



PetMate and ClearOrbit/TSC

It was July 20, 2009. John Reece, President and Warren Sumner, the General Manager of TAKE Supply Chain (TSC) were preparing for a top management committee meeting to evaluate the upscaling at PetMate, one of their key customers. The focus was on impressing solutions architects and presales group to increase their scope of solutions to PetMate. This would include selling Enterprise Returns Management (ERM), their recent software, and creating an interest for Global Trade Management (GTM), a product which was about to be released.

Prior to 2008, TSC was ClearOrbit, a supply chain product company, based in Austin, Texas. It was branded as TAKE Supply Chain in May 2008, after its acquisition by Chennai-based TAKE Solutions Ltd (TSL) in June 2007. TSL was promoted as a supply chain integrator and later transformed into a software product and solutions company. ClearOrbit was to be the engine of growth for TSL in the supply chain domain. Experiences of ClearOrbit in the American market were to be adopted by TSL for the rest of the world market.

PetMate was in the business of manufacturing and distributing a large range of non-food products for pets with its head quarters at Arlington, Texas. Though the company was popularly known as PetMate (since it predominantly branded products in the name of PetMate), the official name of the company was Dorskocil Manufacturing Company, Inc (DMC).

Sumner, who had been involved in developing the PetMate account, was keen to demonstrate proof of continuing customer engagement with the company. The engagement with Petmate started as early as 2000. The success of the engagement so far had been captured in a web article (Exhibit 1).

CLEARORBIT

ClearOrbit was established in 1994 at Austin, Texas as a real time supply chain execution solutions provider that would improve the speed, visibility, and control of extended manufacturing and distribution supply chains. ClearOrbit delivered solutions that synchronized with enterprise resources planning (ERP) systems such as Oracle and SAP. It facilitated full integration across the supply chain network through its mobility and collaboration solutions that addressed 'last mile' issues. All these were done by complementing the existing infrastructure of its clients and thus, becoming attractive to them. ClearOrbit clients included market leaders like such as Alcoa, Canon, Cisco, and Motorola.

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Cases of the Indian Institute of Management, Ahmedabad, are prepared as a basis for class discussion. They are not designed to present illustrations of either correct or incorrect handling of administrative problems.

ClearOrbit was acquired by TSL, an Indian company in June 2007 for an acquisition price of \$20 million. At that time the annualized revenue of ClearOrbit was \$16 million. TSL's revenue in 2006-07 was \$40 million. Sumner, along with Reece, and the senior management of TSL were keen on actualizing the synergy of both the companies in the supply chain domain. There was an opportunity to cross sell in markets including the USA and other developing regions where TSL was then present. Also, there was a chance to reduce developmental costs by shifting such activities from Austin to Chennai, India.

TSL was promoted by HR Srinivasan and a group of professionals who had successful experience as third party logistics operators in managing supply chain integration. In 2001, TSL was launched as a private limited company to provide high-end non-asset based logistics service. This grew out of their domain expertise and ability to create proprietary solutions for its clients. TSL grew in the initial years by developing information technology (IT) products for supply chain solutions. Then, it merged its software developer, Millennium Business Solutions, and evolved as a fourth party logistics solutions provider.

The company grew in Asia, primarily in Malaysia and the Middle East. To grow faster, it realized that it must be present in a big way in the USA. This was to be achieved through acquisition. TSL set out to identify companies which had a similar philosophy. Opportunities arose for software solutions in the life sciences domain. TSL decided to diversify and went ahead with three acquisitions to achieve market expansion. A year later, in 2007, TSL identified and acquired ClearOrbit, which was in the supply chain domain. The acquisition-led growth of TSL in the USA is summarized in Exhibit 2.

The synergies between TSL and ClearOrbit, as explained by Reece, were

1. **Entry into new industry segments:** Acquisition of ClearOrbit enabled TSL to get access to new industry segments like aerospace and defense
2. **Enabled cross selling across geographies:** By acquiring ClearOrbit, both the companies expanded their existing market since ClearOrbit had a strong presence in the USA, while TSL covered the Asia Pacific region.
3. **Created comprehensive portfolio:** TSL's product portfolio was more focused towards integrating the enterprise and its customers where as ClearOrbit products were more inclined towards integrating the suppliers with the enterprise. With collaboration, it brought a completeness to the portfolio.
4. **Leveraging leading ERP Applications:** ClearOrbit had proven products with a collaborative platform for Oracle and SAP. This added to the product portfolio of TSL and provided an enhanced offering to clients in multiple technologies such as Microsoft/Oracle and SAP.
5. **Cost advantage:** ClearOrbit derived this by leveraging the global delivery capabilities of TSL's office in Chennai.

Annexure 1 gives a brief description of the products of both TSL and ClearOrbit.

DOSKOCIL MANUFACTURING COMPANY, INC

DMC was started by Ben Doskocil in 1962 to produce safe and comfortable kennels for transporting dogs and cats on airplanes. A contract to manufacture pet carrier products for Delta Airlines in mid 60s helped the company to grow fast. By 1968, it standardized its product for moving pets in airplanes.

It merged with California based Dogloo Inc and formed PetMate in 1997. It acquired Stylette Pet Products, Oakdale, Pennsylvania in July 2005 and later, Aspen Pet Products, Denver, Colorado in 2006 (see Exhibit 3 for PetMate Company growth). DMC produced a wide variety of products under the PetMate name such as pet bedding, animal feeding and water bowls, and dog kennels. It operated a manufacturing plant and a distribution center (DC), both housed under one roof in a 1.1 million square foot building in Arlington, Texas. In 2006, DMC added three contract manufacturers (CMs), Century Foam, Consumer Specialities, and Murtex. To deliver prompt service to the customer, two of the CMs were in the east coast while one was in the west coast. One of the east coast CMs was for pet bedding, while the other two were for a range of products. The company made about 60 per cent of the products in the USA and imported the remaining 40 per cent from suppliers in China. The CMs in China produced items such as food bowls, wire kennels, and water dishes. The products from China usually entered the USA at the Port of Long Beach in containers and continued via intermodal rail services to the Arlington facility.

DMC manufactured and marketed a range of plastic products, including pet products, such as pet carriers, pet shelters, feeding and watering systems, and pet beddings. The watering and feeding category included a full line-up of water and food bowls for pets, including gravity water bowls and feeders. DMC also produced and marketed products as wire kennels and a full line of cat litter boxes, including litter pans, litter pan and rim sets, and hooded litter pans. DMC's Vari Kennel®, Sky Kennel®, Pet Porter®, Pet Taxi®, and Kennel Cab® which were brand names for pet carriers were used in the transportation and indoor training of pets.

The company also manufactured various products for the sporting goods market, including plastic cases for pistols, shotguns, and archery bows; and plastic cases for the golf industry. It also introduced a line of gun vault security safes. It manufactured and supplied a line of photo/video camera cases. Its Gun Guard® and Golf Guard® brands were used in the sporting goods market. The photo/video case product line was sold under the Camera Guard® name and included products such as Seal-Tight®, a water, dust, and airtight case with foam inside.

The company's products were sold to various retailers, including specialty pet superstores, mass merchandisers, food and drug stores, hardware stores, wholesale clubs, home centers, and distributors that sold to independent pet stores. The company was competing with Stylette, Blitz, TFH, Pet Zone, Gracious Living, Kennel-Aire, Marchioro, and Blitz.

