

## Global Trade Metrics Study Reveals Opportunity for Dramatic Gains

By Matt Gersper & Marisa Brown

The quiet but rapid evolution from domestic sourcing of raw materials to increasingly complex, global supply chains has caught many executives by surprise. Cross-border transactions have swelled from \$3 trillion in 1990 to \$10 trillion in 2007, and a recent McKinsey report predicts growth to more than \$70 trillion by 2025.<sup>1</sup> Given this tremendous growth, global trade remains one of the last corporate frontiers in which upgrading and optimizing business processes can drive significant financial and operational gains. Yet the lack of standardized measures of global trade performance has left many executives wondering how to capture these gains.

In the face of increasing government regulations, and with logistics expenditures rising from an already staggering 9.9 percent of U.S. GDP, only 7 percent of executives are fully satisfied with their global trade programs.<sup>2</sup> The other 93 percent may be shocked to learn that current measurement tools reveal error rates in global trade processes exceeding 20 percent. A more comprehensive set of measurement tools, in the estimation of the data services firm Global Data Mining (GDM) and nonprofit research organization APQC, could reveal that more than 90 percent of all international shipments have mismanaged handoffs that slow the transaction and add hidden costs to the importing company.

### The Impact of Complexity

Imagine that your organization has the ability to precisely measure performance in eight major handoffs within your international supply chain. Once a purchase order is created, your systems can track the frequency with which:

1. the supplier filled your order on time and complete,
2. the foreign in-land transportation delivered the goods to the foreign port on time,
3. the goods cleared the foreign customs process with no delays,
4. the international transportation delivered the goods to the domestic port on time,
5. the goods cleared domestic customs with no delays,
6. the domestic in-land transportation delivered the goods to your warehouse on time,
7. the order was received complete and damage-free, and
8. all customs declarations were complete and accurate (no post-entry consequences).

Further, imagine that your company-wide performance across all eight of these major supply chain activities averaged 80 percent—in other words, 80 percent of the time, the activity was completed on time and according to expectations set by your company. Though 80 percent may seem acceptable, the result of this level of performance across 10,000 transactions would be only 1,678 transactions completed according to your expectations. The remaining 8,322 would incur one or more problems, slowing the transaction and shrinking your bottom line with unintended costs.

How does 80 percent on time and complete become just 16.78 percent? The answer lies in the Supply Chain Performance Index™. The cumulative effect of error rates are illustrated by the following formula:

$$80\% * 80\% * 80\% * 80\% * 80\% * 80\% * 80\% * 80\% = 16.78\%$$

Unfortunately, real-world error rates can be much worse than 20 percent: A June 2007 article by *Global Economy* magazine reports that “in the first quarter of 2007, only 47% of container vessels globally arrived at the ports on time, the lowest level on record.”

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<sup>1</sup> [www.trademerit.com](http://www.trademerit.com) (Retrieved July 2007)

<sup>2</sup> Byrne, Patrick M. “Cross-border trade: Redefining high performance.” *Logistics Management*. V44n3 pp:25-27, March 2005,

When we insert this data into the index we just discussed, the level of performance across 10,000 transactions drops to just 9.65 percent on time and complete. More than 90 percent or 9,035 shipments would be hampered by a problem or problems adding time and costs to the shipment:

$$80\% * 80\% * 80\% * 47\% * 80\% * 80\% * 80\% * 80\% = 9.65\%$$

What could possibly cause such poor performance? The problem lies in the autonomous nature of the process: Each stakeholder is acting independently, with incomplete information. Their decisions are motivated by self-interest because they cannot see (and therefore cannot make) their decisions in the context of the entire transaction. Adding to this primary problem are other communication failures: lack of importer-set standards and expectations, cultural differences, industry jargon, etc. Inefficient supply chains cost corporations millions of dollars in hidden costs, severely impacting company profits.

### **The Power of Measurement**

Financial opportunity abounds for international supply chains that effectively manage the proliferation of Free Trade Agreements, improve sourcing options, and implement new supply chain finance programs for international suppliers. In *CFO's Agenda for Global Trade Benchmark Report*, Beth Enslow formerly of AberdeenGroup concludes, "A \$1 billion company can free \$10 million to \$40 million in cash by better controlling its basic global trade processes." GDM recently collaborated with Enslow, a leading industry analyst, on an extensive data mining project for the International Compliance Professionals Association (ICPA). The project analyzed the trade data of five Fortune 500 companies and identified more than \$500 million in potential savings. How large is the opportunity for your company?

Like other professionals charged with global supply chain oversight, you may wonder:

- How effective are my global trade operations?
- Is there a way to effectively measure its performance?
- How much does it contribute to or detract from the company's bottom line?
- What are my competitors doing?
- Are others using global trade to a competitive advantage?

Leading executives are beginning to use data mining and metrics to answer these questions and identify significant financial and operational opportunities within their global supply chains. However, only metrics standardized across industries can provide truly relevant comparisons.

To help organizations understand and profit from this emerging benchmarking opportunity, APQC and GDM have launched the study "Global Trade Measurement: Driving Supply Chain Optimization." Using APQC's award-winning benchmarking methodology, this study will give executives the measures and metrics needed to assess current performance and implement strategic changes to tap the vast opportunities that lie in global trade process optimization. Beth Peterson, president of global trade consulting firm BPE, will serve as a special adviser.

All organizations that would like to learn how to improve the measurement and management of their global supply chains are invited to participate. Additionally, if your organization has best practices it would like to share, we invite you to nominate your company to be recognized as a best-in-class example. The study is expected to conclude February 2008 and will result in significant metric data as well as several qualitative, in-depth case studies. An overview of the study results will be published in July 2008.

The power and potential of global trade to dramatically improve your financial and operational bottom lines will be harnessed through consistent measurement of standardized metrics. Business information can and should be used to outthink rivals, and there's no better way to outthink them than by using analytics to make decisions.

For more information about “Global Trade Measurement: Driving Supply Chain Optimization,” contact APQC project manager Gerry Swift at [gswift@apqc.org](mailto:gswift@apqc.org) or visit [www.apqc.org/studies/gt](http://www.apqc.org/studies/gt).



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