

# IT-enabled logistics to better services

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At the beginning of the year, 2011 seemed to be the year in which the global economy would reach pre-financial crisis levels as economies around the world continued to gain momentum, leading to increased manufacturing output, retail sales, and global freight flows. Now, the world watches with a mixture of anxiety and hope as people revolutions sweep across the Middle East and North Africa. In the short term, oil prices will spike, driving up transportation costs; but in the long term, this could usher in an era of growth to regions that have been suppressed for years, driving up consumer demand for a range of goods and offering new opportunities for logistics.

## SUPPLY CHAINS IN AN ERA OF RAPID CHANGE

The unrest in the Middle East and its immediate effect on oil prices underscores the reality manufacturers, retailers, and logistics service providers have had to face since the global financial crisis in 2008 -- the reality of massive global economic shocks that hit very quickly and often get resolved quickly as well. The world has always seen change -- what makes the current period different is the frequency, scope and duration of each change.

The winners in this era of rapid change will be manufacturers and retailers who re-engineer the long, thin supply chains they have evolved over the last decade, and move to a model in which they sell where they build and build where they sell. The shorter supply chains will be less vulnerable to transportation cost spikes, carry lower inventory, and more demand sensitive. Third-party logistics providers have a key role to play in this transformation as shippers -- manufacturers and retailers -- to outsource a greater portion of their logistics planning and execution.

The 2010 Annual Third Party Logistics (3PL) Study, conducted by Capgemini Consulting, the Georgia Institute of Technology and Panalpina, showed that companies spend 11 percent of their sales revenue on logistics, and outsource about 42 percent of logistics spend. The logistics service provider (LSP) industry has been growing steadily over the last two decades with revenues over \$500 billion globally. Shippers outsource a range of services,

from domestic and international transportation to warehousing, forwarding, customs brokerage, and supply chain redesign. LSPs offer anywhere from one to 16 separate services, with most LSPs offering eight or more services.

## IT CAPABILITY GAP

The 3PL Study also showed that LSPs still face an IT capability gap -- only 54 percent of the shippers surveyed were satisfied with the IT capabilities their LSPs offered. LSPs have been bridging the IT capability gap over the last three years, but there is still a long way to go. Two decades of strong growth through mergers and acquisitions, decentralised IT, and a huge growth in geographical footprint, clients, industries, and services offered have resulted in a complex IT environment with legacy platforms, point-point integrations, multiple data silos, and custom applications that are difficult to maintain, difficult to modify, and expensive. LSPs often have operating platforms for each service they offer, and an instance of the system for each client, leading to hundreds of warehouse management system (WMS) instances and transportation management system (TMS) instances that need to be maintained to support clients.

IT is the bottleneck for a large number of LSPs, limiting the agility and functionality LSPs need to bring innovative new services to market quickly, deliver existing services reliably at the lowest cost, and meet ever-increasing regulatory requirements. LSPs have used short-term fixes for years to overcome these challenges, using manual processes to meet client needs, but this is not sustainable. LSPs have to simplify and modernise their information technology environments, standardise and automate business processes, and transition to logistics platforms that allow them to provide multiple services to multiple clients on a single configurable platform.

## SIX PRINCIPLES OF TRANSFORMATION

Leading logistics providers have realised that IT is a strategic differentiator and that investments in IT are critical to long-term success. As a result, they are making the investments to transition their information technology environments to this state. In working with shippers, LSPs and carriers over the last two decades, the Oracle Transportation industry team has identified

six key principles that characterise class information technology platform. Over the last two years, we have presented these principles to several business and IT executives in logistics companies. There is broad acceptance that logistics leaders will perform the following steps:

- Automate to scale the business and improve profitability: Standalone systems, disconnected and labour intensive processes, and the lack of decision support for complex tasks such as quoting, routing, and shipment consolidation have resulted in LSPs adding manpower to support growth, high cost of service, and low margins. Logistics leaders will automate routine and complex tasks and orchestrate enterprise workflows, allowing the workforce to focus on the customer and on exceptions that require human expertise.
- Leverage technology to speed time-to-market: Multiple systems for logistics planning and execution and financials, and the lack of standard processes, have increased the time LSPs need to introduce new services and made it difficult to deliver them consistently. Logistics leaders will adopt global quote-to-cash platforms that allow new services to be introduced quickly and delivered reliably by ensuring adherence to contracts, automated workflows, and pro-active monitoring.
- Configure solutions without customising processes and IT: Inflexible legacy platforms for transportation and warehouse management have forced LSPs to add a new instance of the system for each client, resulting in hundreds of TMS and WMS instances that needed to be setup, configured, and maintained. LSPs have also had to rely on workforce training to ensure adherence to customer-specific requirements. Logistics leaders will adopt TMS and WMS platforms that can support multiple services for multiple clients, reducing the time and costs to onboard each client. Logistics leaders will also automate client business rules, ensuring service reliability and customer satisfaction.
- Collaborate with customers, partners, employees: Collaboration with customers using spreadsheets, complex EDI integrations, high error rates, and long lead times for setting up electronic communications with shippers and carriers have limited the real-time collaboration abilities of LSPs. Leaders



in logistics will use new collaboration platforms that support data exchange in a variety of formats, integration using web services, and automated workflows. This will reduce the time and costs for integration, increase reliability, and promote proactive workflow monitoring.

