# **APPS RUN THE WORLD**

# Transportation

Vertical Applications Market Report 2009-2014, Profiles Of Top 10 Vendors

9/30/2010

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# **Summary**

This applications market sizing report examines the 2009 performance of the top 10 applications vendors in the transportation vertical, which includes airlines, railways, postal and package carriers, shipping companies, and logistics service providers.

The market was essentially flat in 2009 as recession, coupled with relatively high fuel costs in the first half of the year, hurt the performance of the whole sector. Many transportation companies slashed their IT spending as a result. The tentative recovery did not improve things until the tail end of the year.

Still the signs are encouraging as passenger and freight traffic starts picking up once again. Government-funded initiatives, including high speed rail projects that could begin service as early as 2013, will also boost investment in the applications market through the forecast period.

#### **Top Line and Bottom Line**

On the top line, the transportation vertical is one of the most fragmented sectors encompassing different modes of transport for moving people and goods around the world. Hence there will always be a need for not just implementing new applications for new transportation systems, but also upgrading existing ones with the latest technologies to improve speed, performance and scalability.

Airlines, for example, are undergoing major expansion as leisure travel picks up in developing world and business travel is rebounding in industrialized nations. The result is an increased demand for agile applications to accommodate airlines' requirements for real-time booking and ticketing as well as for managing passenger records and departure control.

Legacy applications for computer reservation systems are at different stages of being replaced or upgraded as airlines are loath to carry on with the expensive task of maintenance and support so that they can focus on their core competency. Hence new software will need to be written specifically for next-generation infrastructure that leverages the latest mobile technologies.

In one example, the Chinese government plans to invest up to \$1 trillion by 2015 on infrastructure projects. More than half of that amount will go into new railways, airports and other systems for the nation's more than 30 domestic airlines.

The bottom line is that the transportation vertical is a work in progress because of its inherent challenge of running a distributed network that is always in search of the nexus to accommodate people on the move. In fact there are so many untapped opportunities for new applications including electronic toll collection for the next-generation car to grid system or Web-based portals for clearance of customs forms to meet shifting global trade management compliance requirements.

#### **Market Overview**

The market for applications for the transportation vertical was essentially flat in 2009 as new IT spending was either halted or postponed at the teeth of the recession. As economic outlook began to look rosier, new projects were placed on the front burner.

In August 2009 American Airlines announced its plan to develop a new computer reservation system with HP, which has considerable presence in the market through its EDS division. The new system called Jetstream is

expected to be phased in over the next four years replacing the Sabre CRS that American has been running for decades.

Other new developments have been put into high gears by applications vendors such as Amadeus, Sabre, SAP, Travelport and TravelSky, all vying for the opportunity to sell next-generation applications to airlines and airports to manage their operations and customers over the next few decades.

Other vendors have focused on ground carriers, logistics service providers as well as an army of freight brokers, forwarders and other stakeholders helping them improve their operations through optimized profitability by incorporating partner collaboration, transportation network design with the help of RFID and fleet management, as well as the inclusion of carbon footprint analysis for companies that make sustainability a business priority.

On the M&A side, apps vendors focusing on the transportation vertical have done their share of deal making. Descartes, for example, raised \$38 million in a stock offering to help fund its acquisitions. Its latest one was the purchase of Belgian-based Routing International for its optimized route planning solutions.

RedPrairie, following its acquisition by private equity firm New Mountain Capital in March 2010, acquired SmartTurn for its warehouse management applications two months later.

The underlying strengths of the transportation vertical, coupled with the heightened interest of institutional investors, are expected to fuel the growth of apps vendors that have every intention of making it easier for companies to transport people and goods around the world.

# **Implications Of The Great Recession of 2008-2009**

While the recession has dented the hopes of sustainable growth in the transportation vertical, it did not threaten to take down the entire industry. While the transportation vertical appeared to be more resilient than financial services because of its critical role as a global link, it was not immune from external threats.

The spread of the H1N1 virus in early 2009 – and more recently the volcanic ash eruption incident - posed serious challenges to the vertical, underscoring the vulnerability of the system in staving off potentially disastrous outcome. What it remains unclear is whether new technologies and the accompanying applications can be put to the test of securing the system, perhaps limiting the damage done to the entire transportation network.

The second half of 2009 appeared to have given the vertical a new lease on life as the transportation vertical was swamped by increased passenger traffic. By the end of the third quarter of 2009, bookings using Amadeus Global Distribution System ended the fifth-straight quarterly decline with only a 2.8% drop. The figure shot up to an 8.8% jump in the fourth quarter of 2009 and continued with a 9.6% jump the following quarter. Amadeus attributed the rebound to strong bookings in Middle East and Asia Pacific. Similar sentiments were echoed by other GDS providers as well as applications vendors that specialize in transportation industry.

Descartes, which operates an on-demand service that acts as a federated global logistics network processing everything from carrier selection to cargo freight billing, saw a 35% jump in revenues for its latest quarter ended July 31, 2010, citing improved business conditions and recent acquisitions. That followed a 22% rise in revenues for its preceding quarter even though its network was snared by disruption of cargo traffic due to the Icelandic volcanic activity in April.

As the turnaround of transportation vertical was buoyed by heavy infrastructure investment around the world, the threat of a double-dip recession began to recede. Even in mature markets such as Western Europe, Amadeus saw

pockets of growth. In its latest quarter, Amadeus sold its Altea passenger service systems to two regional airlines in France and migrated three airlines including Spanair of Spain to new departure control module.

What these developments suggest is the resiliency of the transportation vertical fueled by man's eternal quest for discovery. The applications vendors in turn are doing their part not to disappoint the intrepid travelers.

#### Customers

Airlines, railways and logistics service providers in Asia Pacific and Middle East are expected to serve as the catalyst for applications vendors to expand in the transportation vertical. Given the strong fundamentals of these regions and their lavish spending on bulking up their transportation networks, the market is ripe for sustainable growth.

A case in point is Dubai-based Aramex, an 8,100-person logistics service provider that has doubled its size since 2005 and now plans to enter 10 new markets in Africa, Asia, and Eastern Europe. Recently it signed Descartes to start using its Global Logistics Network and global supply chain execution applications, Messaging and Cargo 2000, to help manage its air freight operations.

Similarly applications implementations will gravitate toward countries such as China, India and Indonesia where transportation systems are undergoing major overhaul.

For instance, Infor last year signed three metro operators Chongqing Metro, Shenzhen Metro and Seoul Line 9 to sell its enterprise asset management applications to help these rail companies keep up with their increasingly complex operations and equipment needs.

# **Top 10 Applications Vendors In Vertical**

The following table lists the 2009 shares of the top 10 applications vendors in the transportation vertical and their 2008 to 2009 applications revenues(license, maintenance and subscription) from the vertical.

		2009 Applications	2008 Applications
		Revenues From	Revenues From
Vendor	2009 Share(%)	Transportation(\$M)	Transportation (\$M)
SAP	8.2%	180	170
Amadeus	7.4%	162	138
Sabre Airline Solutions	6.3%	138	139
Travelport	5.1%	111.3	119.5
Lufthansa Systems	4.9%	107	122
TravelSky	3.1%	67	59
Oracle	2.7%	60	55
JDA	2.6%	56	53
Descartes Systems			
Group	2.1%	47	44
Infor	2.1%	45	50
Subtotal	44.4%	973.3	949.5
Other	55.6%	1220.7	1256.5
Total	100.0%	2194	2206

#### Vendors To Watch

Because of the fragmented nature of the vertical, small and midsized applications vendors will continue to take advantage of often overlooked opportunities.

Rostima, for example, has become a viable alternative to mainstream workforce management applications because of its domain expertise in serving port operators by addressing their human capital management requirements.

McLeod Software and Mercurygate are among the apps vendors that have succeeded in tapping into logistics services providers. McLeod, which focuses on the trucking segment, has established a base of more than 500 carriers and brokerage customers. Mercurygate is another major contender in transportation management applications for 3PL, brokerages and shippers.

On the airline side, the vendor to watch is Navitaire, which is often considered an underdog compared with the well-known Airline IT operations of Amadeus, Sabre, and Travelport. Navitaire, which acquired the computer reservation system from HP in 2000, has carved out a niche by selling passenger service systems to low cost carriers such as AirTran, Cebu Pacific, GOL, Jetstat Airways, Porter Airlines, and Virgin Blue. It's not clear the pending merger between Southwest Airlines, a big Oracle customer, and AirTran would have on Navitaire.

#### Outlook

On the upside, the transportation vertical is girding for a new era of expansion as passenger and cargo traffic starts taking off. Applications vendors appear to be benefiting from the upward movement given the amount of legacy systems that needs to be upgraded or replaced by airlines, railways and LSPs in order to accommodate their growth.

For one thing, both American and Air France/KLM are doing just that. Other so-called legacy operators, including United Airlines, are considering the same to better compete with upstarts and low-cost carriers.

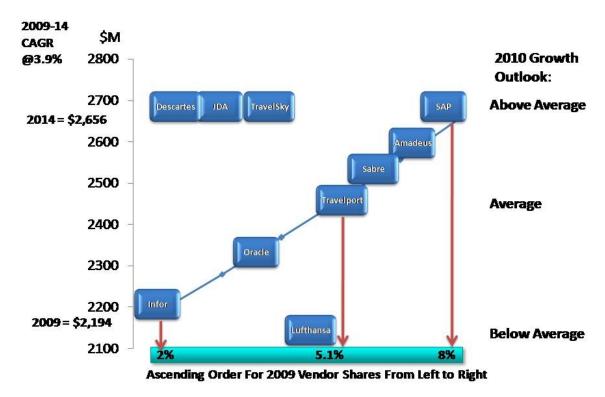
On the downside, the transportation vertical, which has been hurt by sharp swings in fuel costs, labor unrest and external factors from climate changes to terrorist attacks, has gone through the boom to bust cycle a number of times since the 1990s.

