

Using Oracle Trade Management in the Life Sciences Industry

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Oracle Trade Management—Solution for Life Sciences Industry Needs

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Oracle Trade Management—Solution for Life Sciences Industry Needs

EXECUTIVE OVERVIEW

We use the term Trade Management to refer to the processes by which manufacturers sell to, and manage and support pricing, rebate and promotion agreements with, their business customers and trading partners. We refer to the Life Sciences industry as inclusive of the pharmaceutical, medical device, medical supplies, and biotechnology sectors. Trade Management primarily targets the vendors (manufacturers, distributors) in these sectors. To the vendors, trading partners include wholesalers, distributors, retailers, managed care organizations and group purchasing organizations.

Expenses related to rebate offer and pricing agreements used for selling purposes range from 15-30% on average of a company's revenue. With the vigorous cost containment efforts by healthcare service providers and merging of group purchasing organizations that may serve hundreds to thousands of hospitals, vendors face the ever-increasing pressure on pricing, rebate and promotion agreements. For the vendors, managing these expenses requires the ability to model complex business relationships, equally complex product hierarchies and pricing and rebate agreements in such relationships, tight control of expenses and accruals for Sarbanes Oxley (SOX) compliance, and efficient resolution of claims and deductions and validations of indirect sales data. These interrelated needs extend into areas of both ERP (Enterprise Resource Planning) and CRM (Customer Relationship Management). An effective solution, therefore, must integrate back-office with front-office functionality.

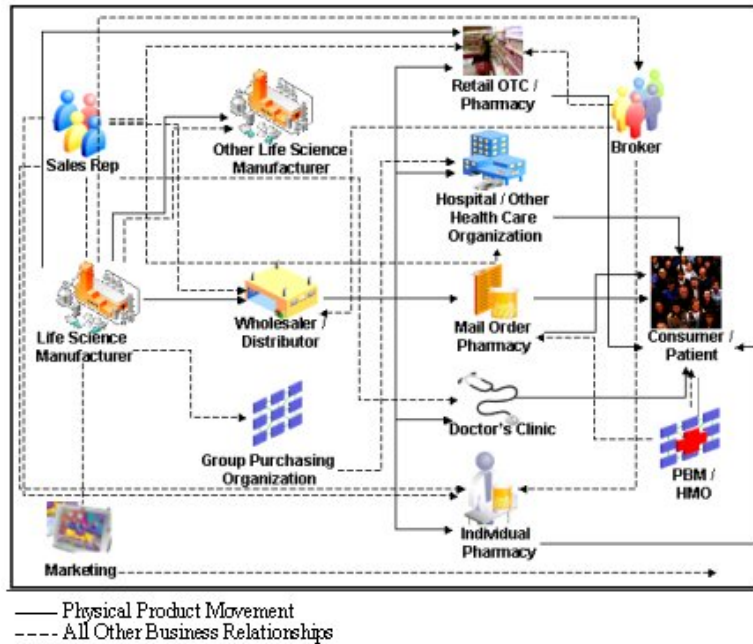
Oracle Trade Management (OTM) is a comprehensive, integrated application answering these needs. Its tools help life sciences companies model complex trading relationships and control rebate accruals for both their direct and indirect trading partners.

THE LIFE SCIENCES INDUSTRY AND ORACLE TRADE MANAGEMENT

Trading Relationship Complexity in Life Sciences

Government regulations, the proliferation of products and sales channels, and partnerships are some of the causes of the trading relationship complexity in the life sciences industry. Pricing and promotion agreements can exist in each of these relationships outlined below in Figure 1. These agreements can be based on direct shipments or indirect transactions in the distribution chain, posing tremendous challenges in planning, tracking and reconciliation.

Figure 1 – Trading Relationship Complexity in Life Sciences



Complicating the matter further is the ever-increasing market power of some of these trading partners. In the US, for example, the top three wholesalers – McKesson, Cardinal, AmerisourceBergen – together enjoy over 70% of the market share of all prescription drug distribution. Managed care organizations such as health maintenance organizations are becoming more popular and can influence the choice of drugs used by its members. On the over-the-counter side, products are sold through the various retail channels, inheriting all the same business problems and exhibiting all the same complexities as in the traditional trade promotion management area. In all regions and all lines of business, life sciences manufacturers are dealing with trading partners that wield great bargaining power against them.

While finding true customer profitability is difficult in any industry, it is a daunting task in this industry. If a company does not have an integrated system for tracking every dollar spent on every agreement and every relationship, this becomes near impossible.

Oracle Trade Management Overview

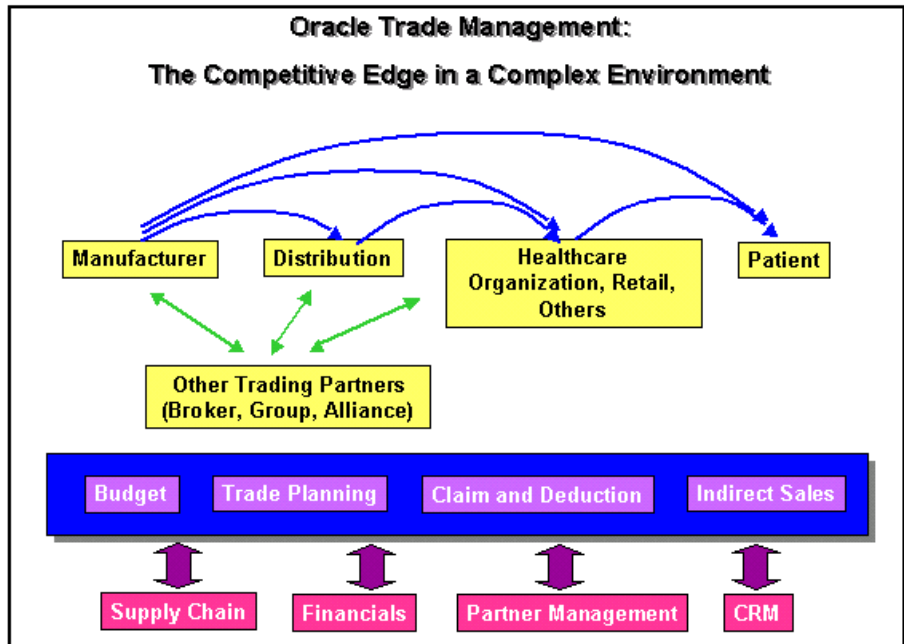
Oracle Trade Management is a comprehensive solution that addresses business challenges in managing complex promotion and pricing agreements, budgets, claims and deductions, and indirect sales data. Many life sciences business flows do not fall neatly within the conventional definitions of CRM or ERP. As such, Oracle Trade Management provides integrations with both Oracle CRM and Oracle ERP applications to enable closed-loop functionality without customization or exorbitant implementation costs, while its open architecture supports integration with other CRM or ERP systems. It facilitates planning and execution of promotion and pricing agreements, streamlines processes for tracking all types of rebate accruals, reduces costs associated to resolving claims and deductions, and automates indirect sales data import and validations.

