COGNIZANT WHITE PAPER

Transportation Diagnostics Framework

- A Roadmap to Success

Cognizant
Passion for building stronger businesses

As companies seek to sustain growth through international markets, logistics professionals are encountering the typical challenges associated with global trade and cross-border goods movements. Additionally, they struggle with daily operating challenges such as ever-escalating fuel costs, longer lead times, increasing complexity, constrained capacity and little or no visibility into and control over critical elements within their end-to-end processes. Too many hand-offs in the supply chain, gaps in information sharing, limited visibility into costs and lagging measurements make matters worse.

providing companies with a surprisingly simple tool --- the Transportation Diagnostics Framework (TDF) --- that is flexible, comprehensive and adaptable across industries and organizations with varying transportation networks and customer needs.

The TDF provides extraordinary insights into a company's supply chain landscape. It also identifies opportunities to vastly improve organizational capabilities to service internal stakeholders, as well as to partner with and manage external stakeholders. The Transformation Roadmap that results from the TDF methodology is the most

Partnership with **SAP**, especially on **TMS**, has been extremely critical for **Cognizant** to play in a leadership role in this space.

With the rapid changes occurring in global economies such as China, India, Eastern Europe and Latin America, it is paramount that companies have the right tools and inter-connected networks to facilitate execution performance and provide greater visibility and control of the transportation process. This can only be achieved with uniform alignment of goals, objectives, organizations and processes, as well as timely information sharing. These initiatives are heavily dependent upon a common (autonomous) network. Without the right tools, systems and processes, most organizations will only chase the market leaders.

As logistics leaders grapple to cope with the emerging New Economy, new perspectives and innovative approaches are paramount to gaining the flexibility, speed and visibility required to gain competitive advantage. Cognizant has taken a large leap forward in

Important output toward achieving a best-in-class supply chain.

Solution Overview

In its work with several Fortune 1000 global companies that spend hundreds of millions annually to transport goods over multiple modes and geographies, Cognizant has developed its Transportation Diagnostics Framework. Transportation Diagnostics Framework offers a 360-degree view of transportation needs, enabling organizations to develop a roadmap to identify, prioritize and tackle the major challenges they face in the complex world of global trade.

Cognizant's TDF is a flexible diagnostic that will quickly allow logistics companies to gain invaluable reference points into opportunities for their transportation networks, as well as their

competencies and capabilities. It will also enable the organization to garner tremendous strategic support from the various internal and external stakeholders for these efforts. TDF helps unearth the elements that inhibit growth, scale, effectiveness and cost-efficiency.

The TDF roadmap is a milestone-driven plan to transform a sizable portion (30% to 50%) of the transportation network and creates the necessary foundation for others in the organization to emulate and deploy.

Elements of the framework include:

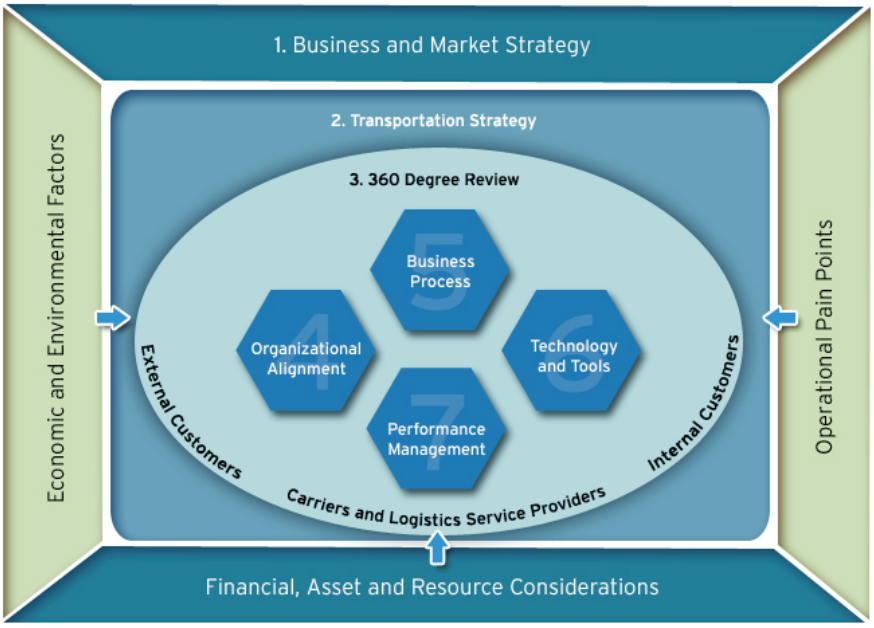
- A line-of-sight plan to transform a transportation network toward best-in-class using proprietary tools to evaluate multiple elements and dependencies of the business, the supply chain and demand/supply variables.
- A cost/benefit analysis of each element, with overall opportunities in the range of 10% to 20% of transportation spend (hard dollars).
- A sensitivity analysis and roadmap to manage ongoing changes and business trends (internal and external).
- An assessment of IT systems, tools and techniques directly aligned with the business strategy, market requirements and efficiency objectives.
- A roadmap and recommendations to plan, execute, deliver and manage performance.

