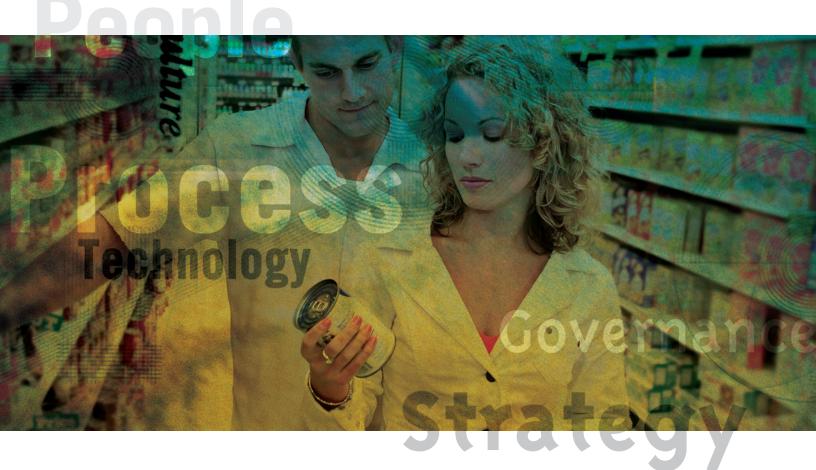
Synchronization—

The Next Generation of Business Partnering

How Leading Companies are Delivering Actual Results















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WEGMANS FOOD MARKETS, INC. is a 71-store supermarket chain with stores in New York, Pennsylvania, New Jersey, Virginia, and Maryland. The family-owned company, founded in 1916, is recognized as an industry leader and innovator. Wegmans has been named one of the '100 Best Companies to Work For' by FORTUNE magazine for nine consecutive years. In 2006, Wegmans ranked #2 on the list.

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1SYNC™ is a newly-formed subsidiary of GS1 US™. The company is the combination of Transora and UCCnet, two Global Data Synchronization Network (GDSN)-certified data pools. 1SYNC offers a range of data synchronization services that eliminate costly data errors, increase supply chain efficiencies, and promote the advancement of next-generation technologies, such as the Electronic Product Code™ (EPC). GS1 US is a not-for-profit member organization of GS1 and is dedicated to the development and implementation of standards-based, global supply chain solutions. 1SYNC is headquartered in Lawrenceville, New Jersey with offices in the U.S., Brazil, France, Mexico, and UK. Visit www.1SYNC.org for more information.

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ACKNOWLEDGEMENTS

Data synchronization has been a hot topic for consumer packaged goods companies for several years. This report is a follow-up to a 2003 study sponsored by the GMA-FMI Trading Partner Alliance. That study projected significant benefits for trading partners through improved data synchronization. In response to this positive news, the Global Data Synchronization Network (GDSN) was launched, and by the end of 2005, hundreds of thousands of items had been registered in the GS1 Global Registry and even more item synchronizations had been completed. Yet, despite this progress, identifying and capturing the true benefits of data synchronization remained elusive for many industry members.

This report — sponsored by the **Food Marketing Institute (FMI)**, the **Grocery Manufacturers Association (GMA)**, **Wegmans Food Markets and 1SYNC**, and conducted by **Accenture**, a global management consulting, technology services and outsourcing company — goes beyond previous studies to deliver field data quantifying and describing actual benefits of Global Data Synchronization (GDS). The findings validate the benefits projected in 2003, and in some cases, surpass the original projections. In addition, the report identifies areas where manufacturers and retailers could capture greater benefits, and details actions companies can take to use GDS as a tool to transform their businesses.

Accenture, the co-sponsors, and participating companies conducted this new study to reignite passion around GDS and build momentum for industry collaboration and investment. Accenture received the support and commitment of senior management at the following companies:

The Coca-Cola Company Nestlé
General Mills PepsiCo, Inc.

The Hershey Company The Procter & Gamble Company

The J.M. Smucker Company Wegmans Food Markets

In March and April of 2006, researchers interviewed more than 120 individuals in sales, customer service, logistics, store operations, merchandising and accounting at these leading companies and:

- Synthesized insights from Wegmans and each manufacturer to identify the challenges and opportunities of achieving accurate data synchronization using global standards;
- Quantified, when possible, the actual results achieved as a percent improvement over current state and documented case studies illustrating the results; and
- Captured qualitative benefits and/or estimated benefits based on achievements completed so far where quantifiable data was not available.

The study participants are confident their benefits justify the investments made, and encourage other companies to accelerate their own implementation of GDS. The sponsors wish to thank both Accenture and the participants for the tremendous amount of time and effort spent. This study would not have been possible without their generous contributions.

EXECUTIVE SUMMARY

Synchronization — The Next Generation of Business Partnering: How Leading Companies Are Delivering Actual Results

This study delivers specific insights about how companies are using Global Data Synchronization (GDS) to improve their business performance. It also identifies for industry participants the areas and activities on which to focus to capture the greatest benefits. Accordingly, this report provides a roadmap for retailers and manufacturers to follow to deepen their own GDS capabilities. Key findings:

- There is tremendous value for all industry players by using accurate data to drive business processes
- Data synchronization is not just about technology it is about people and processes working together to form a highly integrated and collaborative value chain
- Significant value is created and performance enhanced throughout an organization when accurate data is used to interact and operate differently
- Manufacturers and retailers that are leading the way in this new environment are beginning to realize significant benefits

These findings confirm the results of an earlier 2003 study exploring the potential of GDS. That report, *Data Synchronization Proof of Concept: Case Studies from Leading Manufacturers*, projected significant benefits in using global data synchronization. Those projections were correct, and were in fact conservative. The study clearly confirms that companies that take action are making progress and achieving real results with GDS. Further, those manufacturers and retailers that have collaborated and taken an integrated approach to data synchronization have realized even greater benefits in synchronization than originally perceived — often going beyond the more obvious benefits in value chain and administration to enabling improvements in new product introductions, customer service, and sales.