According to one report, the Texas DC shipped on an average 200 to 250 truckloads of merchandise throughout the USA every week. DMC had arrangements with 20 truck operators for this movement. The web-based portal solution offered by TSL helped the customers and CMs to get accurate and up to date information. The increased visibility enhanced value for everyone along the network.

DMC had about 750 employees with annual revenue of \$300 million by December 2007. The Supply Chain Quarterly, however, reported annual revenue of \$200 million in 2008 (Exhibit

1). The company had become a leader in this market through organic and inorganic growth over the last 45 years.¹

SUPPLY CHAIN MAPPING OF PETMATE NETWORK

PetMate imported accessories and materials for manufacturing, and products from CMs which were direct-to-market through containers at the Port of Long Beach. Most of the products were then received at the DC at Arlington, Texas. Product imports from the CMs were also delivered directly to large retail customers. The in-house manufacturing facilities were in Arlington, Texas; Denver, and Pennsylvania. The manufactured goods were again moved through the DC, though at times directly to large customers. The same structure was also valid for the CMs in the USA. PetMate had nearly 1,500 stock keeping units (SKUs) in its product categories. The supply chain network is depicted in Exhibit 4. The key PetMate locations are shown in a map in Exhibit 5. As per their top management, the key to their supply chain efficiency was information flow, enabling effective physical flow of goods across the chain.

The following key processes enabled the supply chain planning and operations:

1. Demand estimation
2. Production planning and allocation of order among CMs and own facilities.
3. Sales order (SO) generation and fulfillment
4. Replenishment order from DC for fulfillment
5. Labeling at different stages
6. Returns management, primarily to ensure freshness of stock
7. Physical flow from/to trading partners
8. Information flow from/to trading partners
9. Management Information Systems incorporating performance measures for business effectiveness

A lot of buying by customers was impulsive. Customers also had preferences for specific SKUs. High margins could be sustained only through high customer service levels. This brought out stickiness to the brand. Still, mismatch of demand and supply (causing over supply of certain SKUs and non-availability of other SKUs) led to price discounts and potential revenue loss. Given their brand image, PetMate could push the products to retail chains selling pet products. However, slow movement would lead to erosion of the PetMate brand image and affect its business in the long run. It was important therefore, that PetMate worked in partnership with retail stores to enable synchronized supplies. Retail chains also had their own store brands of pet products which were manufactured by PetMate and other competitors. This could potentially eat into sales of PetMate products, which typically sold at higher prices.

¹ <http://www.oracle.com/customers/snapshots/doskocil-manufacturing-snapshot.pdf>, accessed on August. 01, 2010.

As stated by the top management of PetMate, the key success factors for their business were:

1. Synchronized supplies
2. Timely information flow
3. Appropriate pricing
4. Managing relations among partners including the IT vendor

PETMATE AND CLEARORBIT ENGAGEMENT

The engagement between PetMate and ClearOrbit started in 2000. The estimated revenue of PetMate was \$100 million in 2000. It had been investing in IT for its business processes. PetMate invested in Oracle as its ERP. However, in early 2000, PetMate was looking for support in fine tuning the ERP with data tools for its users who could handle supply chain functions like order management and demand estimation better. ClearOrbit was identified as the vendor to integrate this function.

According to Sumner, "The choice of ClearOrbit was due to multiple reasons. One was the locational advantage, being in Texas. The second was its experience in data tools products and implementation, and familiarity with Oracle applications. The greatest comfort was the relationship that had been built between the sales team of ClearOrbit and the user team leader at PetMate. This gave confidence that ClearOrbit could effectively handle the requirement rather than a large vendor."

The relationship started with an order for Business Process Links/Supply Chain (BP Links/SC) sold by ClearOrbit on March 2, 2000 for 20 users at \$90,400. PetMate found value for its users who earlier had to work as add-ons and extract data for analysis. The ClearOrbit product automated the functionality. By June 2000, PetMate placed another order for \$152,000 for 40 users. Exhibit 6 gives a history of transactions between PetMate and ClearOrbit.

Sumner stated, "It was a sizeable achievement to integrate with an ERP like Oracle through a small vendor's data tools and win double the size of user base order within three months. Though PetMate would have had a requirement for 60 users, it limited its risk by placing an order for 20 users. With a convincing experience, it scaled up with another 40. The maturity of the relationship and confidence in delivery was then critical for ClearOrbit to experience the first commercial engagement with PetMate. PetMate realized value through business process improvement in supply chain, especially in order management."

The next transaction that PetMate had with ClearOrbit was buying products for guided picking in its DC at Arlington, Texas. PetMate was then using Oracle 11i inventory module (IM). It wanted to improve picking efficiency while using IM of Oracle. It chose ClearOrbit among other vendors because of its understanding of Oracle 11i and ability to synchronize its products, with implementation support. ClearOrbit sold Automated Inventory Management (A.IM) guided picking for Oracle 11i on December 31, 2003 at \$40,000.

On December 31, 2003, PetMate also bought Gemini Products from ClearOrbit. These included Gemini Automate Plus Pack at \$19,750, and Gemini Suite Bundle and Compliance Label Manager (CLM) at \$135,000. The suite was on a platform called Automate and included four standard modules. (i) Automate Advanced Shipping 4.0, (ii) ProView Application (Pro-Act and View Combined), (iii) View Receiving Report Pack and (iv) View Shipping Report Pack. The suite and CLM came with 60 Radio Frequency (RF) devices and 30 printers for 120 users.

The suite was later called Gemini Simplified Interface (G.SI)TM. This interface for Oracle Process Manufacturing (OPM) enabled process manufacturers to collect data using RF devices to increase the availability of real time information on receiving, shipping, manufacturing, and inventory activity. With hand-held devices, users collected data and performed OPM transactions directly on the shop floor, in the DC, and on the loading dock. The information collected was immediately available to OPM applications throughout the enterprise to improve control and visibility of key processes as they occurred. Rather than keying information into Oracle forms, G.SI allowed users to gather data at the source, reducing the potential for errors.

ClearOrbit G.SI preserved existing investments in technology and training by leveraging the existing OPM data model. Many data collection solutions relied on a standalone database that required integration with the ERP database via a custom interface. In contrast, G.SI integrated directly with OPM database in real time using standard Oracle application programming interfaces. It also worked with the setups, security, and profiles already defined in Oracle, helping to minimize implementation, training, and ongoing support costs. Furthermore, G.SI required no modifications to Oracle or custom interfaces, thus simplifying future Oracle upgrades and helping to maintain compliance with existing support agreements.

PetMate was keen in having these products considering its growth and need for efficient DC and order management. Gemini was a flagship suite of ClearOrbit products around that time (Annexure 2). Apart from the stated reasons of PetMate buying from ClearOrbit, the price was also a factor in this decision

From 2003 to 2005, PetMate's business grew. It finalized plans to acquire two companies and involve CMs in the USA. PetMate was keen on further automation of supply chain processes, especially to enable direct shipments bypassing the DC, called Drop Shipments. ClearOrbit was selected and products bought on March 31, 2005 included: (i) X.PC (Xtended Process Control) PO (purchase order) Drop Shipment, (ii) X.PC PO Collaborator including E-Kanban Manager and (iii) X.PC SO Drop Shipment for 10 users at a total of \$85,000.

