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The Pocket Guide to

MIS



Content for this pocket guide excerpted from the *MIS: A Guide For Managers*, a new, 24-page publication currently available through PIA/GATF, CIP4, IDEAlliance and Network PDF.

Executive Summary

A Management Information System (MIS) uses technology to perform two primary functions. It is a *repository of information* that stores data regarding the future and historical activities of the business, and a *process workflow and collaboration tool* that helps to provide efficiency and consistency in day to day operations.

As an information repository, MIS can help managers understand what has happened and enable them to better anticipate what is going to happen. This information is captured in sales data, production data, and even in comment fields.

As a process and collaboration tool, MIS provides the ability to coordinate the activities of multiple departments into a seamless workflow by capturing data up front (at the beginning of the sales cycle or job) and tracking and communicating changes throughout the production, fulfillment, and financial processes.

Most MIS applications are divided into modules, to group similar functions and provide a logical place for end users to work within the application. The modules are often based on departmental lines; common modules include Order Entry, Estimating, Scheduling, Shop Floor, Shipping, and one to many modules related to accounting and finance. Some vendors base the cost of the software on the number of modules purchased or the number of users per module, while others charge a base fee with additional fees per user.

Of course, not all companies are the same and not all software is designed for every company. The package that is best for a commercial printer with 10 employees will not scale to support a company that has hundreds of employees in different plants running different processes.



Many MIS packages specialize in different markets and manufacturing techniques. The estimating and production planning functions required to support commercial printing are different from those used in cartons or flexible packaging, just as screen printing has different requirements than flexography.

Different packages also provide different levels of integration capabilities. Some MIS systems are designed to operate *standing alone*, i.e. without interacting with other applications. Other systems can integrate with creative and prepress processes, production equipment, third-party shipping systems, and external financial or warehouse management systems.

Selecting a system is the easy part—the challenge is in the implementation. MIS implementations combine training, moderate configuration efforts, and a climate of change. While in many cases package software can be customized, it is often best to adapt the business process to meet the software. Most organizations that struggle with implementation do so because the software is forced to conform to a process that is far outside its design.

Successful implementations occur in organizations that are able to understand their business processes, accurately learn the capability of the software, and envision a future that embraces the best of both. If done correctly, the change will be for the better.

The JDF Pocket Guide was created in Adobe InDesign CS2, and uses a FOLDRite™ custom digital template.

MIS Modules

The standard modules in an MIS system are typically divided as follows:

Estimating

Defines the individual elements of a job, the processes and materials that will be used to produce them, and the associated costs. This information is combined to create an estimate, which in turn is typically used to generate a quote, define many of the details of an order, inform production scheduling, and relay materials requirements to purchasing. The Estimating module is the core of MIS systems in the printing industry.

Order Entry

Is a module used by customer service to maintain customer information, generate quotes, enter orders, and track in-process and completed jobs. Order details that are not defined in the estimating module are typically maintained in Order Entry, including production instructions and shipping information. Here quotes are converted to orders.

Scheduling

Once an order is received in the system, it must be produced. The scheduling module helps to plan production by determining when and where a job will be produced. Specific equipment, production centers, and production steps are identified—and the job is assigned a time to begin activities in the production centers.

Shop Floor Data Collection

Captures actual production information for a job. This module acts as a record of time and materials, enabling managers to control those key aspects of cost and productivity. The most advanced implementations integrate with production equipment using a Direct Machine Interface (DMI) so that the MIS system tracks, in real time, the number of units produced.

Shipping

This module manages the shipment of a job. Typical functions include generating shipping documents and labels, and also storing tracking numbers, package weights, and freight costs.