Most software packages for the life sciences industry, whether standalone or traditional ERP software packages, place a narrow focus on contract creation, rebate calculation and/or claim validation, without enabling true integration. True integration should be viewed from both a system perspective and a solution perspective. Without an integrated system, companies must bear the cost of maintaining connections among systems. The real cost, however, is not in IT. Having multiple systems means that all data – customer, partner, product, pricing, etc. – need to be maintained and synched, exposing a company to the risks of errors and out-dated information, unnecessarily increasing the very complexity in data that life sciences companies need to get control of.

Traditional ERP software packages, on the other hand, provide an integrated system but not an integrated solution. Features and functionalities may simply exist across the packages – promotions in one place, contracts in another, deduction management embedded in yet another, and so on; but the features and functionalities do not necessarily enable cross-department collaboration. This approach supports a way of managing business by silos. Finance, supply chain, contract management, sales, marketing, customer service, may all be optimizing their own operations, without really optimizing entire business flows.

Oracle Trade Management solves these problems. As a part of the Oracle E-Business Suite, it provides both an integrated system and an integrated solution. Capabilities to manage complex customer relationships, pricing agreements, promotions, claims and deductions and indirect sales data are not simply “there”. The features and data communicate with each other. This means that different personnel in finance, contract management, customer service, sales and marketing can use the application, and though each may have their own security control over different features and data, can truly collaborate through the application, increasing overall business alignment and effectiveness.

Figure 2 – Oracle Trade Management Introduction



Oracle E-Business Suite and Application Foundation

Oracle Trade Management is built on solid and robust foundation components, be it from a data model, integration, or technology standpoint, as all other Oracle E-Business applications so that life sciences companies can model their data relationships with ease and can understand information across departments, business units and geographies.

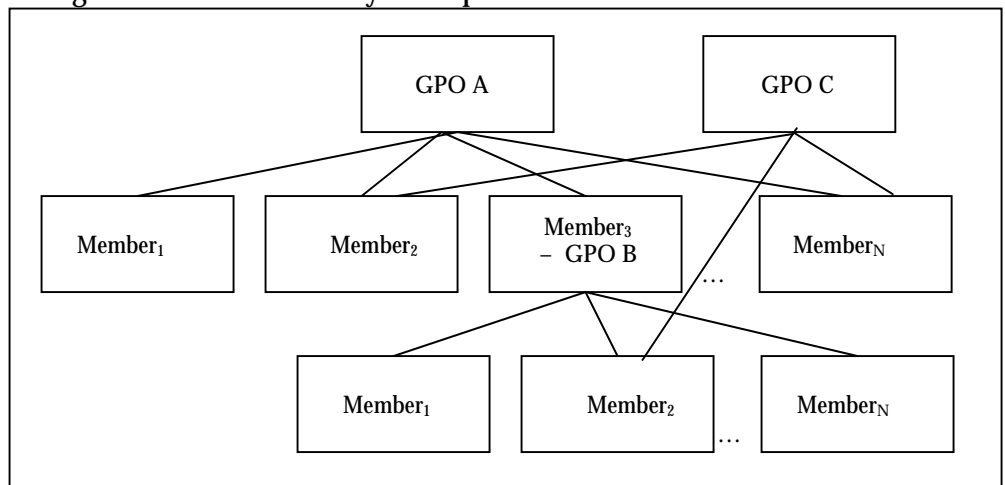
Customer Hierarchy

Customer hierarchies can be built by leveraging on the Oracle Trading Community Architecture (TCA) – a highly flexible schema that allows companies to fully model real world entities in any trading community and accurately represent the complex relationships among these entities. Its building blocks are the concepts of parties and party relationships. By linking any party with another via any number of relationships, it provides support not just for customer relationships but for customer hierarchies that can be any level deep as well. A party within TCA does not even have to have any financial or order transaction with the company directly. Indirect customers that life sciences companies deal with or want to understand, but may not transact with, can be stored within the model. TCA provides a single view of all trading partner relationship that is critical in the life sciences industry.

Following are examples that illustrate the flexibility of the TCA.

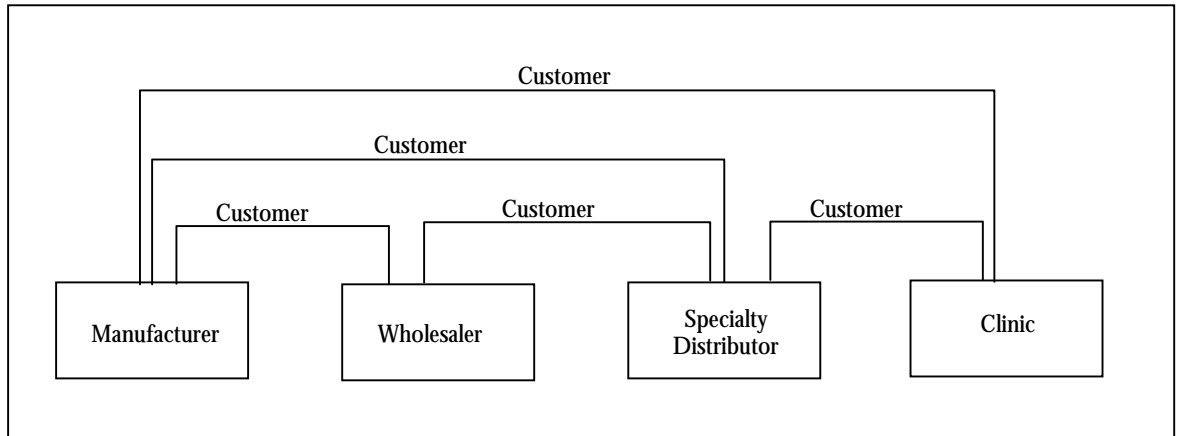
Example 1 – Different members may belong to a group purchasing organization (GPO). This organization may in turn have other organizations as group members. Customers can belong to any number of GPOs. A GPO does not necessarily transact with the company. Even the members do not necessarily transact with the company directly.

