

DTCC – From Internal Measures to External Partnerships

STRATEGIC OBJECTIVES

The Depository Trust & Clearing Corporation (DTCC) is the largest financial services post-trade infrastructure organization in the world. Through its subsidiaries, it provides clearance, settlement and information services for equities, corporate and municipal bonds, government and mortgage-backed securities, money market instruments and over-the-counter derivatives. In addition, DTCC is a leading processor of mutual funds and insurance transactions, linking funds and carriers with their distribution networks. DTCC has operating facilities in multiple locations in the United States and overseas, offering an array of services to further the development of low-cost, efficient capital to foster global economic growth.

DTCC serves some 11,000 customers that comprise the world's major banks, broker/dealer firms, hedge funds, mutual fund companies, investment managers and insurance companies. DTCC's customers serve private and institutional investors all across the U.S. and 110 other countries and territories. In 2008, DTCC settled more than

\$1.88 quadrillion in securities transactions. On the peak volume day in 2008 one DTCC subsidiary, National Securities Clearing Corporation (NSCC) processed 209.4 million transactions.

Against this backdrop of large-scale transactional volume, our customers are facing increased pressure for financial performance and quantifiable results. Given DTCC's critical role in world financial markets, and the possible impact of defects in high volume transactional processing, it is crucial that we ensure closure of gaps between current operating performance and customer expectations. As an example, in 2008, a challenging year with volatile markets, DTCC successfully resolved \$500 billion in financial exposure and systemic risk following the Lehman Brothers bankruptcy.

BUILDING A CULTURE FOR PROCESS EXCELLENCE

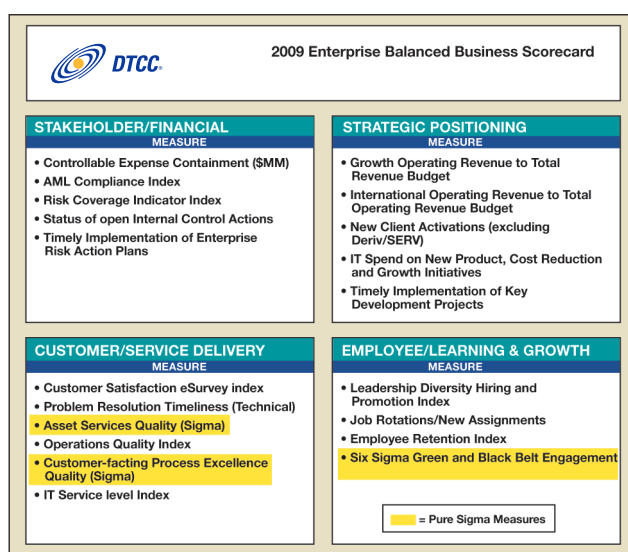
DTCC's use of metrics to drive and measure success has enabled the corporation to maintain a leadership position

in the industry. Our commitment to applying performance management tools, such as the Balanced Business Scorecard where we track corporate goals in four quadrants: Stakeholder Financial, Customer Service Delivery, Strategic Positioning, Employee Learning and Growth;

and customer-facing metrics, has created increased efficiencies, cost reductions and world-class customer satisfaction scores for the organization. In fact, the overall satisfaction score, based on our 2008 annual survey was 91%. Quality practices go to the heart of what customers tell us they want. These practices are also part of the reason why our overall customer satisfaction scores have been among the industry's best for three straight years now.

In addition, our customers rated our commitment to quality at an impressive 90%.

We began in 2006 with the reinvigoration of our Business Reengineering and Quality (BRQ) program focusing attention on an enterprise-wide process excellence strategy, our primary objective was to implement and better equip the company to meet the demands of the increasingly competitive and global financial marketplace. Utilizing a simple plan to engage staff and the management team in



process improvement we led with the Operations Division by initiating a plan to process map all of the critical Operations' functions. This led to sharing certain of its customer-focused benchmarks with specific external customer groups. These metrics were reported out to the customer groups on a quarterly basis. To further our understanding of actual process capability, we then introduced sigma levels for asset servicing, the cornerstone of our business offerings, measuring key customer satisfiers for both accuracy and timeliness.