Applications vendors will not experience smooth sailing given the fragility of the current recovery. The outlook is particularly worrisome in North America and Western Europe, which still represent the lion's share of the passenger and cargo traffic and any sustainable growth in IT spending is far from certain.

#### **SCORES Box Illustration**

The following graphic shows the 2009 shares of the top 10 applications vendors in the transportation market with SAP claiming the top spot at 8%, followed by Amadeus, Sabre, Travelport, Lufthansa Systems and others. Based on our SCORES methodology, SAP, TravelSky, JDA and Descartes are rated above average for their growth potential in 2010. The market is expected to achieve a 3.9% compound annual growth rate rising from \$2.2 billion in 2009 to \$2.7 billion by 2014.

# 2009 Shares of Top 10 Apps Vendors In Transportation Vertical, 2010 Growth Outlook, Forecast Through 2014



# **Profiles of Top 10 Applications Vendors In Vertical**

- SAP
- Amadeus
- Sabre Airline Solutions
- Travelport
- Lufthansa Systems
- TravelSky
- Oracle
- JDA
- Descartes Systems Group
- Infor

# **SAP**

Walldorf, Germany

www.sap.com

#### Overview:

SAP has emerged as one of the biggest applications suppliers for transportation companies helping them manage a smattering of functions from transportation management to maintenance repair and overhaul. Typical customers include airlines, railways, shipping companies and logistics service providers.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	180	170

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	45	25%
EMEA	108	60%
Asia Pacific	27	15%

# 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	63	35%
above)		
Large(1K-5K ees)	81	45%
SMB(1K ees and	36	20%
below)		

Туре	2009(\$M)	% of total
License	45	25%
Maintenance	135	75%
Subscription	0	0%

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product portfolio, solution scope	Average
Customers	Customer wins across regions and customer segments, momentum among new and existing customers	Above average
Opportunities	Market opportunities at the vertical and subvertical levels	Average
Risks	Ability to handle internal and external risks and challenges	Average
Ecosystem	Network effects of VARs, resellers, SIs and ISV partners, health of ecosystem	Above average
Shares	Market shares, company sales, size, overall market presence	Above average
Total	With a 8.2% share in the transportation vertical, SAP's ability to maintain and win share in the market segment in 2010	Above average

#### **Full Overview**

Having developed domain-specific solutions and secured a long list of customers, SAP has seen increased adoptions of its fully integrated applications by key players in different parts of the transportation vertical.

The growing momentum has been supported by a robust ecosystem of implementation partners and others that add value to the core systems from SAP.

In recent quarters SAP has picked up new customers in the airline industry, while gaining ground among logistics service providers and railways that have been drawn to the vendor's extensive portfolio of applications and complementary technologies that help make a standardized back-to-front office environment possible.

Some of these implementations demonstrate the scalability of SAP products. One major rail company has been running SAP ERP Human Capital Management applications to help manage its more than 1.3 million employees.

In 2009 SAP acquired SAF, a developer of ordering and forecasting software. The acquisition is expected to shore up SAP's capabilities in simulation of complex logistics systems.

# **Key Applications For Transportation Vertical:**

SAP ERP, SAP ERP Human Capital Management, SAP Transportation Management, SAP Extended Warehouse Management, SAP Customer Relationship Management, SAP MRO(Maintenance Repair & Overhaul), SAP LAM(Linear Asset Management)

# **SCORES Analysis**

#### Strengths

SAP has been building a loyal following among transportation companies that need to shave their operating costs and boost efficiency through systematic business process improvement. Relying on a standardized system as their backbone, these customers have been able to improve financial and operational performance by aligning resources

properly across their organization. At the same time they can leverage a set of integrated tools for better planning, forecasting and customer information management, which in turn would result in higher profitability.

The reliability and scalability of the SAP applications has helped convince transportation companies such as railways and postal carriers to the value of running on a stable platform. And SAP has proven to be the safe choice for that type of investment because of its experience in the vertical, augmented by the extensibility of its solutions from the vendor and its partners, including many that are considered rainmakers such as Amadeus and Lufthansa Systems in aviation.

#### **Customers**

More than 1,200 customers in the transportation vertical have chosen SAP applications as their standard business management systems for different parts of their operations.

In 2009 SAP's reference wins included Aeroflot Russian Airlines, Ethiopian Airlines, Japan Post Holdings, Norfolk Southern, Olympic Air, Queensland Motorways, Malaysian Airline System Berhad, and SpiceJet.

Some of these deals were substantial. For example, the deal with Ethiopian Airlines was valued at \$8.5 million covering SAP applications for financial, human capital management, supply chain management system, portal, business intelligence, as well as implementation services.

Other reference customers include Amtrak, Austrian Airlines, Canada Post, Canadian National Railway, CAT Logistics, CHEP, Deutsche Post World Net, Eimskip, Estafeta Mexicana, Hamburger Hafen und Logistik, Industriaplex, Istanbul Deniz Otobusleri (IDO), Japan Airlines, Linfox Logistics, Marine Resources, Neptune Orient Lines, NYK Line (NYK), Old Dominion Freight Line, Panalpina, Port of San Diego, Poste Italiane, Prague Airport, Saudi Arabian Airlines, Schwarz Logistik, Siemens Transportation Systems, Slovak Post, Smurfit-Stone Container Corp., STEF-TFE, Strukton Rail, Swiss Post, and TNT.

# **Opportunities**

SAP is well-positioned to expand its reach into railways and shipping companies after making significant inroads into some of the biggest operations in those segments.

Large rail operators from Amtrak to Union Pacific have standardized on SAP applications and their utilization is expected to grow as a result of heavy investments fueled by high-speed rail projects in the United States and other countries.

SAP has also established a beachhead among major shipping companies and postal carriers, translating into depending recurring revenue streams for the vendor.

#### **Risks**

The irony of SAP's lofty position in the transportation vertical is that SAP IT resources are constrained especially in sectors like railways where attrition is low and barriers to entry are kept fairly high because of the specific domain knowledge required to run these implementations. One rail operator has expressed concern over the inability of finding qualified IT resources when implementing in-house a new SAP system, forcing his company to turn to third-party business process outsourcers. That does not necessarily portend a positive development for SAP as the market begins to recover and these transportation companies may have to compete with other industries for SAP skills, rendering further investment in SAP projects less desirable with such uncertain outcome.

# **Ecosystem**

SAP primarily sells direct to customers in transportation vertical. It also works with systems integrators to develop add-ons for the aviation industry.

For example, it has partnered with HCL Axon to develop iMRO, a SAP-endorsed business solution for maintenance repair and overhaul for the aviation industry. HCL Axon and SAP have been using the solution to target more than 100 customer sites covering aviation, aerospace and complex asset management and maintenance organizations.

SAP has collaborated with Amadeus and Lufthansa Systems to deliver joint solutions for the airline industry. Also SAP has worked with two airline user groups, AIROPS, which focuses on airline operations, and SUGAIR, which focuses on maintenance, to help define future user requirements and best-practices implementations.

Additionally SAP has been expanding its ecosystem by bringing into its fold major shippers, which in turn will create a network effect when their customers become SAP customers as well to achieve real-time connectivity among all parties involved.

#### **Shares**

With a 8.2% share in the transportation vertical, SAP's ability to gain share is above average because of its increased momentum in segments such as airlines in emerging countries, coupled with its growing ecosystem to deliver end-to-end solutions for transportation customers.

On the upside, SAP's dominance in railways and postal carriers will sustain its growth in the near term, while its mid-market offerings will help the vendor expand into small-to-midsized logistics providers and ground carriers.

On the downside, the challenge for SAP is to broaden the appeal of its applications through program and implementation simplification for customers and partners in order to make readily available an easy to consume solution that multiplies its utilization and its ecosystem effects. As it stands, the perceived complexity of its applications and the required skills to implement them could undermine any existing mind share and market presence that it has fought so hard to accomplish.

# **Amadeus IT Group SA**

Madrid, Spain

www.amadeus.com

# Overview:

As one of the largest IT solution providers for the transportation vertical, Amadeus wields industry clout by steering the direction of major and fast-growing airlines as well as a large swath of the global travel market. Typical customers range from network airlines to low-cost and leisure carriers.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	138	162

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	16.2	10%
EMEA	97.2	60%
Asia Pacific	48.6	30%

# 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	97.2	60%
above)		
Large(1K-5K ees)	40.5	25%
SMB(1K ees and	24.3	15%
below)		

Туре	2009(\$M)	% of total
License	0	0%
Maintenance	0	0%
Subscription	162	100%

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product	Above average
	portfolio, solution scope	
Customers	Customer wins across regions and customer	Average
	segments, momentum among new and existing	
	customers	
Opportunities	Market opportunities at the vertical and	Average
	subvertical levels	
Risks	Ability to handle internal and external risks and	Below average
	challenges	
Ecosystem	Network effects of VARs, resellers, SIs and ISV	Average
	partners, health of ecosystem	
Shares	Market shares, company sales, size, overall	Above average
	market presence	
Total	With a 7.4% share in the transportation vertical,	Average
	Amadeus's ability to maintain and win share in	
	the market segment in 2010	

#### **Full Overview**

Created as a Global Distribution System by Air France, Lufthansa, Iberia, and SAS in 1987, Amadeus has continued to expand as a primary technology enabler for airlines and other players in the travel industry.

