BIBLIOGRAPHY

3COM. 2001. Data Warehousing Solutions. High-Availability, High-Performance Networks Support Superior Business Decisions. In *Data Warehousing: The Ultimate Guide to Building Corporate Business Intelligence*. Ed. SCN Education B.V. Wiesbaden: Vieweg. Pp. 37-46.

AAKER, D.A. 1998. Developing Business Strategies. 5th Ed. New York: John Wiley & Sons, Inc.

ACHABAL, D. D., MCINTYRE, S. H., SMITH S. A., AND KALYANAM, K. 2000. A decision support system for vendor managed inventory. *Journal of Retailing*, 76(4):430-454.

ALTER, S. 1999. *Information systems: a management perspective*. Massachusetts, United States: Addison-Wesley.

ARTHUR ANDERSEN. 2000. *Branded Consumer Products Point of View Guidebook*. Reference Information. July 2000.

ASHILL, N.J. AND JOBBER, D. 2001. Defining the information needs of senior marketing executives. *Qualitative Market Research: An International Journal*, 4(1):52-60.

BALLOU, R.H. 1987. Basic Business Logistics: Transportation, Materials Management, Physical Distribution. 2nd edition. New Jersey: Prentice-Hall, Inc.

BERSON, A. AND SMITH, S. J. 1997. *Data warehousing, data mining, and OLAP*. New York: McGraw-Hill.

BOOTH, R. 1996. The role of supply-chain re-engineering in the pharmaceutical industry. *Logistics Information Management*, 9(3):4-10.

BROOKE, K. AND MACTAVISH, D. 2001. *Forecasting the Future – Planning for Tomorrow* [online]. Available from: <u>http://www.dmreview.com/editorial/dmreview/print_action.cfm?EdID=3896</u> [accessed November 23, 2002].

BUTCHER, H. 1998. *Meeting managers' information needs*. London: Aslib, The Association for Information Management.

CASHMAN, M. R. 2000. Data Warehouses Can Become Treasure Troves. *Financial Executive*, 16(1): 49.

CORBETT, C.J. BLACKBURN, J.D., VAN WASSENHOVE, L.N. 1999. Case Study: Partnerships to Improve Supply Chains. *Sloan Management Review*, Summer 1999, pp. 71-82.

CORR, L. AND KIMBALL, R. 2000. *Data Warehousing Design Techniques*. Berkshire, UK: Kimball University (DecisionOne Consulting Ltd & Ralph Kimball Associates).

DAPHNESOFT. 2001. Building Corporate Business Intelligence: From Datamarts to the Enterprise Data Warehouse. In *Data Warehousing: The Ultimate Guide to Building Corporate Business Intelligence*. Ed. SCN Education B.V. Wiesbaden: Vieweg. pp. 75-82.

DAVENPORT, T. H., HARRIS, J. G. AND KOHLI, A. K. 2001. How Do They Know Their Customers So Well? *MIT Sloan Management Review*, Winter 2001, pp. 63-73.

DAVENPORT, T.H. 1998. Putting the Enterprise into the Enterprise System. *Harvard Business Review*, July-August 1998, pp. 121-131.

DODGE, G. AND GORMAN, T. 1998. Oracle8 Data Warehousing. New York: John Wiley & Sons, Inc.

EDVINSSON, L. 1997. Developing Intellectual Capital at Skandia. *Long Range Planning*, 30(3), 366-373.

FREDERICK, J. 2000. Retailers, suppliers seek advances in supply chain management. *Drug Store News*, 22(6):10.

FRIEDMAN, T. 2002. Data Warehouse Infrastructure: Hitting the Moving Target of User Needs. Gartner conference Business Intelligence–Managing Effectively in Times of Economic Uncertainty. Amsterdam, 31 January – 1 February 2002.

FROM MASS TO CLASS. 2000. Soap, Perfumery and Cosmetics, 73(5):34-36.

FOOD AND DRUG ADMINISTRATION. 2000. Good Manufacturing Practice Guide for Active Pharmaceutical Ingredients [online]. Available from http://www.fda.gov/cder/guidance/4011dft.pdf [accessed October 16, 2001].

GASKIN, B. 1994. Using DSS to Boost Sales and Marketing. *CMA, the Management Accounting Magazine*, pp. 13-16.

GATES III, W. 1999. Business @ The Speed of Thought: Succeeding in the Digital Economy. England: Penguin Books.