Asset Services, an end-to-end customer facing process, measures the functioning of its core transactional processes and calculates sigma levels to reflect performance. The life-span of Asset Services begins with eligible securities moving through DTCC's new issuance process in the Underwriting area; it continues with the payment of income, principal and other types of periodic cash and/or stock distributions; and ends with the retirement of securities through redemption and reorganization activities. Data was collected for a number of months to assess performance in various Asset Services processes. Each of the sigma level metrics was designed by the respective Process Owner in collaboration with the Business Reengineering & Quality group. This allowed teams to begin using control charts to understand error levels and variability over time. As data gathering continued, process groups were able to identify the natural levels of variation inherent in each of these customer-facing operations.

This approach to monitoring the process using control charts was another step forward for Operations in further embedding Six Sigma methodology and tools to manage process performance. All Operations directors, managers and supervisors were given e-learning Metrics training and it marked yet another step in adopting a customer-centric move toward managing by facts. All process teams received the same metrics training and additionally been

trained in process control management as well as the Lean methodology.

While the sigma levels metrics were designed with customers in mind, the sigma level approach sets the stage to separate the portion of process capability under DTCC control from that provided by information suppliers, such as Underwriters, and Redemption Agents. By understanding accuracy and timeliness levels relative to the levels expected by customers, opportunities for differentiation can be established. These sigma levels were used to set business improvement goals for Operations in 2007 which included working with our supply chain, network of

agents, underwriters and data providers. This "outside-in" approach to quality lays the groundwork to assess productivity and resource utilization. To ensure that recurring gaps between current operating performance and customer expectations are being addressed in an adequate and timely manner, business reviews were held

to discuss operating performance and pertinent root cause(s) of the gap. Owners and due dates are assigned to the various gap closure activities and progress is reviewed on a monthly basis. The dashboard is the control mechanism that enables DTCC to meet customer expectations.

PROCESS METRICS ACROSS THE ORGANIZATION

Supported by a metrics-driven senior management team, this initial rollout served as our prototype for pursuing process excellence across 34 functional areas across the organization. The question was could we surmount cultural roadblocks and implement similar skills in these other areas? The Lean yellow belt professionals facilitated and challenged their team members to factually demonstrate commitment to continuous improvement. Employees collected Voice of the Customer (VOC) through survey metrics, customer focus groups, mining the problem management tools, relationship managers and advisory groups.

Sigma Level Dashboard for Asset Services			
April 2009 – Blended Internal and External Sigma Levels		I = Internal Sigma, E = External Sigma	
Area	Metric Type	Defect Rate (%)	σ Level
Underwritings	Accuracy (I/E)	.04%	4.86
	Timeliness (I/E)	7.88%	2.91
Dividend Announcements	Accuracy (I/E)	.43%	4.13
	Timeliness (I/E)	.64%	3.99
Cash Processing	Accuracy (I/E)	.85%	3.89
	Timeliness (I)	2.63%	3.44
Redemptions	Accuracy (I/E)	1.13%	3.78
	Timeliness (I/E)	.16%	4.44
Reorganization Announcements	Accuracy (I)	.35%	4.19
	Timeliness (I)	0.00%	6.00
Reorganization Processing	Accuracy (I/E)	.31%	4.24
	Timeliness (I)	0.00%	6.00
Global Corporate Actions (GCA)	Accuracy (I)	.02%	5.05
	Timeliness (I)	.16%	4.45

Education began with mandatory Quality Awareness training, varying levels of process metrics training, townhall advisories, direct reports meetings and poster campaigns.



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scores have been among the industry's best for three straight years now."

Donald Donahue, Chairman & CEO

Employees are taught that our customers are the ultimate judge of quality in our products and services and we therefore, must understand how they define quality. DTCC uses the VOC tools captured above along with best practices, financial reports, regulator(s) information where applicable. We have to date, met and exceeded our target of 75% coverage in functional area for 2009. Ten customer-facing metrics are a part of an Index appearing on our corporate Balanced Business Scorecard while the remaining 14 are housed on an enterprise level dashboard. Our results are shared with our board, all managing directors, process owners and teams. We also maintain separate dashboards for 14 key Asset Services metrics, 40 Operations metrics and Structured Securities metrics, complex financial instruments requiring principal and interest payments, as well as corporate action activities. The latter is a great example of how we continue to use metrics to help re- fine our business, reduce risk and improve accuracy and timeliness across the financial services industry by partnering with our suppliers.

In this case study example DTCC "went public" with internal and external sigma performance measures by publish-

ing performance metrics to leverage DTCC's six sigma experience with customers, agents and their service providers in order to reduce variation in the process and effect continuous improvement. The process was primarily impacted by late rates on payments and amended rates. In January Q1 of 2008 the late rate processing (payable date -1) was 11.08% (2.72 σ) defective and amended rates were .52% (4.06 σ) defective. DTCC partnered with paying agents to measure, identify and eliminate root causes of defects.