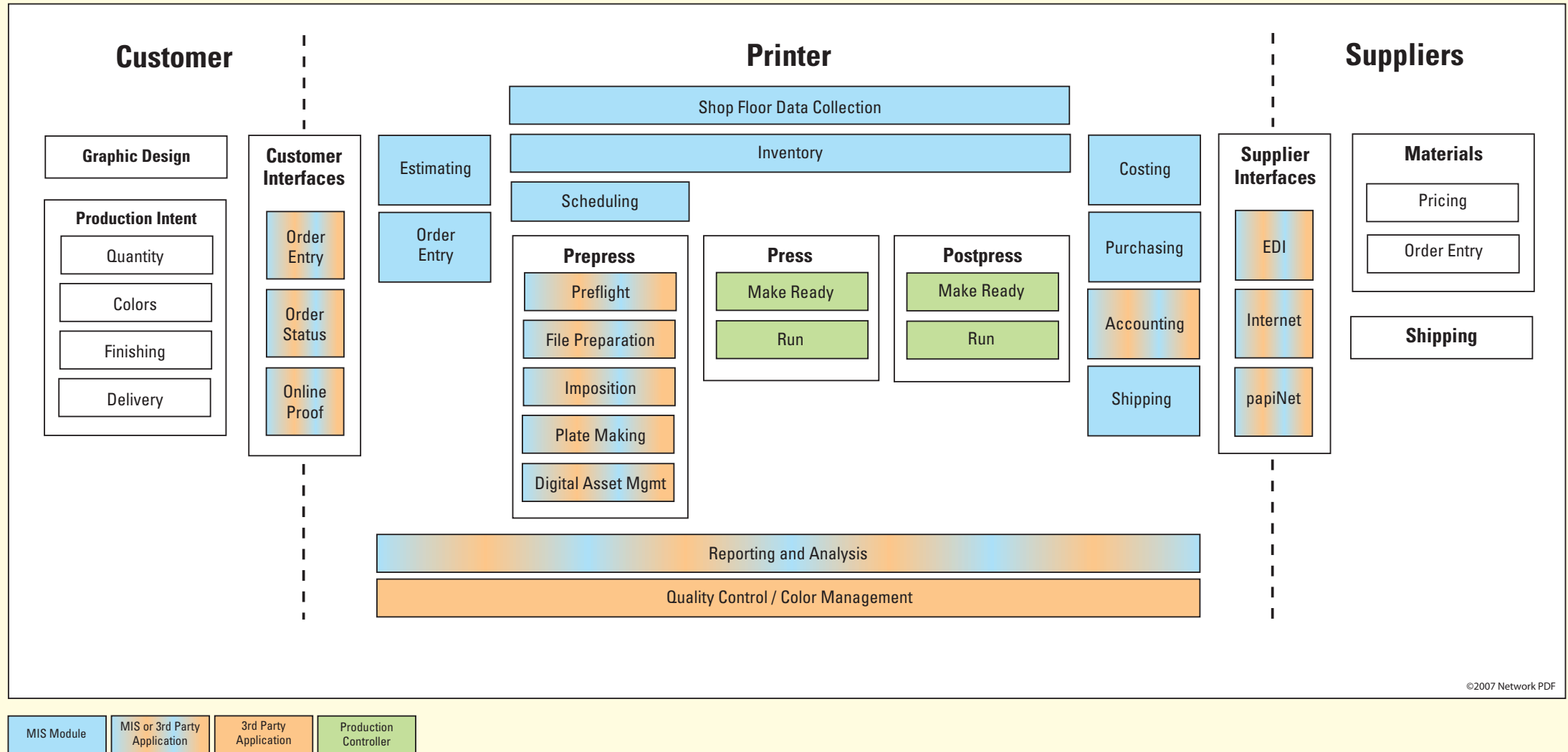
Inventory

This module tracks materials and other production consumables. Paper, ink, bindery components, plates, chemicals and other items can be defined in the system. Physical characteristics (size, paper caliper, ink mileage, etc.) are added to the item data to support the estimating process. Items in inventory can be assigned lot numbers and warehouse locations. The quantity on hand in a location can be tracked providing a real time view of the warehouse. Additional information such as preferred suppliers and desired on-hand quantities are assigned to specific inventory items.

Purchasing

In conjunction with the order entry and inventory modules, the purchasing module generates purchase orders for materials and

The MIS Big Picture



outside services. An incoming order can automatically generate a requisition, identifying the material quantity required for a specific job. If the required quantity cannot be fulfilled by the material on hand, many systems can convert a requisition to a purchase order.

Accounting

Accounts Payable (AP), Accounts Receivable (AR), and General Ledger Functions are located in this module. Connections to the other modules provide an integrated view of accounting information by customer, supplier, and internal cost center. Since accounting functions have tax and other legal implications, many systems also provide integration with 3rd party accounting applications.

MIS-Specific Resources

Web Resources for Articles and Interviews:

www.whattheythink.com and www.ondemandjournal.com

MIS article by Terry Nagi: <http://www.ondemandjournal.com/specialfeatures/nagi24.cfm>

NAPL Article Archive: <http://www.napl.org/svc.article.aspx>

Electronic Document Systems Foundation:

<http://www.edsf.org>

EDSF Study from 2006: <http://www.piworld.com/story/story.bsp?sid=41866&var=story>

Relevant reports/articles from www.gain.net:

Computer Integrated Manufacturing: Hype or Key to Profitable Survival—a report and case study analysis by Bill Lamparter, Print Com Consulting.

Information Technology in the Printing Industry—A Company Wide Endeavor Author: Craig Press, President, Profectus, Inc.

Part 1. Selecting Business Management Software—This white paper defines a process that can be used by a print provider to pinpoint the correct business management software.

Part 2: Implementing Business Management Software—This will delineate a process for effectively implementing the selected business management software in the provider's facility.