GORDON, G. L., SCHOENBACHLER, D. D., KAMINSKI, P. F., AND BROUCHOUS, K. A. 1997. New product development using the salesforce to identify opportunities. Journal of Business & Industrial Marketing, 12(1):33-50.

GRAY, P. AND WATSON, H.J. 1998. *Decision Support in the Data Warehouse*. New Jersey, United States: Prentice-Hall PTR.

GREEN, F. B. 2001. Managing the unmanageable: integrating the supply chain with new developments in software. *Supply Chain Management: An International Journal*, 6(5): 208-211.

HAGEL, J., III, AND RAYPORT, J.R. 1997. The Coming Battle for Customer Information. *Harvard Business Review*. January-February 1997, 53-65.

HAN, J. AND KAMBER, M. 2001. *Data Mining: Concepts and Techniques*. San Diego, USA: Academic Press.

HANDFIELD, R.B. AND NICHOLS, E.L., Jr. 1999. *Introduction to supply chain management*. New Jersey, USA: Prentice-Hall, Inc.

HARRIS, D. B. 1996. *Creating a knowledge centric information technology environment* [online]. Available from <u>http://www.htcs.com/ckc.htm</u> [accessed September 30, 1996].

HEISE, D. 2001. What is Data Warehousing? In *Data Warehousing: The Ultimate Guide to Building Corporate Business Intelligence*. Ed. SCN Education B.V. Wiesbaden: Vieweg. Pp. 33-35.

INFORMATION DISCOVERY, INC. 2001. DataMines for DataWarehouse. In *Data Warehousing: The Ultimate Guide to Building Corporate Business Intelligence*. Ed. SCN Education B.V. Wiesbaden: Vieweg. Pp. 195-210.

INMON, B. 2002. Building The Data Warehouse. Third edition. New York: John Wiley & Sons.

INVENTORY MANAGEMENT: LEVERAGING THE SUPPLY PIPELINE. 2000. *Chain Store Age*, New York.

KIMBALL, R. 1996. The Data Warehouse Toolkit. New York: John Wiley & Sons.

KIMBALL, R. AND MERZ, R. 2000. *The Data Webhouse Toolkit: Building the Web-Enabled Data Warehouse*. New York: John Wiley & Sons.

KIMBALL, R., REEVES, L., ROSS, M. AND THORNTHWAITE, W. 2000. The Data Warehouse Lifecycle Toolkit: Expert Methods for Designing, Developing, and Deploying Data Warehouses. New York: John Wiley & Sons, Inc.

KIRKMAN, M. 2001. *The Impact of Recent and Proposed Legislation on the Pharmaceutical Industry*. Andersen Products, Retail and Services Workshop. Gordon Institute of Business, Johannesburg. November 12, 2001.

KUMAR, K. 2001. Technology for Supporting Supply Chain Management. *Communications of the ACM* (44):6, pp. 58-61.

LAPIDE, L. 1999/2000. New Developments in Business Forecasting. *The Journal of Business Forecasting Methods and Systems*, 18(4):12-14.

LESSER, E., MUNDEL, D. AND WIECHA, C. 2000. Managing Customer Knowledge. Journal of Business Strategy, November/December 2000, pp. 35-37.

LEVINE, M. AND SIEGEL, J. 2001. What the Accountant Must Know About Data Warehousing. *The CPA Journal*. January 2001:38-42.

LURQUIN, M. G. 1996. Streamlining the supply chain in the pharmaceuticals industry. Logistics Information Management, 9(6):6-10.

LIPSCHITZ, L. AND STOUT, R. 2001. *Managing the FMCG Supply Chain*. Andersen Products, Retail and Services Workshop. Gordon Institute of Business, Johannesburg. November 13, 2001.

MATTISON, R. 2001. Data Mining: Statistical Analysis. In *Data Warehousing: The Ultimate Guide to Building Corporate Business Intelligence*. Ed. SCN Education B.V. Wiesbaden: Vieweg. Pp. 181-194.

MCLACHLAN, M. 1999. Interview with Shana Ponelis. September 1999.

MENTZER, J. T., MIN, S., AND ZACHARIA, Z. G. 2000. The nature of interfirm partnering in supply chain management. *Journal of Retailing*, 76(4):549-568.