MILESTONE IMPROVEMENTS

The first step of "Going Public" with sigma levels, focused on the process of periodic, principal and income payments on structured securities. DTCC worked with six paying agents with the highest volume (97% total volume) to share our six sigma experience and partner with them to continually improve the process. A report card posted to the DTCC website monthly, highlights the performance of

these agents responsible for the processing of Structured Securities in two specific areas of concern: 1) the availability of timely rate information and 2) inaccurate rate information that requires amendments and therefore posts payable adjustments to DTC's participants. Due to this effort, payment rate submissions for structured securities have improved overall for

Process Excellence at DTCC is a structured approach , supported by Lean Sigma principles, to identify core process metrics, with the view to improve them in a sustainable manner.		
Number of Targeted Functional Areas: 34		Cumulative Percent Coverage
2007	Asset Servicing, Securities Processing, Inventory Management	9% (Actual)
2008	Network Engineering, Employment, Customer Help Center, Customer Support Center, Finance, Corporate Services, Credit Risk, Ops Risk, Global Corporate Action, Test Support Group, Distributed Sys Infrastructure	42% (Actual)
2009	Corporate Comm., HRMS, Wealth Mgmt, Relationship Management, FICC Net Settlement, Ed Center, AML, Corp Information Security, Application Dev Governance, Insurance, Deriv/SERV,	70% to 75% (Target)
2010	Strategy, Compliance, Auditing, BCP-CRE, Core Sys Technology, Architecture, Application Dev Business Support, EuroCCP	90% to 100% (Target)

the industry.

We also educated our agents and participants in the six sigma methodology by developing a webcast entitled "Six Sigma Methods of Champions" and invited them to participate in Business Process Management in-house training. The second phase of this initiative was to publish all Asset Services performance metrics. These metrics report accuracy and timeliness trends, on an industry-wide basis for all Asset Services products. A web-page was developed to include a definition of all the metrics, trend charts for each metric, as well as a dashboard and can be found

on our website <http://www.dtcc.com/products/asset/new_report_card.php>. These charts are updated monthly on the web. This initiative improved our relationship with our participants and the agent community which fostered partnership opportunities to improve the overall end-to-end-processes.

By measuring and identifying root causes of defects, expenses were reduced, risk mitigated and together, we improved the overall operating effectiveness for Asset Services over the past year. Overall defects (accuracy and timeliness) were reduced 77% and Cost of Poor

Quality reduced from \$3.72 mm to \$2.38 mm since year-end 2006. In an effort to further improve efficiency and quality, DTCC needed to reduce externally caused defects. A decision was made to go public with both internal and external

metrics in order to seek opportunities to partner with customers, agents and data providers to further improve quality. This initiative supported two corporate goals; the first goal was Stakeholder/Financial – to achieve process improvements by publishing benchmark data on Asset Services sigmas to foster further partnership with financial service providers, and the second goal was Customer/ Service Delivery – to improve payment rate submission performance on structured securities by 20% (from 15% to 12%) by implementing a rate timeliness and accuracy program including a paying agent report card to evaluate agents' performance.

BUILDING ON A STRONG SIX SIGMA FOUNDATION

Our success in becoming a “process excellence” organization is rooted in a strong Six Sigma foundation that is strategically traversing the organization. To date, more than 800 employees have participated in Six Sigma teams since the program was introduced; and 145 Six Sigma projects have been completed, yielding a cumulative benefit in new revenue and savings of more than \$18 million. The Process Excellence dashboard is reflective of the areas outside of the Operations division – demonstrating how widely embedded Six Sigma has become throughout

our organization.

When we launched our Six Sigma Quality program in 2001, our primary objective was to implement an enterprise-wide strategy that would better equip the company to meet the demands of the increasingly competitive and globalizing finan-

cial marketplace. The deployment, from the start, has had top down support through the installment of a Quality council. Managing Directors (MDs) from various divisions of the organization comprise this august body which acts to promote the quality program as a business initiative and a management philosophy.

In 2008, guided by our council, we have involved our business partners and pursued improvements that are integral to keeping our competitive edge sharp. Our employees receive rewards and recognition on an annual basis through Chairman's awards for process performance improvements. We continue to take the Business Reengineering & Quality program to the next level and incorporate tools to help DTCC become a “process excellence” leader in the Financial Services industry. ■

Structured Securities Amended Rates

