



The Retailer's all in one solution turning your
transaction data into actionable information:
Real-time

DMK-ERP Intelligent Retail Solution

Positioning Framework for Retail Logistic and Distribution Industries



Table of Contents

1. Overview	3
2. Efficiency	3
3. Process Based Focus	5
4. Conceptual Design	5
5. Data Mart/Warehousing/Data Mining	6
6. Multi-Company and Branch	7
7. Real Time System	8
8. Access and Password Management	8
9. Multi-Currency	8
10. Multiple Calendars	9
11. Auto Posting Accounts	9
12. Inventory Catalogue Management	9
13. Credit Terms	11
14. General Ledger	12
15. Customer	13
16. Suppliers	13
17. Purchasing	13
18. Warehouse Processes	14
19. Warehousing	15
20. Packs and Bill of Materials	16
21. Bundles	16
22. Integrated Point of Sale/Service	17
23. Financial and Inventory Process Tracking	18
24. Enquiries and Reporting	18
25. Price Table Management	18
26. Cost Table Management	19
27. Margin Based Pricing	19
28. Margin Reporting	21
29. Deal Sheets	21
30. Incoming Margin	22
31. Outgoing Margin	22
32. Merchandise Planning	23
33. Assortment Planning – Get the Right Mix	23
34. Replenishment Planning – Buy at the Right Time	24
35. Built-In Retail Planning Best Practices	24
36. Customer Satisfaction	25



1. Overview

DMK-ERP Intelligent Retail Solution empowers customers in the Logistics Industry to continually add value to their supply chain by optimizing logistics and warehousing processes.

DMK-ERP Intelligent Retail Solution is a flexible and integrated Merchandise - and Logistics Management tool that provides Retail, Point-of-Sale, Supplier - and Customer Management, Price – and Cost Management and complete Accounting functionality.

DMK-ERP Intelligent Retail Solution helps increase the flexibility and control needed to connect to business partners, streamline operations, maximize customer satisfaction and increase the efficiency of logistics and internal processes. DMK-ERP Intelligent Retail Solution has been designed to provide exceptionally flexible and easy access to management information from transactional data. This allows management and operational staff access to decision-making information while processing business transactions with no impact on processing. This information is used to make better-informed operational decisions.

2. Efficiency

DMK-ERP Intelligent Retail Solution helps you increase efficiency and control costs by pulling together and sharing information from purchasing, warehousing and sales.

The strength of the system lies in the fact that it allows the user to customise parameter settings and map the organization, accounts, debtors, creditors, product and document structures. Once these are mapped they can be expanded into increasing levels of detail. This will for example allow for data to be displayed by cost center, container, pricing method, account, product, product attribute, debtor, location, supplier and any of the above combinations.

The warehouses (locations), product, customer, supplier, accounts and cost centers and documents are set up as hierarchies, similar in concept to the view that is obtained when working with Windows Explorer. Each of these hierarchies is user definable with various levels and branches. The structures can have an unlimited number of nodes and levels. These structural nodes are then used to represent the various product and organizational grouping levels or reporting points.

Inherent in using a node and level type structure is that they create a reporting framework as each node includes and encompasses all implied parent and child



characteristics and relationships. Changes made at any level automatically adjust all levels above and below, thereby creating visual on-line and restructuring capabilities.



3. Process Based Focus

Although many companies have embarked on re-engineering and re-design initiatives in an attempt to address the problems created by a functionally structured organisation, the accounting and information systems have rarely been capable of providing suitable management and operational information to manage the business processes. In this regard, all systems have some measure of process capability, but in most cases the processes referred to are software processes and normally amount to a simple chaining of transactions in order to attempt to enforce business rules.

DMK-ERP Intelligent Retail Solution is a true business process oriented system in that the core business processes are clearly defined and the relevant business documents used in each business process are process event driven. The benefits of this approach can obviously only be derived if the process boundaries are clearly defined, inputs, outputs and their relationships are clearly understood and process responsibilities are clearly defined and assigned.

Each business process is managed in the system from conceptualisation up to and including completion and review. For example, purchase order parameters and the purchase order filing structures are determined in advance. All purchase order processes, events, subdocuments, transactions, authorisations and other related data and transactions are clearly visible for a particular purchase order and are filed per document and process event.

In order to ensure flexibility, many of the processes can be conducted independently and simultaneously. International accounting conventions and best practice recommendations are used to ensure that the minimum business process requirements needed from a generally accepted accounting practice approach in addition to best practice management requirements are adhered to. In many instances this constrains the ultimate order that tasks can finally be completed in. In addition the principles required to ensure accountability and traceability also impact on the processing.

4. Conceptual Design

The power of DMK-ERP Intelligent Retail Solution lies in the hierarchies that can be manipulated as a set of interlinked multi-dimensional cubes.

In this regard the organizational cost centers and warehouse bin cost centers form the foundation for the cost center cubes. The accounts hierarchies, which include customers, suppliers, general accounts, fixed assets and products, form the foundation for the account cubes. By analyzing transaction postings in relation to accounts and cost



centers, a multi faceted view can be obtained of the data from an accounting perspective.

In a similar fashion, each of the incoming and the outgoing stock document hierarchies form additional cube foundations that enable multi-faceted views to be obtained from a business process document perspective. The selection of one or many hierarchy points in addition to date, group or specific accounting criteria enables data stored in the system to be analyzed from many perspectives simultaneously. For example alternative perspectives of data can be obtained from an accounting only, or a business process document only, or a combination of both perspectives. The use and selection of groups enables multiple alternative views to be obtained of the same core data, without having to rework or manipulate the data.