MICROSOFT CORPORATION. 1999. *Microsoft SQL Server 7.0 Data Warehousing Training Kit.* Redmond, Washington: Microsoft Press

MOON, M.A. AND MENTZER, J.T. 1999. Improving salesforce forecasting. The Journal of Business Forecasting Methods & Systems, 18(2), pp. 7-12.

O'BRIEN, JAMES A. 1999. *Management information systems: managing information technology in the international enterprise*. Intl Ed. United States: Irwin/McGraw-Hill.

PALMQUIST, J. AND KETOLA, L. 1999. Turning Data into Knowledge: database marketing steers marketers to the future. *Marketing Research*. Summer 1999, pp. 29-32.

PALO ALTO MANAGEMENT GROUP, INC. 2001. Database Solutions. In *Data Warehousing: The Ultimate Guide to Building Corporate Business Intelligence*. Ed. SCN Education B.V. Wiesbaden: Vieweg. pp. 271-282.

PELLETIER, M., AND TODARO, T. 2000. Proper use of BI tools can enhance your business. *Online Product News*, 19(11):1.

POE, V., KLAUER, P., AND BROBST, S. 1998. Building a data warehouse for decision support. Second edition. New Jersey: Prentice-Hall, Inc.

POIRER, C. C. AND BAUER, M.J. 2001. *E-Supply Chain: using the Internet to revolutionize your business.* San Franciso: Berrett-Koehler Publishers, Inc.

PONELIS, S. AND BRITZ, J.J. 2002. Customer-Centric Data Warehousing in Organisations and the Privacy of the Individual as a Customer: A Call for Re-Examination [online]. *South African Journal of Information Management*, March 2002, 4(1): Available WWW: http://general.rau.ac.za/infosci/RAUjournal/default.asp?to=peer1vol4nr1 [accessed March 24, 2002].

PRAHALAD, C.K. AND KRISHNAN, M.S. 1999. The New Meaning of Quality in the Information Age. *Harvard Business Review*. September-October 1999, pp. 109-118.

RANDALL, G. 1994. *Trade Marketing Strategies: The Partnership Between Manufacturers, Brands and Retailers*. 2nd revised edition. Oxford: Butterworth-Heinemann.

RAO, S. K. AND SHENBAGA, S. 2000. Developing Customer Databases. *Marketing Health Services*, Winter 2001, pp. 11-14.

ROBSON, G. 2000. Interview with Shana Ponelis. November 2000.

ROGERS, P. 2000. The ABCs of distribution. Candy Industry, 165(2):44-45.

ROOS, G. AND ROOS, J. 1997. Measuring your Company's Intellectual Performance. *Long Range Planning*, 30(3), 413-426.

ROSS, D. F. 1998. *Competing through supply chain management: creating market-winning strategies through supply chain partnerships*. Chapman & Hall Materials Management/Logistics Series. Series editor: Magad, E.L. New York, United States: Chapman & Hall (International Thompson Publishing).

ROSSI, P., DELURGIO, P. AND KANTOR, D. 2000. Making Sense of Scanner Data. *Harvard Business Review*, March-April 2000, p. 24.

RUDIN, K. 1998. Transaction Processing Today. DBMS, 11(1):40-45.

SAMARAJIVA, R. 1998. Interactivity as Though Privacy Mattered. In: *Technology and Privacy: The New Landscape*. Edited by Agre, P.E. and Rotenberg, M. Cambridge, Massachusetts: The MIT Press, pp. 277-310.

SCHROECK, M. 1998. Data Warehousing Is Worth The Investment. *InternetWeek*. June 8, 1998 no. 718 p. 47.

SCHROECK, M. 2000. *E-Analytics – The Next Generation of Data Warehousing* [online]. DM Review, August 2000. URL: <u>http://www.dmreview.com/master.cfm?NavID=198&EdID=2551</u> [accessed August 11, 2000].

SCHULTE, R. 1996. *Overview of Six Modern IT Architectures, Part 2*. Gartner Research and Advisory Services, August 12, 1996.

SHARMA, R. 1997. Decision Enabling in the Retail Information Revolution. *Canadian Manager/Manager Canadian*, Fall 1997, pp.17-18.

SIMON, A. 1998. 90 Days to the Data Mart. New York: John Wiley & Sons, Inc.

SINGH, J. 1996. The importance of information flow within the supply chain. *Logistics Information Management*, 9(4):28-30.

SSA. *Pharmaceutical & Speciality Chemicals* [online]. Available from <u>http://www.ssagt.com/product/industry/industry.htm</u> [accessed February 15, 2000].