Its IT Solutions division, which offers an array of applications including Altea Customer Management Solution, has worked with many European airlines to manage their passenger booking, sales and marketing as well as business intelligence requirements.

In addition to its strong hold in Western Europe, Amadeus has been expanding in regions such as Latin America where it started migrating a number of airlines to its applications and hosting solutions in 2009. By leveraging the synergy between its GDS and the IT Solutions division, Amadeus is well positioned to deliver high-performance passenger service systems as well as the underlying data for customers to improve their sales and marketing programs. Amadeus estimates that its transaction processing engine handles 37% of worldwide airline bookings through the travel agency channel, allowing airlines to spot transportation trends.

In April 2010 Amadeus completed an initial public offering in Spain raising nearly €1.5 billion. At the same time Amadeus consolidated its gain in the transportation vertical by investing heavily in research and development, while bulking up its product portfolio to boost cross-sell and upsell opportunities among its customers. In the first quarter of 2010, Amadeus spent €68.7 million on research and development, a 23% rise from the year-earlier period.

Amadeus appeared to be rationalizing its IT investment strategy. In September 2010, it sold its hotel property management system division to Infor SoftBrands in order to focus on its core competency in the transportation vertical.

# **Key Applications For Transportation Vertical:**

Amadeus Airline Retailing Platform, Amadeus Altéa Reservation, Amadeus e-Merchandise Solution, Amadeus e-Service Solution, Amadeus e-Retail Solution, Altéa Customer Management Solution, Amadeus Ticketing Solutions,

Fares & Availability Management, Revenue Integrity, Amadeus PNR Data Feed, Amadeus Business Intelligence Portfolio.

# **SCORES Analysis**

# Strengths

With backing from its investors including Air France/KLM, Amadeus has exerted considerable control over a large part of the Western European travel market. Its GDS picks up the lion's share of passenger booking in countries such as France, Spain and elsewhere in Western Europe.

Its IT Solutions division, which includes airline passenger service system and ancillary services, has experienced a 95% retention rate among customers that enter into long-term contracts that span anywhere between three and 15 years.

In 2009 it saw a total of 238 million passengers boarded on flights operated by airlines using its airline passenger management system and IT solutions. With continuous upgrade and migration to its latest Altea platform among its existing airline customers, the number of passengers boarded could top 575 million by 2013.

In 2010 alone, the number of passengers boarded could mean an addition of 100 million with such airlines including Aegean, Air France/KLM, LOT, Mauritania, Royal Jordanian, Saudi Arabia, and TAP.

Successful migration on this scale is the key to Amadeus' ability to deliver flexible and high-performance passenger service system and optimized customer experience to its airlines that have been striving to contain costs through system standardization and the extensive use of affordable technology solutions from Amadeus.

#### **Customers**

Within its IT Solutions division, Amadeus has more than 144 customers including 92 airlines that are under contracts to use its passenger management system and ancillary services.

In 2009 Finnair, Groupo SATA, Royal Jordanian, SAS Group, Spanair and TAM were among Amadeus' reference wins for its IT Solutions division. Last year it migrated a total of 12 airline customers to its Altea suite of applications.

More recently Asiana Airlines and LOT Polish joined the list of airlines planning to standardize or expanding the use of the Amadeus IT platform. In the case of LOT, it plans to add Altéa inventory module to its customer management system also from Amadeus.

# **Opportunities**

Upselling and cross-selling opportunities are proliferating among its installed base of airline customers, which are at different stages of rolling out their airline passenger management systems using the Amadeus platform. That opens up opportunities for them to add key modules like departure control as well as ancillary services.

Already 100 airlines are using its eCommerce applications including Affinity Shopper for search solution for airlines' websites.

#### **Risks**

When measuring passengers boarded, Amadeus registered continuous growth in the Middle East and Asia Pacific. But that has been overshadowed by the sluggish economy in Western Europe, which remains its biggest market. Any slowdown among its Western European carriers could delay their implementation plans, clouding the short-term outlook for Amadeus.

At the same time its IT Solutions division remains an also-ran in the North American market where some of the largest system migration is taking place. Amadeus appeared to have taken an interest in expanding into the United States. However one of its targets ITA Software for its airfare pricing system was picked up by Google for \$700 million in July 2010. The dilemma for Amadeus is whether it should continue to defend its home turf in Western Europe or take the offensive by acquiring IT solution vendors in North America or Asia Pacific.

# **Ecosystem**

Amadeus primarily sells direct its IT Solutions. It also works with a number of technology partners including SAP, IBM, Microsoft, British Telecom (BT), Cisco, Unisys, Siemens, HP, AT&T and SITA and software vendors such as Travelfusion, Hitch Hiker, InteRes, and Trisept.

#### **Shares**

With a 7.4% share in the transportation vertical, Amadeus' ability to gain share is average because of its heavy reliance on the Western European market where economic recovery is still tentative at best.

On the upside, Amadeus' successful IPO has provided considerable capital infusion for the company to expand in the Middle East and Asia Pacific, while ensuring its GDS as the top choice for suppliers and travel agencies.

On the downside, much of its near-term growth for the IT Solutions division will depend on its ability to successfully migrate its customers from legacy systems to new applications that are based on reusable and affordable Web services that replicate the performance and stability of mainframe solutions common in the airline industry.

# **Sabre Airline Solutions**

Southlake, TX

www.sabreairlinesolutions.com

# Overview:

As part of a diversified holding company responsible for automating business processes of the travel marketplace, Sabre Airline Solutions has helped transform the transportation vertical with a full suite of computer reservation, customer service and operations applications. Typical customers range from major airlines to fast-growing carriers that aim to alter the competitive landscape with highly differentiated offerings.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	139	138

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	82.8	60%
EMEA	34.5	25%
Asia Pacific	20.7	15%

# 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	96.6	70%
above)		
Large(1K-5K ees)	27.6	20%
SMB(1K ees and	13.8	10%
below)		

Type	2009(\$M)	% of total
License	41.4	30%
Maintenance	96.6	70%
Subscription	0	0%

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product portfolio, solution scope	Above average
Customers	Customer wins across regions and customer segments, momentum among new and existing customers	Below average
Opportunities	Market opportunities at the vertical and subvertical levels	Average
Risks	Ability to handle internal and external risks and challenges	Below Average
Ecosystem	Network effects of VARs, resellers, SIs and ISV partners, health of ecosystem	Average
Shares	Market shares, company sales, size, overall market presence	Average
Total	With a 6.3% share in the transportation vertical, Sabre's ability to maintain and win share in the market segment in 2010	Average

#### Full overview:

In order to maintain an upper hand in the transportation vertical, Sabre Airline Solutions has continued to broaden its product portfolio through internal development efforts and acquisitions.

Despite the economic downturn that wrecked havoc among its airline customers, Sabre's product release cycle has not skipped a beat. Sabre Airline, a division of Sabre Holdings, has also enjoyed a loyal following among developers that use its Qik tools to build add-on applications and Web services on top of the Sabre customer service applications.

Since Sabre Holdings was acquired by Silver Lake Partners and Texas Pacific Group in 2007, it has gone through significant expansion through acquisitions. The 2008 purchases of EB2 for its online travel booking and pricing applications and Flight Explorer for its commercial aircraft situation display systems shored up the capabilities of Sabre Airline in customer service and flight operations.

Following its early 2010 acquisition of Calidris for its revenue integrity and business intelligence applications, Sabre bought Flightline Data Services Inc. for its airline crew member schedule management applications in July. Flightline's crew applications and services will augment the Sabre AirCentre portfolio with real-time trip trading, mobile applications, preferential bidding, vacation bidding, system and training bidding capabilities.

In addition to these acquisitions, Sabre is planning for general availability of 2010 releases of a slew of applications for Flight Plan management, Crew Control, Movement Control, and Flight Explorer. Enhancements include new Gate Manager and Data Mart reporting capabilities.

# **Key Applications For Transportation Vertical:**

Sabre AirCentre Enterprise Operations, SabreSonic Customer Sales & Service, Sabre AirVision Marketing & Planning

# **SCORES Analysis**

#### Strengths

With more than 50 years of experience in computer reservation systems as well as airline operational applications, Sabre Airline has been guiding the aviation industry with a steady hand.

Its applications touch every aspect of the operations of an airline, airport as well as other key stakeholders in the travel industry.

Since it was spun off by AMR, parent of American Airlines, in 2000, Sabre Holdings has gone through wrenching changes because of the Dot Com bust, followed by the 911 terrorist attack that left much of the travel industry in tatters.

Amid the turbulence, Sabre Airline has persevered by delivering new applications such as in-flight merchandizing and mobile applications to meet changing requirements of its customers. Additionally it has been able to reap incremental benefits by leveraging other properties of Sabre Holdings including Travelocity and the Sabre Global Distribution System for distributing schedules, fares and inventory to travel agents.

The steady performance of Sabre Airline underscores its strengths in helping major and low-cost carriers establish and sustain their positioning through an integrated solution that optimizes visibility into their operations as well as sales and marketing programs. That is particularly important for newly-formed carriers that have relied on Sabre Airlines Customer Sales and Services applications to leapfrog the incumbents by establishing real-time results of innovative marketing campaigns, while rolling out e-ticket systems at the same time.

#### **Customers**

After securing more than 300 airlines and airports as customers, Sabre Airline has kept its momentum by entering new markets especially in developing countries where aviation has become accessible to a bigger percentage of the population.

In 2009 Sabre Airline's reference wins included Air China, Air Malta, First Air, JetBlue, Kenya Airlines, LAN Airlines, TAM, Volaris, and WestJet.