5. Data Mart/Warehousing/Data Mining

The various hierarchies used actually form a virtual 17-dimensional cube that can be used to assess, group and extract data. In addition to the hierarchies, the business process approach ensures that all business related documents have one or many hierarchy associations. As a consequence of this approach, data is actually stored in the manner that it is most likely to be used later.

At the point of storing data, the various relationships between transactions, documents, business rules, parameters, software rules, authorisations in conjunction with any other data relationship which is either formal or created by association is actually known. By recording the various relationships and being able to extract data based on the various hierarchy intersections, a virtual data mart or data warehouse is actually maintained. The addition of multiple hierarchy groups to nodes in the various hierarchies creates a capability whereby multiple alternative views can be examined in respect of the same data.

From a data mining approach, the ability to query data from multiple dimensions without having to rearrange it, based on multi-layered criteria, actually creates a data mining architecture. This approach is facilitated by the fact that the front end-grids used in the system support dynamic multi-layered grouping capabilities. This means that in addition to the grouping and selection criteria used to extract and segment data, that multiple subsequent groupings can be achieved for reporting purposes.



6. Multi-Company and Branch

DMK-ERP Intelligent Retail Solution is a multi-company and branch system. This means that several companies can use the system concurrently. In order for this to operate successfully each company or business unit (branch) that is added must be able to:

- Control security access to data
- Structure and manage reports independently
- Define independent numbering structures and sequences
- Define independent country and currency specific setup.
- Define own company or branch details (e.g. logo's, addresses, etc) to be used on company specific report
- VAT percentage setup
- Posting rules in respect of depreciation

Each profile is linked to a number of users and roles and ensures that when a user logs on the correct access level and documentation-numbering sequences are used for transactions performed by that user. In addition to the profiles, a company or organization structure is used to control cascading levels of reporting and access, and also facilitates data capture and storage.



7. Real Time System

For a system to be regarded as real time there must be no multiple transaction processing batches and all financial information can be extracted as and when required, without the necessity for day-end or month-end procedures to be conducted. DMK-ERP Intelligent Retail Solution uses a real-time posting method and all accounting transactions are immediately posted in a transaction ledger at the point of capture and therefore immediately available for analysis and review.

Because transactions are posted at the lowest level, there is no requirement for subsidiary books to be balanced or for totals to be re-posted. Transactions are always managed at a general ledger level. This means that real-time income statements and balance sheets can be viewed as and when required. At a technical level a number of summarized management information tables are kept to reduce the sorting and analysis requirements that this type of operation necessitates.

8. Access and Password Management

DMK-ERP Intelligent Retail Solution can be deployed across an enterprise that has multiple companies and/or branches. It is important to be able to determine the nature and type of data that a user may access and modify, and what functions a user may perform. A number of system roles are specified per company profile. Each role is granted access rights to screens, cost centers, accounts and documents.

A users right's to perform transactions within a business process are constrained by the implementation of multiple authorisation levels. Authorisation levels are set at cost center level, enabling users to perform tasks and authorise transactions, documents or activities, provided that they have access rights to the cost centers involved.

Security is managed by the maintenance of passwords at a user level in respect of sensitive transactions or activities, for example the ability to reprint invoice, credit limit overrides or when releasing goods in circumstances where a customer's account is in an "on hold" status.

9. Multi-Currency



Although transactions are kept in a base or local currency in the transaction ledger, daily transactions can be performed in a variety of currencies at different exchange rates. Each document and transaction is associated to a currency and an exchange rate, and these are confirmed and refined at the point of transaction. This means for example that stock related transactions are always posted at the spot rate, whilst the actual payments can be transacted using either a forward cover or actual exchange rate. Exchange rate variances are automatically calculated and posted at the point of customer receipt or supplier payment. This is done at an individual transaction level and, enables a detailed analysis of exchange rate. Price and cost tables (and their related versions) can be kept in multiple currencies and invoices and purchase requests can therefore be printed in the appropriate currency of transaction.

10. Multiple Calendars

Calendars are used in DMK-ERP Intelligent Retail Solution as reporting structures. This means that calendar periods are merely reporting buckets, and that calendars can be modified as and when required with all the historical data automatically restated using the new calendars. In addition to the default financial calendars, a number of alternative reporting calendars can be used to facilitate the analysis of data.

11. Auto Posting Accounts

Although the system is a multi company enterprise solution, it would obviously be inappropriate and unrealistic to expect end-users to have to select cost centres and accounts when posting transactions that are frequently conducted. In this regard a number of auto posting accounts are used to facilitate these transactions. This process is augmented by the deployment of several rules that have been introduced into the software that determine which cost centres should be used when postings are transacted. This means that provided that the minimum mandatory data has been captured into the various process documents, that the transactions are automatically posted to the correct account and cost centre combinations without the end user having to select accounts or cost centres for posting purposes.

The only transactions that therefore require detailed knowledge of the financial structures are the various journal entries that can be captured in the general ledger or from a bank account management perspective or with regard to non- stock related customer or supplier postings.

12. Inventory Catalogue Management

DMK-ERP Intelligent Retail Solution uses a sophisticated, user driven process to manage the inventory catalogue. A product only becomes a stock item once it is included in a purchase order. Prior to this point, it only exists as a catalogue item. This approach



enables products to be included in purchase and sales orders based on customer requests and planning inputs. In DMK-ERP Intelligent Retail Solution, a catalogue product is created based on the attributes that define a specific product. This means that any number of attributes and attribute values can be used in order to differentiate products from each other.