Figure 3 – GPO Hierarchy Example



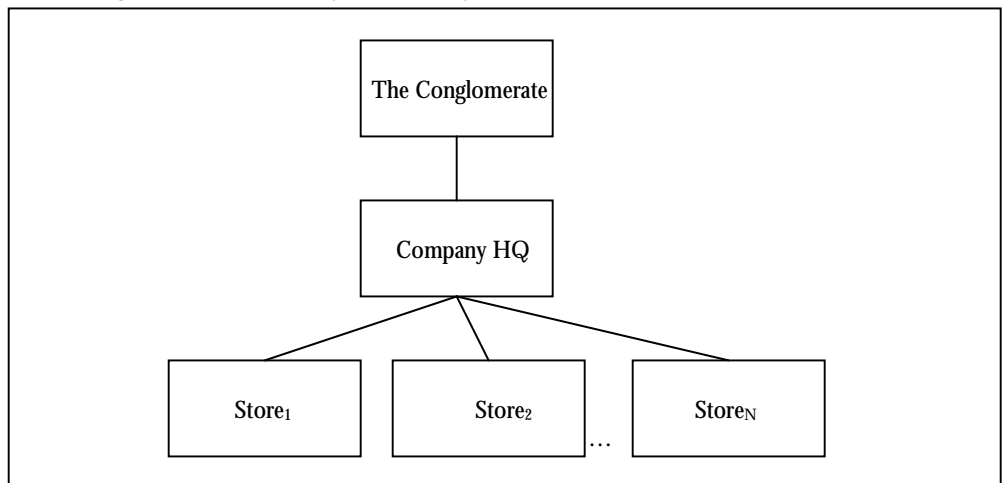
Example 2 – A clinic is both a direct and an indirect customer, depending on products or inventory availability. When it buys indirectly, it may transact through a large wholesaler or a specialty distributor, again based on products or inventory availability.

Figure 4 – Direct and Indirect Customer Example



Example 3 – A retail organization with an HQ in one state and stores nationwide. You may assign sales reps to sell over-the-counter products directly to the individual stores based on geographic territories.

Figure 5 – Company Hierarchy Example

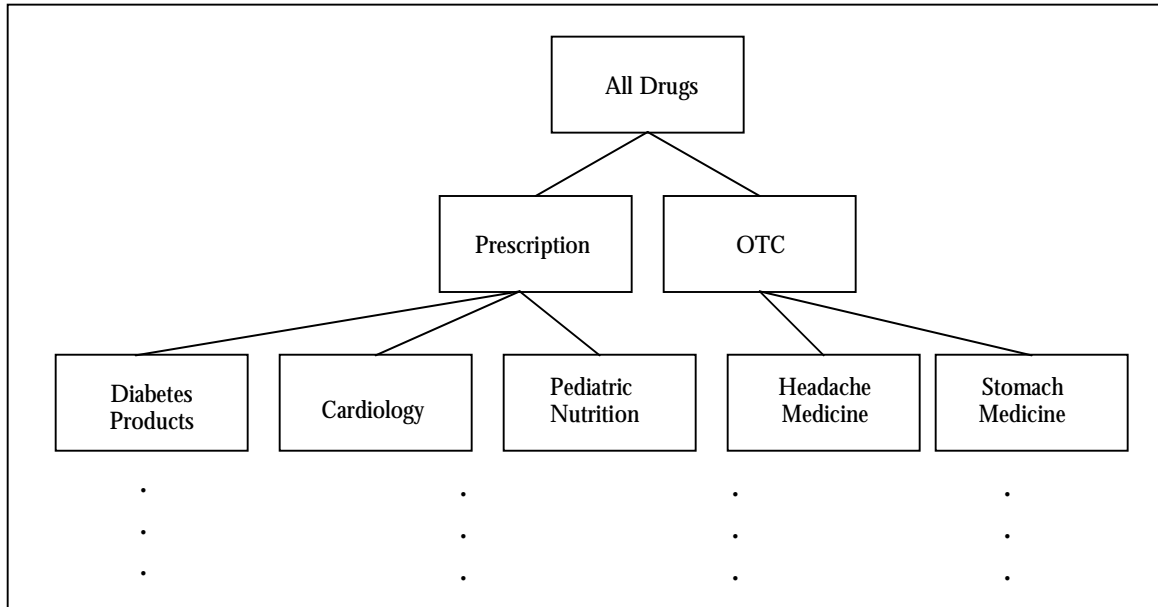


Oracle Trade Management leverages on TCA to support party relationships, account relationships and customer hierarchies. For example, pricing agreements may be created at a group level, and no matter how deep this group hierarchy is, the group itself and all the members are eligible for the agreement. There is the flexibility to track the accruals or sales volume either at that group level or the member level, and claims payments can be created for either the group level or the member level. In all functional areas, Oracle Trade Management fully makes use of the power of TCA.

Product Hierarchy

Product hierarchies can be built using the Advanced Product Catalog (APC) architecture – a unified, extensible product model including all information required for all business functions. The building blocks for product hierarchies are categories and a flexfield structure. Like customer hierarchies, the product hierarchies are also completely configurable and can be any level deep, where each category can have child categories.

Figure 6 – Product Hierarchy Example



Categories themselves leverage on the highly configurable flexfield structure whereby many segments can constitute a category, each segment containing any number of values as needed. While a single product hierarchy can be used for common reporting purpose, this hierarchy can also be sliced and diced at different levels for analysis and execution support purposes. A single product may be grouped under different categories for different needs. All these categories can roll up under a single product hierarchy. An easy-to-use interface is provided to configure the product hierarchy.

Sales Territory / Geographic Hierarchy

Sales territory or geographic hierarchies are fully supported. Sales territory hierarchies can be built using multiple customer attributes plus geographic attributes such as country, county, province, state, city, postal code and area code. An easy-to-use interface is provided to configure the sales territory / geographic hierarchy.

Multi-Currency

Oracle Trade Management fully supports multi-currency environments.

Currency conversions can be set by multiple conversion types. Different types may be created for different business needs, e.g. reporting, corporate, spot, daily, etc. Conversion types support multiple calendar types, fiscal or otherwise, and calendar periods. To each set of books, we support a functional currency with which accounting entries are recorded, while transactions can be executed, stored and reported with different transaction currencies.

Accruals can be stored with functional currency, budget currency and transaction currency. Automatic conversions take place based on the appropriate exchange rate. Where there are different currencies used, rollup views of accruals can be converted into any common currency for reporting and analysis purpose. Such conversions can be configured depending on who a user is. Where transactions take place in different currencies, conversions are automatic without user interference. There is also support for multi-currency price agreements and claims and deductions.

This high degree of configurability completely supports any environment where there are different needs for multi-currency in terms of transaction, reporting and accounting.