# **Opportunities**

With the tenuous economic recovery on its back, Sabre Airline's biggest opportunity lies in developing countries as well as its partnerships with some of the most aggressive airlines such as Emirates Air. Additionally incumbents like British Airways have continued to seek the latest technologies to boost their competitiveness, while other long-time customers such as Aeroflot have started upgrading their back-to-front office and operations systems to boost and retain the loyalty of their business travelers.

#### Risks

Despite its long history of helping automate the computer reservation systems of its customers, Sabre Airline has continued to face challenges with its complex implementations. Two recent implementations — one at WestJet and the other at JetBlue — helped illustrate the point. While the WestJet implementation was met with disappointing results because of inadequate planning, JetBlue fared much better after it learned from the mistakes of WestJet. It is not clear what role did Sabre professional services team play in the two well-publicized implementations. One thing is clear, though. It remains a work in progress for the transformation of Sabre Airline from a legacy mainframe

computer reservation system vendor to a provider of agile Web-based solution that renders expensive integration obsolete.

Another risk facing Sabre has to do with its ability to retain its marquee customers such as AMR. Last August AMR signed a letter of intent with HP to develop a new computer reservation system that would replace the current Sabre system. The possible decommissioning of the Sabre system at American could spark other incumbent customers to follow. While some may be able to justify the need of paying for continuous support costs of a system whose value is depreciating with time, others may opt for a better alternative of adopting a new platform that entails less cumbersome and perhaps less expensive maintenance costs in the long run.

# **Ecosystem**

Sabre primarily sells its applications directly, but it has developed a large ecosystem that leverages other assets of Sabre Holdings as well as its leadership position in the GDS marketplace to secure long-term commitment from its airline and travel industry partners.

#### **Shares**

With a 6.3% share in the transportation vertical, Sabre Airline's ability to gain share is average given the turmoil in the airline industry.

On the upside, the heavy investments that Sabre Holdings is putting behind its airline division underscores its strategic importance to the company, which appears to be bulking up development of Web-based capabilities, while extending the lifespan of its existing applications.

On the downside, Sabre Airlines faces the technology challenges of maintaining the performance and reliability of its legacy systems as the travel industry is going through seismic changes, something that could make it difficult for Sabre to be both an innovator and a custodian that aims to preserve the status quo.

# **Travelport**

New York, NY

www.travelport.com

# Overview:

With decades of experience in the airline computer reservation systems, Travelport has evolved with the rest of the travel and transportation industry by becoming a diversified company that delivers an array of technology solutions and business services. Typical customers include airlines, hotels and travel agencies.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	120	111

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	66.78	60%
EMEA	27.8	25%
Asia Pacific	16.6	15%

# 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	77.91	70%
above)		
Large(1K-5K ees)	22.26	20%
SMB(1K ees and	11.13	10%
below)		

Туре	2009(\$M)	% of total
License	0	0%
Maintenance	0	0%
Subscription	111.3	100%

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product portfolio, solution scope	Above average
Customers	Customer wins across regions and customer segments, momentum among new and existing customers	Average
Opportunities	Market opportunities at the vertical and subvertical levels	Above average
Risks	Ability to handle internal and external risks and challenges	Below average
Ecosystem	Network effects of VARs, resellers, SIs and ISV partners, health of ecosystem	Average
Shares	Market shares, company sales, size, overall market presence	Average
Total	With a 5.1% share in the transportation vertical, Travelport's ability to maintain and win share in the market segment in 2010	Average

#### **Full Overview:**

Travelport has established a large footprint in the transportation vertical following its purchase of Worldspan and a stake in Orbitz. The 2007 acquisition of Worldspan, coupled with its ownership of Galileo and Apollo, has positioned Travelport as one of the world's biggest Global Distribution System(GDS) providers. In January 2010 Travelport bought a 48% stake in Orbitz, strengthening its presence in the online travel market.

Its Airline IT Solutions division came through the acquisition of the Galileo GDS from the divestiture of Cendant, a conglomerate that fell under the weight of its accounting problems in the 1990s. With long term agreements with major airlines such as United and Delta, the division offers full-service hosted solutions including airline reservation systems as well as e-ticketing, pricing, ground handling, selling and merchandising, and other mission-critical functions.

In 2010 the vendor signed a deal with IBM to collaborate on new software development in order to improve performance and applications capabilities by leveraging IBM's hardware and infrastructure technologies ranging from Websphere to Rational as the building blocks of a Service Oriented Architecture environment for Travelport.

# **Key Applications For Transportation Vertical:**

Travelport Meridian for Passenger Management, Travelport e-Pricing for Airlines, Worldspan FareSource, Travelport Rapid Reprice for Airlines, Worldspan XML Pro.Travelport Rewards, E-Ticketing Technologies, Travelport e-Pricing, Travelport Fare Verified, Travelport Rapid Reprice for Airlines.

# **SCORES Analysis**

# Strengths

One of the strengths of Travelport lies in a balanced presence of its GDS footprint as well as the coverage of its subscribers across all regions, allowing it to deliver the economy of scale that optimizes its sales and marketing strategies, while ensuring its suppliers(airlines, hotels and others) to reach their target customers.

In 2009, Travelport's share of GDS-processed air segments was 46%, 26%, 12% and 17% in the Americas, Europe, MEA and Asia Pacific, respectively. The balance is similar to the global distribution of GDS-processed air segments of 43%, 32%, 9% and 15%, respectively.

Because of its established presence in fast-growing regions like Asia Pacific and Middle East, Travelport appears to be in a good position to take advantage of any spike in air segment volume in areas such as Southeast Asia and Dubai.

With more than 1,300 IT professionals involved in developing and supporting its applications for both GDS and Airline IT Solutions divisions, Travelport has continued to invest heavily in its product offerings. For instance, it plans to roll out its Universal Desktop and Universal API solution in the second half of 2010. The new applications will allow for easier display of price comparisons by suppliers including airlines, while enabling subscribers from travel agents and corporate travel buyers to have better access to fare information and unbundled services for price analysis and flexibility.

The deal with IBM is also expected to result in extensive use of Web services and components through the incorporation of the SOA architecture into Travelport's existing mainframe-centric environment.

That in turn will add more intuitive Web interfaces and reusable tools to enhance usability and reduce development costs, while continuing with the reliability and high-availability performance of its transaction processing engine.

#### **Customers**

Travelport sells its Airline IT Solutions offerings including passenger management, pricing and e-ticketing to 235 airlines and airline ground handlers, of which 44 are direct customers and 191 are indirect customers sold through its channel.

Its major airline customers include Alitalia, American Airlines, Air France, British Airways, Cathay Pacific, Delta Air Lines, Emirates Airlines, Jet Airways, KLM, Lufthansa Airlines, Northwest Airlines, Qantas Airways, Qatar Airways, Saudi Arabian Airlines, Singapore Airlines, South African Airways, Thai Airways, Turkish Airlines, United Airlines, US Airways.

In 2009 United Airlines was its largest airline customer accounting for \$180 million, or 8% of its total revenues.

#### **Opportunities**

For its Airline IT Solution division and the GDS business, Travelport's opportunities lie in both its major customers and low-cost carriers. The pending merger between United Airlines and Continental could result in additional hosting and subscription revenues if the combined company decides to standardize its passenger management system around the Travelport platform. Continental currently uses the computer reservation system hosted by HP.

On the other end, Travelport has made inroads into the low cost carrier space with more than 60 customers. Recently it signed SkyExpress and Fly540 for its GDS business. The issue is whether it can convert these low-cost carriers to use more of its hosting and subscription offerings.

In addition Travelport is expanding into emerging markets in Eastern Europe with increased momentum in Poland.

# **Risks**

The continuing consolidation among major carriers will have certain impact on Travelport's recurring revenue stream. For one thing, the combination between Delta and Northwest – both of which were customers of Travelport

prior to the merger - has resulted in a loss of more than \$13 million in revenues because of volume discounts and process consolidation.

In addition the long-standing relationship between Travelport and United Airlines will be tested as the latter may consider using other GDS providers once its contract with Travelport expires in 2013. That would be a blow to Travelport since United was the original developer of the precursor to the GDS being offered by Travelport.

# **Ecosystem**

Travelport primarily sells its airline IT solution offerings directly to its major customers like United and it uses third party national distribution companies in certain regions or tier-2 markets.

In addition to IBM, Travelport also works with technology vendors such as Hitachi, CA, Cisco and Microsoft.

#### **Shares**

With a 5.1% of the transportation vertical, Travelport's ability to gain share is average because of heavy reliance of major airlines, which are still rationalizing their IT investment plans because of the lingering effects of the recession.

On the upside, Travelport's new product offerings, coupled with considerable technology investment(\$93M in the IBM deal alone), underscore the vendor's commitment to sustain innovation on behalf of its customers.

On the downside, Travelport's airline IT solution division is heavily dependent on a dozen or so major airline customers and it has had limited presence selling its passenger management systems to low cost carriers, a diversification move that may hold the key to its future.