SWIFT, R. 2000. *The Stages of Growth for CRM and Data Warehousing* [online]. Available WWW: <u>http://www.dmreview.com/master.cfm?NavID=55&EdID=2632</u> [accessed September 13, 2001].

TALVINEN, J. M. AND SAARINEN, T. 1995. MkIS support for the marketing management process: perceived improvements for marketing management. *Marketing Intelligence & Planning*, 13(1):18-27.

TANLER, R. 1997. *The Intranet data warehouse: tools and techniques for building an intranet-enabled data warehouse.* New York: John Wiley & Sons, Inc.

TANLER, R. 2000. *The Next Big Thing for Data Warehouses* [online]. DM Review, July 2000. URL: http://dmreview.com/master_sponsor.cfm?NavID=193&EdID=2370 [accessed August 20, 2000]

TREVORROW, R. 2000. Interview with Shana Ponelis. May 2000.

TURBAN, E. AND FRENZEL, L. E. 1992. *Expert Systems and Applied Artificial Intelligence*. New York: MacMillan.

TURBAN, E, MCLEAN, E. AND WETHERBE, J. 2001. Information Technology for Management: Making Connections for Strategic Advantage. New York: John Wiley & Sons, Inc.

VISHWANATH, V. AND MARK, J. 1997. Your Brand's Best Strategy. Harvard Business Review. May-June 1997, pp. 123-129.

VIVIER, F. 2001. The Impact of B2B Technology on the Products Industry. Andersen Products, Retail and Services Workshop. Gordon Institute of Business, Johannesburg. November 12, 2001.

WHITE, C.J. 1997. *Building a Corporate Information System: The Role of the Data Mart* [online]. Prepared for Sagent Technology, Inc. by Database Associates International. Available http://www.dmreview.com/whitepaper/dmc.pdf [accessed July 13, 2000]

WHITTEN, J. L. AND BENTLEY, L. D. 1998. *Systems Analysis and Design Methods*. Fourth edition. Boston, Massachusetts: Irwin/McGraw-Hill.

WHO'S WEARING THE TROUSERS? 2001. *The Economist* [online]. September 6, 2001. Available http://www.chass.utoronto.ca/~jovb/ECO310Y/economist/Economist2.pdf [accessed January 18, 2002].

WIIG, K. 1997. Integrating Intellectual Capital and Knowledge Management. *Long Range Planning*, 30(3), 399-405.

XU, X. M. 1999. The strategic orientation of marketing information systems - an empirical study. Marketing Intelligence & Planning, 17(6):262-271.

ZENIE, F. AND HALPIN, E. 2000. A Fully Integrated Approach to Paperless GMP/GLP Compliance. *Pharmaceutical Technology*, pp. 12-16.

ZUBOFF, S. 1996. The emporer's new information economy: Information technology and changes in organisational work. In: *Information technology and changes in organizational work: Working conference proceedings*. December 7-9, 1995. Ed. Orlikowski, W.J. et al. London: Chapman & Hall, pp. 13-17.

APPENDIX A: MANAGEMENT REPORTS REQUIRED BY THE BCP ORGANISATION

Management Report Name	Pages	Rows	Columns	Calculations
Sales and Marketing	 National (sum of 2. Below) Per TCC region (depot) 	 Product lines: Major, intermediate and minor multiplied by quantities Factory sales (manually captured) 	 Product description Tonnage: MTD and YTD for comparison years Value: MTD and YTD for comparison years WTD and YTD for comparison years (with Budget figures captured manually) Realisation: Comparison years and rand variance 	 Actual/Budget * 100 Actual (this year) / Actual (previous year) * 100 Actual rand value / actual tonnage * 100 (=Realisation) Realisation (this year) - Realisation (previous year) (=Rand variance)
Trade Marketing	 National (sum of 2. Below) Per region (Gauteng, Free State, Natal, Eastern Cape, Western Cape) Twelve month trend figures per region (with regions as in 2.) 	Business review accounts Rest of Trade Factory	 Account For 1. and 2.: MTD current and previous financial year Growth (MTD) YTD current and previous financial year) Growth (YTD) For 3.: October to September with values month-ends completed Total 	 For 1. and 2.: (MTD this year – MTD last year)/MTD last year (=Growth MTD) (YTD this year – YTD last year)/YTD last year (=Growth YTD) For 3.: Sum of October to September values (=Total)