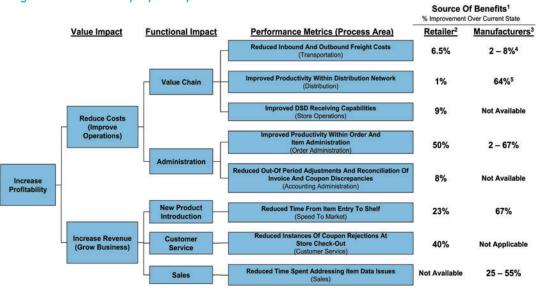
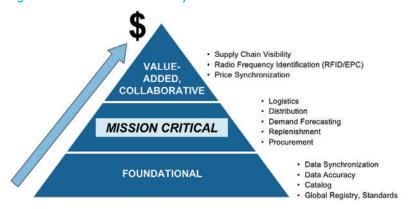


Figure A — Summary of Benefits

- 1. Where actuals were not available, estimates were provided
- 2. Percentages calculated using weighted averages, based on magnitude of dollar values
- 3. Represents spot benefits for particular manufacturers; percentages do not reflect savings across all participants
- 4. 8 percent based on mill transit savings for a single product line at a particular manufacturer. Total mill transit savings for this manufacturer is pending completion of a full product portfolio audit and is expected to be lower
- 5. Improvement is in particular area at manufacturer; does not represent improvement across entire distribution network

The initial hypothesis was that most benefits would come from "foundational" activities, including improved standards, accuracy, and synchronization. However, it quickly became apparent that those were just the beginning. Results are also being achieved by enabling people to eliminate non-value-added work and deliver "mission critical" processes more efficiently (such as demand forecasting, procurement, replenishment, distribution/logistics, etc.). Ultimately, even greater benefits exist as industry participants continue to work together on "value-added, collaborative" processes (RFID/EPC, price synchronization, etc.). See Figure B — e-Collaboration Pyramid below.

Figure B — e-Collaboration Pyramid



Building the components of the pyramid may take time, but it will definitely yield results. There are actions that manufacturers and retailers can take immediately to build their GDS capabilities and maintain the momentum behind GDS. Figure C — Industry Action Plan provides a short 'to do' list that allows industry participants to capitalize on the insights in this report.

Figure C — Industry Action Plan

Industry Action Plan

	Manufacturers	Joint Activities R	etailer
•	Perform detailed audit of item characteristics ensuring stated information is valid/accurate	Understand GDS and how it can enable improved results Perform spot a characteristics information is	ensuring stored
	Align quality controls across all manufacturing entities	Work jointly with industry groups (1SYNC, FMI, GMA etc.) to provide roadmap for future initiatives truth" network information er	architecture for
•	Integrate data into all retailer touch points	Participate in the GCI Global Scorecard Benchmarking (Data Integrate data	into all manufacturer
•	Work with retailers to understand their business processes, adopt	procurements	touch points – starting with procurement systems
	trading partner specific processes		nufacturers to share
•	Set appropriate GDS benchmarks and actively measure results	 In realizing benefits, define process changes/timing, sharing externally 	cesses, objectives for measurement
•	Continue to build confidence around additional supply chain		uild confidence onal supply chain
	benefits through GDS and collaboration	Continue to build confidence around additional supply chain benefits through "pilot" showcases benefits through collaboration	

Data synchronization is at a critical juncture. While industry pressures to capture operational efficiencies and revenue growth are greater than ever, skepticism still exists among many manufacturers and retailers regarding the mode of adoption and

how quickly to proceed with GDS. This study provides the latest and most comprehensive perspective on the power of GDS by quantifying the actual benefits gained by those companies bold enough to pave the way — up to 64 percent improvements in supply chain and operational areas and 67 percent in customer relationship and growth areas. The spot benefits have been achieved by many companies and appear to represent the "tip of the iceberg" of what is possible with GDS. Additional organizational savings and revenue growth are sure to follow.

Given these results, few could dispute that the opportunity is tremendous. Those who wait will continue to fall further behind. Leading businesses will work together to expand the range of GDS benefits, as well as distance themselves from their competitors.

BACKGROUND: ACCURATE DATA SYNCHRONIZATION TAKES FLIGHT

Background: Accurate Data Synchronization Takes Flight

New product introduction delays, order accuracy issues, invoice errors, coupon rejections and ballooning freight and warehouse costs — All of these chronic industry problems have multiple causes, and the complexity of solving them should not be underestimated. The lack of accurate and synchronized data was pegged as one of the root causes of such inefficiencies years ago, and previous reports also projected potential benefits to the consumer packaged goods (CPG) industry from better data synchronization. Some CPG manufacturers took action; yet many still have not fully engaged. Those that moved forward would be the first to tell you that the investment has been well worth it.