The basic methodology is that a product catalogue structure is constructed in a manner similar to that utilised in building report structures in Windows Explorer. In Windows Explorer, folder nodes and files are specified to facilitate file storage and retrieval activities. The same approach is used in DMK-ERP Intelligent Retail Solution, but each folder represents a reporting node for aggregating or decomposing data into various levels of complexity and summarisation.

The lowest level in the product hierarchy represents a product class, group or style. Each unique combination of a number of attribute values with a product class represents a catalogue product. For example, the lowest level may represent a specific brand of running shoe. If for example, men's UK sizes, shoe colours and shoe fabrics are used, each specific combination of a size, colour and fabric linked to that style of running shoe, would represent a catalogue product. In the same manner a lounge suite would be defined by using the manufacturer or style as the group, class or style with the number of divisions, colour and fabric used as the defining attributes. Once a catalogue product has been generated, a number of product groups can also be linked to the product to facilitate product group analysis.

In addition to the above, inventory catalogue management is facilitated by the use of a number of predetermined parameters. For each of the parameters a number of values are specified. This enables subsequent selection of these parameters during the product generation process. These parameters include the following:

- Images – a number of image types can be specified for example a top or side view. These are used for example when a visual catalogue is used. Digital photographs can be stored in the system and a number of views can be specified per product or product group, class or style. The database storage requirements would need to be assessed if images are to be kept at a product level.
- Units of measure – a number of units of measure can be specified for products for example pairs, each or kilograms. For each unit of measure, a level of precision can be specified, determining whether only whole units or proportions or fractions of units are capable of being purchased or sold.
- Specifications – a number of specification types can be used for each product. For example, a technical description, an installation guide or a repair manual can all be defined as specification types and stored in respect of each product.



- Product groups – several product groups can be specified in order to facilitate ongoing product analysis. One or more product groups can be assigned to products or product styles/classes.
- Attributes – many attribute groupings and attribute values can be specified in the system. For example sizes may need to be tracked for a number of products. For each size specification a number of sub-categories may need to be determined and inside each specification a number of values can be assigned. For example shirt sizes may need to be tracked and specific values could include small, medium and large or may be represented by a size curve or grid e.g. 37, 38, 39, etc. An attribute may represent either a physical property of a product or may alternatively relate to a quantitative or qualitative aspect of a product, i.e. high heat tolerance or soft etc.
- Product types – a number of product types can be specified for example, stock products or non-stock products. A product can only be generated once a product type has been assigned to the group, style or class that a product is linked to. For each product type a number of factors can be specified, for example whether the product type has units of measure and specifications. These selections alter the functionalities that apply to a product, for example whether an image can be stored for a product or not.
- Tariffs – a number of tariffs can be specified and assigned to products to facilitate tariff management and tariff liability assessment.
- Introduction seasons – season analysis can be deployed throughout the system. To facilitate this type of analysis, a number of introduction seasons can be specified to facilitate the analysis of the performance of a product based on its date of entry into the product catalogue or system.

13. Credit Terms

In order to facilitate the assessment of cash flows, credit terms are applied at a transaction and document level rather than only at a customer or supplier level. This means that each transaction is individually aged with its own credit terms, rather than applying a specific master file default during the ageing process. Credit terms that are set up can be applied to customers, suppliers or both. In setting a credit term, a selection can be made as to whether the credit term operates using days or periods. This enables ageing to be calculated on a daily basis or for rolling of ageing to occur at the expiration of a period.

In addition to the selection of ageing based on days or periods, a further parameter that is set per credit term is the number of days that should be used in ageing calculations. For example, if periods are used, sales made during the current month can either be treated as been current for the month that the transaction is posted in only, or alternatively, can be treated as been current until the time of the next period roll.



The credit terms are used to proactively highlight the cash flow impacts of debtor and creditor items. In order to achieve this, a dual ageing method is used. The first of these is the traditional method where ageing is calculated from the date of invoicing. This method is usually used in the preparation of statements, as it is the method that is conventionally used, and that debtors are familiar with. In addition, the credit terms are also used to calculate the cash flow impacts of ageing. For example, if a sale is made and 60 days credit are granted, the transaction is reflected as having an ageing status of minus 60 days. This means that only those transactions that are due or overdue are treated as collectable, facilitating the analysis of comparing outstanding balances versus collectable balances. The same applies to supplier payable versus due balances.

14. General Ledger

A typical general ledger structure is not required to be specified during the set up of the system or at any stage thereafter. Transactions are always posted in a manner where the transaction type, transaction date, account and cost centre details are stored together with all the other relevant financial transaction data and details. Although transactions are stored in transaction tables, all the typical general ledger functionalities are catered for in DMK-ERP Intelligent Retail Solution.

In this regard, multiple formats of balance sheets, income statements and any other financial reports can be extracted for any organisational entity at multiple levels. Because a multi company approach is utilised, transactions are always posted together with the selected cost centres associated to the accounts that have been used in respect of a financial transaction. Cost centres are summarised and grouped into their relevant reporting structures with the highest level being the entry level to a specific company profile.

In order to facilitate the speed of access to data, a number of groups are attached to cost centres and accounts, and it is these groups that are used for constructing income statements and balance sheets and any other financial reports. As a real-time system approach is deployed, postings are always performed at a general ledger level. The general ledger is therefore always up to date and in balance. Specific general ledger functionalities that are available include general journals, indirect and recurring journal templates, accruals and pre-payments and year-end rolls.