# **Lufthansa Systems**

Frankfurt, Germany

www.lhsystems.com

# Overview:

As part of the biggest airline group in Europe, Lufthansa Systems has enjoyed ready access to a large number of captive and external customers as well as partnership opportunities that help sustain its growth in the transportation vertical. Typical customers range from major and discount airlines to transportation and logistics companies throughout the world.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	122	107

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	5.3	5%
EMEA	74.9	70%
Asia Pacific	26.75	25%

# 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	53.5	50%
above)		
Large(1K-5K ees)	32.1	30%
SMB(1K ees and	21.4	20%
below)		

Туре	2009(\$M)	% of total
License	32.1	30%
Maintenance	74.9	70%
Subscription	0	0%

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product portfolio, solution scope	Average
Customers	Customer wins across regions and customer segments, momentum among new and existing customers	Average
Opportunities	Market opportunities at the vertical and subvertical levels	Average
Risks	Ability to handle internal and external risks and challenges	Below Average
Ecosystem	Network effects of VARs, resellers, SIs and ISV partners, health of ecosystem	Average
Shares	Market shares, company sales, size, overall market presence	Average
Total	With a 5% share in the transportation vertical, Lufthansa Systems' ability to maintain and win share in the market segment in 2010	Below average

#### Full overview:

Long a powerhouse in the airline IT market, Lufthansa Systems has seen steady growth in selling its extensive portfolio of airline management and operations applications, business outsourcing services and industry solutions to a wide array of customers.

Its sales to customers outside of the Lufthansa Group rose sharply between 2004 and 2008 as a result of its diversification effort. However the recession stalled its growth in 2009 as its airline customers and those in other industries slashed their IT spending.

Lufthansa Systems proceeded with caution by launching new products and growth initiatives. Recently it enhanced its financial management applications Sirax AirFinance Platform, which offers an integrated platform for such processes as revenue accounting and cost control.

In addition the vendor aims to take advantage of the upgrade and replacement cycle of incumbent airlines that have been using their legacy applications for a long time and are increasingly planning to offload their IT infrastructure to a third party service provider such as Lufthansa Systems.

# **Key Applications For Transportation Vertical:**

Lido/FlightOps Suite, Lido Flight Plan, NetLine/Crew, ProfitLine/Yield, Integrated Operations Control Center(IOCC), Sirax Revenue Accounting

# **SCORES Analysis**

# Strengths

Lufthansa Systems has considerable expertise in such areas as MRO planning and management for a large number of airline customers. Additionally it has leveraged long-standing ties with applications vendors such as SAP to expand in different segments of the transportation vertical as well as other industries.

Its extensive product portfolio helps automate every part of the business of an airline from resource management to flight operations.

In 2009 Lufthansa Systems upped the ante by unveiling an integrated control panel for operations control that is based on its Integrated Operations Control Center(IOCC) platform. The control panel takes advantage of the integrated IOCC application platform to control and monitor all aspects of airline operations providing full visibility into schedule management, operations control, crew management, flight planning and weight & balance.

#### **Customers**

With more than 200 airline customers and another 200 in other industries, Lufthansa Systems has made significant inroads into some of the largest and fast-growing carriers that have come to depend on its applications to run their entire operations.

In 2009 Lufthansa Systems' reference wins included Austrian Airlines, Cargoitalia, China Southern Airlines, Etihad, flydubai, Hamburg Port Authority, Meridiana Group, Nouvelair, Purolator Courier, Southwest Airlines, TACA, TAP, Tunisair, and Virgin Blue.

#### **Opportunities**

Air cargo business process automation will be one of the priorities of Lufthansa Systems in the coming year. Its newly-launched AdvancedCargo Platform covers the cargo selling and booking processes, handling as well as revenue accounting. The applications were slated to become generally available in April 2010.

The AdvancedSelling module of the application controls the booking process across all distribution channels and optimizes the complex process of capacity management. Handling processes are streamlined by the AdvancedHandling module which supports Cargo 2000 and IATA e-freight. It covers cargo ground handling and transport processes including warehouse management and customs. The AdvancedCargo Platform also offers a revenue accounting system for air cargo business called AdvancedAccounting, which provides reliable flight operations data and simplifies and accelerates accounting and billing processes.

# Risks

For years Lufthansa Systems has had a strong track record in the airline industry. However recent stumbles — including a failed alliance with Unisys to develop new passenger management applications — raised questions about its staying power when its competitors have been growing through acquisitions or accelerated product strategies. In 2009 Lufthansa Systems and Unisys reached an out-of-court settlement over the dispute.

Whatever the case, the challenge for Lufthansa Systems is to muster its considerable resources to come up with an alternative platform that could rival the innovation from its competitors as well as a long list of software developers aiming to overthrow the legacy systems.

Change will come gradually at Lufthansa Systems, which now expects its sales to drop in 2010 as a result of its continuous restructuring efforts. Barring any attempts to acquire other companies, Lufthansa Systems may have to move faster in order to regain its ability to lead the airline IT marketplace.

# **Ecosystem**

Lufthansa primarily sells direct and it also has partnered with industry associations such as IATA to simplify business processes of its members.

# **Shares**

With a 5% share in the transportation vertical, Lufthansa Systems' ability to gain share is below average given its stated goal of realigning its operations to better meet future customer requirements.

On the upside, Lufthansa Systems continues to exert its control over a large part of the aviation marketplace through its extensive alliances with major and startup carriers throughout Europe where its considerable presence is difficult to dislodge.

On the downside, Lufthansa Systems is in the midst of a corporate transformation that could take years to complete, following its earlier attempts to expand into other verticals. Its new management - headed by a recently appointed CEO, could mark a turning point for the company, whose commitment to the airline industry now hangs in the balance.

# **TravelSky**

Beijing, China

# www.travelsky.net

# Overview:

The fast-growing economy in China has fueled the expansion of TravelSky, which operates a Global Distribution System as well as other aviation and travel technology services in the country. TravelSky has enjoyed its status as the exclusive technology vendor for airlines in China to automate their ticketing function.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	59	67

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	0	0%
EMEA	0	0%
Asia Pacific	67	100%

# 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	46.9	70%
above)		
Large(1K-5K ees)	13.4	20%
SMB(1K ees and	6.7	10%
below)		

Туре	2009(\$M)	% of total
License	0	0%
Maintenance	0	0%
Subscription	67	100%

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product	Average
	portfolio, solution scope	
Customers	Customer wins across regions and customer	Above average
	segments, momentum among new and existing	
	customers	
Opportunities	Market opportunities at the vertical and	Above average
	subvertical levels	
Risks	Ability to handle internal and external risks and	Average
	challenges	
Ecosystem	Network effects of VARs, resellers, SIs and ISV	Average
	partners, health of ecosystem	
Shares	Market shares, company sales, size, overall	Average
	market presence	
Total	With a 3.1% share in the transportation vertical,	Above average
	TravelSky's ability to maintain and win share in	
	the market segment in 2010	

#### **Full Overview**

With the backing of the Chinese government, TravelSky has become the preferred technology vendor to the aviation and travel industry serving the needs of airlines and travel agencies. In addition to the government, 14 commercial airlines in China including China Southern Air and China Eastern Air own a 39% stake in TravelSky.

That in turn gives TravelSky virtual monopoly in the airline industry in China when it comes to handling the back-office, networking, transaction processing and other applications requirements of these carriers. Its growth has been impressive.

In 2009 its GDS processed 249 million bookings on domestic and foreign commercial airlines, up 18% from 2008. Its total revenues of TravelSky, whose shares are listed on Hong Kong Stock Exchange, rose 15% last year because of a number of acquisitions including one that handled accounting and settlement services for airlines.

The core operation, which includes the Aviation Information Technology service, saw a 12% rise in revenues in 2009 because of the rebound of domestic travel in the second half of 2009.

# **Key Applications For Transportation Vertical:**

Airline Passenger Processing Service, Computer Reservation System, Electronic Travel Distribution

# **SCORES Analysis**

#### Strengths

TravelSky has leveraged its status as the de facto technology supplier to indigenous airlines as well as other carriers that fly into China, helping them with their ticketing, distribution, airport service and other related requirements.

Not resting on its laurels, TravelSky, like most state-owned enterprises that have become listed companies, has continued to invest heavily in new applications as well as expansion programs to help it better compete with other technology providers on the global level.

In 2009, it has invested in such areas as seat management, distribution business and airfare solutions for domestic and international carriers.

Last year it also improved the integration of agent terminal, e-commerce distribution platform and settlement and clearing system with WebLink, a sales settlement and clearing product recently launched by IATA for airline ticket sales settlement and clearing between agents and commercial airlines.

TravelSky has proceeded with the development of the next-generation Passenger Process Service system. In addition, it has extended an agreement with Travelport to collaborate on integrating its e-ticket interchange system into the one at TravelSky, making it easier for airlines around the world to access the ticketing system in China.

More recently TravelSky signed an agreement with SITA, the communications service provider for airlines and airports, to set up a regional airfare pricing service on behalf of SITA in China.

#### **Customers**

TravelSky's customer count includes 30 domestic airlines in China as well as 300 international airlines that access its different services and its GDS.

#### **Opportunities**

One of its latest developments is in the ecommerce area where TravelSky has provided hosting service for 10 domestic airlines. Additionally it helped China Eastern Airlines Corporation Limited and Shenzhen Airlines Company Limited establish overseas websites to attract customers outside of China.

#### **Risks**

With a booming domestic travel market, much of TravelSky's near-term growth will center around bulking up the infrastructure for national carriers. The issue is whether the vendor is agile enough to meet such increased demand for optimized technology throughput and customer experience given its penchant for relying on internally-developed technologies, rather than commercially available and open source applications and middleware components for rapid development.

# **Ecosystem**

Because of the breadth of its product portfolio that spans across airlines, airports, air freight operations, along with its reach into nearly 60,000 sales terminals owned by more than 6,000 travel agencies, TravelSky has built out a robust ecosystem that is capable of meeting next-generation user requirements in such areas as the latest mobile technologies.

#### **Shares**

With a 3.1% share in the transportation vertical, TravelSky's ability to gain share is above average because of its special status in the fast-growing travel market in China.