One global manufacturer that used this approach was able to unearth potential cost saving opportunities worth $50mn in its transportation sourcing, planning and execution, by aligning its IT system strategy with business requirements. The framework helped establish a three-year plan, with major milestones to be attained jointly by its business and system support teams and the corresponding impact on the business's bottom line. A governance team was formed to ensure the achievement of overall strategic objectives. At the same time, teams were given plenty of flexibility to adjust to real-world challenges. This loop back mechanism helps refine the strategy and keep it grounded in reality.

This approach is a three-year, milestone-driven plan to transform a sizable portion (30% to 50%) of the transportation network.

Transportation Diagnostics Framework

TDF encompasses seven elements (see figure below) for developing a comprehensive transportation strategy, taking into consideration inherent dependencies of the business strategy, market positioning strategy and objectives that influence the execution of transportation services. This diagnostics framework analysis uses key decision criteria emanating from the business strategy to evaluate business and supply chain alignment. Additional qualitative factors include consistency of approach, or the degree to which the organization uses a set of processing



standards, performance metrics/management and error rates (modeling toward a perfect process). These are sent as inputs to send data through the diagnostics framework.

The framework begins by identifying the strategic imperatives facing the organization (step 1 in the diagram), and then --- using these imperatives as guiding principles --- drills down into the details of how the supporting processes, tools and people are aligned.

Within the seven steps, strategic alignment, together with transportation strategy (step 2), defines the overall vision and mission for logistics.

Following are the details of each step:

1. Strategic Alignment (Business and Market Strategies)

Description: This step establishes a strategic context for transportation strategy alignment, with a focus on removing conflicts, barriers or constraints that block effectiveness. Cognizant's plan is to establish a roadmap to attain transportation excellence. An important element of this first phase is to identify key success factors --- the criteria from which the team will make decisions such as cost vs. service --- and to apply this as a filter throughout the review process. Since there are always trade-offs involved in decision making, it is important to clarify these filters in advance of the review process.

Cognizant has developed a Transportation Diagnostics Framework that offers a **360-degree** view of transportation needs for developing a plan to identify, prioritize and tackle **major challenges** facing organizations.

A 360-degree benchmarking review (step 3) provides a much needed external viewpoint on effectiveness and performance, as seen by internal/external customers and partners. Furthermore, a process analysis step (step 5) helps establish the current state of the transportation process and identifies potential gaps to achieving best-in-class or customer requirements.

An organization (step 4) and IT evaluation (step 6) identify critical path for process and agenda for aligning supporting systems and the potential areas of improvement, along with a cost/benefit analysis and the establishment of change management requirements for overall enhancements. Lastly, a performance management (step 7) lays a foundation for existing visibility and control from which to launch improvement initiatives being implemented after the diagnosis.

Pain Points: Typical pain points emanate from lack of access to the strategic plan or lack of visibility and line-of-sight into inter-dependent goals and incentives with departments affecting transportation outcomes. As an example, transportation may not be included in the company's sales and operations planning (S&OP) processes. This leads to higher than expected costs to serve a marketplace, underperforming service levels and resultant margin decreases.

Approach: The intent of the approach and methodology is to create alignment of strategy with operations across three dimensions of an organization: top-to-bottom (strategic to operational); side-by-side (across organizational

functions that operate inter-dependently with transportation); and front-to-back (from customer delivery requirements to supply source requirements). Once these organizational dimensions are aligned, the next step of the methodology is to inventory each element of the transportation network and supporting people, processes, technology and organizational structure. This includes assessment of:

By benchmarking existing business process, companies can identify areas of improvement and establish a feel for the potential savings as a percentage of transportation spend.