In order to facilitate the analysis of general ledger postings, cost center groups, account groups and journal type groups are used. Journal type groups allow for a journal to be classified at the point of transaction, obviating the need to analyze postings at a later stage. For example, customer credit notes can be analyzed into discounts, marketing issues, quality related discounts, etc. The general ledger report capabilities are based on



an analysis of the transaction ledger. This is done by transaction type as well as by account and cost center grouping. This approach allows for the analysis to be conducted according to a number of additional criteria, as these are the details that are posted in the transaction ledger.

15. Customer

Customers are managed through the use of a customer hierarchy. This enables group credit limits, consolidated statements and representative access to be effectively managed. Each customer is represented by the lowest node in the customer structure and a number of master file details are kept per customer. In addition to the master file details, a number of parameters relating to debtors are also maintained. These include priority ratings, general debtor ratings, credit terms, currencies and exchange rates.

16. Suppliers

Suppliers are managed through the use of a Supplier hierarchy. This enables group credit limits, consolidated statements and buyer access to be effectively managed. Each Supplier is represented by the lowest node in the Supplier structure and a number of master file details are kept per Supplier. In addition to the master file details, a number of parameters relating to suppliers are also maintained. These include priority ratings, general creditor ratings, credit terms, currencies and exchange rates.

17. Purchasing

DMK is based on the management and tracking of business processes. In this regard the core processes from a value chain perspective are tracked. Included in the core processes is the management of incoming and outgoing stock.

There are four methods for managing incoming stock: purchase orders, customer returns, incoming inter-branch transfers and inventory increases.

Purchase orders are managed in a purchase order hierarchy with the lowest node representing a specific purchase order. The objective of purchase order management is to ensure that a business process perspective is maintained with regard to the purchasing process. Several additional parameters are utilized to facilitate the analysis of purchase orders, including purchase order groups. A number of sub documents are managed for each purchase order.

- Purchase Order Ad Hoc Charges – such as insurance or transport
- Full Purchase Order – where it is necessary to split responsibilities



Purchase orders can either be created manually or automatically based on the suggested order quantities taking the minimum and maximum stock level into account at each location/branch. Automatically generated purchase orders will also display the distribution requirement (allocation schedule) of the order to the various locations. This can be included in the purchase order to indicate the delivery requirement to the supplier.

Merchants or Buyers can review the suggested order quantities based on a Review Cycle defined for individual users. This will allow Merchants to schedule their review activities and ensure that all products are reviewed for reorders over a period of time. Review Cycles can be defined daily, weekly, monthly or annually in a very similar way that meetings are scheduled in Microsoft Outlook.

18. Warehouse Processes

Inventory is moved between branches, or organization units, in two ways. The first uses an inventory move document whilst the second uses an Inter Branch Transfer (IBT) document.

An IBT-In document manages incoming inventory while the IBT-Out manages outgoing inventory. IBT's are actually purchases and sales between branches. In order to avoid the IBT sales from affecting sales totals in the financials, separate sales and cost of sales accounts are used to track postings for IBT's. Inventory received via an IBT-In is captured on a Goods Received Voucher, (GRV) and thus forms part of normal inventory. Management of IBT documents using their own hierarchies provides a further level of analysis.

If a simple move with limited control or accounting impact is required, an inventory move document can be used. If there are transfer costing impacts, or if documentation is required to track responsibility or accountability, or if different legal entities are involved (with VAT implications), or if inventory can get lost or be stolen en route, then the preferred method is an IBT document.

Inventory re-enters the cycle by being transacted on an IBT-In document. Either an IBT-In or an IBT-Out can be the initiating document dependant on the business requirements, viz. an IBT-In can be used as a request for stock document that would trigger an IBT-Out creation. Once the Inventory is received the IBT-In can be completed. Alternatively Inventory can be distributed as part of a push cycle. In this case, the IBT-In is merely documenting and managing the receiving side of the transactions. If both documents have not been completed and transacted in an accounting period, a difference in stock totals will arise, and an appropriate in transit entry will need to be generated. In this regard the in transit liability can be used to fulfill this function.



19. Warehousing

DMK-ERP Intelligent Retail Solution facilitates multiple warehouse management. Warehouses are represented in a warehouse structure with the lowest node being a bin. For example, warehouses can be structured per country, per region, etc and inside a particular warehouse many levels can exist, for example, rows, levels, aisles, bays, bins, etc. Each bin is associated to a cost centre in the organisation structure for accounting posting purposes. In order to facilitate the management of the business rules related to purchasing management each bin is associated to a bin type. There are five bin types catered for in the system. These are:

- Virtual on order bins – These bins are used to manage virtual stock and enables a company to reserve stock on order, prior to receiving the stock in the various warehouses. This is particularly useful in companies where purchase orders that have delivery dates that extend far into the future need to be placed, accompanied by the capability of reserving sales orders against the potential future stock receipts.
- Holding / QA bins – Incoming stock is managed in a holding or quality assessment bin when it is first received. This enables costing, shipping and tariff management to be able to be completed prior to the goods being released for general resale. This ensures that a landed cost costing approach can be used. In selected industries release certificates, bill of entry documents or other release related documents are used, and holding bins facilitate managing incoming inventory in this regard.
- Bonded bins – When an ad hoc cost is added to a product and the ad hoc relates to custom's duty, bonded bins facilitate the management of bond stock from a custom's duty and tariff liability perspective.
- Issuing bins – This is the only type of bin from which stock can be picked for invoicing purposes.
- Virtual on hand bins – These bins are used to manage stock that is in transit between various units in an organisation. For example, whilst stock is in transit from one city to another, it cannot be picked while it is in a truck or a train. These transit bins facilitate picking management.