Sales By	 Account by region Account by product by region Account by region by product 	Business review accounts (same accounts as in Trade Marketing) Account Total Rest of Trade Regional Total Factory Sales Grand Total	 For 1.: Account Region YTD value (previous and current year) Contribution % Total contribution to SAM YTD volume (current previous year) Contribution % Total contribution to SAM Growth For 2: Similar to 1. except for product (TCC stock no, description and pack description) 	Growth calculation
----------	---	---	--	--------------------

Daily Sales	National	 TCC regions (depots) Totals by region (Gauteng, Free State, Natal, Eastern Cape, Western Cape, Southern Transvaal, Northern Transvaal) Sub-total for TCC regions C/T factory and trading stock (captured manually) Total of TCC and factory figures 	Depot/region Daily: Value Mass Realisation (day) Month to Date: Value Actual Budget Pro Forma % Actual Budget Pro Forma % Realisation month Actual Budget Year to Date: Same MTD above Trading stock mass MTD YTD	Realisation (day) Pro forma %
Ranking (Top 30 customers)	 National (month) National (YTD) Regional (month) Regional (YTD) 	Top 30 outlets sorted by descending value	 Oulet number Outlet address (first line) Exclusive value Mass 	
Rebates (Tiger)	1. Month 2. YTD 3. Quarter	 By customer (group, division and region name) Total by group Other sales Grand total 	 Group Division name Region name Total 	Sales and Marketing YTD figure for current financial year – the total of the sales captured = Other sales

Direct vs. Normal Sales	1. National	Products to pack description level	TCC stock no Total Value %	
Direct visi Tronman Sales	2. Spar by TCC region	Troducts to pack description rever	Description	
			Pack description	
			• Directs:	
			Exclusive Value	
			Mass	
			Total Value %	
			• Normal:	
			Exclusive Value	
			Mass	
			Total Value %	
			Total	
			Exclusive Value	
			• Mass	

Sales vs. Returns	 Customer (major group) Depot by customer (major) Depot by value Depot by mass 	 For 1: Major group description Total For 2: Major group description Subtotal by depot Total For 3: Depot description Subtotal by region Total margarine For 4: Depot description Subtotal by region Total margarine For 4: Depot description Subtotal by region Total margarine 	 For 1,2: Description Delivery (DEL) Price adjustment credit (PAC) PAC % Saleable return not associated with a delivery (SAR) SAR % Unsaleable credit (USC) USC % Total For 3, 4: Description Delivery (DEL) Price adjustment credit (PAC) PAC % Number of PAC Saleable return not associated with a delivery (SAR) SAR % Number of SAR Unsaleable credit (USC) USC % 	 PAC% SAR% USC% Total no of credit notes
			 USC % Number of USC Total Total number of credit notes 	
Promotional Review (based on ad-hoc sample provided)	Sales for region by store	 Major group down to pack (Description (major group), inter group and description, outlet number and name, product line description and pack description) Total per outlet 	 Previous financial year: Exclusive value Mass Current financial year: Exclusive value Mass 	

Profitability Reports (Analysis of Variable Selling)	There are two reports with the same rows but different columns.	•	By product By integroup by product By intergroup By major group by product By depot by product By customer (combination of major, inter and minor groups)	For • • • • •	1: Mass (kg) Gross sales Sales (R/ton) Variable selling % Net sales Cost of sales (R) Gross margin (R) Gross margin (R/ton) Gross margin % Direct overhead	Fo:	r 1: Net Sales = Sales (R/ton) * (100 - VS%)/100 Gross Margin (R) = Net Sales - Cost of Sales Gross Margin (R/ton) = Gross Margin (R)/Mass(kg) * 1000 Gross Margin % = Gross Margin (R)/Gross Sales Net Margin = Gross Margin (R) - Direct Overhead - Indirect Overhead
				• • • • • • • • • • • • • • • • • •	TCC commission Merchandising TCC selling Quarterly SAM Annual growth SAM Quarterly Tiger Annual growth Tiger Coads DC allowance Settlement discount Transport Swell allowance Total		values

Т

APPENDIX B: LAYOUT OF FILES RECEIVED BY THE BCP ORGANISATION FROM THE THIRD PARTY DISTRIBUTOR (3PL)