Making the Case for Investing in GDS

Global Data Synchronization (GDS) grew out of a consumer goods industry initiative to align master data and harmonize its use and availability across the value chain. Soon it became apparent that GDS — while a valuable, problem-solving tool — was not getting proper attention in many organizations. While a myriad of reasons existed for the slow adoption of GDS, three stood out: difficulty in building and measuring business cases, a lack of clear data standards, and non-GDS business priorities taking precedence. See Figure D — GDS Adoption Breakthroughs.

Figure D — GDS Adoption Breakthroughs

GDS Adoption Hurdles	GDS Adoption Breakthroughs		
Difficulty building and measuring the business case	Spot "benefits" have been realized through setting and piloting the appropriate GDS benchmarks with active measurements		
Consensus around adoption of a single set of industry standards	 Industry standards and compliance allow trading partners to scale their investment in data management across many trading relationships. Companies recognize data as an asset throughout the supply chain 		
Competing resources and capital for other initiatives	 Through the use of high quality data, companies realized GDS can lay the foundation for business transformation and process sharing (e.g. RFID/EPC) 		

As a manufacturer, I have to choose where to invest money and resources to gain the best ROI against business issues...?

~ Director, Strategy, CPG Manufacturer

Initially, these hurdles slowed down many companies; yet, by working to overcome them, GDS adopters gained a better understanding of the need for end-to-end data integration and the importance of convincing more trading partners to join this valve-generating endeavor.

Moving Up the Learning Curve and Beyond Technology

One positive aspect of the slow motion uptake is that it gave GDS leaders the time to identify the business impact of cross-company data integration. As a result, they have addressed many of the root causes of data synchronization problems, as well as the implementation challenges that go with any significant enterprise effort.

Specifically, participants recognized that data quality — its accuracy, timeliness, completeness and consistency — had to be addressed from the outset. Companies soon found that upfront time addressing standards compliance and data maintenance issues paid off through the elimination of rework.

In addition, early adopters recognized that GDS improved business processes across many functions and operations, and that it was "not just another IT project." Consequently, they broadened efforts from item data synchronization to business process improvement by:

- Focusing on the highest priority trading partner relationships to ensure key processes and transactions reflect GDS best practices
- Educating and motivating employees and partners to work more collaboratively
- Collaborating on the introduction of new items through automated workflow and processes
- Aligning master data projects with business processes across the enterprise
- Performing data quality audits consistently, underscoring the commitment to treating accurate data as a critical asset

The GDSN (Global Data Synchronization Network) is an enabling technology that lays the foundation for future trading partner collaboration. However, synchronizing data through the GDSN does not guarantee a return on investment. To create value, trading partners must transform business processes 'hand in hand' with GDS implementation."

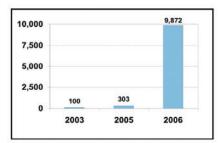
~ GDS Service Manager, CPG Manufacturer

Gaining GDS Converts and Momentum

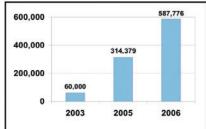
Over the last several years, consumer goods and retail companies made strides in collaborating over accurate data synchronization. Since mid-2003, industry participation has risen from 100 companies to nearly 10,000. The number of registered items has also increased, growing from 60,000 to more than 580,000. See Figure E — GDS Adoption Rate.

Figure E — GDS Adoption Rate

Registered Companies (GLNs)



Registered Items (GTINs)



In addition to the technology and data management advances, the alignment of people and processes has made GDS initiatives less arduous than even a few years ago. Specific enablers include:

- People and business process synchronization
- Improved Enterprise Resource Planning (ERP) systems, including GDS functional and integration capabilities
- Process automation tools that facilitate workflow, compliance and data stewards
- Mature data standards that allow governance and harmonization across the supply chain

Companies can now take advantage of early insights in GDS adoption to avoid the pitfalls that handicapped earlier launches. With consumers having more purchasing choices, the number of new product launches accelerating, and fuel costs skyrocketing, accurate data synchronization with trading partners is becoming more critical to improving top- and bottom-line growth.

What GDS has done for the industry is put a bright beacon on the necessity to have one's data management strategy integrated internally and then across enterprises.

~ GDS Service Manager, CPG Manufacturer

BENEFITS: GROWING THE TOP AND BOTTOM LINES

Benefits: Growing the Top and Bottom Lines

The main message from this study is both simple and compelling: Accurate data synchronization directly, and in some cases, dramatically improves a company's overall financial and operational performance, increasing profitability at the top and bottom lines. Those improvements are both real and significant — not one-time cost reductions and revenue increases — with sizeable potential benefits still to come.

Benefits Abound on the Bottom-Line: Operational Improvements Reduce Costs

To date, the greatest benefits from GDS have come from new, collaboratively designed business processes and operational improvements that minimized labor-intensive activities and maximized asset utilization. Figure F — Benefits Related to Cost Reduction identifies the improvements measured to date.