Bins can either be a representation of a logical or physical bin in an organization. The exact warehouse operation will determine which type of warehouse structure set up will best suit the business. In instances where internal stock movements are cumbersome or difficult to track, and where stock movements cannot be constrained by the necessity to track moves by documents, or where picking can occur without the ability to enforce bin picking rules, a logical structure as opposed to a physical structure is recommended. All the activities that are associated with bins ultimately result in a financial accounting transaction being transacted.



20. Packs and Bill of Materials

It is important to be able to manage packs. Products are sometimes sold in various forms, either by pallet or box or tray or unit. This issue is complicated by requirement to include various combinations of packs in a single invoice or purchaser order. It is often difficult to manage pricing and to be able to manage stocks, forecasting and replenishment. An attempt is sometimes made to address this by trying to use the Bill of materials functionalities used in other systems. It is important to be able to manage assembly, bill of materials, packs and bundles. A bundle refers to the construction of a set of items that are usually sold together e.g. a cell phone, a pouch, airtime etc. It is also important to be able to specify reporting, ordering and management levels per pack, viz unit or any other level per branch.

The product catalogue and pricing methodologies that we have incorporated into our design provide a foundation for us to be able to include the various factors into our design and to address this functional requirement. The benefits that we are able to provide include:

- Definition and management of multiple relationships between a product and its various pack combinations.
- Assembly and management of multiple relationships between a product and its various raw material combinations through a bill of material.
- Ability to set alternative costing and pricing methodology at each level of a BOM/pack.
- Ability to quickly assemble or decompose packs
- Multiple pack purchase and sales combinations on a single sales or purchase order.
- Product traceability back to original item source, even when managed and sold as a BOM, pack or a bundle

21. Bundles

Products are individually entered onto sales orders as well as other stock out documents. In order to facilitate the population of documents we have created bundles. These bundles are a collection of products and related quantities that are sold at once. For example a PC could be sold that is comprised of a number of elements such as a monitor, a CPU, Ram etc. The various items that are sold as a PC can be defined as a PC bundle. When this bundle is selected, all of the products that constitute a PC, together with their related quantities are selected and populated into the document.



22. Integrated Point of Sale/Service

DMK-ERP Intelligent Retail Solution has an integrated Point-of-Sale management system. This includes much of the functionality that would normally be managed in a Debtors Department, or at the picking and invoicing point in a warehouse.

Any number of Direct Sale or Point-of-Sale (POS) sites can be set up and attached to one or many company profiles. The POS functionality enables a company to perform the following activities:

- Integrate sales, cost, banking, margin and customer returns data across Point-of-Sale and Non-Point-of-Sale transactions,
- Define authorisation actions per manager for each POS profile with various password levels and printing standards,
- Specify field level access and screen layouts per till,
- Manage cash sales and account sales after taking credit limits into account at tills,
- Manage customer returns and exchanges at till point,
- Accept multiple methods of payment per sale including cash payments multiple cheque payments, multiple credit card payments, multiple gift vouchers and multiple credit notes,
- Sell, redeem and manage gift vouchers and goodwill gift vouchers,
- Real time adjustment of inventory levels in respect of sales at the Point-of-Sale,
- Integrate sales and stock-turn data with the main system sales and return information,
- Manage floats and till differences,
- Create customers at a till point,
- Ability to sell into negative stock with an automated stock recon done later,
- Accept and issue receipts in respect of account payments at the till point,
- Non-Stock Products and Non-Stock Sales at till point,
- Ability to track and sell consignment merchandise at till point,
- Accept payment in any number of foreign currencies with up to 4 different currencies per transaction including foreign travellers cheques, with the option of giving change in local or foreign currency,
- Manage till floats for multiple currencies,
- Accept external gift vouchers, e.g. from shopping malls of casinos,
- Petty Cash (paid outs) and supplier payments from tills, with a financial allocation in the back office,
- An extensive promotions module to manage multiple types of sales promotions,
- Banking Register functionality that includes a facility to convert foreign currency and gift vouchers to local currency and bank together with the local currency cash available for banking
- Transaction recovery when session was abnormally terminated.



23. Financial and Inventory Process Tracking

As the system is business process based, it is possible to review tasks, activities and transactions from a business process perspective. In order to manage this, there are two major views related to inventory business processes. The first of these relates to incoming inventory while the second relates to outgoing inventory. From an incoming inventory perspective, enquiries can be launched per business process activity and per business process document. For each level of the analysis or enquiry, a number of additional selection criteria can be specified. This enables user's to draft and manage their own reports without having to resort to programming interventions. The same applies to inventory from an outgoing inventory perspective. Searches can be conducted using document criteria only, accounting criteria only, or combinations of both. Once the data, based upon the selection criteria is displayed on the screen, it can be dynamically re-arranged and grouped according to the specific information requirement. The process tracking grids are used from both a management reporting perspective as well as a daily operational perspective. For instance, warehousing staff can use outgoing process tracking to determine which products should be picked during a particular period and plan accordingly. It is also useful from a customer enquiry perspective as it is possible to determine how far in a particular process a customer's order has progressed. The benefits include:

- Traceability
- Integration of document and financial searches at a granular or summarized level
- Foundation to support balanced score card drill downs.