On the upside, TravelSky is aiming to extend its ability to address the full spectrum of the domestic and international travel markets by consolidating gains among local partners, while establishing direct links with the reservation systems at companies such as the Hilton Group. The partnership with Travelport and SITA underscores the commitment of TravelSky to improving its internal infrastructure in order to meet future customer demands spurred by increased globalization.

On the downside, TravelSky's competitiveness is obscured by its near-monopoly position, which could face increased pressure by international carriers trying to expand with new services to tier-1 and tier-2 cities in China, something that could usher in a new way of interconnecting the domestic GDS with others. When that happens, TravelSky will need to adapt to the reciprocity needed in order to collaborate with other standardized systems for safety and process improvement at the global level.

# Oracle

Redwood Shores, CA

www.oracle.com

# Overview:

Oracle has positioned its transportation management and supply chain applications as a complete solution capable of addressing specific pain points of companies in the transportation vertical, while helping them tackle a broader set of operations and business process challenges. Typical customers range from airlines to rails and from shippers to third party logistics providers.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	55	60

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	30	50%
EMEA	18	30%
Asia Pacific	12	20%

# 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	24	40%
above)		
Large(1K-5K ees)	21	35%
SMB(1K ees and	15	25%
below)		

Туре	2009(\$M)	% of total
License	19.8	33%
Maintenance	40.2	67%
Subscription	0	0%

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product portfolio, solution scope	Average
Customers	Customer wins across regions and customer segments, momentum among new and existing customers	Above average
Opportunities	Market opportunities at the vertical and subvertical levels	Average
Risks	Ability to handle internal and external risks and challenges	Average
Ecosystem	Network effects of VARs, resellers, SIs and ISV partners, health of ecosystem	Below average
Shares	Market shares, company sales, size, overall market presence	Average
Total	With a 2.7% share in the transportation vertical, Oracle's ability to maintain and win share in the market segment in 2010	Average

#### **Full Overview**

Following the acquisition of G-log for its transportation management applications in 2005, Oracle has been picking up reference wins in the transportation vertical. At the same time, the vendor has been enriching its product portfolio for a wide range of companies involved in the movement of people and goods.

On one hand, Oracle has built enough momentum behind its push into the vertical that its Oracle Transportation Management(OTM) application is often purchased as a standalone product apart from its flagship ERP brands such as Oracle E-Business Suite.

On the other hand, Oracle's extensive product portfolio enables the vendor to cross-sell and upsell a full spectrum of applications that appeal to customers wanting to have a standardized system to run their back-office, front-office, customer information management, and different parts of their operations from supply chain to inventory management.

The two pronged approach has resulted in Oracle becoming more entrenched in the vertical than ever, winning a long list of customers that have come to dependent on the vendor not only for its transportation management capabilities, but also the extensibility of such applications to their heterogeneous back-office and front-office environments. As such Oracle is taking on a new role by demonstrating the ease of integration between its transportation-specific offerings and other applications being used by its customers to ensure open interoperability.

# **Key Applications For Transportation Vertical:**

Oracle Transportation Management 6.1, Oracle Global Trade Management 6.1, Oracle JD Edwards Enterprise One TMS, Oracle Siebel for LSP

# **SCORES Analysis**

# Strengths

The emphasis on open interoperability has become one of the biggest reasons behind Oracle's success in the transportation vertical.

In 2009 Oracle announced OTM connectivity with E2open Logistics Network to simplify the integration between shippers, transportation carriers, and logistics service providers through self-service Integration as a Service tools that cover everything from tenders to shipment tracking, compared with the traditional approach of using point-to-point integration that is difficult and expensive to replicate and reuse.

In January 2010 Oracle upped the ante by releasing OTM 6.1, which offers enhancements including extensions to sourcing, planning, execution, financial settlement and visibility across all modes of transportation.

In addition the new Oracle Fleet Management is designed to help customers reduce transportation costs and improve equipment utilization by enhancing the planning and optimization engine for solving complex fleet planning scenarios. OTM 6.1 has also taken into account of changing reporting requirements by delivering new business intelligence capabilities and additional dashboard reports to drive process efficiency and help measure and monitor green metrics such as CO2 (Carbon Dioxide) Emissions, NOX (Oxides of Nitrogen) Emissions and Total Fuel Consumption.

Such enhancements underscore Oracle's ability to build out its applications offerings for the transportation vertical at a time when many of its customers are wrestling with an array of integration, operations and compliance challenges.

#### **Customers**

With more than 500 customers in the transportation vertical, Oracle has been aggressively going after key players in different industry segments.

Its 2009 reference wins included AirBaltic, APC, APL Logistics, Athens International Airport, Averitt Express, Bornholms Trafikken, Bosselman, Budapest Airport, China International Shipping Container, Con-way, DHL Exel and DHL Global Mail, Drive India Enterprise Solutions Limited(DIESL), ETA Freightstar, FedEx, Grupo Mexicana, Integrated Distribution Services Group, Log-In (Logistica Intermodal), Distribuidora de Combustibles Mexicanos(UNNE), Integrated Distribution Services Group, Northern Southern, Patel Rail, Schneider National, Southwest Airlines, Spear Logistics Private Limited, Toll Holdings Ltd, Transport Corporation of India, TUI, UPS Supply Chain Services, US Airways, and Ying Kou Port Group Corp.

In the case of FedEx, the carrier has decided to overhaul its backend system with the selection of Oracle E-Business Suite as the new ERP platform under an initiative designed to what a top FedEx IT executive calls eliminating composite complexity that has been created with generations of legacy technology. FedEx also plans to revamp its global interactive voice response system for customer service and its mobile infrastructure. The decision to purchase Oracle E-Business Suite underscores FedEx's desire to start using more Oracle applications after years of standardizing on BEA's WebLogic and JRockit infrastructure software as its transaction processing engine for package tracking and logistics.

### **Opportunities**

In 2010 Oracle plans to introduce OTM 6.2 with additional capabilities in fleet management, business intelligence, sourcing and improved user experience. That is expected to allow the vendor to become more entrenched among companies in the logistics service provider space, which is considered one of the fast-growing areas within the vertical.

Another opportunity lies in the compliance space with the recent introduction of Oracle Global Trade Management 6.1, which is based on the same platform as OTM 6.1. This allows customers to operate in a holistic environment to manage their trade and transportation requirements. The GTM application offers such capabilities as automation of import and export trade compliance, master trade data management, improved product classifications and risk management through the use of restricted party and sanction screening.

#### Risks

In selling into the transportation vertical, one gaping hole in Oracle's strategy is the ability to cover the computer reservation system needs of its airline customers. While Oracle has done well selling horizontal applications to the passenger operations of different airlines, it appears to be taking a backseat to other contenders when it comes to mission-critical functions such as passenger reservation.

However under the 2009 alliance with SITA, the communications service provider for airlines and airports, Oracle has been providing infrastructure products mostly databases and middleware to help SITA build the next-generation computer reservation system. The question is whether it would make it even less likely for Oracle to invest in its own passenger reservation applications for fears of jeopardizing its fledgling relationship with SITA.

One thing is clear. Following its acquisition of Sun Microsystems, the vertically integrated technology roadmap of Oracle is making it almost impossible to steer clear of strategic markets like transportation that could well define the vendor's future. So the question is whether Oracle can afford not to deliver a full suite of applications and technologies to its airline customers.

#### **Ecosystem**

Oracle primarily sells direct to customers in the transportation vertical. In addition to working with E2Open, Oracle has been harnessing the domain expertise and business requirements of its customers to drum up new product features and adjacent market opportunities. Its customer advisory board has representation from logistics service providers such as BDP, DHL, Exel, EGL, Kuehne+Nagel, Toll, and TLC.

#### **Shares**

With a 2.7% share in the transportation vertical, Oracle's ability to gain share is average with its growing presence among LSPs, airlines and carriers.

On the upside, the release of OTM 6.1 will accelerate the upgrade cycle of the former G-log customers, while its added capabilities such as fleet management, load configuration and transportation business intelligence will help Oracle further differentiate itself from others because of its rich applications functionality coupled with ease of integration.

On the downside, the number of customers in the transportation vertical using its OTM applications is relatively small, compared with that in industries such as CPG using OTM primarily for sourcing transportation partners. There lies a delicate balance for Oracle to ensure both sides can realize tangible benefits of using the latest release to boost overall productivity, which may not be apparent until they also standardize on other Oracle applications. Small to midsized LSPs and carriers may not have the resources to do that, which could make it difficult for them to maximize the benefits of their Oracle solutions.

# **JDA**

Scottsdale, AZ

www.jda.com

### Overview:

JDA has been helping a growing number of logistics companies automate their mission-critical functions such as transportation and risk management to create an extended supply chain that is responsive to real-time market needs. Typical customers include shippers, airlines, and third-party logistics providers.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	53	56

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	39.2	70%
EMEA	11.2	20%
Asia Pacific	5.6	10%

## 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	11.2	30%
above)		
Large(1K-5K ees)	28	50%
SMB(1K ees and	16.8	20%
below)		

# 2009 Applications Revenues in Transportation By Revenue Type:

Туре	2009(\$M)	% of total
License	20	40%
Maintenance	36	60%
Subscription	0	0%

### 2009 SCORES Box:

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product portfolio, solution scope	Above average
Customers	Customer wins across regions and customer segments, momentum among new and existing customers	Above average
Opportunities	Market opportunities at the vertical and subvertical levels	Average
Risks	Ability to handle internal and external risks and challenges	Below average
Ecosystem	Network effects of VARs, resellers, SIs and ISV partners, health of ecosystem	Average
Shares	Market shares, company sales, size, overall market presence	Average
Total	With a 2.6% share in the transportation vertical, JDA's ability to maintain and win share in the market segment in 2010	Above average

### **Full Overview**

Following its acquisition of Manugistics in 2006, JDA has continued with its push into the transportation vertical with domain-specific applications such as cargo revenue management and network and inventory optimization.