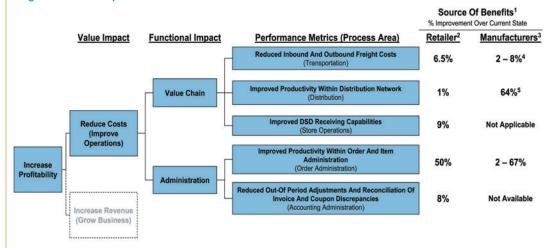


Figure F — Benefits Related to Cost Reduction

- 1. Where actuals were not available, estimates were provided
- 2. Percentages calculated using weighted averages, based on magnitude of dollar values
- 3. Represents spot benefits for particular manufacturers; percentages do not reflect savings across all participants
- 4. 8 percent based on mill transit savings for a single product line at a particular manufacturer. Total mill transit savings for this manufacturer is pending completion of a full product portfolio audit and is expected to be lower
- 5. Improvement is in particular area at manufacturer; does not represent improvement across entire distribution network
- Whether at a plant, a distribution center or a store, improved accuracy of weights and measures has directly increased the speed and efficiency at which participating companies can move products. Instead of transactions slowing down for necessary data corrections at various points, products flowed faster and transportation costs dropped. Indeed, transportation savings were the single greatest benefit accruing to GDS participants. Manufacturers will capture 2 to 8 percent in annual inbound and outbound transportation cost savings, and Wegmans will realize 6.5 percent in estimated savings.
- Companies also improved productivity within their distribution networks. Through automation, and use of the GDSN, one manufacturer condensed a five to six day, spreadsheet-based process used to align product information with its distributors into 48 hours a 64 percent improvement. Due to several advances in Wegmans distribution network, it estimated productivity savings of \$1 million in its warehouse operations.
- Wegmans enjoyed sizeable improvements to its direct store delivery (DSD) receiving, improving time spent on items that do not scan at the back door by 25 percent and reducing receiving time by an estimated 7 percent, resulting in an overall weighted average savings of 9 percent.
- Improved item data information has also streamlined administrative activities. One manufacturer decreased from three to one day the time needed to have visibility to new items through its continuous replenishment program (CRP). At another company, shaving five minutes off the order inspection process yields an annual savings of 59,000 hours, or 2 percent of total customer service time for the year. Another manufacturer was able to avoid the cost of hiring additional full time employees to process new items saving 33 percent in administrative costs. At Wegmans, when all GTIN information is provided correctly by manufacturers, productivity increased by 50 percent for employees entering new item information. Wegmans estimated an improvement of 8 percent in its accounting administration costs across the areas of out-of-period adjustments and invoice and coupon reconciliation.

CASE EXAMPLES

Bottom-Line Benefits

Freight Costs

One manufacturer's data audit efforts revealed that each case in an entire product line had been overweight for years. Incremental product changes had not been captured in internal master file systems. The discovery now allows the manufacturer to accommodate up to two additional pallets of product per truck on inter-company transfers, and up to one additional pallet on outbound trucks to retailers. This adjustment resulted in a \$2.2 million annual savings in transportation costs for this product line alone. Needless to say, additional product lines are also being investigated. The manufacturer expects to save an additional \$1.5 to \$3 million in annual transportation costs when all weights are accurately catalogued and adopted by retailers in placing orders.

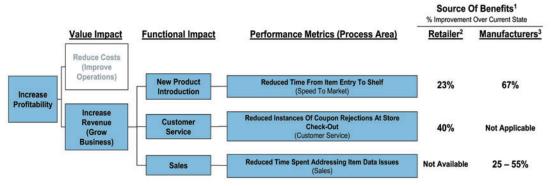
Administrative Costs

In 2005, one study participant introduced 720 new products into its portfolio — a 50 percent increase from 2004. The process of getting all the relevant data associated with these products to both internal units and trading partners would have required hiring an additional two full time employees to input the data, print or develop documentation and send it out. Automating this process through GDS eliminated these administrative activities, saving the company a combined 3,840 hours annually (estimated savings were \$288,000). GDS has also helped mitigate the risk of not getting these new products to market by their start-sell dates.

GDS Fuels Top-Line Growth: Quality Data Spurs Higher Revenues

The benefits were not all derived from operational efficiencies and cost avoidance. Study participants also generated additional revenue from GDS-based improvement as shown in Figure G — Benefits Related to Top-Line Growth.

Figure G — Benefits Related to Top-Line Growth



- 1. Where actuals were not available, estimates were provided
- 2. Percentages calculated using weighted averages, based on magnitude of dollar values
- 3. Represents spot benefits for particular manufacturers; percentages do not reflect savings across all participants
- GDS is the foundation for superior retail execution. Wegmans has used GDS in conjunction with its WRetail program to improve speed to shelf by seven days, a 23 percent improvement. That improvement accelerated sales of thousands of new items per year and contributed to increased revenue for Wegmans. One manufacturer reduced its speed to shelf from four-to-eight weeks to two weeks, a 67 percent improvement increasing responsiveness to its retail customers.
- Synchronization of accurate data has also cut instances of "coupon rejections" at the front end of Wegmans stores by 40 percent, with a potential for an additional 35 percent improvement. This "coupon family code synchronization" results in an enhanced in-store experience for the consumer — thereby increasing customer

- satisfaction and loyalty as well as the potential to generate additional sales from these customers.
- In addition, sales personnel at participating manufacturers spend 25 to 55 percent less time addressing item data questions during their sales calls, allowing them to spend more time on revenue-generating activities with retail merchants. With the continued development of automated new item forms, sales force productivity will improve more as category merchants gain access to an accurate and timely stream of new product information.