Multi-Language

As with all Oracle applications, Oracle Trade Management fully supports multi-language environments. Out-of-the-box, 25 languages are supported. A simple language preference setting by user determines the language for that user's interface.

Integrations with Oracle Applications

Since trade management is a complex business area and is intricately linked to the Order-to-Cash flows, our application integrates with the Oracle E-Business Suite to fully align data and automate processes. Following are the main integration points:

- o Supply Chain – for order execution and demand forecasting purposes; leverage on Advanced Pricing for configurable eligibility rule sets and for storing price agreements;
- o Financials – automate Receivable Lockbox processes for deduction management and all types of claim payments, automate accounting entries for rebate and discount related expenses and accruals
- o Partner Management – enable self-service interactions for all types of partners and brokers
- o CRM – integrate with Marketing for campaign management; Incentive Compensation can use POS data from Trade Management to pay sales commissions

Workflows and Business Events

Workflows and business events are used throughout the application to provide process automation, configurability, approval control and notifications.

XML Gateway (EDI Transactions)

A central XML Gateway provides Oracle application users the ability to receive and transmit EDI transactions.

Task Management

The task management foundation enables management of all work items in terms of human resource assignment, scheduling, planning, tracking and workflow notifications. Users can manage their tasks in general, or specific tasks as related to each customer, promotion or claim and deduction.

Calendar

The calendar foundation provides all application users a productivity tool. Using this, they can schedule their tasks, manage their own appointments or collaborate with other personnel by creating meeting invitations. Sales and marketing users whose jobs involve a lot of cross-team coordination, customer visits or activities will find this a useful tool.

Customer or Partner Contact Management

This foundation component of the Oracle Trade Management application allows users to capture customer or partner contact information such as address, email addresses, telephone numbers, job title, their role inside the customer or partner organization, and any interactions users have as stored in note formats with each contact. Sales and marketing users can make use of this tool to store information for each customer or partner contact and to record each interaction.

Documentation Support

Documentation using any form of notes and attachments, including links to external URLs or 3rd party documentation or imaging system, is supported throughout the application.

Reporting

Using the flexible Oracle Discoverer reporting tool, any internal or external data can be used both to pre-build user reports and to cater to any ad-hoc reporting needs. With flexible query capability, data rollup or drill down, graphing features, built-in mathematical and statistical functions, and the ability to configure other customized functions, Oracle Discoverer is also used for analytical purposes such as to create customer and product profitability reports.

Wireless Mode

The Oracle Trade Management application is enabled for wireless access.

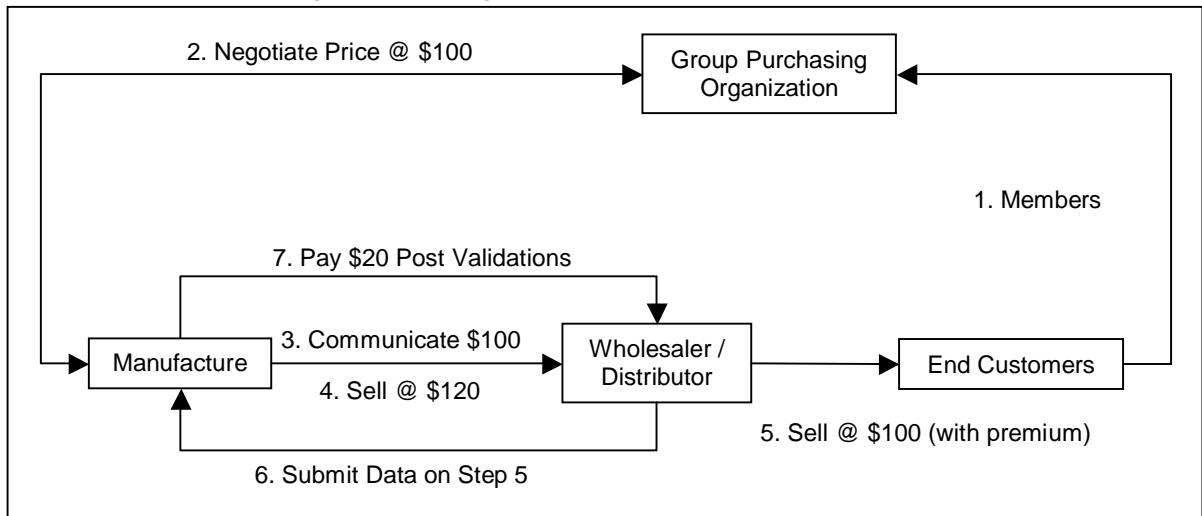
TRADE MANAGEMENT IN LIFE SCIENCES

In this section we will highlight the common usage of Oracle Trade Management in the life sciences industry.

Chargeback

The chargeback business flow refers to the process by which wholesalers or distributors in the life sciences industry claim back the difference between their acquisition cost of a product and the contract price negotiated between a manufacturer and an end customer.

Figure 7 – Chargeback Flow



End customers who negotiate such pricing agreements with the manufacturers include the following:

- o GPOs representing hospitals
- o HMOs and PBMs (e.g. Kaiser, Medco)
- o Government
- o Retail Chains

Life sciences companies face great challenges in maintaining these relationships on a timely basis for accurate chargeback validation, being able to accurately model pricing complexities, importing high volume of transaction data, and integrating data to claim, payment, incentive compensation or revenue recognition purposes.

To solve these business pains, Oracle Trade Management provides out-of-the-box, integrated support for Chargeback. The following are the main components of this solution.

GPO and Other Trading Partner

GPOs are formed so that members such as hospitals or other managed care organizations can leverage on greater buying power. They negotiate pricing agreements on behalf of the members, or called end customers, with life sciences manufacturers. The group itself does not necessarily transact with the manufacturers or distributors. Rather, they may get a fee based on the purchases of their members. Membership data may be high in volume and subject to frequent changes. The ease of maintaining such data and the ability to make them available across the enterprise in a timely fashion is a critical need in the management of chargeback claims.

Using the robust Oracle Trading Community Architecture (TCA), GPOs can be created easily using the party relationship called “buying group”. (Please refer to Figure 3 above). All other trading partners such as HMOs and PBMs, the government and different retail chains, can be also created within TCA where a flexible classification system allows life sciences companies to categorize these trading partners into different channels or classes of trade. Since GPO membership is built by party relationships, maintaining membership is a simple task of updating party relationships. They can be:

- Added
- Updated
- End-dated or made inactive.

A GPO can have any number of members, and members can belong to any number of GPOs.