JDA targets a variety of customers in the transportation vertical. Many of these companies including air cargo companies, airlines and railways have been facing common problems such as revenue leakage. Inadequate planning, coupled with little or no collaboration from their suppliers, exacerbate such problems. All these have prevented customers from operating in an extended network environment for real-time sharing and reporting of critical information.

Additionally JDA seeks to resolve the supply chain challenges of these customers by overhauling their schedules, loads and processes within current business constraints.

The January 2010 acquisition of i2 enhanced JDA's ability to sell into the vertical by adding incremental revenues from a long list of logistics and transportation companies.

## **Key Applications For Transportation Vertical:**

JDA Transportation Management, i2 Transportation Management, JDA Cargo Revenue Optimizer, JDA Integrated Fleet Management

### **SCORES Analysis**

### Strengths

The 2006 acquisition of Manugistics has strengthened the revenue management capabilities of JDA, especially in helping its customers tackle such thorny issues as real-time pricing and revenue management for airlines and other transportation companies. Prior to its acquisition by JDA, Manugistics picked up Talus Solutions, which offered an array of revenue management applications for airlines and logistics companies.

For instance, Cathay Pacific Airways recently selected JDA Cargo Revenue Optimizer to help improve profitability in the airline's cargo operation. Over the course of a three-phased rollout, the solution will enable the Hong Kongbased airline to determine the most cost-effective cargo capacity and rates for each flight or route using historical data and complex optimization algorithms.

#### **Customers**

With more than 1,700 customers in the transportation vertical, JDA has made significant inroads into different market segments. Reference wins included American Airlines Cargo, DHL Aviation NV/SA, TDG Limited.

The acquisition of i2 has netted additional customers in the transportation vertical. Sample customers include Agility Logistics, APL Logistics, Barloworld Logistics, BNSF Logistics, Canadian National Railway, CAT Logistics, CEVA Logistics, DHL Exel NA, DSC Logistics, eFreight, England Logistics,

Frontier Logistics Services, Hub Group, Inc., Landstar Logistics, Inc., Leading Edge Logistics, New Breed Logistics, Ryder Integrated Logistics, Synchrony Logistics, Tradisa, Transcend Logistics (formerly Daymark Group), UPS Logistics, UTi Worldwide, Wallenius Wilhemsen Logistics, WWL and YRC Logistics.

#### **Opportunities**

Armed with an integrated suite of supply chain and transportation management applications, JDA has assembled the key components for transportation companies to run their business profitably. In the coming year, the biggest opportunities lie in extending its vision to help these organizations improve their bottom line by renovating traditionally siloed operations with integrated offerings that range from back-office profitability and pricing management applications to those designed specifically for boosting operations efficiency.

For example, in 2008 it made available JDA Integrated Fleet Management, which offers fleet-route optimization combined with multi-carrier, multi-modal rating, routing, capacity management, carrier and mode selection in a single transportation strategy.

The same applies to the use of the vendor's managed services offerings allowing transportation customers lower their IT support costs, while taking advantage of its professional services capabilities to gain a full picture of one's supply chain risk assessment in order to formulate an effective transportation management strategy that yields desirable results.

### Risks

For the transportation vertical, the flip side of JDA's comprehensive product and supply chain optimization strategy is a staggering amount of technologies that the vendor needs to maintain, support and enhance in order to meet shifting customer requirements as a result of the volatility in global trade.

After years of internal development and acquisitions, JDA has applications in 22 product areas from collaboration and visibility to transportation management.

Following the purchase of i2, JDA sells two sets of transportation management applications with similar functionality. The gating factor is going to be specific customer requirements and it will take some time before JDA can position these overlapping products properly. For its part, JDA has stated that it will be supporting all deployed solutions for maintenance paying customers so there will not be any forced upgrades or sunsetting of these solutions.

### Ecosystem

JDA primarily sells direct to its retail customers, but it also uses more than a dozen value-added resellers to target customers of less than \$100 million in sales. They include ABU ISSR Supply Chain Solutions, DBO Services, e-Future Information Tech, EXT C&T, Genietech, ICE Consulting, Logis, MCC Solutions, NRI, NS Solutions, ROCE Partners, RPE, Safezone, SDLVO Ltd., Sims, Smollan Group, Solteq, Soltius, Strategix, Symetrix Solutions, TruEconomy Consulting, UCS Solutions, and Wincor Nixdorf.

On the implementation side, JDA works closely with systems integrators such as Accenture, Cap Gemini, IBM, TCS, and Wipro.

In addition, JDA has been working with partners such as GXS to better leverage demand signals – especially at the messaging level - between retailers and their suppliers as they become more collaborative in nature.

#### **Shares**

With a 2.6% share in the transportation vertical, JDA's ability to gain share is above average because of the incremental revenues from its i2 acquisition.

On the upside, the purchase of i2 will combine two best-of-breed supply chain and transportation management applications vendors for the vertical. There is little doubt that new and existing customers will be the chief beneficiaries of the combined resources as well as the economy of scale needed to sustain product and service innovation.

On the downside, there will be a period of product rationalization as well as reprioritization of its future development efforts that could result in some adjustment for its partners and customers alike. The sooner JDA can stabilize such efforts, the easier it is for its customers to leverage the strengths of the combined company.

# **Descartes Systems Group**

Waterloo, Ontario, Canada

## www.descartes.com

### Overview:

Descartes has helped revolutionize the world of logistics and transportation management with an extensive portfolio of network service and applications products. Typical customers range from transportation providers to logistics service providers and from shippers to brokers.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	44	47

## 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	34.78	74%
EMEA	9.87	21%
Asia Pacific	2.35	5%

## 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	4.7	10%
above)		
Large(1K-5K ees)	14.1	30%
SMB(1K ees and	28.2	60%
below)		

# 2009 Applications Revenues in Transportation By Revenue Type:

Туре	2009(\$M)	% of total
License	4	10%
Maintenance	10	20%
Subscription	33	70%

### 2009 SCORES Box:

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product	Above average
	portfolio, solution scope	
Customers	Customer wins across regions and customer	Above average
	segments, momentum among new and existing	
	customers	
Opportunities	Market opportunities at the vertical and	Above average
	subvertical levels	
Risks	Ability to handle internal and external risks and	Average
	challenges	
Ecosystem	Network effects of VARs, resellers, SIs and ISV	Above average
	partners, health of ecosystem	
Shares	Market shares, company sales, size, overall	Average
	market presence	
Total	With a 2% share in the transportation vertical,	Above average
	Descartes' ability to maintain and win share in	
	the market segment in 2010	

#### **Full Overview**

With a long history of selling into the supply chain management market, Descartes has evolved to become the ondemand solution provider of a federated global logistics network.

The network acts like a central switch that combines component-based applications and messaging service connecting logistics service providers, carriers and shippers. Through such real-time connections, all parties are expected to benefit from reduced administrative costs, billing cycles, fleet size, contract carrier costs and mileage driven, while boosting their profitability.

Although the recession has dealt a blow to many of its customers, Descartes has pressed ahead with a series of acquisitions to expand into new markets from global trade management to tariff filing.

Last year it purchased Oceanwide Inc. for its Web-based logistics offerings and Scancode Systems for its parcel shipping solutions. That was followed by its 2010 acquisitions of Zemblaz NV for its global trade management solutions and Imanet for its applications for customs brokers, freight forwarders, exporters and self-clearing importers.

More recently it acquired Belgian-based Routing International for its optimized route planning solutions.

These moves, on the heels of a \$38 million stock offering, will help Descartes expand the reach of its federated global logistics network to facilitate the movement of goods around the world.

### **Key Applications For Transportation Vertical:**

Descartes LogiMan, Descartes CargoAssist, Descartes Turnaround Documents and Descartes eForms, Descartes Message Quality Monitor, Descartes Data Integrity Services, Descartes Advanced Manifest Service, Descartes Cargo 2000, Descartes Carrier Portal, Descartes Export Compliance, Descartes Border Compliance, Descartes Importer Security Filing, Descartes Ocean Tariff Compliance, Descartes Electronic In-Bond, Descartes EDItrade Customs Link, Descartes EDItrade Compliance, Descartes Global Filer, Descartes Rate Builder, Descartes

WebSimon and MyWebSimon, Descartes Ocean Freight Audit, Descartes Bookings and Reservations, Descartes Local Haulage, Descartes Multimodal Track & Trace, Descartes Forwarder Management, Descartes Visibility & Event Management, Descartes Sales & Territory Planner and Descartes Area Planner, Descartes Route Planner and Descartes Route Planner RS, Descartes Reservations and Descartes Dock Appointment Scheduling, Descartes Transportation Manager and Descartes Yard Management, Descartes Visibility & Event Management and Descartes Turnaround Documents, Descartes MobileLink, Descartes Dispatch, Descartes Dispatch RS, Descartes Automated Vehicle Locator, Descartes On-Demand Logistics, Descartes' Sales and Merchandiser Management

## **SCORES Analysis**

### Strengths

Since 1981 Descartes has been closely involved in shaping the modern supply chain management space and its long track record has cemented its reputation as the driving force in software development for advanced logistics and transportation management. Over the years it has evolved from a traditional on-premise applications vendor to a network operator that banks on Web services to deliver a full range of transportation solutions requiring little IT investment on the part of the customers.