CASE EXAMPLES

Bottom-Line Benefits

Sales Productivity

One manufacturer had many of its sales force's administrative tasks completed by brokers. However, sales managers were still required to spend time answering inquiries on invoice errors, deductions or item data information. Since the inception of GDS, this company's item data is published to retailers and brokers, providing more timely information on product specifications through a more accessible channel. Happily, sales personnel have increased their productivity by approximately 25 percent by spending less time answering questions on errors or basic item data information. With this increased efficiency, sales reps have been able to spend more time evaluating consumer needs and providing merchandising plans to help grow business for the manufacturer and retailer.

Qualitative Benefits: Soft, But Real

In addition to the quantifiable results, GDS also delivers a host of qualitative benefits to companies. Although their specific value is hard to calculate, study participants agree that these benefits can be felt and have strengthened their organizations. Some of these intangible benefits are:

- Heightened awareness and education within organizations on the necessity of data quality
- A broader foundation on which to build more advanced initiatives (e.g., advanced ship notice (ASN), pay-from-receipt, RFID/EPC)
- Improved service to consumers who benefit from fewer out-of-stocks and earlier access to new products
- Increased visibility into inventory levels to compare new items to transitioning products, allowing better management of flow-through inventory
- Improved trading partner relationships as less time is spent discussing clerical and administrative issues and more time on merchandising

Summary of Benefits

This report is based upon a mere two months of fact-finding and analysis, yet the team was able to confirm the magnitude of GDS' impact, which often surpassed initial expectations. A notable example: the Data Synchronization Proof of Concept study projected benefits in the range of 7 to 13 percent improvement in sales force efficiency, while the actual benefits were in the 25 to 55 percent range. As understanding of the qualitative and quantitative benefits of GDS and industry participation gain momentum, the benefits are anticipated to multiply.

Wegmans Retailing Advantage

With more than 80 percent of its trading partners having 100 percent synchronized data via the Global Data Synchronization Network (GDSN), Wegmans supplier adoption rate is the industry's highest. Accurate data is a business necessity at Wegmans for superior execution in logistics, distribution, store operations, administration, new product introductions and customer service. Accurate and synchronized products enable truck and warehouse optimization, reduce reconciliations, increase productivity, improve speed to shelf, and enhance customer service. More accurately synchronized data has and will lead the way for next generation business process innovations, such as dynamic logistics, e-financials, radio frequency identification (RFID/EPC) and much more.

Transportation: By using accurate synchronized data Wegmans will minimize pallet cube variance and will eliminate approximately 10 percent of its outbound shipments, generating over \$1.0 million in annual savings. Moreover, accurate and synchronized item information enables Wegmans inbound logistics team to utilize advanced technology to optimize inbound truckloads. This will provide Wegmans and their partners an estimated annual savings of \$2.5 million, which is 5 percent of inbound transportation costs.

Distribution: Accurate data synchronization enables dynamic distribution practices and the efficient operation of the Wegmans Distribution Network saving \$1 million a year. Time spent on activities such as pallet reconfiguration and reconciliation has also improved due to GDS as the number of incorrect shipments and pallet configuration errors has decreased due to better data.

Store Operations: Synchronized accurate data has reduced disruptions at the store level. At the point of sale, more accurate coupon family code data has eliminated 40 percent of coupon scanning errors. This improved "coupon family code synchronization" means that there are 454,000 fewer disruptions at the point of purchase — leading to greater customer service.

More accurate data means more items scan properly, therefore, less time spent reconciling items that do not scan correctly at the back door — a decrease from 40 minutes to 30 minutes a week. In addition, instead of today's 30-minute labor-intensive process of inspecting deliveries item-by-item, Wegmans anticipates it can reduce its DSD receiving time by 17 percent for deliveries of GDS items versus non-GDS items. Across all stores, this will yield an annual savings of almost 7 percent in DSD receiving costs. Faster receiving and less time spent on reconciliation allow store personnel to concentration on more value added activities.

Accounting Administration: Due to improved item data information, Wegmans has reduced its reconciliation of invoice and coupon discrepancies by 5 percent. Fewer item data errors means less time reconciling discrepancies. In addition, Wegmans has been able to reduce its time spent on out-of-period adjustments by 14 percent, allowing the accounting department to spend more time on value added activities.

Wegmans GDS Benefits					
Process Areas & Metrics	Benefit				
Transportation					
Inbound Freight	\$2.5 million				
Outbound Freight	\$1.0 million				
Distribution					
Network Utilization	\$1.0 million				
Store Operations					
DSD Backdoor Operations	\$163,000				
Reduction in Coupon Scanning Errors	40%				
Sales & Merchandising					
New Item Entry	50% Faster				
Speed to Shelf	23% Faster				
Accounting Administration					
Productivity: Invoice Reconciliation &					
"Out of Period" Adjustments	8%				

Order Administration: Employee productivity in the new product setup process increased considerably. When all GTIN information is provided correctly to Wegmans, productivity is increased by 50 percent.

Speed to Market: GDS facilitates the superior retail execution of WRetail. Wegmans leveraged these process improvements to increase speed to shelf by seven days, a 23 percent improvement. That improvement accelerated sales of thousands of new items per year and contributed to increased sales. Not only does this efficiency allow stores to realize sales sooner, it improves Wegmans customer service — ensuring that products are made available to Wegmans customers as rapidly as possible.

Through this study, Wegmans learned that the benefits of accurate data synchronization expand far beyond the efficiencies gained from the data that is transferred. Accurate data synchronization also provides a foundation for mission critical systems that are enabling increased sales and significantly reduced expenses. Wegmans has set a high standard for the industry, realizing a wide range of real business benefits through its accurate data synchronization initiative and alignment of business processes within and across enterprises.