TCA provides public APIs (application programming interfaces) for the purpose of bulk loading or updating of GPOs and members. With the use of these APIs, membership updates can be automated, instead of being keyed in manually by users based on paper documents they receive. Once updated automatically, as all Oracle applications leverage on TCA, the information can be made available across the entire enterprise instantly. Pricing and/or promotion agreements with GPOs as eligible parties will validate membership dynamically, eliminating the need to perform the duplicate tasks of updating membership information and syncing it up with the agreements.

With a central repository for all GPO, customer and trading partner information, life sciences companies can give all their users timely information to do their jobs effectively and reduce costs in managing such information.

Price Agreement with End Customers

End customers are customers who may not purchase directly from a manufacturer but nonetheless has contracts, or called pricing agreements, with the latter that entitle them to buy certain products at special prices from a distributor. As mentioned above, these pricing agreements may be negotiated by GPOs on behalf

of end customers. Once finalized, these agreements need to be stored within the manufacturer's system to serve as the basis for validating the chargeback data submitted by distributors.

Within Oracle Trade Management, users have the ability to enter such price lists to store the contracted prices with the end customers. The agreements can be qualified specifically for chargeback purpose so that when chargeback claims and data come in, the OTM system will automatically find the eligible lists to validate the claim data.

Price lists used to model contracted prices with end customers are extremely flexible¹.

- Flexible customer eligibility rules
 - Grouping of customers by GPO or dynamic segment. We have already discussed GPO in the above section. Once created, GPOs can be assigned to any price agreement. Alternatively, customers may be assigned different tiers, based on which their pricing is different. If tiers are determined by pre-determined criteria as historical sales performance, they can be defined as customer segments. E.g., customers who meet some sales performance criteria will be included in tier 1 and a list of special prices apply for them.
 - Enter customer eligibility based on customer characteristics. Many seeded attributes such as customer classification, sales channel and other information can be used for defining customer eligibility of a price agreement. In the most basic eligibility rule, users can simply enter customer names. For example, a certain group or a certain customer may be eligible simply based on negotiations with the life sciences company's sales teams, in which case upon conclusion of the negotiations a contract administrator simply adds the eligible group or customer in the price agreement.
 - All other eligibility rules. Attribute mapping can be used to build any custom rules.
- Flexible product eligibility rules
 - Product and product category can be used to define eligibility
 - All other eligibility rules. Attribute mapping can be used to build any custom rules.
- Dynamic pricing formula

¹ Although these price lists record contracted prices with end customers only and do not affect order management, Oracle Advanced Pricing still provides the flexible infrastructure for building eligibility rules for them.

- In addition to defining a fixed price, a dynamic formula can be used as well to determine pricing based on calculations with any data.

Maintenance of these agreed prices is easy. In case of any changes, such as customers dropping out of the agreement, users can end date the eligibility. Alternatively, there are public APIs available for bulk loading and updating them. With the use of them, maintenance of these prices can be automated, instead of being keyed in manually by users.

Cross Reference of Distributor / Wholesaler and Internal Data

Distributors often use their own data in their own format. With each distributor having its own references and with the high volume of data coming in, manufacturers need a data mapping tool that can translate external data to internal data. The application provides this mapping table and performs the real-time, automatic conversions when external data are received, for the following information:

- Product number
- Unit of measure (UOM)
- Price agreement number
- End customer number and location

EDI Support via XML Gateway

Common EDI formats used are EDI 844 and EDI 867 on the inbound side, and EDI 849 on the outbound transactions, all of which supported out of the box. In addition, other formats can also be supported if mapping is done with consulting effort. Through Oracle XML Gateway, EDI transactions can be automatically received by the Chargeback system.

Flat File Import and Export

Smaller distributors may submit flat files instead of sending data via EDI. A flexible flat file import tool called WebADI automates this process. Different layouts by distributor can be used. The same tool also supports exporting data with different layouts.

Data Quality Management

Customer or end customer data may be sketchy or incomplete, causing either duplicate data entry or slowing down of the chargeback validation process. Duplicate customer data in a life sciences company will pose great challenges not just for chargeback validations but in many other functional areas as well. As an example, a company may track an indirect customer's performance over time to evaluate if they should establish direct trading relationships with them; to be able to

help with such an evaluation, an application system must be able to store a clean record of that indirect customer.

The Chargeback system integrates with a robust rules engine called Data Quality Management (DQM) where companies can define filtering conditions, scoring rules, data transformations and fuzzy search logic to find matching customer information in their systems, avoiding duplicate customer creation and streamlining the chargeback process.

Validations

Validation is an important step in managing chargeback claims, as both the processing time and accuracy of payments to the distributors will be greatly impacted by this. Automatic validations are provided by OTM to expedite the chargeback claim process.

Chargeback data get validated against price agreements for the following:

- o Validation of agreement terms and conditions:
 - Basic information such as agreement number, shipping / invoice date. Distributor's agreement number, after conversion to internal number, is checked to ensure the validity of the agreement. Distributor's shipment date is compared against the effective date range of the agreement.
 - Customer eligibility. The system checks whether the customer on the indirect sales transaction submitted for chargeback purpose is eligible for the contracted price. Where eligibility is defined for a GPO, membership validity is checked. Through the use of custom attributes, validations can also take place for valid HIN#² or DEA#³.
 - Product eligibility. Product number or NDC#⁴, after conversion to the internal product number based on the cross-reference setups, is checked against the product eligibility rules on the price agreement for validity.
 - Claimed price versus contracted price

² Health Industry Number – a unique identifier for a prescriber by location, provider establishment or other healthcare industry organizations

³ Drug Enforcement Administration code – another identifier for a prescriber from a government numbering system

⁴ National Drug Code – an identifier for a drug listed under Section 510 of Federal Food, Drug and Cosmetic Act; it is a 10-digit, 3-segment number. The first segment is assigned by the FDA to identify the manufacturer or distributor of the drug; the second segment identifies the strength, dosage or formulation of the drug and is assigned by a manufacturer or a distributor; the third segment identifies package size code and is also assigned by a manufacturer or a distributor

- o Tolerances – the system accepts small differences between the claimed amount and the system-calculated amount based on tolerance settings. Tolerances can be set up by header or by line, and can vary based on the distributor.
- o Unit of measure (UOM)
 - First a distributor’s UOM is converted to an internal UOM based on the cross-reference setup.
 - Then if indirect sales data are imported in a different UOM from that used on the price agreement, automatic conversion is done by the system to validate that the contract price referenced on the indirect sales data matches that on the agreement.
- o Quantity / distributor inventory checking
 - A distributor claims chargeback credits with information on the number of units of a product sold to a contracted end customer. The system provides an option to validate whether the quantity claimed by the distributor is within the inventory level of the distributor.
 - Based on direct sales data to a distributor and indirect sales (or called tracing) data a distributor submits for chargeback purpose, plus any periodic adjustment, OTM automatically tracks the inventory level of a distributor and uses the tracking to enable this validation. (Please see the POS / Tracing Data and Channel Inventory section later in this paper.)
- o Acquisition cost. On the chargeback transaction data, a distributor generally provides its acquisition cost of a product, the price at which it bought a product from the manufacturer for. Likewise for inventory checking, the Chargeback system provides an option to validate whether that cost claimed by the distributor is accurate based on the sales information to the distributor⁵.

