meaning that, by default, toy shipments are admitted unless CPSC targets a specific product for examination. Targeted products are held, samples are collected for lab testing, and a final determination is then made regarding clearance.

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1 PIC, or Product Information Committee, was created by the International Trade Data System to explore ways to utilize additional information to improve the efficiency and effectiveness of product admissions at international borders.

PILOT STUDY

The toy and game pilot examined two central questions: To what extent can GTINs improve inspection efficiency? Can GPC codes improve product targeting?

Hasbro provided product information for 30 containers shipped into the U.S. Containers were selected to provide a variety of typical products and multiple products per container. To assess how commonly products repeat in entries over time, Hasbro was able to measure the number of times that products present in those 30 containers reoccurred over the next 12 months. Although product repetition was not measured across multiple years, it’s fair to assume that each additional year would generate additional value as seasonal product shipments repeated.

CPSC investigators at different locations were given a three-part worksheet to evaluate the product classification codes and asked to record, given the information on the sheet, whether in their judgment the product MUST be examined, PREFERRED to be examined, or DID NOT NEED examination. With the first worksheet, only the information provided by the HTS codes and product name were listed; the second worksheet included the GPC and GTIN® code data in addition to the HTS code; the third worksheet provided all the information on the second sheet, as well as additional GPC brick attributes.3

PILOT FINDINGS

Greatly enhanced visibility and efficiencies were realized, as well as a significant return on investment.

The pilot confirmed that GPC codes significantly improved product visibility. When the GPC code was used, the number of Examine as High-Risk designations dropped from 178 to 67, a 62% reduction in High-Risk designations. When the additional GPC brick attributes were considered, the number of High-Risk designations dropped by another 23%.4

The pilot also found that toy products commonly repeat in entries over time. Using the GTIN, the pilot found that 68% of the different invoice-line products repeated at least once, and products that did repeat, did so 4.23 times on average over a 12-month period. Based on this, CPSC can expect to see product repetition in 75% of the entry lines. As a knowledge base of previous admissions decisions is established, three-quarters of all toy entries will quickly have a known admissions history, and investigators can focus on the remaining one-quarter of toy entries with no history or no GTIN code.

The pilot also demonstrated much improved inspection targeting efficiencies. Product examinations could be reduced by 80% using GTINs and GPC codes in the first year of adoption, and to over 90% in following years. If the top 10 importers each with an average 49,900 toy and game entry lines utilized GTINs and GPC codes, and government reused the previous admission action as the default action, the trade savings realized by these top 10 importers over a period of five years would be approximately $15,130,000, or about $303,000 annually per importer. This should prove to be a conservative estimate.

According to Douglas Bailey, Chairman of the U.S. International Trade Data System Product Information Committee, “Using e-commerce data, repeat products known to be low-risk can be released in advance of arrival, easing bottlenecks, improving the reliability of product flow, and creating a more efficient and safer global supply chain,” while the government focuses on the remaining 10-20% of products for examination. The benefit is also great in terms of brand name protection. By removing non-compliant products more effectively prior to entry, recalls can be avoided.

Most importantly, the benefit for consumers is significant. The global community will see reductions in injuries and deaths as a result of a dramatic improvement in product targeting efficiency by CPSC and their counterparts in other nations around the world.

Product examinations could be reduced by 80% using GTINs and GPC codes in the first year alone.

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3 The foundation “brick” of a GPC defines product categories; additional brick attributes provide even more insight, for example bricks could define the consumer life stage as ‘younger than three years’. See http://www.gs1.org/gdsn/gpc for detailed insight.

4 The benefit projections for the toy pilot business cases are calculated on the use of the GPC code alone without the GPC Brick attributes.
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CUMULATIVE COST AND BENEFITS FOR TOY AND GAMES PRODUCTS FOR PARTICIPATING GOVERNMENT AGENCIES (PGA) AND THE TOP TEN TOY IMPORTERS OVER FIVE YEARS

COST BENEFIT ANALYSIS FOR TOY AND GAME PILOT

Return on Investment of 850%

Net Value of $15.7 Million for the Top 50 Importers
BEYOND THE PILOT

The return on investment, as demonstrated by the pilot, has the potential to be dramatic.

The infrastructure to move more product freely across international borders, with greater visibility and efficiency, is maturing, providing a valuable opportunity for industry to adopt GS1 Standards. In the fall of 2012, U.S. Customs will complete the addition of a new data record set, allowing importers to electronically pass product e-commerce data for each entry line to government agencies, providing a clear place for the use of global classification codes and GTINs. Other governments are adding this same capability to their infrastructures.

To make this happen, industry, government, and world customs leaders can:


• Share these concepts with your company’s e-business manager, Customs manager, product safety/compliance manager—and with Customs agencies at the borders where you do business.

• Discover the potential value for your company. Contact Douglas Bailey, Chairman of the U.S. ITDS PIC at douglas.bailey@ams.usda.gov, for additional insight into the pilot studies, or to participate in an upcoming pilot study; or Al Garton at GS1 US™ (agarton@gs1us.org), to find out more about how GS1 Standards can improve supply chain efficiency for industry and government.

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Douglas Bailey
Chairman
US International Trade Data System
Product Information Committee