CASE STUDIES: DELIVERING RESULTS ACROSS THE VALUE CHAIN

Case Studies: Delivering Results Across the Value Chain

Clearly, companies are seeing their GDS investments pay off, allowing them to achieve improved performance reflected in their bottom lines. Key to replicating this success is understanding how GDS touches and improves multiple functions within an organization. This section identifies leading practices in GDS implementation by describing the specific actions that retailers and manufacturers have taken.

Research identified so many specific "spot" successes that they appear to represent the "tip of the iceberg" of what is possible with GDS. Additional organizational savings and revenue growth are sure to follow. Indeed, a key insight of the research is that while benefits from data synchronization are concentrated on the cost side, GDS also delivers opportunities to increase revenue. As Figure H–Value Framework illustrates, the successes with data synchronization touch multiple functional areas throughout an organization.

Functional Impact Performance Metrics (Process Area) **Reduced Inbound and Outbound Freight Costs** Improved Productivity Within **Distribution Network** Value Chain Improved DSD Receiving Capabilities **Reduce Costs** (Improve Improved Productivity Within Order And Operations) **Item Administration** Administration Reduced Out-Of Period Adjustments And **Reconciliation Of Invoice And Coupon** Increase **Discrepancies** Profitability **New Product** Reduced Time From Item Entry To Shelf Introduction **Reduced Instances Of Coupon Rejections** Increase Revenue Customer At Store Check-Out (Grow Business) Service (Customer Service) Reduced Time Spent Addressing **Item Data Issues** Sales

Figure H — Value Framework

As Wegmans and the participating manufacturers have achieved and recognized data synchronization benefits, they have simultaneously noted opportunities to further transform and align business processes and functions along the way. These leading companies have acknowledged the need to actively engage their people and trading partners in the initiative.

1. Minimizing Value Chain Disruption

The Scale Doesn't Lie. Manufacturers are inspecting their products' weights and dimensions to verify the accuracy of published standards. Product audits need to be done two to three months after initial launch, after manufacturing and packaging processes have stabilized. After that, the longer a product's attribute information remains unchanged, the higher the likelihood the integrity of the data is out-of-date due to packaging changes and other product improvements. One manufacturer has implemented a policy of auditing all products at least every two years to capture product changes that could skew weight and dimension attributes. Accurate product weights and measures ensure products fit better in trucks and on retailer shelves.

There is a huge opportunity in freight optimization if we can accurately weigh out and cube out trucks on orders.

~ Buyer, Wegmans Food Markets

CASE STUDIES

Updated Product Specifications

Maintaining and communicating accurate product weights and dimensions in dynamic packaging environments is an industry challenge. One participating manufacturer undertook a project to audit all its product attribute information. This entailed examining the weights and measures of its products and packaging materials. Building item attribute hierarchies from the bottom-up gave the company a level of precision it did not have before. This methodology confirmed, for each product, that the "sum of the parts" do equal the whole. The audit revealed that the manufacturer overstated its product case weight information by an average of 0.5 to 1.0 pound. The discrepancies within legacy systems were due to both rounding errors and out-of-date information. As a result, the manufacturer and customers now relying on this corrected information are benefiting from reduced transportation costs. Now the practice of building product specs based on the bill of materials is standard operating procedure for this manufacturer.

Better Data Equals Better, Faster Distribution. Manufacturers and retailers that access accurate product attributes can better utilize their distribution and transportation networks, so trucks are full and fewer trips are made.

- Fewer ordered items are "cut" (items removed) to reduce overweight trucks
- Fewer trucks are fined and returned to the shipping point for being overweight

CASE STUDIES

Outbound Shipments to Stores

When Wegmans plans for outbound shipments to their stores, they do so using software and the published weights and cubes of all cases. Due to years of uncertainty regarding the accuracy of the data in the system, calculated cube for a truckload has been conservatively estimated to avoid rework and supply chain disruption. With accurate data synchronization, Wegmans will be able to utilize up to 18 percent more outbound capacity (utilizing 2500 cube of a potential 2900 cube), reducing at least 100 shipments per week from DC to store.

The Store Works Better Too. DSD suppliers have worked with Wegmans to improve the delivery and check-in process. This is a "win/win" for manufacturers, retailers, and, ultimately, the consumer.

- For accurately synchronized items, Wegmans has been able to employ a spot check of goods versus a manual check of all items, reducing overall backdoor delivery and receiving time
- Wegmans is able to redeploy resources from backdoor check-in operations to more value-added activities

CASE STUDIES

Store Productivity

Wegmans used accurate information to reduce time spent reconciling items not scanning correctly at the back door to 30 minutes per store per week — a productivity impact of 25 percent. In addition, improvements in the DSD receiving process through spot checking of physical goods at receipt is projected to reduce DSD receiving time by 17 percent. For Wegmans, where 40 percent of monthly DSD shipments are affected by GDS, this amounts to almost 7 percent in annual labor savings related to DSD receiving.

2. Avoiding the Administrative Paper Chase

There remains a significant opportunity for benefits from higher order accuracy and fewer manual touches to invoices.