From mid 2005, Petmate consolidated its activities based on the acquisitions and involvement of CMs. The relationship between ClearOrbit and PetMate was sustained, as in the past, by continuous interactions between the key account manager at ClearOrbit, John Yoneda and the manager of customer satisfaction and traffic at PetMate, Terry Lemley. Exhibit 7 gives the organization chart at ClearOrbit as of 2007. Yoneda's team from ClearOrbit also involved Dusty Knight, Laurie Molter, and Rachel Joost. There was a further payment of \$70,000 on January 1, 2008 by PetMate towards services for SO Drop Shipment. There was a sense that the X.PC SO Drop Shipment was not being used in the intended manner.

Business Process Review of 2008

To get visibility for its new brand and showcase the increased range of products including that of TSL, TSC organized a customer meet in May 2008. Following this, it decided to conduct business process reviews (BPRs) with its customers to identify scope for increased engagement. On July 30 and 31, 2008, TSC conducted a BPR of PetMate's operations at Arlington, Texas. The purpose of this BPR was to obtain a thorough understanding of PetMate's business model and daily organizational activities with regard to their SO Drop Shipment processes. The idea was to find strategic gaps in processes and identify scope for

improving process efficiencies with the implementation of ClearOrbit's X.PC® SO Drop Shipment application, leveraging on the existing Oracle ERP system, and data flows and configurations.

The main business issue that PetMate was dealing with was the way the SO Drop Shipments were handled between PetMate operations personnel and CMs in the Oracle ERP. PetMate sent frequent purchase orders to the CMs based on SOs received for specific products through Electronic Data Interchange (EDI). Those CMs then shipped the goods directly to the end customers like PetSmart, Petco or BJ's Wholesale Club. The most significant opportunity for ClearOrbit's X.PC product was improving process efficiency by removing the need to have PetMate personnel manually emailing shipment information, perform purchase order receipts, and execute shipping transactions in the ERP. There was no real time visibility to PetMate's SOs by the CMs. This was also true with PetMate not being updated real time with the CMs' shipping processes on their SOs. Exhibit 8 gives the business process being followed by PetMate in 2008.

ClearOrbit's X.PC SO Drop Shipment application would give PetMate increased scalability to expand to additional CMs by significantly reducing the amount of activity performed in-house on behalf of the CMs. Instead of PetMate personnel managing each step within the SO Drop Shipment process through manual intervention, the system of transaction was posted to the CMs through an internet browser, which would give them access to view SOs, print case labels, ship deliveries, and print shipping documents. PetMate's interaction would be reduced to exception handling only.

The implementation of the system would also give the CMs the ability to populate shipment level descriptive fields, which was then manually entered by customer support. It would also enable printing of all shipping documents onsite which were then printed at PetMate and faxed or emailed to the CM.

The main challenges foreseen by TSC were:

- Integrating the X.PC SO Drop Shipment replenishment process with PetMate's available to order (ATO) with replenishment by CMs
- Linking shipments in X.PC SO Drop Shipment with deliveries which already existed in the ERP for the transacted SO
- Printing carton labels during the shipment process closure which was linked to existing CLM rules defined within the current production system.

Based on the various process studies and business meetings with key PetMate users, TSC recommended the following business process changes:

- Create a unique sub-inventory for each CM that would utilize X.PC SO Drop Shipment application. This sub-inventory would be used to link the SO to the CMs in X.PC.
- Use X.PC to post new SOs directly to the CMs instead of using the purchase order to communicate demand. This would give them direct real time visibility regarding the customer, carrier, and shipment line information on item/quantity/ship date requirements.
- When the CM performs the ship action in X.PC, SO Drop Shipment automatically performs the PO receipt transaction in the background which triggers the work in process completion that replenishes the CM's sub-inventory. The current processes and technology required that PetMate perform explicit PO receipt transactions for each SO line.

- Allow the CMs to input the shipment level descriptive fields to eliminate the need for PetMate personnel to reopen deliveries and key in this information on the Bill of Lading (BOL) documentation that is faxed/emailed to them from the CMs.
- Automatically generate the shipping documents at ship confirm time that the CMs could access via the X.PC application and print locally. Currently, a customer service representative generated these documents while confirming shipping in Oracle and emailed or faxed the documents to the CM.
- Print the case labels at time of ship confirm, which would be initiated by the CMs. Currently, the labels were generated when the customer support representative at PetMate performed a pick release by trip through the ClearOrbit G.SI guided picking transaction.

The proposed process could have the following features:

- The SO should be posted to the CMs directly. There could be features to prevent CMs from transacting SO in X.PC SO Drop Shipment so that customer service of PetMate can review and update the scheduled ship dates as necessary.
- When the shipment was closed in X.PC, the PO receipts for the transacted SO should be received automatically. If the CM was short on the quantity expected, then the CM would only pack the available quantity and thus a partial receipt and partial ship confirm would be performed. There would be no need for customer service to perform returns to vendor (RTV) and subsequent ship-confirm transactions.
- The closing of the shipment in X.PC would trigger the pick release process for the associated delivery which would also automatically print the case labels at the CM site using the same CLM rules as were then in use.
- The closing of the shipment in X.PC would also trigger the generation of the ship confirm document which would be viewable and printable within the X.PC application.
- PetMate would also like for the CMs to have the ability to populate the waybill, seal code and number of pallets, and have that information written back to the ERP automatically.

THE WAY FORWARD

At this stage, PetMate had nearly integrated its requirement on supply chain processes, especially from the DC and CMs to delivery management. Various sub processes like labeling were automated so that human intervention was minimized.

Sumner reflected, "PetMate had chosen to work with ClearOrbit for about nine years based on ClearOrbit's ability to provide domain expertise with the right products/features that could be synchronized with Oracle ERP. The transactions can be summarized as constituting three stages:

1. 2000 - Data tools for collaboration with existing Oracle ERP
2. 2003 - Automating shipping, labeling and receiving using ClearOrbit's Gemini
3. 2005 - Extended enterprise transactions with supplier and retailer. This was better leveraged in 2008."

In response to how the takeover and revised branding had affected the business with PetMate, Reece said, "The takeover, if at all, had added to the possible engagement. Structurally and relationship wise, the interface with PetMate had been retained as before with Yoneda and his team continuing the interaction with Terry Davlin. There were some changes at the senior management as also in the product (development) group." Exhibit 9 gives the organization structure of TSC. Reece and Sumner considered possible opportunities with PetMate which could include ERM, GTM, and planning and analytics tools, over the next couple of years.

PetMate had invested in more applications from Oracle including Oracle Transportation Management, which had enabled them to save freight costs of about \$2 million in 2008.² It was estimated that PetMate had an annual IT spend of four to five per cent (like any consumer good company), of which one per cent was expected to be on SCM and ERP. This implied that PetMate would have a potential IT budget of over \$2 million per annum which TSC could tap into. According to Reece and Sumner, the PetMate growth strategy would be based on the following:

- Imported bedding material which would go either to PetMate or CM facility and get completed for delivery directly to retailers
- Toys and accessories received in bulk at PetMate DC and labeled and sent to the distribution network
- Made to stock volumes wherein PetMate built stock at its DC in anticipation of demand. These would be produced either at PetMate or by CM facility and delivered direct to PetMate DC. These would be further delivered to dealers as per the delivery note
- As is the situation now, CMs would not be committed vendors and would supply to competition. Similarly, PetMate dealers would have their own private label, which could be sourced either directly or through PetMate (from its own facility or through CMs). The same would be true for accessories, largely imported from China

Also, Reece and Sumner were cognizant of the fact that they now had a better offering with strengths of other TSL products, domain expertise, and low cost service capability. They were keen to drive a relationship between PetMate and the newly branded TSC. The acquisition of ClearOrbit had brought synergies to TSL. The total revenue of TSL had gone up to \$66 million in 2007-08 and \$76 million in 2008-09, significantly attributable to the acquisition. They felt that the long term vision could even be to position TSL among the top three supply chain products/services brand across the globe.