24. Enquiries and Reporting

There are multiple alternative methods in which enquiries can be launched and reports specified. Each hierarchy provides cost center, account, warehouse, fixed asset, debtor or creditor related information. This also applies to each of the document hierarchies. Reports can be generated for debtors and creditors and general ledger transactions at a detailed transaction level or can alternatively be queried at a summarized level.

25. Price Table Management

In order to facilitate sales order or other incoming stock documents completion, a number of price tables can be specified in the system. To reduce the maintenance effort required, a price table is linked to a customer as a default. Each price table can have many price versions and can be linked to one or many customers. Each price version has a validity period and can contain one or many products. Each product has a standard and actual selling price per version.



When a sales order is created and a debtor is selected, the default selling price table is automatically populated into the sales order. This can be manually overridden and an alternative sales price table can be selected. When products are selected into a sales order, the system checks the due date against the validity dates for each version attached to the sales price table selected for the sales order. If the product is in a version and the version is valid in respect of the due date, the default price is automatically populated for the product in addition to the relevant discounts. This can be manually overridden.

26. Cost Table Management

In order to facilitate purchase order and any other outgoing stock documents completion, a number of cost tables can be specified in the system. To reduce the maintenance effort required a cost table is linked to a supplier as a default. Each cost table can have many cost versions and can be linked to one or many suppliers. Each cost version has a validity period and can contain one or many products. Each product has a standard and actual purchase cost per version.

When a purchase order is created and a supplier is selected, the default cost price table is automatically populated into the purchase order. This can be manually overridden and an alternative cost price table can be selected. When products are selected into a purchase order, the system checks the due date against the validity dates for each version attached to the cost price table selected for the purchase order. If the product is in a version and the version is valid for the due date, the default cost is automatically populated for the product in addition to the relevant discounts. This can be manually overridden.

If no valid cost version is found or if the selected product is not in a valid cost version or any cost version attached to the cost table, no cost is populated into the purchase order. A cost will have to be manually determined before any financial transactions are capable of being processed.

27. Margin Based Pricing

Although “Pricing” is a standard functionality in all traditional software systems the innovative nature of the DMK-ERP Intelligent Retail Solution, results in unique information and results. In a typical system, costs and prices are stored at a product level. This means that the table containing data related to a specific product also contains its costs and prices. This means that only a limited number of prices can be captured and that differences usually have to be managed by a complicated discount matrix. A further complication arises when a supplier of a company revises several



thousand prices (e.g. Bosch has 13 000 products). An immense amount of time and effort must be applied to capture new supplier prices and to update selling prices. This functionality is also important in the management of Jobs.

We have taken a business process based approach to pricing and costing. In addition, the business relationships of price, cost, customer, demographic and product are stored as mark up, margin and relationship data. This is in stark contrast to merely specifying and saving a cost and prices or managing discount matrices.

Our approach has been to separate prices and costs from products and to store these in separate price and cost versions. These are attached to cost and price tables that are in turn linked to customers and suppliers. A further refinement is that products can be assigned to price mark up groups and a mark up relationship can be then be assigned per product per price table.

- An unlimited number of costs can be maintained per product
- An unlimited number of prices can be maintained per product
- Mark up relationships can be assigned and managed
- Mark up and margin variations can be easily managed on an exception reporting basis
- Our catalogue structure facilitates the task of uniformly pricing linked products e.g. strawberry yoghurt, peach yoghurt etc.
- Prices are attached to versions and validity periods can be specified per version. This means that future price tables can be defined, and these will automatically come into operation and expire as per the predetermined validity dates.
- A set of prices can be set per customer or market sector. An unlimited amount of cost tables can be set up and used.
- Supplier costs can be directly imported into the system as the costs are captured into a supplier cost version. This saves time and cost.
- Recommended prices are immediately calculated and these can be automatically updated, whereafter the appropriate shelf talkers or barcode labels can be immediately printed.

The above enables the ability to be able to respond quickly to price changes and as this is crucial it provides a foundation for competitive advantage. A significant bottom line improvement can therefore be demonstrated Revisions can easily be achieved by changing price mark up groups or their mark up relationship to tables. Several thousand cost prices can be changed and their price impacts rippled through the system in a matter of minutes.



28. Margin Reporting

Margin reporting is an important aspect of management control in a retail operation. There are three major types of margin reports that are extracted in order to manage margins. These three areas relate to the various stages at which a business will need to review margins, viz. when:

- Initially negotiating deals with suppliers (deal sheet),
- Purchasing products (incoming margin) and
- Reviewing actual performance (outgoing margin).

The functionalities these reports are as set out below.

29. Deal Sheets

A deal sheet is set up in respect of prices that have been negotiated for a specific period of time to obviate the need to debate or discuss prices per purchase order. An agreement is normally concluded with a supplier to set or fix prices for a period, e.g. the next thirty days. This means that all purchases for that period will occur at the predetermined price. The period is usually consistent with a purchasing or buying cycle, such as the fifteenth of a month to the fourteenth of the next month, not necessarily a calendar or financial month.

In terms of the DMK system, a deal sheet is effectively a price version that has been set up for a specific period, provided that versions are set up per supplier. An appropriate reporting structure and management method will only work if the product only appears in one cost version per period, and one selling price version per table per period.