~ Managing Director, Customer eCollaboration, CPG Manufacturer

Improving Order Accuracy. Accurate item data improves order and invoice accuracy, which in turn allows expedited delivery of products to customers and less manual investigation and rework of problem orders. Manufacturers and their brokers often invest considerable up-front time and resources reviewing orders to ensure item-level accuracy. Successful organizations recognize and minimize the considerable cost imposed by inaccurate orders on downstream variables such as:

- Order Size
- Bracket Pricing
- Warehouse Picking
- Trailer Loading
- Invoice Deductions

CASE STUDIES

Penalty Reduction

At one participating manufacturer, product information was being manually transferred between the manufacturer, its distributor representatives, and retailers. This multiple touch point exchange of information, predictably, presented a situation rife with human errors in the form of inaccurate UPC codes and the like. Prior to the implementation of GDS, this manufacturer was consistently hit with \$300,000 to \$500,000 in annual fines from retailers for these inaccuracies. With the adoption of GDS, the company reduced the number of manual touches on product information. As a result, that number is approaching \$0. The cause and effect is clear: automated item synchronization minimizes errors and improves efficiencies.

Error-Free Accounting Administration. Deductions represent business process disruptions and undermine trading partners' vision of the "perfect order." Wegmans and the manufacturers in this study have used synchronized, accurate data and order review processes to reduce order, invoice and deduction related inefficiencies. Many manufacturers appreciated that the volume of Wegmans deductions is significantly less than that of other trading partners.

CASE STUDIES

Administration of New Item Entry

At most retailers, new product information is manually entered, confirmed and reconciled into systems during the item setup phase. GDS enables a simpler, faster means by which new products are introduced to market. Wegmans is a leader in this area because the electronic receipt of data through the Global Data Synchronization Network (GDSN) allows the retailer to receive mission critical item information from their suppliers in a near real-time, standardized format. That data is systematically fed to the systems and people throughout the company. When the global data synchronization network is utilized properly, item information flows more rapidly and the products get through the supply chain to the shelf with less disruption. For Wegmans, this faster speed to shelf is a competitive advantage that generates increased revenues, particularly when one considers the above-average velocity with which new items sell.

3. Better and Faster — New Product Introductions

Consistency in providing our business network with [new item] information has improved from what used to be a 'chaotic,' spreadsheet-based process, to an automatic process that takes merely 48 hours and translates to real efficiency."

~ Manager, Data Synchronization, CPG Manufacturer

Leading companies are leveraging GDS to move new products to market faster, closing the gap between the time the item is introduced to a retailer's merchants and when it is available to consumers. Retailers and manufacturers are achieving this by using GDS-enabled automated transfer of accurate data to communicate changes in product specs to their internal teams, cutting down on manual processes wherever possible.

CASE STUDIES

Direct Store Delivery

Prior to GDS, the new item setup process was so slow that the manufacturer's sales people had concerns over whether retailers were able to setup items in their systems in time for delivery at the back door. This concern led sales people to personally visit individual stores with the (new) items of concern physically in hand ahead of scheduled DSD deliveries, to ensure that these items were actually able to be accepted upon delivery. GDS has helped eliminate this practice, as the faster item setup time now mitigates concerns over a retailer's ability to process last-minute information.

4. Delighting the Consumer through Better Customer Service

66 The significant reduction in coupon scanning errors at the front end of our stores has been great for us and our customers.

~ President, Wegmans Food Markets

Exceptional service at every consumer touch-point is critical. At the store register, data-based errors cause rejection of manufacturer coupons, leading to frustration in the checkout lane and potentially creating a negative impression of the product, manufacturer and retailer. Wegmans relies on coupon family code synchronization to minimize coupon rejections and UPC not-on-file errors. This ability to better serve the consumer by providing a more efficient, pleasurable shopping experience is an important business advantage.

5. Unshackling the Sales Force

Through the GDSN... sales teams are working smarter and tighter with their category merchants to generate more sales volume. ??

~ GDS Service Manager, CPG Manufacturer

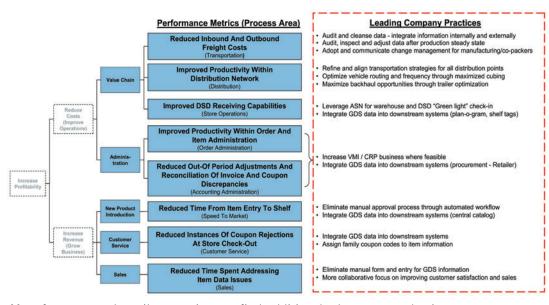
Across manufacturers, a big challenge for salespeople was balancing true 'selling time' with the ever-increasing administrative tasks associated with selling. Some manufacturer organizations, however, are finding ways to use GDS to reduce the administrative burden and allow representatives to focus on revenue-generating sales efforts.

- Manufacturers send standardized product data electronically and continuously to buyers and category merchants, without the need for human facilitation
- Quality assurance personnel perform data audits to ensure accurate and consistent product information allowing sales personnel to spend less and less time addressing item data questions during sales calls

Summary of Leading Company Practices

Study participants improved their performance in virtually all aspects of the value chain as a result of GDS. Figure I — Leading Company Practices summarizes item-synchronization based business practices that have been shown to deliver significant benefits.

Figure I — Leading Company Practices



Manufacturers and retailers continue to find additional advantages as business processes are transformed to support future GDS-enabled initiatives. Leading companies such as those profiled here recognize data synchronization as a business imperative, not just a technology initiative. In addition, their strategy requires the synchronization of business processes across people and trading partner organizations. By addressing all dimensions, these companies are positioned ahead of their competition.