Dispute and Duplicate

Where there are errors, incomplete data or duplicate information, the system automatically flags the chargeback transactions with dispute codes for investigation. All error codes are tracked in the system. Upon correction, a user simply clicks a button to ask the system to re-process the data.

Disputed records can be sent back to distributors for corrections. The EDI 849 outbound format is supported by the same integration with Oracle XML Gateway.

⁵ Based on the indirect sales shipment date, this validation currently takes place based on the price the distributor paid on the last order from the manufacturer before that shipment date on the indirect sales data, in effect a last-in-first-out (LIFO) validation. Other custom validation methodology can be used with consulting effort.

While for smaller distributors, users can simply download the data in different formats via the WebADI tool.

Payment

If data are validated and determined to be eligible for payment, the entire payment process from the Chargeback system to Oracle Financials is automated, with all relevant customer, product and amount information passed for creating either a credit memo or a check.

GPO Administration Fees

As a result of their contract administration service, GPOs may get a fee based on the Chargeback transactions. Such a fee may be calculated on a percentage or lump sum basis or a combination of both, based on the sales value of a GPO member paid to a distributor. This fee is then paid to the GPOs on a periodic basis, e.g. monthly or quarterly.

(For support of general functions regarding GPO such as creation, membership update and others, please refer to Figure 3 – GPO Hierarchy Example, and the section “GPO and Other Partner” on page 15).

Example of an administration fee

Manufacturer X has a contract with GPO A. Hospital B as a member of GPO A.

Distributor Y sells to Hospital B for a total of \$1000. It submits to Manufacturer X such transactions for its chargeback claim purpose. Based on the data, Manufacturer X finds that GPO A is to be paid 1% in administration fee. Manufacturer X accrues \$10.

Trade Management provides full support for all administration fee calculations and can automate the payments with integration to Oracle Financials.

- Calculation by %, amount, lump sum
- Accrual tracking and accounting integration. E.g. a fee may be paid to the GPO on a quarterly basis, but tracing data come in on a daily or weekly basis. As often as the tracing data come in, accruals can be created and accounted for in the General Ledger and relieved when the payment is made at the end of the quarter.
- Automatic payment by checks or credit.

Direct Rebate Accrual

We use the term “direct rebate accrual” to refer to any accrual that is not based on indirect sales data, but calculated based on either direct sales data to customers or simply created on a lump sum basis.

Oracle Trade Management leverages on a robust pricing engine and provides capability to handle highly complex and dynamic rebate offers, tiered pricing, and other performance-based accruals. The following summarizes the key features in this area:

- Support different types of direct rebate accrual:
 - Volume Rebate
 - Variable Rebate
 - Lump Sum Rebate
- Support different calculations:
 - By % or amount
 - With or without minimum quantity or amount (“floor”)
 - With or without maximum quantity or amount (“cap”)
 - With or without volume tiers
 - In any UOM
- Dynamic pricing formula, especially useful in defining rebates based on performance as measured by:
 - Market share
 - Growth rates
 - Other factors that require data from multiple systems or external sources
- Flexible eligibility rules based on customer, customer grouping, product, category, sales volume, channel, class of trade, territory and many other available qualifying attributes. These eligibility rules are entirely configurable and can also be used for validation purposes such as price floor and profitability validations.
- Integration to Advanced Pricing. Trade Management leverages on all the flexible incompatibility, bucket, precedence, phase and qualifying rules that Advanced Pricing provides.
- Integration to Order Management. For rebate accruals that are calculated based on direct sales orders, Trade Management automatically tracks the amount calculated for each order.
- Integration to General Ledger. As rebates apply and are tracked in Trade Management, the application also creates accounting entries to track the impact on sales revenue, expense and accrued liability.
- Performance tracking and validations

Certain rebate accruals are related to sales orders placed by customers. For these, Oracle Trade Management supplies out-of-the-box, automatic integration with the back-end pricing and ordering systems. Errors and miscommunications arising out of situations whereby sales people write down deal details on paper and pass them to the back-end offices for manual data entry can be minimized. With this order-to-cash step automated, pricing and invoicing accuracy increases.

Based on complex pricing rules and structures set up, rebate rates apply and get calculated. In some cases, e.g. for volume rebates, the system needs to validate purchase volume of a customer or the aggregate volume of a buying group before finding the proper promotion rate. In other cases, retroactive adjustments may need to be made if a customer's purchase volume reaches a certain level. The Funds Accrual Engine within Oracle Trade Management fetches back all sales order information, dynamically deciphers all such business logic, and calculates the expenses and accruals that need to be tracked in different sales budgets.

The following describes some examples of such rebate accruals.

Example 1 – Flat Rebate

Customer A gets the following rebate %:

<u>Product Category</u>	<u>%</u>
X	1
Y	2
Z	3

When this customer places an order in order management for a product within the above categories, the corresponding rate is applied. Trade Management tracks the accrual and creates accounting entries for it in the General Ledger system.

Example 2 – Volume-Tier Rebate

A customer gets a rebate accrual rate that varies based on its volume throughout the year. At the end of the year, this customer gets paid by a check or a credit.

<u>From</u>	<u>To</u>	<u>%</u>
\$1	\$1mm	1
\$1mm	\$2mm	2
\$2mm	\$3mm	3
\$3mm+		4

Throughout the year, as the customer buys from the company, Trade Management applies the appropriate % to be accrued for this rebate

program. There is also the flexibility to retroactively make adjustments for a higher rate once the customer reaches a higher level.

<u>Month</u>	<u>Sales (cumulative)</u>	<u>%</u>	<u>Amt</u>	<u>Retro-Adjustment</u>
Jan	\$0.5mm	1	\$5,000	N/A
Feb	\$1.5mm	2	\$20,000	\$5,000

The February accrual is \$1mm x 2% = \$20,000. The retroactive adjustment of \$5,000 is created for the \$0.5mm in sales from January.