Deal sheets are assessed by a simple methodology to assess buyer performance over time, and to determine in advance whether to adjust selling prices. The method used is to run a report to examine the trend of costs, margins and selling prices over a period of time. This means that a review is made whereby monthly unit costs from a single set of non-overlapping cost versions and monthly unit selling prices from a price table are compared per buying cycle. A total of four periods history, the current month and the next month must be displayed.

In order to manage deal sheets products are grouped per default supplier irrespective of whether they are attached to a cost version or not.



30. Incoming Margin

The incoming margin report is used to determine how much profit is available to be made with regard to existing stock on hand and purchases. This report is only in respect of stock on hand for the current month and stock on order for the next month, from a specific default supplier. It therefore shows the margin that will be made if the existing stock is sold and the margin that will be made based upon selling the incoming stock.

The incoming margin reports are launched within a selling price version.

- The default supplier must be chosen.
- A portion of the catalogue must be selected to avoid huge queries in instances where a supplier has an excessively large product range.
- In the selection criteria area the selling start date per period must be specified e.g. 15th. This means that the selling cycle is from the fifteenth of a month to the fourteenth of the next month. This also applies to the purchasing period.
- In addition the margin method used should either be including VAT or excluding VAT. The margin calculations are either based upon prices and costs including VAT or both excluding VAT. A tick box to exercise this option is required.
- A further selection criterion is whether the margin % shown is based upon the default supplier net list cost or the default supplier actual net cost in respect of stock on hand for the current month and the purchase order net cost for the next month.

This means that the intersection between a default product supplier and the catalogue is firstly used as a filter. The costs for the last four cost versions, the current cost version and the purchase order average cost for the selected supplier for the next period, that the product appeared in will be retrieved. The selling prices for the last four price versions, the current and the next cost version that the product appeared in will be retrieved.

31. Outgoing Margin

The outgoing margin report is used to determine how much profit was made with regard to sales. This report is only in respect of sales. It therefore shows the margin that was made in respect of actual sales.

The outgoing margin reports are launched within a selling price version.

- A portion of the catalogue must be selected to avoid huge queries in instances where an excessively large product range exists.



- In the selection criteria area the selling start date per period must be specified e.g. 15th. This means that the selling cycle is from the fifteenth of a month to the fourteenth of the next month. This also applies to the purchasing period.
- In addition the margin method used should either be including VAT or excluding VAT. The margin calculations are either based upon actual prices and costs including VAT or both excluding VAT. A tick box to exercise this option is required.

32. Merchandise Planning

DMK-ERP Retail Merchandise Planning (RMP) is a true end-to-end solution which brings effective planning processes to your entire organization. It extends beyond the four key areas – strategic, location, merchandise, and assortment planning – to link to markdown planning, style management, purchasing, and allocation capabilities. By connecting these planning and execution processes customers are ideally placed to maximize profits and adapt quickly to changing market conditions.

DMK-ERP RMP provides comprehensive real-time performance metrics with powerful planning and simulation capabilities and the ability to execute these on the fly.

DMK-ERP RMP provides our customers with the ability to consolidate store information at head office without any recapturing or reconciliation, which means that planning information is truly real-time and from a single source, providing top management with the tools they need to make profitable decisions. Management can now create long-term, company wide and/or channel-specific strategic plans using quantitative performance measures such as market share, sales growth, and overall profitability targets.

33. Assortment Planning – Get the Right Mix

Today's retailers need to plan and manage thousands of products. DMK-ERP helps ensure that the right products are in the right stores at the right time – and at the right price. This means anticipating what your customers are looking for and building a product mix that attracts customers. In order to present localized, customer-centric assortments, merchandisers need to start from localized, customer-centric plans.

DMK-ERP includes powerful, yet easy-to-use functions for defining style, colour, and product plans according to regional, demographic, capacity, and price variations. Your planners can run standard assortment assessment reports to evaluate the mix and performance of each assortment before it is approved. Assortment plans are



continuously compared with in-season sales and inventory performance to prevent overstocks and forecast under-stocks.

By ensuring each assortment is attractive to your target customers and profitable to your bottom line, your company benefits from faster inventory turns, decreased lost sales, and fewer markdowns.

Assortments based on local customer preferences are easy to build and analyze, and you can profitably balance your most controllable investment – your merchandise inventory. The result is that finance, merchandising and store operations are all planned and executed according to common objectives.

34. Replenishment Planning – Buy at the Right Time

Optimizing inventory levels at stores and distribution centres are necessary for removing excess costs from the Customer-Driven Value Chain. In order to more effectively invest inventory dollars, customers must be able to blend both the art and science of buying and inventory management. DMK Replenishment Planning helps retailers increase revenue and ensure high levels of customer satisfaction by sustaining this balance. By providing accurate visibility into the warehouse, DMK-ERP helps buyers to create accurate forecasted demand and order projections as well as stable order patterns.

DMK-ERP Replenishment Planning is a true inventory management solution involving scientific and statistical evaluations of each of the numerous variables involved in making a buying decision. Customers gain far more than what a min/max or one-for-one system could ever offer. Instead, DMK weighs for each SKU every factor for each store – demand, seasonality, order frequency, lead times, vendor minimums, vendor discounts, service levels – and recommends the best action based on the most desired result - profitability.

35. Built-In Retail Planning Best Practices

Based on our own extensive retail experience, and that of our partners and customers, we have created templates for retailers who want a high-quality planning solution in the shortest possible time.