² <http://www.oracle.com/customers/snapshots/doskocil-manufacturing-snapshot.pdf>, accessed on August. 01, 2010

GLOSSARY

ABAP	Advanced Business Application Programming
A.IM	Automated Inventory Management
ATO	Available to Order
BP Links/SC	Business Process Links/Supply Chain
BPR	Business Process Review
BOL	Bill of Lading
CLM	Compliance Label Manager
CM	Contract Manufacturer
CS	Customer Support
CSG	Corporate Services Group
COO	Chief Operating Officer
DC	Distribution Center
DMC	Doskocil Manufacturing Company
EDI	Electronic Data Interchange
EPG	Enterprise Product Group
ERM	Enterprise Returns Management
ERP	Enterprise Resource Planning
EVP	Executive Vice President
FG	Finished Goods
GM	General Manager
G.SI	Gemini Simplified Interface
GTM	Global Trade Management
HHT/PDA	Hand Held Terminal/Personal Digital Assistant
IM	Inventory Module
IT	Information Technology
OM	Order Management
OPM	Oracle Process Manufacturing
OTM	Oracle Transport Management
PO	Purchase Order
PTX	Private Trading Exchange
RF	Radio Frequency
RFID	Radio Frequency Identification
RMA	Return Material Authorization
RTV	Returns to Vendor
SAAS	Software As A Service
SCM	Supply Chain Management
SKU	Stock Keeping Unit
SO	Sales Order
SSG	Software Solution Group
TSL	TAKE Solutions Limited

USA	United States of America
VAR	Value Added Reseller
VP	Vice President
WO	Work Order
X.PC	Xtended Process Control

Exhibit 1: A Pet Project Pays Off

By James A Cookie, Editor

A Web portal for communicating order and shipping information improved visibility, timeliness, and accuracy for a pet products company and its contract manufacturers.

The ability to see which orders are coming through the pipeline is vitally important for any company. But when contract manufacturers play a critical role in a supply chain, it's imperative that those outside suppliers have up-to-the-minute order visibility.

Until late last year, though, Dorskocil Manufacturing Company could not provide real-time order visibility to the contract manufacturers it hired to make some of its pet care products. As a result, orders that shipped directly from the factory to customers did not always go as smoothly as Dorskocil would have liked. But new software and a Web-based portal that allowed the company to quickly exchange order and shipment information with its contract manufacturers saved the day. Not only do Dorskocil's customers now have a seamless order experience regardless of where their merchandise originates, but both shipper and contractors also have eliminated order uncertainty and unnecessary administrative costs.

Pet Care Pioneer

Based in Arlington, Texas, USA, Dorskocil Manufacturing makes pet care products and sells them to both distributors and retail chain stores. The company was founded in 1962 when Ben Dorskocil developed a plastic kennel for transporting dogs and cats on airplanes, the first such pet carrier approved for airline use. Today Dorskocil Manufacturing makes a wide variety of products under the Petmate name, such as pet bedding, animal feeding and watering bowls, and dog kennels. Sales for the privately held company totaled some \$200 million in 2008.

Dorskocil operates a manufacturing plant and a distribution center, both housed under one roof in a 1.1-million-square-foot building in Arlington. The company makes about 60 percent of the products it sells in the United States and imports the remaining 40 percent from suppliers in China. The contract manufacturers in China produce such items as food bowls, wire kennels, and water dishes. Imported products cross the Pacific by container ship, usually entering the United States at the Port of Long Beach and continuing via intermodal rail service to the Arlington facility.

The Texas distribution center ships merchandise throughout the United States, moving an average of 200 to 250 outbound truckload shipments every week. Dorskocil has arrangements with about 20 motor carriers to haul its product to customers.

About three years ago Dorskocil added three more contract manufacturers, this time in the United States. Terry Lemley, manager of customer satisfaction and traffic, says the company decided to outsource the manufacture of pet bedding to contractors because of capacity constraints at its Texas plant. Two of the new manufacturers are located on the U.S. East Coast, and one is on the West Coast. They ship orders directly from their factories to Dorskocil's customers. The pet products company chose those particular contractors in part because their proximity to key retail accounts would reduce shipping costs.

Central Control, Local Action

Working with the U.S.-based contract manufacturers did achieve Dorskocil's goal of cutting its freight costs, but the new arrangement imposed other expenses on the company. For one thing, Dorskocil needed extensive manual workarounds to communicate order information to the manufacturers through its Oracle enterprise resource planning (ERP) system. For another, order volumes sometimes were so large that one employee could spend an entire day sending e-mails and faxes containing order information, shipping instructions, and labels to the contractors. What's more, someone on Lemley's staff had to gather and key the order releases, inventory pick confirmations, and shipment information from the contractors into Dorskocil's ERP system.

The shipper eliminated those time-consuming burdens—along with the likelihood of errors that arise with manual data entry—by establishing a Web portal for sharing information with its contract manufacturers. To do that, the company bought the Xtended Process Control (X.PC) software solution from TAKE Supply Chain (formerly ClearOrbit) and installed the application on its inhouse servers. Dorskocil already had a working relationship with the vendor, as it had been using TAKE's warehouse management system in its Texas distribution center for 10 years. The X.PC installation and integration took 10 weeks, and the system was up and running in October 2008.

Much has changed since then. The X.PC system helps Dorskocil gather important information more quickly and accurately than before. Through the portal, the contract manufacturers now can print shipping labels, confirm shipment quantities, and automatically receive shipping documents, thus eliminating the need for phone calls or faxes. Because Dorskocil's Oracle transportation management system assigns carriers and routes the delivery, the selected carrier information is attached to the order, and the contract manufacturer sees those instructions in X.PC. And since the software is connected with Dorskocil's ERP system, it even prevents the outside manufacturer from shipping to a customer with a credit hold.

The system also simplifies compliance with the end customer's labeling requirements. Dorskocil now centrally manages label formatting and all changes in a centralized library of approved formats. This guarantees that the manufacturers will ship the orders with compliant labels printed at their own sites.

It's no longer necessary for a Dorskocil employee to gather data from the contract manufacturers and key it into the ERP system. Now those suppliers immediately submit order and shipment details, including the carrier name, trailer and seal number, and number of pallets, directly to the ERP system through the portal. With such up-to-date information, Dorskocil can keep its customers informed of actual order and shipment status. "It was very efficient to turn this over to the contract manufacturer, and it freed up labor here," says Lemley.

Mutual Benefits

Thanks to the Web-based portal, both the contract manufacturers and the shipper now get accurate, up-to-date information. "The increased visibility helps the manufacturers immensely," Lemley says. "When the orders come in now, the contract manufacturers can see them almost immediately. They know what orders are coming up. They know the volume. They know what the stocking levels have to be." Having that data available makes it possible for the manufacturers to meet Dorskocil's requirement that its contractors fill 100 percent of orders and deliver them on time. "This system gives the outside manufacturers all the visibility they need to process an order," Lemley adds.