Example 3 – Strategic Lump Sum Rebate

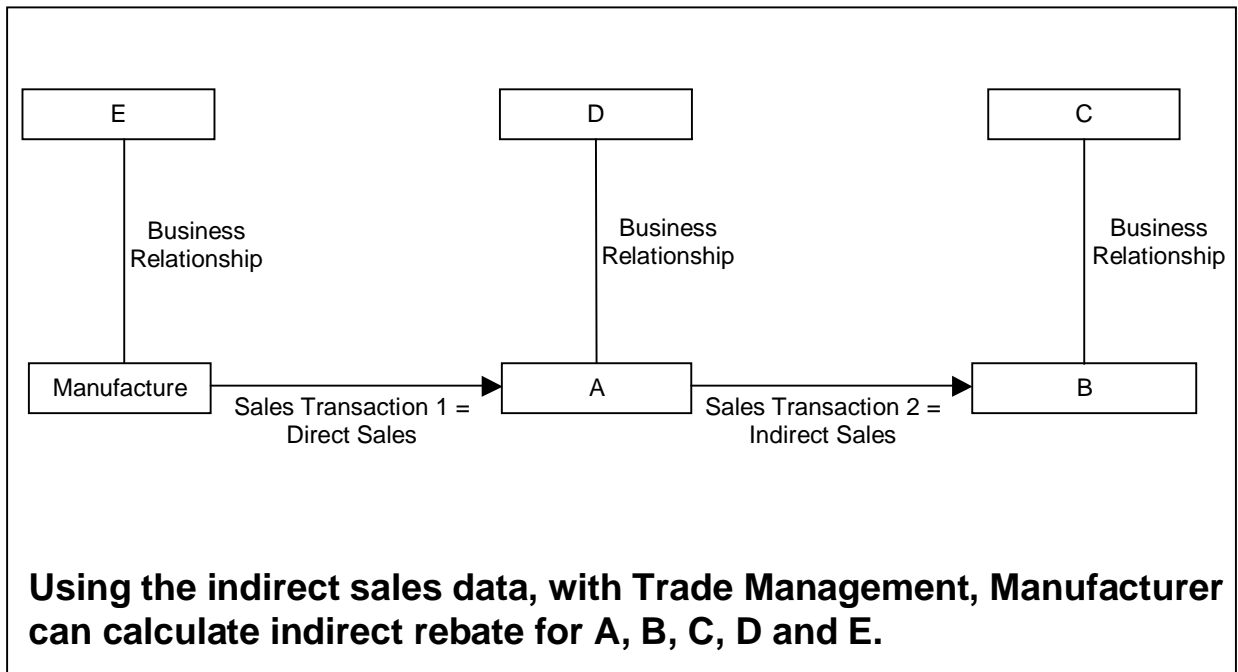
If Customer X meets certain strategic objectives, at the end of the year, Manufacturer Y gives it a lump sum rebate in the amount of \$12,000. Although the payment by check or credit is only made at the end of the year, in order to smooth out the revenue or expense impact of this \$12,000, Manufacturer Y creates monthly accrual for this throughout the year approximately for \$1,000 monthly.

Indirect Rebate Accrual

We use the term “indirect rebate accrual” to refer to any accrual that is based on indirect sales data. These rebate accruals may be for many different purposes; GPO administration fee can be a form of indirect rebate accrual.

In general, figure 8 below summarizes all the possible indirect rebate accrual scenarios that Trade Management can support. In terms of the support for calculation, eligibility rules, qualifying attributes, and General Ledger integration, indirect rebate accrual is similar to direct rebate accrual. Please see the section above on Direct Rebate Accrual for details on features available in these areas.

Figure 8 – Trade Management Supports All Indirect Rebate Accrual Scenarios



Some more examples are as follows.

Example 1 – Indirect Customer Promotion

Manufacturer sells to Wholesaler A who then sells to Pharmacy B. Although Pharmacy B is not a direct customer, Manufacturer would still like to promote to it and therefore creates a 2% rebate accrual to be paid to Pharmacy B.

Example 2 – Price Difference Rebate

Pharmacy K sometimes buys directly from Manufacturer, but sometimes from Wholesaler A. It is therefore both a direct and an indirect customer. Normally when Pharmacy K buys, it gets a price of \$10 from Manufacturer. If Manufacturer runs out of stock of a product, however, Pharmacy K has to buy from Wholesaler A at a price for \$11. Based on the indirect sales data, Manufacturer compensates Pharmacy K for the price difference of \$1.

Example 3 – Recurring Indirect Sales Rebate to Wholesaler

Manufacturer sells to Wholesaler A who then sells to Pharmacy B. Based on the value of the indirect sales transaction from A to B, Manufacturer gives Wholesaler A a rebate of 5%.

Net Sales Rebate

Net sales accrual is an accrual calculated based on a net sales number, defined as the gross sales number subtracted by certain credits.

Example 1

Manufacturer gives Wholesaler B a rebate accrual of 3% calculated based on net direct sales as defined below:

$$\begin{array}{r} \text{Gross Sales} \\ - \text{ Rebate Credits} \\ - \text{ Promotion Credits} \\ \hline = \text{ Net Sales} \\ \hline \times 3\% \\ \hline \end{array}$$

Net Sales Rebate Accrual

The Net Accrual Offer in Trade Management allows life sciences manufacturers to define the subtractions from gross sales based on any Receivable transaction type, Order Management transaction type or Trade Management accrual type.

Capitation Agreement

Here we refer to capitation agreements from a manufacturer's perspective. It is not to be confused with capitation agreements from a healthcare service provider's perspective.

The following example illustrates such an agreement and Trade Management's ability to manage it.

Example 1

Manufacturer charges Customer A for a medical device at the beginning of a year for \$1,200. This total amount is divided by 12 to arrive at a forecast monthly amount of \$100. On a monthly basis then, based on the order value of Customer A, Manufacturer compares the actual amount versus the forecast.

<u>Month</u>	<u>Forecast (\$)</u>	<u>Actual (\$)</u>	<u>Differential Amt (\$)</u>
Jan	100	115	-15
Feb	100	105	-5
Mar	100	75	25
Apr-Dec	100 each	100 each	0

The differentials are settled at the end of the year. At that time, Manufacturer finds that the total differential amount is \$5, meaning that Manufacturer owes Customer A \$5.

To handle this business flow, a lump sum can be created in the Trade Management system for the yearly bill, e.g. \$1,200 in the scenario above. This lump sum can be configured to have spread posting instead of one-time posting, so that the system records a monthly posting of approximately \$100. On the other hand, a -100% accrual can be set up in Trade Management. With integration to Order Management, as a customer buys, the actual accrual (in negative amount) updates Trade Management. In the above example, at the end of January, one will see an accrual in the amount of -\$15 in Trade Management. At the end of the year, the difference can be settled in Trade Management by either a claim (settled by a credit or check) or a debit claim (settled by a debit).

