A Crash Course in Graphic Communications

Press Page Up or Page Down to navigate through the program.
Press Esc twice to exit the program.
Part 2
Print Production

The Journey of a Job
Production Workflow

Concept
Writing
Design
Salesperson
Estimator
CSR
Planner
Image creation
Scanning
Image editing
Page layout

Preflighting
Trapping
Imposition

or

Imagesetting
Film assembly
Analog proofing
Analog platemaking

Digital proofing
Computer-to-plate

Presswork
Finishing and binding
Packing and shipping
Mailing and distribution
Production Workflow

• A sequence of production steps—called *workflow*—is required to produce any printed item

• Production workflow may vary slightly from one plant to another, but the phases of production are essentially the same
Production Workflow

- Concept
  - It all begins with the need to communicate
Production Workflow

• Writing
  - Any printed item with written content will require a writer and copy editor
  - It will also typically require the use of a word processor
Production Workflow

• Design
  – A graphic designer works with the customer to develop a concept that best communicates the customer’s needs
Production Workflow

- Design consists of three main phases:
  1. Thumbnail sketches—Idea generators
  2. Comprehensive layout—A “finished” looking piece to be evaluated and approved
  3. File or job submittal—The designer submits the digital file, all related essential elements, and a printout of the job to the printer
Production Workflow

- Job specifications must be determined
  - Gathering this information is often the responsibility of the salesperson
Production Workflow

- The Salesperson
  - Salespeople work with customers to determine their needs and assure that their design ideas are communicated accurately to printing company personnel
Production Workflow

• The Estimator
  – Takes the design specifications from the salesperson, analyzes the phases of production, and assigns cost to the materials and time needed to produce the job
Production Workflow

- The Customer Service Representative – Or “CSR,” is responsible for seeing the print job through to its completion with input from the customer
Production Workflow

- The Production Planner
  - How should this job be printed? What machinery will be used? How will the production be organized? How will it be scheduled?
  - Answering these questions is the job of the production planner
  - A job jacket maps out the job’s organization
Production Workflow

- **Image creation**
  - **Illustrations**
    - Can be drawn by hand or drawn using a computer
  - **Photographs**
    - Digital cameras or film-based cameras
Production Workflow

- Scanning
  - Traditional film-based cameras are still used in image creation, but the photographs need to be scanned
  - Digital cameras are growing in popularity because they eliminate the need for scanning
Production Workflow

• Image editing
  – Digitized images are edited as necessary to ensure they look their best when reproduced

• Popular software includes Adobe Photoshop, Heidelberg Newcolor 7000, and Corel’s Painter
Production Workflow

- Proofing the images
  - Proofs are prototypes showing how the design will appear when printed on the press
  - Proofs are produced throughout the printing process, including after scanning and image editing
Production Workflow

- Page layout
  - Document planning and layout
  - Merging text and graphics
  - A “page” may be a label or package
  - Popular software includes QuarkXPress and Adobe PageMaker
Production Workflow

- Preflight
  - Inspection of the computer files that make up the document, looking for errors or missing files
    - File errors are very common
    - Preflight technicians use checklists to ensure all the necessary components are present
    - Common software includes Markzware’s Flightcheck and Extensis Preflight Pro
Production Workflow

• File Repair
  – The correction of file errors
  • Work here is chargeable to the customer
Production Workflow

• Trapping
  – The process of creating slight overlaps between abutting color objects in the design
  • Trapping is only necessary because of misregister that occurs on the press
  • It ensures that multicolor images will look good even after slight misregistration

Trapped Not trapped
Production Workflow

• Imposition
  – The process of arranging multiple pages, labels, or packages as they will appear on a large press sheet
Production Workflow

Now the production workflow will go in one of two directions:

**Analog**
- Imagesetting
- Film assembly
- Analog proofing
- Analog platemaking

**Digital**
- Digital proofing
- Computer-to-plate
Production Workflow

• Analog Workflow—Imagesetting
  – An imagesetter is an output device that will image sheets of film to be used in the making of plates for the printing press
  – Film is processed with photographic chemistry after imaging
Production Workflow

- Analog Workflow—Film Assembly
  - Positioning and taping films to a vinyl or plastic carrier sheet
  - When films are taped to the carrier, the piece is called a “flat”
Production Workflow

• Analog Workflow—Proofing
  – When film is made in the production sequence, digital proofs are sometimes not made at earlier stages in favor of proofs made photographically, directly from the film
    • Laminate proofs
    • Overlay proofs
    • Blueline proofs
Production Workflow

• Analog workflow—Platemaking
  – The exposing of the film-based flats to the printing plates
  – Plates are processed in chemicals after exposure
Production Workflow

- Digital Workflow—CTP
  - CTP stands for *computer-to-plate*, a technology also referred to as *direct-to-plate*
  - CTP eliminates the need for outputting film
Production Workflow

- Digital Workflow—Proofing
  - Digital Hard Proof—made directly on a substrate by an output device
  - Digital Soft Proof—displayed on a computer monitor
Production Workflow

- Digital Workflow—Platesetting
  - A platesetter is a device that images printing plates from digital data, ready for the press
  - Most plates are chemically processed after imaging
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Finishing and binding
Packing and shipping
Mailing and distribution
Production Workflow

• Presswork: Showtime!
  – Three phases to presswork:
    • Makeready
    • Pressrun
    • Washup
Production Workflow

- Finishing and binding techniques shape the printed piece into its final form
Production Workflow

- Packing and Shipping
  - Packaging the finished pieces
  - Labeling the packages
  - Assuring delivery to the customer
Production Workflow

- Mailing/Distribution
  - Designing and printing products in accordance with postal regulations
  - Database management
  - Labeling
  - Delivery
The final phase of print production is a happy, satisfied customer!
End of Part 2