- Current business strategy. This includes objectives, market positioning and competitive discipline (e.g. "every-day low price," which translates to cost vs. service).
- Transportation strategy alignment with business strategy, mission, purpose and objectives.
- People, including external and internal stakeholders and resources, including 3PLs, external processors and conversion plants, if applicable.
- Technology, including systems, architecture, collaborative networks, as well as policies, guidelines and preferences.
- Processes and requirements, both functional and technical.
- The functional organization and its assets and resources, such as equipment, materials and facilities.

Benefit: Creating a comprehensive baseline from which to launch the evaluation accelerates the analysis and creates a straightforward roadmap from which team members can launch the offensive. The plan delivers a set of desired outcomes that, once aligned, will produce a straightforward agenda from which to launch. During this phase, an actionable vision should be established for the next three to five years, as well as a clear communication plan with all the relevant stakeholders.

2. Transportation Strategy and Operations Analysis

Description: This step analyzes the interdependency between the transportation strategy and the rest of the supply chain. The focus is on aligning conflicting sourcing, inventory and transportation strategies, such that the overall cost of the supply chain is optimized.

Pain Points: Inefficient utilization of assets, escalating cost of cross-border movements, excessive intra-company transportation for realigning inventories, decentralized transportation operations and lack of visibility into freight costs, payments and reconciliations.

Approach: Both a high-level and a granular analysis are conducted for the existing transportation network. Inputs include stocking policies, service level requirements and market/customer segmentation. With regard to movement of goods (finished WIP and raw), an analysis is conducted on nodes for regional and central warehouses, third parties, tellers, manufacturing plants and cross-docking facilities. An analysis is also completed on the impact of supply base network placement, constraints and capacities by lane, and opportunities for consolidation of nodes, routes and modes.

1. Supply chain-level analysis --- total landed cost: The ability to look at total landed cost has gained tremendous significance in recent years for companies with supply chains extending over multiple continents because it can result in better global sourcing decisions and an overall supply chain plan. Total landed cost typically includes the cost of sourcing and manufacturing a product, transporting it over multiple modes, inventory carrying costs and duties/taxes/incoterms.

Performing a sensitivity analysis to measure the tradeoff between these costs and the tradeoff between cost and service levels can reveal surprising alternatives that often challenge conventional wisdom. The analysis could be based on forecasted demand, changing product mix, long-term currency trends, impact to service level, switching suppliers and tweaking the supply chain by changing distribution centers, cross docks, ports and manufacturing facilities.

Total landed cost analysis should be conducted at a high level that is discrete enough to be executed organization-wide.

A significant margin of safety can be built into the final analysis to account for some of the hard-to-quantify costs, including international compliance and safety risk, supplier disruption and the administrative expense of coordinating various stakeholders within an organization. Total landed cost analysis should be conducted at a high level that is discrete enough to be executed

organization-wide. The goal should be to identify preferred suppliers, geographies and international transportation routes at the chosen discrete level (product line, business unit, regions, etc.).

2. Transportation-level analysis --- network design: Network design looks at optimizing the positioning of inventory, suppliers, distribution centers and cross docks within a well-defined region to minimize cost without a drop in customer service levels.

Decision-support tools integrated with mapping software can be used to analyze inventory movements across all these nodes in the supply chain to identify problematic locations and suggest potential locations for the transportation network. The analysis can start off without any constraints on carrier capacity, supplier locations, manufacturing facilities, distribution centers, cross docks, availability of skilled labor and infrastructure and then be narrowed down to a real-world solution through subsequent iterations.

Benefit: Typical outputs from a transportation network analysis could lead to benefits such as:

- Geographical alignment of suppliers, distribution centers and transportation routes as per customer demand.
- Inventory realignment across the network, based on product velocity, supplier and customer locations (such as fast-moving products stocked locally and slow-moving products stocked centrally).
- Renegotiation with carriers on new lanes, shipment sizes, service levels, etc.
- Organization-wide changes to support the new structure.