Filename: STTRAN						
Column Name	Туре	Range of Values	Used for			
REGION	CHAR(2)	Valued values between 01 to 30	Indicates the 3PL depot. Renamed to 3PL region in the BCP's system.			
OUTLET	CHAR(5)		3PL debtor's code at assigned at an outlet level.			
PRODUCT	CHAR(9)		Only digits 5 to 9 contain values other than 0.			
STORE	CHAR(1)	B = Bulk store C = Chilled D = Direct drops R = Returns store W = Frozen warehouse	Indicates location of goods in 3PL depots			
TYPE	CHAR(1)	C = Credit Note D = Direct (CN/Invoice) I = Invoice R = Return (CN/Invoice)	Indicates type of transaction for which details are recorded.			
QTY	NUMBER(7)	Positive integer	Quantity involved in transaction measured in cases (except for part returns which are rounded either up or down).			
MASS	NUMBER(10) Decimal=3	Positive real number	Total mass of in kilograms.			
SALE	NUMBER(10) Decimal=2	Positive real number	Sale value in Rands.			
REASON	CHAR(2)	Assigned codes between 01- 99	Codes used to indicate reasons for transactions			
ROUTE	CHAR(3)	-	Transport route number for delivery.			
TRAN_DATE	CHAR(6) YYMMDD	Valid date in required format	Transaction date.			
GROSS	NUMBER(10) Decimal=2	-	Not used by The Cold Chain.			
CLAIM	NUMBER(10) Decimal=2		Used in claim back report for 3PL commission. Could be used by the BCP organisation to calculate/estimate claim back amount at month end.			
COST	NUMBER(10) Decimal=2		Cost of sales, i.e. price of goods from SA Margarine			
DEAL	NUMBER(10) Decimal=2		Rand value of deal – empty if no deal exists and sale uses list price.			
TAX	NUMBER(9) Decimal=2		Rand value of VAT charged.			

QTY_CHANGED	NUMBER(3)		Records changes to quantity for the transaction e.g. quantity ordered is more than the available stock.
MANU	CHAR(3)	-	Value is 220 for SA Margarine.
DOC_NO	CHAR(8)		Transaction document number e.g. invoice number, credit note number etc.
PRICE_REF	CHAR(16)		Reference captured by the person from BCP organisation capturing the price on 3PL system.
EXTRA_REF	CHAR(10)		Reference calculated by the system when pricing information is captured e.g. M220010937.
ORIG_OUTLET	CHAR(5)	-	Used for crediting purposes: link the GRV account and the debtors for payment of credit notes.
CUST_REF	CHAR(20)	Alphanumeric text	Used as comment field. Normally the order number is captured here.
DEPOT	CHAR(1)	B = Bloemfontein, $C = Cape Town$ $D = Durban$ $E = East London$ $G = George$ $J = City Deep$ $K = Klerksdorp$ $L = Nelspruit$ $N = Dundee$ $O = Midrand$ $P = Port Elizabeth$ $T = Pietersburg$ $W = Welkom$	3PL depot which was responsible for the delivery.
COMMENT	CHAR(8)	Alphanumeric text	Comment field
COLLECT	CHAR(1)	Y = Yes $N = No$	Indicates collect customer.
PRICE_CHANGED	CHAR(1)	Y = Yes N = No	Indicates that there was an override on the price, normally on credit notes and trading stock.
CRED_RELEASE	CHAR(1)	Y = Yes N = No	Release suspended invoice
WEEK_NO	CHAR(2)	1 to 52	3PL week number based on 3PL financial year
USER	CHAR(5)	Valid user name	User who captured sales transaction.