Moreover, the enhanced visibility lets Dorskocil create a seamless supply chain and promotes customer satisfaction among Petmate distributors and retailers. Among the biggest benefits for Dorskocil's customers is the consistency and predictability the new system brings. Now, says Lemley, "From the customer's point of view, there's no difference between something we ship from our facility or an order that our partner assembles and ships."

Source: <http://www.supplychainquarterly.com/print/scq200902petmate/>, accessed on August 01, 2010

Exhibit 2: Acquisition Led Growth of TSL

Time	Company	Rationale
September 2004	ClinMetrics Inc	1. Entry into the niche life sciences domain 2. Establishment of an entrepreneur led USA footprint
March 2006	OnSphere Inc	1. Bolstering regulatory application software with the acquisition of "Pharmaready" suite 2. Domain strength enhancement 3. Superior product envisioning and engineering capabilities in the regulatory affairs sector
March 2006	ACI	1. Entry into clinical data management 2. Strategy to strengthen domain centric offerings around clinical development 3. Opportunity in product led services (software as a service (SAAS)) space
June 2007	Clear Orbit Inc	1. Establishing a firm foothold in the USA in the product led SCM space 2. Addition of four valuable execution and collaboration products
July 2009	IP acquisition of two product lines (ERM and GTM) from PSI Software and EntComm	Under negotiation and expected to close by September. These asset purchases were expected to enhance TSL's product offerings and also expand geographical reach. The purchases could add revenues of USD 4 million in 2009-10 and USD 6.5 million in 2010-11.

Source: www.takesupplychain.com accessed on January 31, 2010
www.takesolutions.com accessed on August 01, 2010

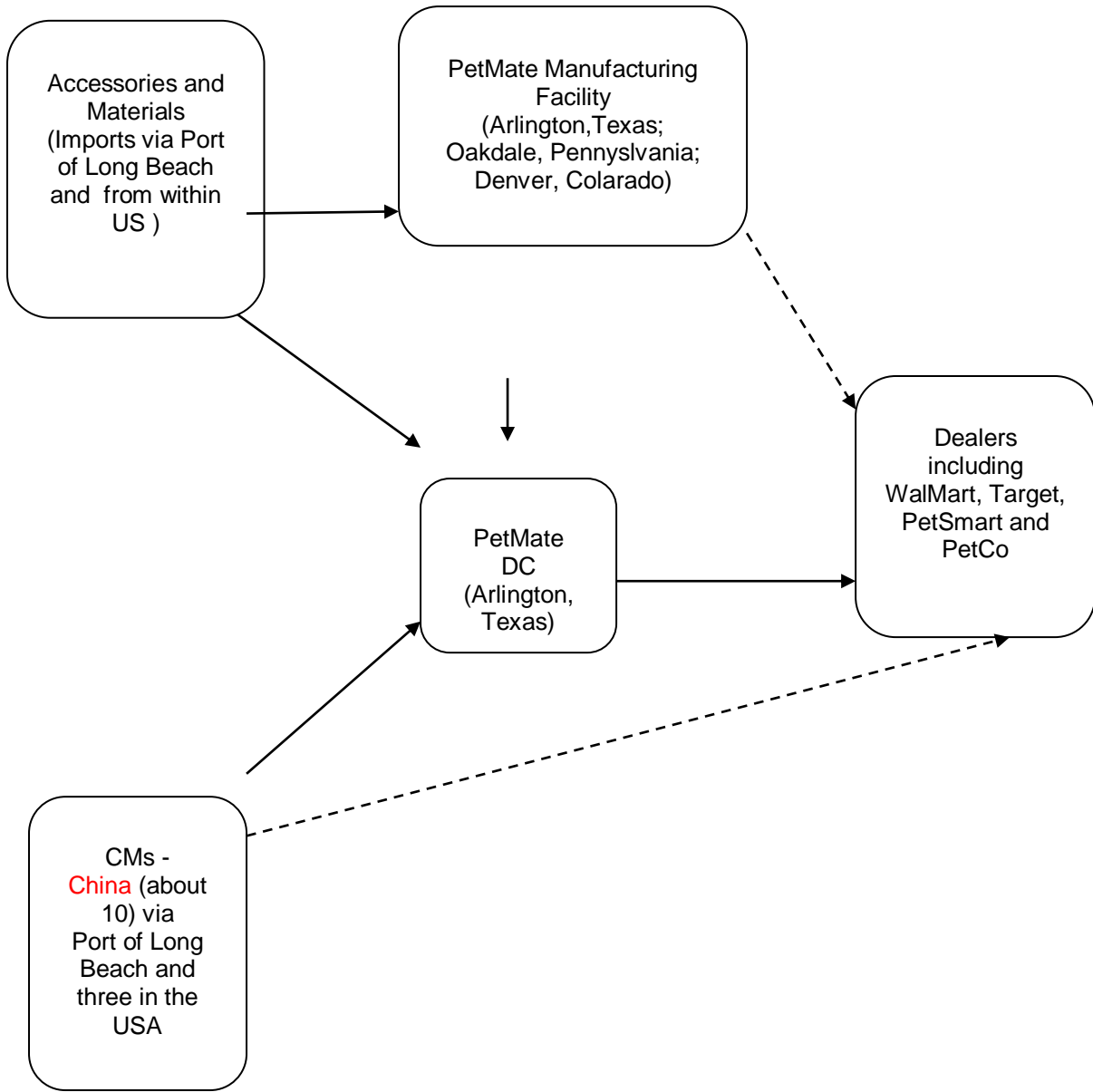
Exhibit 3: PetMate Company Growth

Year	Events
1962	Doskocil was founded by Ben Doskocil and incorporated. Owned by private investment firm Westar. It gave USA the first airline approved pet carrier
Mid 60s	Obtained contract with Delta Airlines to produce pet carriers
1968	Began to make plastic carriers
1997	Merged with California based Dogloo Inc (formed PetMate)
July 2005	Acquired Stylette Pet Products, Pennsylvania
January 2006	Acquired Aspen Pet Products, Denver
Early 2006	Addition of three CMs, Century Foam, Murtex and Consumer Specialities. Two were in the east coast and one in the west coast

Source: <http://www.PetMate.com/about.aspx> accessed on August 01, 2010
<http://www.aspenpet.com/about.cfm?style=aspen> accessed on August 01, 2010
<http://www.supplychainquarterly.com/topics/Manufacturing/scq200902PetMate/>
accessed on August 01, 2010