It should be noted that a transportation network analysis is arguably the toughest to execute within the Transportation Diagnostics Framework, due to the lack of readily available data, as well as the involvement required from diverse business units.

3. 360-Degree Review

Description: This phase collects and analyzes quantitative as well as qualitative internal and external information. This analysis is provided as feedback to help evaluate the transportation network's historical performance.

Pain Points: Customer attrition, underperforming service levels, increasing out-of-stocks, lost sales opportunities, lack of capacity and more. This can cause organizations to ask the following: How is our organization performing vs. our competition? Are our external customers satisfied? Are our policies and procedures preventing our partners (e.g. carriers) from achieving a high level of service at lower cost?

Approach: Two key organizational performance analyses are performed in this step of the TDF:

1. Benchmarking
Cognizant works with several partners to provide clients with a broad base of metrics from relevant industries, domains and disciplines for performance measurement. By benchmarking existing business processes, companies can identify areas of improvement and establish a feel for the potential savings as a percentage of transportation spend. This exercise should be updated annually within a comparable industry group and incorporated into the operations plan in conjunction with the annual budgeting process. Progress should be monitored against identified opportunity areas.

2. Outward-Looking Viewpoint Analysis
By interviewing internal as well as external stakeholders, organizations develop a comprehensive perspective of how transportation is perceived to perform as an internal service function, as well as their ability to partner with customers, suppliers and logistics service providers. Key internal stakeholders may include customer service, supply chain planning, manufacturing, finance and warehousing.

Benefit: The 360-degree review methodology provides an external view of the company's transportation value chain, along with identification of gaps to leading practices, industry performers and role models. Opportunities for potential savings identified during this stage can be used as a basis for making decisions to embark upon major initiatives during the actual transformation.

Once the benchmarking exercise is complete, results are used as an input to other elements of the TDF to identify areas for improvement.

4. Organizational Assessment

Description: In today's global business environment, most organizations are affected by global decisions even when they are not shipping globally. Therefore, they must consider external and internal factors for alignment. The focus of this step is ensuring that enough value-added analysis is being performed in-house vs. daily execution that can be outsourced.

Pain Points: Misalignment is the leading cause for underperforming companies. Conflicting incentives across functional areas cause resources to work against each another. For instance, transportation is incented through consolidation of shipments that result in cost reductions in freight; however the sales and marketing organizations create CPFR or other programs that are geared at increasing sales but result in smaller and more frequent shipments.

Approach: Key questions to be addressed here involve measuring the overall headcount by role, title and cost to the company and benchmarking them against the best in the industry. Many companies work with third-party logistics providers to outsource their transportation needs, but the next logical step is not so widely accepted: Outsourcing the daily execution tasks to a low-cost country. Many logistics personnel --- including those within third-party logistics providers --- spend a lot of time attending to phone calls from carriers, suppliers and manufacturing facilities regarding day-to-day execution. With the aid of technology and centralization, the hallowed task of load planning also is open to offshoring.

The traditional opposition to outsourcing, including lack of understanding of geography, transportation terminology, language barriers and speed of response, has been successfully addressed in other industries, and the stage is set for supply chain executives to evaluate this option seriously. Metrics and incentives need to be in place to measure end-to-end process improvements and not project- or department-based goals.

Benefit: A clear view of mission and vision, roles and responsibilities and goals and measurements can be attained from a quick review of matching the three dimensions of an organization: top-to-bottom (strategic to operations); side-to-side (across all functions of an organization); and front-to-back (demand to supply). The matching of needs and requirements to capabilities (existing and/or needed) will facilitate clarity of mission and direction. In many cases, this step allows the transportation organization to understand what it "will not do" (as opposed to its mission) and bring a sense of scope to operations.

5. Transportation Process Analysis

Description: This step focuses on analyzing the current transportation processes and benchmarking them to best-in-class, leading to a prioritized list of gaps that need to be addressed over time. Such an analysis helps refine the savings estimated using benchmarking, assuming the processes were transformed to best in class. To ensure a 360-degree view of the transportation processes, Cognizant includes the following processes: forecasting, sourcing, planning, execution/visibility, freight charge management and compliance.