- Measure to drive improvement: KPI data collection and computation tends to be manual and delayed at most LSPs, making proactive process improvement difficult. Leaders in logistics will improve decision-making through performance dashboards that allow visibility to KPIs and provide the insights needed to identify root causes and improve processes. Leaders in logistics will invest in robust data collection systems for KPIs, automate KPI computations and make continuous process improvement a priority.
- Deliver one version of the truth: Most LSPs have a real challenge closing their books quickly because revenue

and expense data is split across multiple systems. Customer data, shipment data, and other enterprise master data is stored in multiple systems as well, making it difficult for LSPs to get a consolidated view of customers and operations. Leaders in logistics will centralise customer, shipment, and enterprise master data, lowering IT costs and accelerating decision-making. They will also invest in tools for financial consolidation that greatly accelerate financial data consolidation and reporting.

**THE LSP IMPERATIVE**  
LSPs that continue to do business as usual will not survive in this of rapid change. LSPs that realise IT is a strategic differentiator and adopt modern leadership principles will become the industry leaders of tomorrow.

Sundar Swaminathan is the senior director for industry strategy and marketing at Oracle.

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# Reform measures underpin positive trends

CONTINUED FROM YESTERDAY

ATIUR RAHMAN

Inflation remains a major headache. However, core (non-food) CPI inflation is still low at single digit level, 4 percent in April 2011; but headline CPI inflation is higher (8.5 percent annual average and 10.7 percent p-to-p, in April 2011), propped by upsurge in global prices of food grains, petroleum and other commodities. Annual p-to-p food price inflation in April 2011 stood at 14.4 percent, a level not seen since fiscal year 2008. Rice price decline with the arrival of the bumper boro rice harvest in the market will largely be offset by the recent increases in subsidised energy prices. It may therefore take until H1 FY 12 for p-to-p headline CPI inflation to edge back to single digit comfort zone; by then the effects from Chinese monetary tightening, European fiscal austerity and the end of US quantitative easing on global commodity prices should show up (some downward jolts already seen in Q4 FY 11).

After raising CRR by 50 basis points late in FY 10, Bangladesh Bank (BB) hiked it further in FY 11 by another 50 basis points. Bangladesh Bank's repo, reverse repo interest rates were raised thrice in FY 11 by 100, 50 and 25 basis points. Broad money and private sector credit growth remained high (22.9 and 29 percent y-o-y respectively in April 2011) nevertheless, driven by sharp upturn in external trade, investment and output activities following a brief spell in global downturn related slowdown. BB's monetary and credit policies have served fairly well in keeping core (non-food) CPI inflation low, but exogenous influences of global prices are not impacted by domestic policies of small economies like Bangladesh.



A boy waits for customers at a shop at Karwan Bazar in Dhaka. Inflationary pressure is a "headache" for the economy due to spiralling global commodity prices.

There is no denying the fact that the microfinance sector in Bangladesh is playing a large role in extending self employment credit to the poorer population segments. As of June 30, 2010, MFIs had outstanding loans of Tk 150 billion (\$2.1 billion) to more than 20 million poor borrowers. Beside MFIs, state-owned commercial banks and specialised government programmes also extend microcredit. All the financial inclusion activities have been contributing immensely in rejuvenating the rural economy providing necessary domestic demand.

## Bangladesh scores even better in social and human development indicators

Bangladesh scored quite well in social and human development indicators. Poverty (upper poverty line, 2122 kcal food intake) declined from 57 percent to

49 percent of population during the 1990s and further to 40 percent in 2005. Poverty decline slowed down somewhat in the global downturn, but regained pace subsequently with rising urban and rural real wages. Preliminary reports from the BBS Household Income and Expenditure Survey (2010) indicate poverty at around 31.5 percent. Moreover, the survey indicates lower Gini-coefficient confirming fall in income inequality. Indeed, a substantial number of rural people below the poverty line have crossed the line during the last decade or so. Given this positive background, it is not surprising that Bangladesh is well on course for attaining most of the MDGs by or before 2015. Bangladesh has recently been awarded by the United Nations for her impressive performance in reduction in child mortality, and the country is among the top

10 performers in achieving gender equality with, gender equality in primary school enrolment already achieved.

Between 1980 and 2010, Bangladesh registered 81.1 percent increase in Human Development Index against 62.2 percent in India, 57.6 percent in Pakistan and 28.3 percent in Sri Lanka. Despite having only half of India's per capita income, Bangladesh scores better in most of the social indicators. Life expectancy in Bangladesh is 66.9 years compared with 64.4 in India. The proportion of underweight children in Bangladesh (41.3 percent) is lower than in India (43.5 percent). Fertility rate in Bangladesh is 2.3 against India's 2.7. Mean years of schooling amount to 4.8 years in Bangladesh compared with India's 4.4 years. Female literacy rate in Bangladesh is higher than in India.

Infant mortality and under 5 mortality rates per thousand live birth in Bangladesh are 41 and 52 respectively against India's 50 and 66 per thousand live birth respectively. Nobel Laureate Amartya Sen praises Bangladesh's remarkable achievements in social indicators in the latest New York Review of Books by stating that "It is to the huge credit of Bangladesh that despite the adversity of low income it has been able to do so much so quickly". And he gives a lot of credit to non-governmental actors in addition to pro-poor public policies for this significant gain in social development.

## Reform measures underpinning positive socioeconomic trends

Positive socio-economic trends are underpinned by an inclusive development strategy and a comprehensive range of policy and institutional reforms over the past few decades including development strategies aimed at equitable growth, routine allocation in the national budgets for public expenditure on food security, primary healthcare, education, training and social safety net, ongoing reforms in revenue mobilisation, support for domestic production of essential food crops bolstering food security and rural economy, abolition of directed lending and freeing up of interest rates and exchange rates, financial inclusion campaign by Bangladesh Bank for engaging banks in innovating cost-effective financial services delivery mode in partnership with MFIs and mobile phone/IT platforms, rapid progress in wired and wireless connectivity and so forth.

Atiur Rahman is the governor of Bangladesh Bank.

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TO BE CONTINUED