Exhibit 4

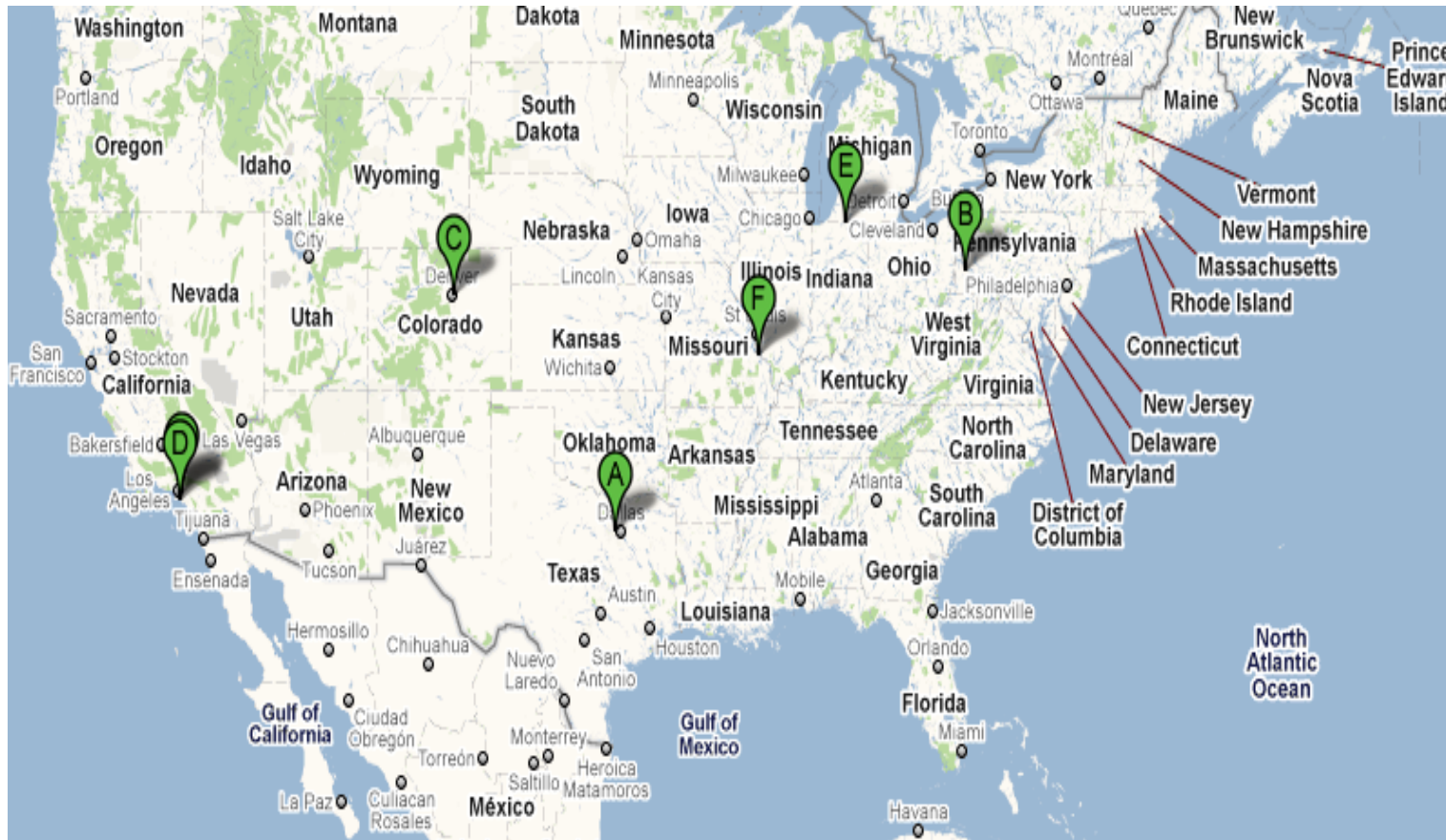
Supply Chain Mapping of PetMate Network



(--- Direct to large customers)

Source: Authors' representation

Exhibit 5: Map of PetMate Locations



- A) Distribution Center - Arlington , Texas
- B) Stylette Pet Products - Oakdale, Pennsylvania
- C) Aspen Pet Products - Denver, Colorado
- D) Port of Long Beach – Los Angeles
- E) Century Foam Products - Elkhart, Indiana
- F) MidWest Consumer Specialities - Bloomsdale, Missouri
- G) Murtex - Pico Rivera, California (Marker for G is behind D)

Source: <http://maps.google.com/>, downloaded on August 04, 2010

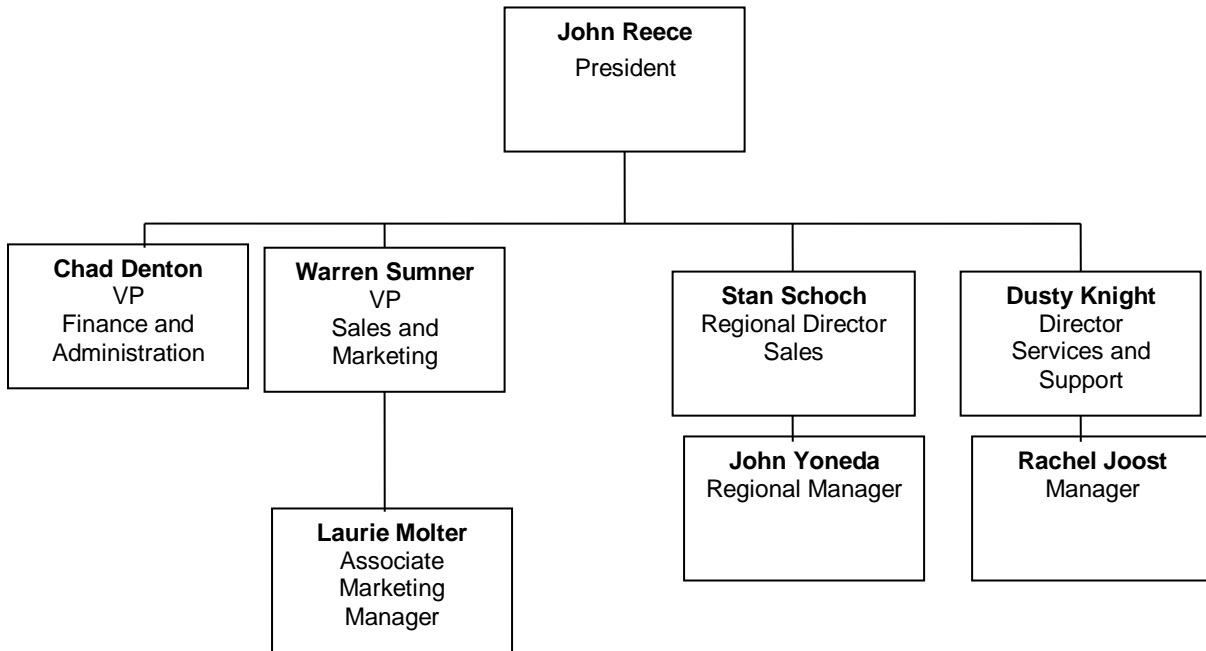
Exhibit 6: Purchase History of PetMate from ClearOrbit

Purchase Date	Product	Instances	Sites	Users	RF Devices	Printers	Purchase Amount (\$)
2 Mar 2000	BP Link/SC			20			90,400 (*)
20 Jun2000	BP Link/SC			40			152,000
31 Dec 2003	A.IM Guided Picking for Oracle 11i						40,000
31 Dec 2003	Gemini Automate Plus Pack						19,750
31 Dec 2003	Gemini Suite Bundle on Automate (four standard modules): (i) Automate Advanced Shipping 4.0, (ii) ProView Application (Pro-Act and View Combined), (iii) View Receiving Report Pack, (iv) View Shipping Report Pack, CLM 2.0			120	60	30	135,000
31 Mar 2005	X.PC PO Drop Shipment	1	10	10			85,000
31 Mar 2005	X.PC PO Collaborator, includes E-Kanban Manager	1	10	10			
31 Mar 2005	X.PC SO Drop Shipment	1	10	10			
1 Jan 2008	Payment for Services for SO Drop Shipment						70,000
Total							501,750

