Data flow process

Technology, Development



This report describes the data flow process for the sales function of an Argos Store. In describing the data flow process, all aspects relating to the sales function are broken down into the various modules and teams which provide a key element in ensuring the successful completion of the sales function for Argos. The modules identified are Order Entry, Inventory, Purchasing, Accounts Payable, Accounts Receivable, Cash Management and General Ledger. Brief descriptions of the roles played by the modules are:

Order Entry maintains a list of all the products sold in Argos and their Selling Price. All promotions and discounts available at the store and the duration for which the promotions/discounts are on offer are also managed within this module. This is the system that is referenced when any product is being sold to a customer in the store, because it displays the selling price and applies any discounts/promotions on offer for the items being sold where applicable. All products maintained on the Order Entry system are given a Catalogue Number and these are identical to the same names obtained by shoppers, wishing to place an order from the Argos catalogue on display.

Each order processed for any customer is given an Order Number and the Order Number, together with the products and quantities on the order is supplied as a nightly update by the Order Entry module to the Accounts Receivable module. Inventory, as the name implies, is the module responsible for keeping a list of all the products in stock for Argos. All products for stock purposes, are given an Inventory Number and this is the number that can be used to re-order products when required. This is the module, which maintains a Supplier Catalogue and the catalogue lists all the products supplied by the various suppliers to Argos.

A Minimum (Min) - Maximum (Max) level is also defined within this module and the Min-Max level is used to manage the sale and maintenance of stock levels within the store. For example, where a Min-Max level is set for Air Beds, the sale which reduces the stock of Air Beds to 48 therefore notifies the system that a re-order from the supplier is required to top up the stock level. All stock items that are replenished are linked to Inventory, which therefore manages the stock levels. The Inventory Numbers defined for the products are also linked to the Catalogue Numbers defined in the Argos Catalogue.

Related article: "Difference Between Flow Shops and Job Shops"

The Inventory module is also referenced when shoppers at Argos use the Product Check system to see the number of items for the product required is available in stock. Although the shoppers' key in the Catalogue Number onto the Product Checker, this Catalogue Number, linked to the Inventory Number, references the Inventory module to check on the stock level of the product required and then informs the customer accordingly. The Inventory module provides a nightly update of the changes in stock levels to the Purchasing module in order to enable the Purchasing module to act accordingly.

Purchasing, and the name implies, is the module linked to the Inventory module which is responsible for making the all the purchases necessary for ensuring that Argos' stock levels are maintained for all the products stocked. Where Min-Max levels have been defined for stock items and there is also a need for the re-ordering of items sold, the Purchasing module is used to

carry out this process. It is also here that the prices of the stock items are defined.

The Buyers responsible for securing good buying prices for Argos would ensure that all these buying deals are defined within this module to ensure that the store takes advantage of the deals on offer. For example, a buyer might secure a deal with an Electronics Manufacturer that for every 1, 000 radios ordered, a further percentage discount will apply. As a result of this deal, the module will be set up to ensure that Purchasing employees ordering the radios take advantage of this offer and cannot order the same radios from another manufacturer. Such relationships and deals established can be defined here.

The Argos store makes use of Purchase Numbers (POs) for all items purchased and these are always quoted on the deliveries from Suppliers for products ordered and also on invoices later forwarded by Suppliers for deliveries made. The Purchasing module receives a nightly update from Inventory for all the items which require to be purchased from Suppliers and Purchasing also supplies an update of all its purchases and deliveries to the Accounts Payable module.

The Accounts Payable module, managed by the Accounts Payable team of Argos, are responsible for making the necessary payments based on the updates received from the Purchasing module. They tie in all invoices received from Suppliers to the PO Number from the purchases made and they also update their systems with commitments for new purchases, and for liabilities which have arisen as a result of deliveries from Suppliers which

have receipted in the Warehouse. This therefore makes the value of the delivery to be accrued on their system pending them receiving the invoice from the Supplier for the delivery made.

All payments made to Suppliers either by cheque or BACS payments can be reconciled on the Accounts Payable module and the General Ledger module is updated of all payable activities on a nightly basis. The Accounts Receivable module, managed by the Accounts Receivable Team receive the nightly update of sales made from the Order Entry module, class the sales into higher category levels (e. g. using Classes) and then record the transactions received into a more summary level. This therefore provides the daily value of sales made in the store based on the way in which Argos would want to report their sales. For example, while all products on the Order Entry system can be individually described by catalogue number for example, on the Accounts Receivable system, the income generated from the product sales can be classed as e. g. " Home & Gardening", " Electronics" etc.