As it continues with its transformation, Descartes has been able to take advantage of its large installed base of 6,800 customers including shippers, distributors and manufacturers in 60 countries as well as 35,000 logistics messaging partnerships to sustain its growth.

Because of its domain expertise in helping logistics-intensive organizations, Descartes has carved out a niche that is difficult to replicate. That is evident in the network effect that it has been able to create through decades of unrelenting pursuit of business process improvement on behalf of its transportation customers.

#### **Customers**

Descartes has built a massive network of customers that have a vested interest in different segments of the transportation vertical. The installed base covers 1,600 ground carriers, more than 90 airlines, 30 ocean carriers, 900 freight forwarders and third-party providers of logistics services.

Sample customers include AGA Linde, Air Canada, Air France, American Airlines, Alitalia, Argix Direct, British Airways, Cargolux, Chambers Transport, Continental Airlines, Crowley Maritime Corporation, Delta, DHL, Edward Don & Company, EGL, Empire Distributing, Emirates, Freedman Distributors, Hanjin Shipping, Iberia, IDS Group, Ideal Supply, John Lewis Partnership, K-Line Europe, KLM, Kuehne + Nagel, Lufthansa, Mallory Alexander, Old Dominion Freight Lines, Polar Air Cargo, Schenker, Schwan's, Swiss World, TNT Freight Management, and UTi.

## **Opportunities**

Following its acquisitions of Zemblaz NV and Imanet, Descartes has signaled its desire to extend its federated global logistics network to help its customers resolve global trade management issues. The proliferation of global trade has resulted in a bottleneck for many shippers, carriers and LSPs due to a myriad of electronic reporting requirements as well as disparate systems being used to process customs filing procedures, which could entail manual intervention.

While many applications vendors in the transportation vertical are racing to the market with their global trade management solutions, Descartes may stand a good chance of becoming a major force because of its well-established electronic connection with LSPs and carriers, along with a number of projects under way to automate and improve customs filing processes. Descartes' current development projects include Mexican Customs

Automation, CBSA extension of ACI (Canadian Customs) to include Truck Shipments, European Union Customs Harmonization and Australian Customs.

#### Risks

Following a series of purchases, Descartes' momentum will depend on its ability to incorporate recently acquired technology assets into its federated global logistics network. For instance, the integration of the underlying platforms and the consolidation of its data centers from nine currently to five will last through the end of 2010. It will be critical for Descartes to demonstrate uptime performance, reliability, security and continuous innovation of its network can stand above that of competing systems during the transition.

In addition to mobile and GPS/GIS applications vendors that could compete with Descartes, emerging solutions from Global Distribution System providers are also expanding their freight automation business for their airline customers. All of these developments will serve as the backdrop for a rapidly changing competitive landscape for Descartes.

#### **Ecosystem**

Descartes sells direct to major accounts, but it also relies on 20 distributors and resellers to reach customers in Asia Pacific and Latin America.

The channel partners include Bestrane Group Pty Ltd, Bowen Enterprises, C&S, Gestions Pierre Thinel, GLS Latvia, Hala Supply Chain Solutions, Harrison Kantner Inc., Infoway S.A.de Informática, Integrated Logistics, Inc., Logistics Associates, MK Alliance, Ocean Commerce Ltd., Optimize Solutions, PDMC & Partners Ltd., Programa, Routing Systems Informatica (RSI), SKU Logistics Corp, Starlight Express P. Ltd., TLC, Tradevision IL Ltd., VSC Solutions Ltd. (SuperGroup), China Freight, and NTI.

#### **Shares**

With a 2% share in the transportation vertical, Descartes' ability to gain share is above average because of the steady pickup of its on-demand revenues.

On the upside, Descartes' recent acquisitions should help it expand into adjacent markets such as global trade management, while securing bigger wallet share among its existing customers.

On the downside, the long history of Descartes and its large installed base suggest that some of its customers are still running their systems in a heterogeneous environment, which is not conducive for a streamlined operation. In fact these customers may opt for competing solutions such as Global Trade Management from their existing technology vendors in order to standardize their logistics and transportation management functions, perhaps at a more attractive price point or value proposition than what they could get from Descartes.

# Infor

Alpharetta, GA

www.infor.com

### Overview:

Infor targets the transportation vertical with a wide range of applications from transportation management to workforce scheduling, in addition to its flagship ERP systems. Typical customers include airlines, logistics service providers and ground carriers.

# **Applications Revenues in Transportation:**

Year	2008	2009
\$(M)	50	45

# 2009 Applications Revenues in Transportation By Region:

Year	2009(\$M)	% of total
Americas	22.5	50%
EMEA	13.5	30%
Asia Pacific	9	20%

## 2009 Applications Revenues in Transportation By Customer Size:

Year	2009(\$M)	% of total
XL(5K ees and	22.5	50%
above)		
Large(1K-5K ees)	18	40%
SMB(1K ees and	4.5	10%
below)		

# 2009 Applications Revenues in Transportation By Revenue Type:

Туре	2009(\$M)	% of total
License	12.15	27%
Maintenance	32.85	73%
Subscription	0	0%

### 2009 SCORES Box:

Evaluation	Criteria	Results
Strengths	Key differentiators, domain expertise, product portfolio, solution scope	Average
Customers	Customer wins across regions and customer segments, momentum among new and existing customers	Average
Opportunities	Market opportunities at the vertical and subvertical levels	Average
Risks	Ability to handle internal and external risks and challenges	Below average
Ecosystem	Network effects of VARs, resellers, SIs and ISV partners, health of ecosystem	Average
Shares	Market shares, company sales, size, overall market presence	Average
Total	With a 2% share in the transportation vertical, Infor's ability to maintain and win share in the market segment in 2010	Average

#### **Full Overview**

For a number of years Infor has been assembling and enhancing a burgeoning portfolio of applications for different segments of the transportation vertical.

Combining its core offerings in ERP and supply chain management, Infor continued to expand its offerings by adding enterprise asset management applications with its 2006 acquisition of Datastream, and workforce management solutions from Workbrain a year later. More recently it acquired Bridgelogix for its data collection, warehouse management and time and attendance applications for manufacturing and transportation companies.

All these acquisitions have resulted in a growing number of its transportation customers that turn to Infor for meeting their diverse needs such as planning, labor forecasting, transportation optimization, event and performance management.

#### **Key Applications For Transportation Vertical:**

Infor ERP, Infor SCM Transportation Planning, Infor SCM Transportation Management, Infor SCM Transportation Management Shiplogix, Infor SCM Network Design, Infor Enterprise Asset Management, Infor Workforce Management, Infor Warehouse Management

## **SCORES Analysis**

### Strengths

Infor's strength in the transportation vertical lies in its supply chain management expertise for shippers, carriers and third-party logistics providers. Its value proposition has been the delivery of affordable and domain-specific applications capable of addressing their operations pain points.

While their needs may vary, Infor is well positioned to deliver scalable and high-performance solutions to overcome any obstacle stemming from their complex operations. For example British Airways has been using Infor Workforce Management applications to meet the scheduling needs of thousands of its employees for a number of years.

Because of the breadth of its applications for asset-intensive industries, Infor has developed considerable insights into how its customers resolve their transportation management issues. For instance, supply chain network design is a priority that has attracted the attention of many of its transportation customers.

Norfolk Southern Corp., the \$8-billion rail company, has turned to Infor SCM Network Design to create a flexible framework that includes modal selection, network analysis, site selection, drayage optimization, inventory and competitive analysis. The result is to offer full visibility to both the shippers and carriers that seek to identify and execute the best possible options from costing, availability and carbon footprint perspectives.

#### **Customers**

More than 500 customers including 200 companies that operate third-party logistics business in the transportation vertical and use a variety of Infor applications to run their operations.

In 2009 its reference wins included ATENA, Chongqing Metro, EXOLOGISTICA, and Shenzhen Metro. Other reference customers include British Airways, DHL, Exel, Jacobson, Menlo Worldwide, NFI Industries, and Norfolk Southern Corp.

#### **Opportunities**

The fast-growing economies in Asia Pacific offer some of the biggest opportunities for Infor to expand its presence in the transportation vertical. Its recent successes in selling its Infor EAM applications to metro operators underscore the IT investment trend among organizations responsible for upgrading infrastructure projects in the region.

#### Risks

The sprawling product portfolio of Infor poses some challenges for the positioning of its applications for transportation customers. The issue becomes more acute when customers decide to standardize on a single platform for its back-to-front office business processes. Currently little integration is being done to connect its transportation management applications and those such as Infor EAM or Infor WFM.

While that may not limit the best-of-breed capabilities of its transportation-related applications, it could undermine the long-term appeal of Infor solutions among those that favor a holistic approach.

## **Ecosystem**

Infor primarily sells direct to customers in transportation vertical. It also works with resellers and partners in certain regions.

Recently it has entered into an OEM arrangement with Pacejet to offer its Web-based shipping and logistics applications to Infor SyteLine customers.

#### Shares

With a 2% share in the transportation vertical, Infor's ability to gain share is average because of its growing acceptance by new and existing customers in Asia Pacific, offsetting lackluster growth in Western Europe and North America.

On the upside, Infor's renewed appetite for acquisitions and its recent alliance with Microsoft to leverage technologies such as Microsoft SharePoint and Silverlight could jumpstart its sales to the vertical especially among mid-sized transportation companies that now find it easier to take on and consume software services such as Infor

ION for improved application interoperability, data sharing and management along with Infor applications for transportation management.

On the downside, Infor's solution map for transportation vertical is hindered by different best-of-breed applications that have yet to deliver optimized results without additional integration work. A lack of fleet management applications has also hampered its growth into ground carriers and third-party logistics providers.

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