(*) Purchase price of \$95,400 was reduced with \$5,000 marketing credit

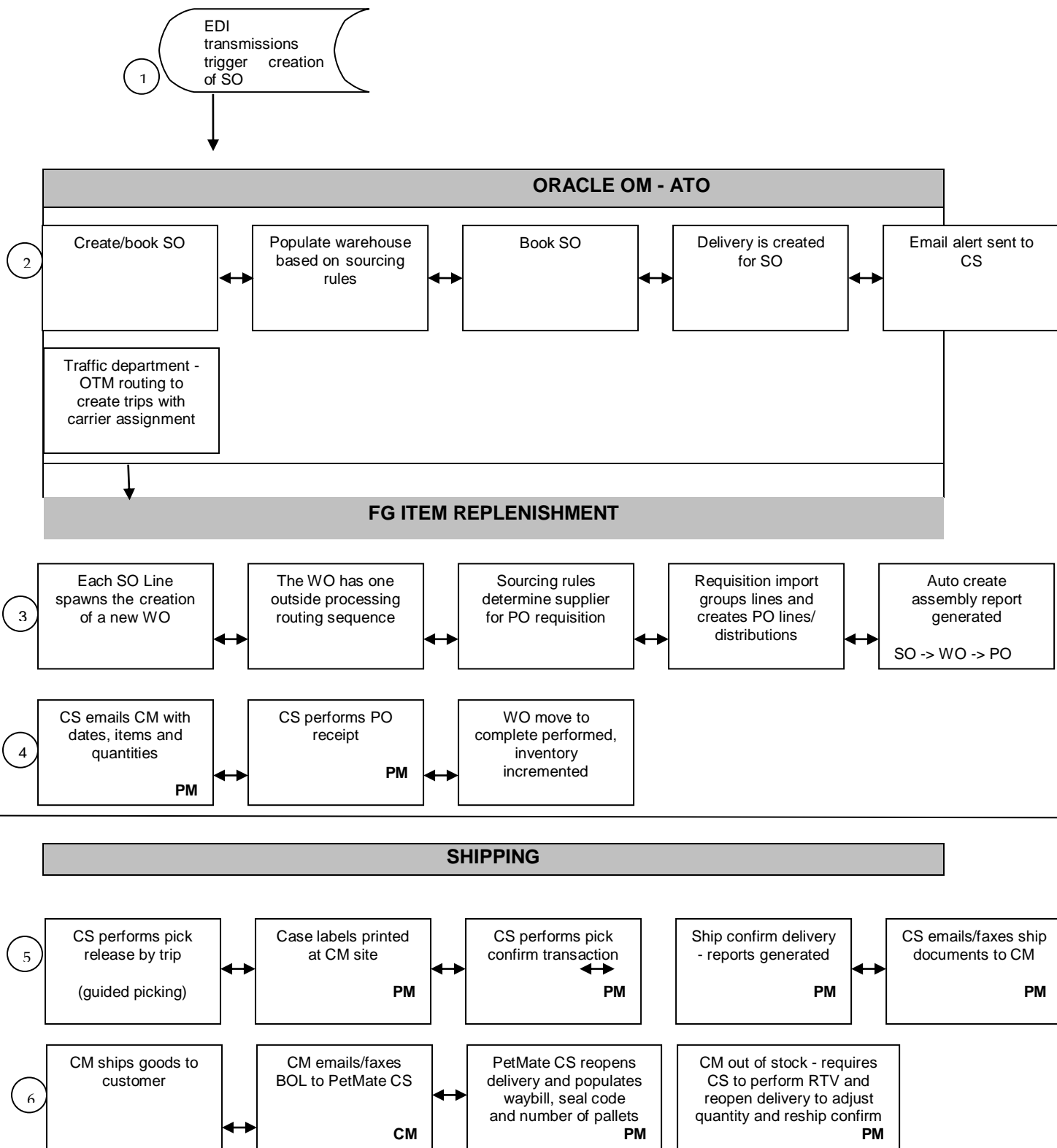
Source: Company Data - Take Solutions Ltd, 2009