Filename: GEOUTLMS					
Column Name	Туре	Range of Values	Used for		
REGION	CHAR(2)	Two digit positive integer combination referring to valid region	Number of 3PL depot which serves the outlet/customer.		
OUTLET	CHAR(5)	Positive integer.	3PL debtor's code at assigned at an outlet level.		
CUST_NAME	CHAR(30)	Alphanumeric text	Name of customer.		
CUST_ADDRESS_1	CHAR(26)	Alphanumeric text	Line in customer address		
CUST_ADDRESS_2	CHAR(26)	Alphanumeric text	Line in customer address		
CUST_SHORTAD	CHAR(20)	Alphanumeric text	Shortened version of customer address		
CUST_STATUS	CHAR(1)	A = Active D = Discontinued	Status of customer's/debtor's account with 3PL		
CUST_TYPE	CHAR(1)	C = Catering $I = Inter-group$ $R = Retail$ $W = Wholesale$	Type of customer.		
CUST_ICS	CHAR(1)	B = Barlows $C = C.G. Smith$ $I = ICS Group$ $R = Region$ $S = Staff$	Indicates whether an outlet is a member of ICS. Not in use by 3PL		
RECORD_STATUS	CHAR(1)	I = Inactive A = Active			
SUMMARY_TYPE	CHAR(1)	Blank S = Summary account	Used to indicate whether debtor belongs to a summary account for group accounting purposes.		
SALES_MGR	CHAR(1)	-	3PL's sales manager.		
AREA_MGR	CHAR(1)	-	3PL's area manager.		
FILLER_1	CHAR(1)	-	Additional space provided should future addition of field to file be required.		
REP_CODE	CHAR(2)	-	3PL's representative code		
EAN13_CUST	CHAR(12)	-	Barcode supplied by customer – mostly not maintained.		
SAM_SALESMAN	CHAR(2)	-	SA Margarine's salesperson responsible for sale. No longer captured by 3PL.		
ROUTE	CHAR(3)	-	Route on which delivery is made by 3PL.		
EXPORT	CHAR(1)	Y = Yes $N = No$	Indicates whether customer requires the exportation of goods.		

TAXZONE	CHAR(2)	01 = South Africa 02 = Swaziland	Indicates zone for tax purposes
COD	CHAR(1)	Y = Yes N = No	Indicates Cash on Delivery
REG_NO	CHAR(1)	-	If ICS customer, then a registration number would be recorded.
DATE_LAST_TRAN	CHAR(6) YYMMDD	Valid date for YYMMDD format	Date last transaction was recorded for the outlet/customer.
CUST_BRANCH	CHAR(6)	-	Not used at present. Available for future EDI/eCommerce applications
CONTROL_CODE	NUMBER(5)	-	No longer used.
CHANNEL	CHAR(3)	Valid values between 000 and 999	Used for grouping to do pricing. BCP organisation uses this a guideline when classifying their customers on their system.
SUB_CHANNEL	CHAR(3)	Valid values between 000 and 999	Used for grouping to do pricing. BCP organisation uses this a guideline when classifying their customers on their system.
CUST_GROUP	CHAR(2)	Valid values between 00 to 99	Used for customer grouping for reporting purposes. BCP organisation uses this a guideline when classifying their customers on their system.
CUST_DIV	CHAR(2)	Valid values between 00 to 99	Used for customer grouping for reporting purposes. BCP organisation uses this a guideline when classifying their customers on their system.
CUST_REGION	CHAR(2)	Valid values between 00 to 99	Used for customer grouping for reporting purposes. BCP organisation uses this a guideline when classifying their customers on their system.
DATE_LAST_UPDATED	CHAR(6) YYMMDD	Valid date for YYMMDD format	Date debtor's (of 3PL) information was last updated.

Column Name	Туре	Range of Values	Used for
PRODUCT	CHAR(9)		Product number assigned by 3PL
DESC	CHAR(30)	Alphanumeric text	Description of product
SHORT_DESC	CHAR(15)	Alphanumeric text	Short description of product
PROD_STATUS	CHAR(1)	A = Active D= Discontinued	Status of product
RANDOM	CHAR(1)	Y = Yes N = No	Sold by random weight or not (not applicable in case of SA Margarine)
SOLD_BY_MASS	CHAR(1)	C = Cases M = Mass (kg)	
COMM_TYPE	CHAR(1)	-	Not used. Indicates whether commission is calculated using mass (kg) or a fixed percentage
COMMISSION	NUMBER(5) Decimal=2	-	Not used. Rate at which commission is received on a product
BUDG_GROUP	CHAR(2)	-	Allocation for 3PL budget purposes.
BUDG_TYPE	CHAR(2)	-	Allocation for 3PL budget purposes.
DATE_OPENED	CHAR(6) YYMMDD	Valid date for YYMMDD format	Date product was opened.
UNITS_PER_CRATE	NUMBER(3)	-	Not applicable to SA Margarine i.e. will always be equal to 1
MANU	CHAR(3)	-	Value is 220 for SA Margarine
STORAGE	CHAR(1)	2 = Chilled	
PROD_GROUP	CHAR(2)		
PACK_TYPE	CHAR(2)		
PROD_TYPE	CHAR(2)		
EAN13_CODE	NUMBER(12)	-	Barcode supplied by customer – mostly not maintained.
ITF14_PREFIX	CHAR(1)	-	Check digit for EAN13_CODE.
CARTON_MASS	NUMBER(5) Decimal=3		Physical weight of packaging used in kilograms
LINK_PRODUCT	CHAR(9)	Valid product number with a 9 prefixed	If the field contains values, it indicates that there is trading stock on this product. Originally used to indicate substitute product if