Trade Planning

In addition to all the rebate accruals, direct or indirect, mentioned above, there are other sales and marketing promotions that life sciences companies run to target their customers. This is especially true on the over-the-counter (OTC) side of the business where the business processes – planning and budgeting, analysis, execution, retail monitoring and settlement – are not very different from consumer good industry's trade promotions. As such we refer the reader to the Trade Management for CPG white paper for details.

Below we highlight the key business needs in Trade Planning that Oracle Trade Management addresses:

- **Budget Planning.** Based on historical sales and promotion data, forecast conditions and other factors, a sales and marketing team analyzes how best to allocate budgets among sales and marketing, across products, brands, customer segments, channel or other criteria. On the other hand, there are certain budgets that are on a fully accrued basis; these are also called live funds. Trade Management supports budgets by the different criteria as well as on a fully accrued basis.
- **Sales Quota and Target Setting.** Along with setting an overall sales budget, quota allocation also needs to be finalized. Once a sales rep knows his quota, he may then set targets across his key accounts and products. In both quota and target setting, Oracle Trade Management supports sales users by automating allocations based on historical sales.
- **Account Plan.** To each customer account that a sales rep is responsible for, they can create an account plan based on different time periods to plan for all the promotions they will run. Multiple analytical, execution and monitoring tools, as described below, empower the sales rep to create effective account plans.
- **Sales Analysis.** This feature provides a sales user with historical sales analysis as well as current sales performance reports, helping them better analyze past performance to design future promotions, as well as to monitor current performance to ensure sales objectives are met.
- **Offer Evaluator, Worksheet, Forecasting, ROI Calculator.** This allows a sales user to truly evaluate promotional lift before execution.
- **Discount Calculator.** An easy-to-use calculator, this saves sales people time in figuring out the right discount level and increases the chances for promotional success.
- **Retail Monitoring, Performance Tracking, Competitor Pricing.** By monitoring retailers' performance, competitors' pricing and positioning and product shelf facing information, sales users can ensure promotional effectiveness. Having captured all such data from thousands of sales people in a central repository, companies can make use of the information for further research and analysis purposes.
- **Customer Contact Management.** The use of customer contact management tools, notes, attachments, tasks and calendar facilitates any customer interactions or negotiations. The entire application is also wireless-enabled, so that during any customer interaction, an account manager can easily access information they might need.

Claim Payment and Deduction Management

Oracle Trade Management provides a complete solution for managing all types of claim payments and deductions. Deductions may be caused by many reasons including shipping errors, invoicing errors, quality problems and promotions. Chargeback and all forms of rebates may also result in deductions. Oracle Trade Management is the central repository for companies to manage all their claims and deductions. Its research, validation and management tools help users efficiently process and reconcile payments and deductions. Its integration with Oracle Financials shortens time to resolution and helps streamline overall financial processes.

The deduction management best practices and capability are explained in full details in another Oracle Trade Management white paper titled *Deduction Management*. Please refer to it for further information.

Below we highlight the key business needs in Claims and Deductions that Oracle Trade Management addresses:

- **Lockbox Integration.** The lockbox process automatically evaluates discrepancies between receipts and payments and creates deductions. Customer reasons are mapped and automatically converted to internal reasons. This integration can significantly increase the efficiency of a company's deduction management process.
- **Bill Back Requests.** In addition to deductions and overpayments, Oracle Trade Management also supports all types of bill back requests.
- **Other Partner Claims.** Companies can provide their external partners with self-service ability to create claims.
- **Owner Assignment.** Claims and deductions can be assigned to various parties for research based on customer account, category, geography, claim type or reason and other factors.
- **Research and Administration.** Research tools are provided to facilitate user investigations of claims. Administration and management tools are provided to ensure management control and proper audit trails.
- **Auto-Resolution.** Integrated with Oracle Financials and Order Management, a comprehensive set of automated settlement methods is available.
- **Reporting.** The application provides out-of-the-box transaction reports that can be created right from a claim summary page and aging views by business unit. A flexible reporting tool is also provided for other needs. Please refer to the section "Reporting" above on page 12.

Customer Checkbooks

With automated tracking of the amount each customer has accrued, and the payment, either in the form of a bill back request or a deduction, made to each

customer, the application provides true customer budget balances. Timely and accurate updates of customer checkbooks enable claim and deduction personnel to quickly determine whether promotional claims or deductions are valid. Checkbook balances can be viewed from and reported on for multiple dimensions:

- Customer
- Budget
- Offer

In addition, reports can also be easily created to provide balance information by other dimensions such as territory, geography, and spending category.

POS / Sales Tracing Data

POS (point-of-sales), or called sales tracing, data are widely used for many different purposes by life sciences companies, including:

- o Validating chargeback claims
- o Calculating indirect rebate accruals
- o Serving as a basis for sales incentive compensation
- o Serving as a basis for revenue recognition
- o Tracking distributor inventory
- o Enabling better analysis whether for sales and marketing
- o Enabling better supply chain planning

To handle the volume of transactions in an automated fashion, the indirect sales management system within Oracle Trade Management provides the following solutions:

- o Data import:
 - Integration with the XML Gateway for importing EDI transactions automatically
 - A web interface that allows re-usable data format mapping to automate the import if customers submit these transactions via any non-EDI means.
- o Data conversion – converting customer data formats to internal data formats.
- o Data Quality Management integration – a rule-based scoring engine that searches for duplicate customer data with support for fuzzy logic and sound and word transformations.
- o Validation – data can be used for validation of chargeback claims as described in the section “Chargeback” above on page 14.

Channel Inventory

With all direct sales and indirect sales information all available, Trade Management automates the tracking of customer or channel inventory by product so that life sciences manufacturers can better understand their distribution channel activities.

CONCLUSION

Life sciences companies find themselves in a highly competitive environment laden with complex business relationships and process. To efficiently manage pricing and promotion agreements in such an environment, companies should adopt the best practice of integration – both from a system as well as from a solution standpoint.

Oracle Trade Management is a solution that enables this best practice. It allows manufacturers to model complex pricing and promotion agreements, track every dollar accrued or spent, automate data processing, maximize promotional effectiveness, reduce costs of claims validation and resolution, and increase payment accuracy.

The result: significant savings in time and costs.



Oracle Trade Management for the Life Sciences Industry
March 2005
Author: Gabrielle Tao

Oracle Corporation
World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Worldwide Inquiries:
Phone: +1.650.506.7000
Fax: +1.650.506.7200
www.oracle.com

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