Exhibit 7: Clear Orbit Organization Chart in 2008



Source: Company Data

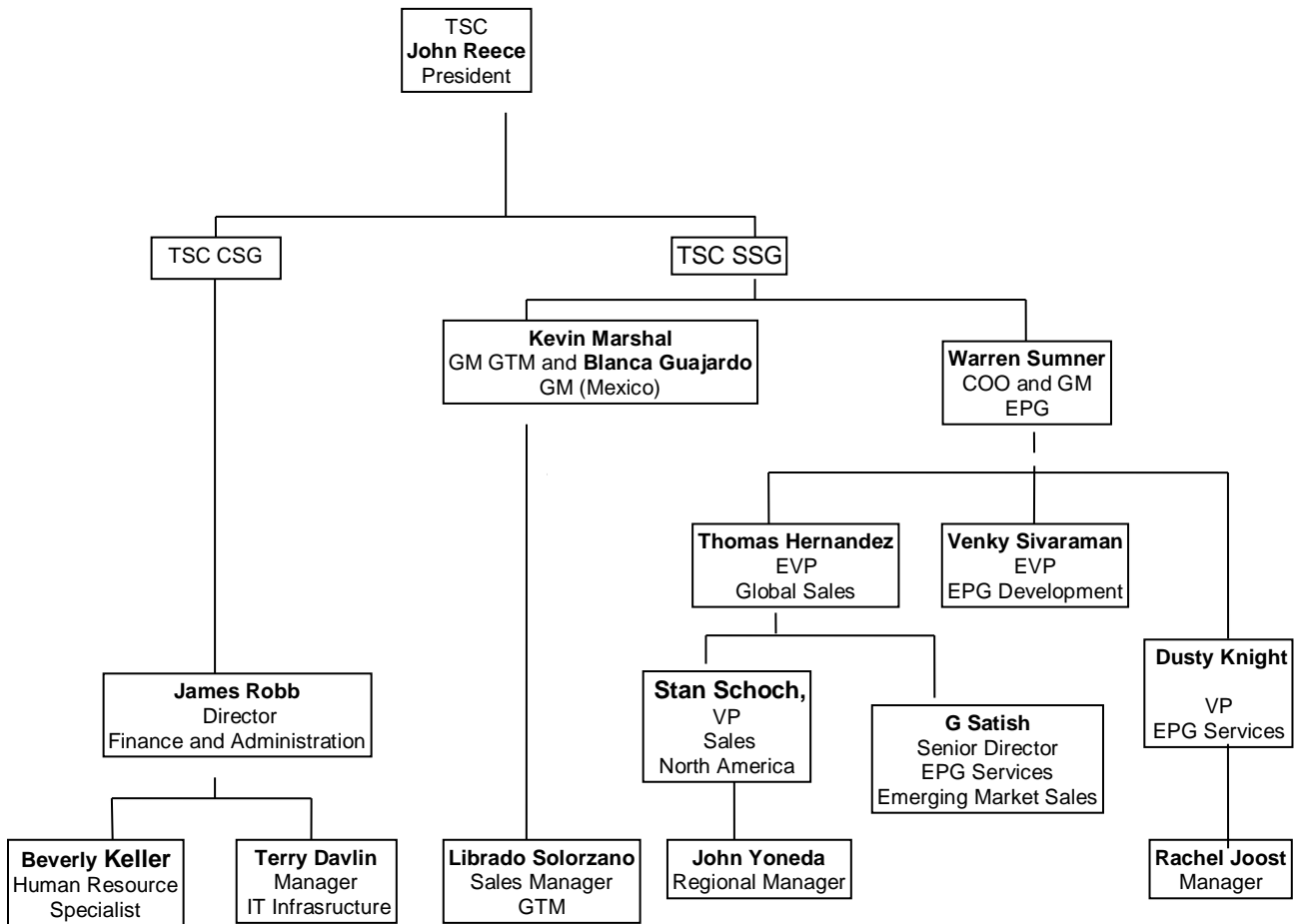
Exhibit 8: Business Process in 2008



PM - PetMate Personnel **CM** - Contract Manufacturer The rest are by Oracle

Source: Company Data

Exhibit 9: TSC Organization Chart in 2009



Source: Company data

ANNEXURE 1: TSL and ClearOrbit Products

TSL		
Product Name	Brief Description	Release Date
ONESCM COLLABORATION PLATFORM	Collaborative business processes by providing real time view of business processes and inventory (One of the key products)	2009
TAKE CAMEO	Advanced planning of operations based on information/knowledge repository services of TAKE (Active among product group)	2008
TAKE MOBITRANZ	A comprehensive solution for secondary sales management using mobile technology (Hand Held Terminal/Personal Digital Assistant (HHT/PDA)) for traders/distributors/ Value Added Resellers (VARs)/Retailers (One of the key products)	2008
TAKE INSIGHT	Advanced analytics and business intelligence based on information/knowledge repository services of TAKE Biz Axis (Active among product group)	2008
TAKE ESM	Collaborative processes with logistics service providers while client transacts with partners in business and tracks performance levels by the service provider (One of the key products)	2008
TAKE OPTIMA	Advanced optimization of use of resources (materials/people/money) based on information/knowledge repository services of TAKE Biz Axis (Active among product group)	2007
TAKE BIZ AXIS	Information/knowledge repository services (Active among product group)	2006
TAKE BEST	Automation of the procurement business process (Scope for improvement)	2004
TAKE iPoint	Comprehensive trading, accounting, sales and distribution management system for the traders/distributors/VARs and the primary sales enterprises (Active among product group)	2002
TAKE INFORIS	Automation of the planning and scheduling production activities including sequencing (Scope for improvement)	2002
TAKE HUB	Automation of the business processes involved in managing a network of hubs/warehouses (Scope for improvement)	2001
TAKE FORWARD	Automation of the transportation business processes (Scope for improvement)	2001

ClearOrbit	
Product Name	Brief Description
Compliance Label Manager (CLM)	Enterprise class barcode and radio frequency identification (RFID) label management solution that provides flexible labeling
Enterprise Returns Management (ERM)	<p>A comprehensive solution to automate the entire returns life cycle, from return material authorization (RMA) creation to final product disposition. ERM provides the ability to capture, report, and analyze returns information, enabling quick response to quality or product design issues. Additionally, ERM complements existing enterprise applications such as enterprise resource planning (ERP), supply chain management, customer relationship management, service parts planning and warehouse management systems, and extends those capabilities for end-to-end management of reverse product flows and disposition. ERM also supports dynamic barcode and RFID label generation and integration with trading partner systems.</p> <p>(Returns management is an integral component of the overall supply network. Firms have implemented effective procedures for managing and tracking returned goods, leading to excessive warranty exposure, transportation costs, product obsolescence, repair costs and increased reserve for returns on the balance sheet. A large amount is being spent every year on processing returned goods. The profit impact of poor returns management is substantial. Equally critical is the damage that a lack of control over reverse logistics can have on customer and partner relationships) (One of the key products)</p>
Global Trade Management (GTM)	Helps companies manage the complexities of complying with trade agreement and local customs regulations by simplifying the collection of required information and providing an accessible audit history of components, parts and shipments. The solution guides users through the submission of information and generates the required compliance documentation. It also maintains the information needed for multiple trade and duty programs, regardless of the number of parts in a product and their point of origin. GTM also features a web based interface for suppliers to provide critical information on components, allowing the manufacturer and regulatory authorities to track materials at the required level of detail. As a result, manufacturers have the component history and documentation needed to avoid unnecessary duties, tariffs and penalties and keep shipments flowing smoothly across international borders. (One of the key products)
Gemini	A software application that empowers shop floor and warehouse workers to enter data and complete transactions in Oracle using handheld RF and barcode scanners instead of a keyboard (One of the key products)
Xtended Process Control (X.PC)	Makes the clients' current enterprise system the center of a Private Trading Exchange (PTX) with its suppliers (One of the key products)

Source: www.takesupplychain.com accessed on January 31, 2010
www.takesolutions.com accessed on August 01, 2010

ANNEXURE 2: Scope of Gemini: Streamlining the Collection of Shipping, Manufacturing and Warehouse Data

Even the most sophisticated manufacturing and distribution environments ultimately depend on the accuracy and efficiency of their data capture activities. Experience shows that the more a process depends on the manual entry of item and shipping data, the greater the likelihood for errors that can lead to manufacturing delays, lost shipments and reduced supply chain visibility.

Without automated data capture technology, warehouse, and manufacturing personnel can spend an inordinate amount of time navigating an ERP system to enter and update critical information and complete transactions. The time lost to this administrative chore not only takes workers away from their primary responsibilities, it limits the reliability of the ERP system as the organization's system of record. Yet, solutions featuring proprietary databases only compound the problem by introducing a new 'silo' of inventory and shipment information that has to be reconciled with the ERP record.

Gemini for SAP

Gemini for SAP®, from TAKE Supply Chain, allows manufacturing and distribution personnel to perform complex transactions and data entry using wireless handheld barcode scanners directly on the shop floor, the shipping dock and in the warehouse. Because the solution reads and updates SAP data in real time, companies can realize significant improvements in receiving, inventory, manufacturing and shipping processes that rely on real time visibility into materials and shipments. In addition to a robust application, customers also benefit from TAKE Supply Chain's deep ERP experience.

Accuracy, Control, Efficiency

Through a user interface optimized for RF mobile devices, Gemini for SAP 'takes the worker to the work' and frees operational personnel to complete ERP transactions without accessing a standard SAP interface and keyboard. Real time error correction and data validation ensure the accuracy of information from the outset.

Gemini for SAP functions as an extension of an existing SAP implementation, without the added cost of custom 'advanced business application programming' (ABAP). In contrast to solutions that require extensive middleware to reconcile collected data with ERP application data, Gemini for SAP uses the SAP data model for a consistent, up to the minute view of warehouse and shop floor information. The solution also integrates with warehouse and manufacturing equipment such as carousels, scales, and conveyors to automate manufacturing and fulfillment processes and improve visibility of inbound and outbound products and materials.

Feature of Gemini	Benefit
Improve real time visibility of inbound and outbound shipments	Eliminates shipping and receiving errors by automating data collection and streamlines the transfer of information to SAP applications.
Increase transaction volumes	Accelerates transaction processing times by eliminating time-consuming data entry tasks on the shop floor and in the warehouse.
Reduce training costs	Provides operational personnel with a streamlined interface tailored to handheld RFID and barcode reading devices, replacing the need to navigate complex SAP transactions.
Enforce enterprise-wide compliance with labeling policies	Integrates with TSC's label printing capabilities to ensure adherence with industry-mandated labeling requirements.
Consolidate competing sources of product and material data	Creates a consistent view of product and material information by eliminating the need to reconcile multiple data sources.
Optimize control of key supply chain processes	Encourages more efficient shared processes with supply chain partners by maintaining a more accurate record of shipping and receiving activity.

Source: www.takesupplychain.com accessed on January 31, 2010
www.takesolutions.com accessed on August 01, 2010