Pain Points: Typically, there is a cost to non-conformance when a common standard is either not available or simply overlooked (many times due to mergers and acquisitions). It is sometimes difficult to gain visibility into process exceptions, due to proliferation of manual processes for lack of technology tools; however, root cause analysis typically points to a flawed process that suffers from inconsistency. As a rule or guideline, all processes atrophy over time and must be reviewed periodically.

Approach:

1. **Transportation Forecasting:** Transportation forecasting is an oft-neglected portion of the transportation value chain, and companies often adopt generic business rules (e.g., applying a 10% increment across all lanes) to determine transportation capacity requirements. This results in a significant amount of ad-hoc sourcing during the course of the year, causing a substantial increase in the annual freight spend.

Best Practices:

- Multi-level forecasts: A strategic forecast forms trends in historical product demand. Forecasts are analyzed, and transportation capacity requirements are determined. Quarterly (operational-level) forecasts are based on the actual order backlog and the inventory positions to enable the shipper reserve capacity with its carriers.
- Integrated forecasting: Best-in-class companies employ a transportation forecasting system, integrated with order management and the enterprise data warehouse, to receive historical product forecasts, seasonality patterns, peaks and troughs in transportation demand and carrier capacity outages. Furthermore, the system must interface with the bid-management system to provide capacity requirements as input to the transport bid creation process.

2. Transportation Sourcing: Transportation sourcing is arguably the most important task in the transportation value chain, as it determines overall freight spend and sets the direction for other functional areas. The bidding process in many companies is handicapped due to inadequate inputs or lack of bid management and analysis tools.

Best Practices:

- Bid evaluation should also include factors such as bundled offers, continuous move discounts and minimum volume guarantees beyond least-cost criterion.
- Contract management should link to the sourcing process to ensure that the bidding parameters are enforced during the engagement.
- An automated bidding process improves responsiveness to the market situation and facilitates incremental bidding at regular intervals. The compatibility of the bidding tool with other systems like forecasting, data warehousing and contract management is important.

3. Transportation Planning: Most shippers face two common challenges in transportation planning that severely inhibit transportation efficiency: localized planning and a disconnect between the sourcing and the planning teams.

Best Practices:

- Centralized load planning enhances visibility across the supply chain and induces economies of scale through improved load consolidation.
- Enforcing sourcing guidelines: The planning tool must consider all constraints arising out of the bid negotiations while designing a transportation plan to ensure savings are realized.
- Adaptive planning: Local constraints and expedited orders are a norm in transportation, and the planning function should be responsive enough to handle these scenarios. The central transport plan needs to be complemented by planning that occurs at the various local planning centers.

4. Transportation Execution and Visibility: The effects of bad sourcing and planning processes are usually felt at this stage. Hence, companies that do not have a transportation management system that can easily link the various parties and a strong responsive planning capability face capacity Shortages, tender rejections and myriad other issues.

Best Practices:

- Automated tendering: Carriers should be sent electronic tenders that specify the complete details of the plan. Tender acceptance performance must be monitored, and rejections from primary carriers must automatically get routed to the next carrier.
- Visibility and event management: The visibility tool should be automatically loaded with the transportation plan and updated with carrier booking and in-transit events as they occur. Easy access across the Web to the various stakeholders (shipper, consignee, carriers freight for warders,custom brokers) enables perfect visibility across the network. The tool should be linked to the financial system to trigger timely revenue recognition and also to the data warehouse for performance
- measurement.
  Regulatory: For shippers with private fleets,regulations around hours of service, safety and pollution norms can be monitored by having a proactive process to adjust load duration, tracking trends in driving habits and training sessions.

5. Freight Charge Management: For shippers with multinational operations, invoice processing becomes a Herculean task if the workflow is not foolproof and the process is not automated.

Best Practices:

- Freight spend analysis across various dimensions through a data warehouse is an essential input for future transportation sourcing and planning.
- Self-billing based on event and contract management obviates the need for elaborate freight invoice matching and auditing for the shipper.
- Freight audit: The invoice processing system needs to link with the visibility system and the contract management system to ensure data accuracy and adherence to performance requirements. This three-way match is made easier when the invoice and contractual measurement parameters are similar.

6. Governmental and Regulatory Compliance: Companies need to ensure compliance with governmental regulations in a variety of ways, from sales to order processing, to shipment preparation and invoicing.

Equally important is the reporting on shipped goods in order to comply with governmental regulations. Additionally, it is important to ensure compliance with other government agencies requiring environmental, health, safety and security, each with a set of compliance standards.