			Originally used to indicate substitute product if enough stock was not on hand.
DATE_LAST_USED	CHAR(6) YYMMDD	Valid date for YYMMDD format	Date of last sale.
PACK_QTY	NUMBER(3)		Number of products in case e.g. 30 (500g)
PACK_MASS	NUMBER(5) Decimal=3		Mass in kilograms e.g. 15.000
TAX_LEVEL	CHAR(1)	0 = Non-taxable 1 = Taxable	Indicates whether product is taxable or not
REGION_* (*=1-30)		Valid value between 01 to 30	Indicates 3PL depot(s) from where product is sold
MAX_DISCOUNT	NUMBER(3)	0-100	SA Margarine supplies this percentage as the maximum discount that can be given to customers by 3PL. Used in pricing.
LIST_PRICE	NUMBER(8) Decimal=2	Positive real number	Normal selling price if there is no existing deal which overrides this value

Filename: GESTOCKS					
Column Name	Туре	Range of Values	Used for		
BRANCH	CHAR(1)	B = Bloemfontein $C = Cape Town$ $D = Durban$ $E = East London$ $G = George$ $J = City Deep$ $K = Klerksdorp$ $L = Nelspruit$ $N = Dundee$ $O = Midrand$ $P = Port Elizabeth$ $T = Pietersburg$ $W = Welkom$	Indicates the 3PL depot (branch) where stock is held.		
WAREHOUSE	CHAR(1)	W = Warehouse	Indicates warehouse of 3PL (as opposed to direct drop in BCP organisation's system, indicated by B)		
PRODUCT	NUMBER(5)	Any product number contained in the product master file	3PL product number		
ALLOC	NUMBER(6)	Zero or positive integer	Number of cases allocated to customer(s) but not yet delivered		
QTY	NUMBER(6)	Zero or positive integer	Number of cases on hand (including allocated) i.e. free stock = QTY - ALLOC		

Filename: GECHANMS					
Column Name	Туре	Range of Values	Used for		
CHANNEL	CHAR(3)	Valid values between 000 and 999	Used for grouping to do pricing.		
SUB_CHANNEL	CHAR(3)	Valid values between 000 and 999	Used for grouping to do pricing.		
DESC	CHAR(30)	Alphanumeric text	Description of channel.		
SHORT_DESC	CHAR(15)	Alphanumeric text	Description of channel.		
EAN13_CUST	NUMBER(12)	-	Barcode supplied by customer – mostly not maintained.		
REPORTING	CHAR(1)	Y = Yes N = No	Indicates if channel is active (Y) or not (N). Used for report listings.		
INCL_VAT	CHAR(1)	I = Inclusive E = Exclusive	Indicates whether VAT is included.		
OPEN_CYCLE	CHAR(1)	Y = Yes N = No	Not used by 3PL		
FILLER_1	CHAR(1)	-	Additional space provided should future addition of field to file be required.		
REGION_* (* = 1 TO 30)	CHAR(2)	01 to 30	3PL depot numbers		

Filename: GECRPMS					
Column Name	Туре	Range of Values	Used for		
CUST_GROUP	CHAR(2)		Customer grouping.		
CUST_DIV	CHAR(2)		Customer grouping.		
CUST_REGION	CHAR(2)		Customer grouping.		
DESC	CHAR(30)		Description of customer grouping.		
SHORT_DESC	CHAR(15)		Shortened description of customer grouping.		
REPORTING	CHAR(1)	Y = Yes $N = No$			
RECORD_STATUS	CHAR(1)	A =Active I = Inactive			
GROUP_TYPE	CHAR(1)	A = Agency C = Catering I = Inter-group R = Retail W = Wholesalers			
CHANNEL	CHAR(3)	Valid values between 000 and 999	Used for grouping to do pricing.		
SUB_CHANNEL	CHAR(3)	Valid values between 000 and 999	Used for grouping to do pricing.		