DMK-ERPRMP incorporates two best practice scenarios that can be used alone or combined:

- Fashion, Footwear and Apparel



- Grocery, Speciality, Furniture, Hardware and Mass Merchandising

These planning scenarios are prebuilt with key planning and performance metrics, business user roles, and links to external merchandise management and supply chain systems. The templates are complete enough to use out-of-the-box, but can be tailored to your specific retail planning processes. Intuitively formatted reports offer exactly the right information for monitoring trends and identifying exceptions – and you don't have to wade through unnecessary data.

With DMK-ERP RMP you can reap the rewards of an integrated planning system in only a few weeks. And it's all comprehensively documented and wrapped in a planner-friendly interface.

36. Customer Satisfaction

DMK-ERP Intelligent Retail Solution gives you the ability to reconcile your in store transactions with financial postings and manage all stock in and stock out processes on one screen

Do business the way your customers want:

- Run your operations across different countries, with replication to a central database, with multi-language and multi-currency support.
- Print purchase orders and sales orders in your customers' languages, or send them directly to the customers' ERP systems—whatever the language.

Help maintain customer satisfaction, while holding the lowest possible safety stocks:

- DMK-ERP Intelligent Retail Solution will help optimize stock levels and reduce purchasing costs by consolidating purchase orders in regions where it makes sense, provides you with automatic reconciliation of stock received across the group.
- DMK-ERP Intelligent Retail Solution will only request changes if it detects inconsistencies between what is promised and what can actually be delivered. It can even take seasonal variations into consideration.

Create and fulfill long-term agreements with customers:

- You can integrate information from warehouse, sales and purchasing, and get quick answers on stock availability and delivery time.



- You will receive a warning if your orders are not fulfilled, to help ensure that you get your purchases in time and can deliver on your promises to customers.

Make competitive quotes and avoid lost sales:

- Make competitive bids with confidence by maintaining accurate information about stock availability and lead-time.
- View the profit margin on products when making quotes to customers.
- See customers' purchasing history for insight on customer needs and to identify new revenue opportunities.

Help manage customer returns to increase customer satisfaction while minimizing your costs:

- Take fast action on returned items.
- Print all relevant documents—such as credit notes required for the return.

Insight

DMK-ERP Intelligent Retail Solution helps you gain the insight needed to optimize inventory levels, make better purchasing and/or sales decisions, and find the right mix of products to maximize your profits.

Help improve your inventory management with traceability and insight:

- Get a comprehensive overview of your inventory in order to optimize purchasing strategies.
- Classify your inventory according to different parameters such as sales volume and revenue.
- Identify slow- and fast-moving items to optimize sales and purchasing strategies.
- Use the connectivity of DMK-ERP Intelligent Retail Solution to create automatic links between sales and purchasing.
- Track items throughout the supply chain with full traceability.
- Reduce manual work in generating sales and purchase orders.

Optimize stocks and reduce inventory-carrying costs:

- Forecast your sales to plan your purchases and inventory levels
- Create special rules for fast-moving goods.



Gain a fast and efficient overview of which products are profitable with the OLAP and reporting functionality:

- Identify which overall product lines to maintain.
- Identify what products to sell to which customers.

Optimize stocks across many warehouses or sites:

- Help make more insightful purchasing decisions based on clear visibility of stock levels within and across warehouses.
- Offer products to customers from all locations and reduce the chance of stock-outs.
- Optimize stock levels to reduce stock-holding costs, while still maintaining customer satisfaction.

Optimize your stocks by using the Internet to connect to your suppliers:

- Exchange information and conduct transactions automatically with your suppliers to lower safety stocks and streamline your supply chain with XML.
- Connect to your suppliers and customers regardless of what ERP system they have.

DMK-ERP Intelligent Retail Solution creates comprehensive and efficient internal connectivity:

- Changes in one area of the application are automatically and instantly reflected across the system—from sales to warehouse to purchasing.
- Drilldown functionality from every module allows you to reduce time and costs in tracking the financial data behind invoices, purchase orders and other records.
- DMK-ERP Intelligent Retail Solution increases the efficiency of your sales organization by cross-linking information and simplifying searches.

Agility

DMK-ERP Intelligent Retail Solution gives you the flexibility you need to support changes in strategy and successfully take immediate advantage of changing market demands.

Let your solution grow with your business:

- Adapt your ERP system, not your strategy.



- Use the freedom provided by the flexible development environment of DMK-ERP Intelligent Retail Solution to run your business the way you want.
- Take advantage of new sourcing logistics and even production strategies, and easily configure DMK-ERP Intelligent Retail Solution to support your new business methods.
- Adapt the source code quickly and intelligently.
- Create a solution that fits your unique business needs simply by building on existing modules.
- Pursue new opportunities in new markets easily and cost effectively with e-business functionality.

Expand functionality as your needs evolve. Install only the functionality you need now with the option to add more later:

- Use the feature keys to easily add or remove functionality according to your needs—with a minimum of external customization support.
- Create a three-tier environment for scalability, and a two-tier environment for heavy users—even within the same company.
- Adapt to new lines of business or changing business models quickly and with few integration hassles.
- Import data from acquired companies—easily.
- Start new companies quickly by creating virtual company accounts on the same database.

Tailor Web portals to match roles and the needs of individual users:

- Set up roles to give each employee exactly what information they need to do their job—regardless of country, company, brand, department or function.
- Use roles to enforce security by limiting sensitive information to only those who need it.

Tailor the look and feel of user screens to match your company with the needs of individual users:

- Train new users faster thanks to the user-friendly and easily customizable screens and menus.