SUMMARY OF LEADING COMPANY PRACTICES

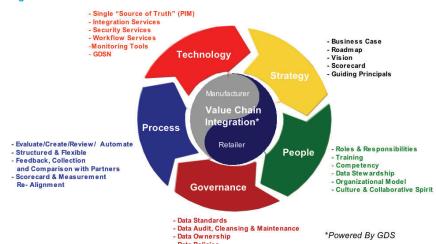
CONCLUSIONS

In 2003, the report *Data Synchronization Proof of Concept: Case Studies from Leading Manufacturers* projected significant benefits from using global data synchronization (GDS). This study details how manufacturers and retailers have overcome early GDS challenges and describes specific practices that have created the highest value for them. Companies can now point to real and significant performance improvements driven by GDS. Specifically, companies are:

- Minimizing disruptions across the value chain
 - Improving accuracy of product weights and measures: A manufacturer corrected a weight error on one item and saved \$2.2 million in annual transportation costs
 - Leveraging data accuracy to drive logistics and distribution efficiencies: Wegmans eliminated \$1 million of labor and inventory carrying costs from its distribution network
 - ▶ Expediting DSD check-ins at the store level to focus on more value-added activities: Wegmans estimated a 7 percent increase in productivity savings by reducing DSD check-in time
- Synchronizing data with trading partners
 - Sharing accurate item data to improve order and invoice administration between trading partners: A manufacturer estimated improved productivity by 59,000 hours annually by reducing inspection time five minutes per order
 - Synchronizing the flow of new product information between manufacturers and retailers to facilitate faster speed-to-market: A manufacturer improved its speed-to-shelf for new items from four-to-eight weeks to two weeks
 - Using global data synchronization to reduce front-end disruptions: Using GDS to synchronize coupon family codes helped Wegmans reduce front-end coupon scanning rejections by 454,000 or 40 percent

Among the important findings: leading companies that see these improvements make accurate data synchronization an ongoing business priority, not just an IT initiative. In fact, participants' results show GDS can be a catalyst for transforming business processes and delivering improved results across the value chain. To get started, manufacturers and retailers can use a Global Data Synchronization (GDS) Framework (see Figure J) to ensure their GDS efforts are designed to deliver similar results.

Figure J — GDS Framework



- Strategy Executive sponsorship is critical to GDS adoption, not only to articulate the 'what and why' of the vision but also to set a roadmap and performance metrics that position GDS as a company-wide priority.
- People Enterprises should identify data stewards and specify roles accountable for ensuring the success of GDS. High quality GDS initiatives also require on-going training of data users and providers.
- **Governance** Data standards are vital to creating and maintaining a consistent interpretation of product information. In addition, processes to regularly audit and cleanse 'stale' data are prerequisites to successful GDS efforts.
- Process Successful GDS efforts can touch and transform many business processes, including purchasing, merchandising, supply chain/logistics, sales/customer service, and IT. Consequently, companies must understand and ensure that their internal systems and processes clearly support GDS so partners can leverage that knowledge.
- **Technology** More than just the right hardware and software, GDS partners need to manage their data assets and integrate with business partners using standards-based communication, including the GDSN.

Applying this framework, as well as the case studies of how participants are using GDS across their organizations, provide the direction that many industry participants need to jumpstart their GDS efforts.

In closing, accurate data synchronization is at a critical juncture, however, GDS can play a key role in meeting the pressures to improve operational efficiencies and revenue growth. This study confirms the power of GDS by quantifying the actual benefits gained by companies — up to 64 percent improvements in supply chain/ operational areas and 67 percent in customer relationship/growth areas. As current GDS initiatives gain more traction and additional companies join this effort, the benefits attributed to GDS are anticipated to become even greater.

We believe that good people, working toward a common goal, can accomplish anything they set out to do. ??

~ Wegmans Food Markets Mission Statement

APPENDIX

The GDS Assessment Calculator

The GDS Assessment Calculator was developed by Accenture to assist manufacturers and retailers in the consumer products goods (CPG) industry in identifying projected value from data synchronization. The benefits can be substantial but, in reality, will vary from company to company. For those companies trying to justify the investment in Global Data Synchronization, the GDS Assessment Calculator is designed to facilitate and identify areas of potential savings.

The tool is a web-based interactive value model that focuses on areas of significant savings around sales and back office functions, labor savings, lower transportation costs and faster time-to-market. Reporting areas are grouped in the following:

- Manufacturers
 - Speed to Market, New Item Launch
 - Salesforce and Broker Productivity
 - Freight Efficiencies
 - Warehouse Productivity
 - Deductions and Reconciliation
- Retailers
 - Merchant and Administration Productivity
 - Freight Efficiencies
 - Distribution Center Productivity
 - Store Operations
 - Deductions and Reconciliation

Whether a manufacturer or a retailer, based on the input, the GDS Assessment Calculator provides a high-level value estimate to assist in understanding the benefit of accurate data synchronization and which area(s) to focus on. The input information is captured via user friendly interfaces, stores calculations and produces a final value summary report. Companies will have complete security and confidentiality through a three-level authorization process.

Data accuracy provides accelerated improvements in operations and business processes. The GDS Assessment Calculator demonstrates benefit opportunity areas for consumer goods trading partners; it is proving to be very valuable in the next generation of business partnering.



Synchronization — The Next Generation of Business Partnering