Export regulations: U.S. regulations require companies to screen customers, end users, end-uses and destination countries for exported products. Penalties can be quite severe for shipping to a denied party, providing inaccurate documentation or failing to put in place the proper license, including fines or restrictions on company exports.

Free trade agreements: Preferential duty rates are awarded to companies exporting/importing from countries covered by agreements like NAFTA and CAFTA. The savings might be realized by end customers in foreign countries having the correct commercial invoice documentation, country of origin, duty rates or by the importing company in the U.S. in terms of reduced import customs duties.

Import regulations: Major challenges are ensuring that product classification and duty paid are in sync with regulations. Duty savings through free-trade agreements, exports, supplier compliance and duty drawback can substantially impact transportation spend.

Best Practices:

- Embrace automation and centralize operations: A manually intensive process might lead to higher head count (with a rare skill set), as well as difficulties managing increasingly complex regulations and maintaining process consistency. It can also distract from risk management. For instance, order screening can be automated by integrating order management in an ERP or legacy system. All supporting documentation can be stored as readily available templates for shipping personnel, and version control and decision justifications can be maintained in a transparent, accessible, traceable format. All filings with the government for export/import can be automated through integration with ABI and AES systems, and the resulting data can later be used to claim duty drawbacks.
- Conduct audits: Measuring compliance risk at a corporate level is a necessity, through a detailed audit of all relevant departments on an annual or semi-annual basis. This could lead to constructive training sessions for both internal and external partners, attaining consistency in process and highlighting the risk of not being in compliance.

Benefit:
This step focuses on analyzing the current transportation processes and benchmarking them to best in class, leading to a prioritized list of gaps that need to be addressed over time. Such an analysis helps refine the savings estimated using benchmarking, assuming the processes were transformed to best in class. The most effective method for governmental compliance is to have an interface with the company's governance committee that maintains executive visibility and interfaces with the company's audit partner. Once automated, compliance becomes far more manageable than having to comply through manual means.

6. Evaluate the Transportation Technology, Tools and Techniques

Description: In this phase of the process, Cognizant's leading experts review the existing framework of systems and technology to compare them to best in class. It uses inputs of previous process analysis to facilitate a review of how well automation is used, what tools (hardware and software) are available to transportation users, what techniques are used in the deployment of those tools to automate the supply chain and how well these tools are absorbed by the functional areas.

Pain Points: Under-supported, under-funded and under-utilized automation to leverage productivity, flexibility and scale. Some of this relates to limited visibility and control over processes, whether internal or external influences.

Approach: While many companies prefer using a single ERP system as a baseline for information standards, there isn't one software vendor that can cover the entire spectrum of transportation needs. Evaluating IT systems, then, involves tracing each business process explained above against the systems used, the number of touch points with users and external systems and the system pain points and business pain points. There is a critical need for a service-oriented architecture to keep the IT landscape flexible enough to plug in and out

applications with minimal disruptions. This architecture should be backed by strong middleware to handle the complex interfaces from disparate systems.

Another key initiative is to identify the systems (new or existing) that need to be retained vs. phased out and the business risks/benefits associated with each. Once this is accomplished, a migration plan can be derived that maps the prioritized process gaps to the solutions available and helps phase out legacy systems without impacting the business. A short-term strategy might involve looking for hosted solutions or packaged solutions until expertise is built within the existing IT landscape.

Having the requisite skill set to deploy and support these systems in a scalable, cost-effective and timely manner invariably requires a trusted IT services company. Key characteristics to look for in such companies include transportation and supply chain domain experience, IT delivery experience with ERP systems, transportation packages and legacy transformation, revenue size, employee headcount and appropriate on-shore/offshore mix.

Benefit:
Companies are typically surprised at how easily technology can be deployed once the right tools are identified and approved by users. Automation is the key to high performance and scale. It does not need to be expensive and does not always require lengthy deployment. Our experts can quickly match corporate standards to available technologies that fit an organization's unique transportation needs and provide surprisingly high levels of productivity.

7. Performance Management

Description: This step models transportation goals and aligns with corporate (and business unit) strategies to provide a comprehensive model for managing transportation functions to meet those goals. As the marketplace evolves to a collaborative model with economic shifts, it is important that organizations develop an early-warning system to respond to these changes and possibly reshape execution to fit these needs.

Pain Points: Possible lack of visibility, automated alerts, integrated process goals and monthly performance-to-plan reports for management control. Unclear or misunderstood guidance for service level parameters causing lack of prioritization for serving best customers first can create "one service level fits all," which does not discriminate expediting a small customer "air freight" shipment at substantial cost for poor ROI.

Approach : While most companies are aware of the right processes and metrics to cover, they are unable to conduct a complete diagnostics exercise due to sheer lack of data or access to that data. Additionally, most organizations do not integrate these metrics across multiple functional areas and/or do not periodically review those metrics to align with marketplace dynamics or organizational changes.

Best Practices:

- Automated alerts provide instant response to failed processes, missed targets and underperforming partners. These are only a few of the ways in which alerts can be used to enable organizations to provide external integration with their supply chains.
- Enterprise data warehouses provide a single repository of operational information residing in disparate systems that management requires to perform efficient decision making.
- KPI metrics and performance scorecard: Management needs to define a set of KPIs that are rigorously tracked throughout the transportation value chain and maintained in the data warehouse. The metrics can either be cost-oriented (freight spend analysis), performance-oriented (on-time delivery performance) or a combination of the two. Also, the metrics can either measure internal performance (planning efficiency) or external carrier performance (compliance with schedules for ocean liners).
- A sophisticated reporting tool must cater to a wide range of audiences, from operational supervisors who use standard reports to managers who prefer complex dashboards with drill-down capability for root cause analysis.

Benefit:
Helps organizations gain an understanding of best in class, or how other organizations are aligning metrics to collaborative goals with internal and external customers, as well as external partners and operations. It also enables them to review best-in-class reporting tools and techniques and see customizable dashboards designed specifically for transportation clients.

Conclusion

A Comprehensive Transportation Diagnostics Framework almost always pays for itself within the first 12 months and sometimes within two quarters; however it can take one to two years to transform a transportation organization and achieve full realization of the objectives outlined in the resultant report. At that point, it would be appropriate to conduct another analysis to boost the organization to a higher level of performance, using enhanced or updated technologies.

The advantage of Cognizant's Transportation Diagnostics Framework is its ability to accelerate the analysis and quickly produce actionable recommendations for improvements. It prescribes taking a holistic view of transportation and aligning business needs with transportation strategy and incorporates a collaborative approach with supply chain partners. The seven-step plan leads to an actionable roadmap with clear, milestone-driven deliverables that have significant impact on the bottom line.

Clients can take advantage of a full set of tools from Cognizant's Transportation Center of Excellence, along with experienced transportation business consultants, technology architects and ERP and best-of-breed package specialists. These resources are continuously updated and refined across multiple partners and industries.

About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting and business process outsourcing services. Cognizant's single-minded passion is to dedicate its global technology and innovation know-how, industry expertise and worldwide resources to working together with clients to make their businesses stronger. With more than 40 global delivery centers and 58,000 employees as of March 31, 2008, we combine a unique onsite/offshore delivery model infused with a distinct culture of customer satisfaction. A member of the NASDAQ-100 Index and S&P 500 Index, Cognizant is a Forbes Global 2000 company and a member of the Fortune 1000 and is ranked among the top information technology companies in BusinessWeek's Info Tech 100, Hot Growth and Top 50 Performers listings.

Start Today

In a time when companies are relentlessly pushing to compete better, move faster and fight harder, Cognizant is the global technology partner with a single-minded passion: Dedicating our systems expertise, industry intelligence, and global resources to make your business stronger.

For more information on how to drive your business results with Cognizant, contact us at inquiry@cognizant.com or visit our website at: www.cognizant.com.

Cognizant | Manufacturing & Logistics
Passion for building stronger businesses

World Headquarters

500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277
Email: inquiry@cognizant.com

European Headquarters

Haymarket House
28-29 Haymarket
London SW1Y 4SP UK
Phone: +44 (0) 20 7321 4888
Fax: +44 (0) 20 7321 4890
Email: infouk@cognizant.com

India Operations Headquarters

#5/535, Old Mahabalipuram Road
Okkiyam Pettai, Thoraipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060
Email: sdc.chn@cognizant.com