

# CROSS-MEDIA PUBLISHING

# LIQUID CONTENT

## WHAT IS CROSS-MEDIA PUBLISHING?

Cross-media publishing is the packaging and delivery of content as several products using multiple media.

Content has a life cycle. Starting with its creation, digital information builds value as it is used, reused, repurposed, and licensed, and so must be managed as a core asset.

Across networks, digital information becomes *liquid content*—a continuous channel capable of assuming different forms, at different times, for different audiences as needed.

This infomap depicts the content life cycle and the new workflow patterns for cross-media publishing. The focus is on mapping integrated communication workflow from authoring and acquisition, to digital mastering and digital library, to “prep” (preparation for output) to cross-media delivery, to demand fulfillment.



### The content life cycle

The content life cycle has four stages:

- 1. Origination**  
Create, author, produce, and master.
- 2. Production**  
Customize, package, replicate, distribute, and deliver.
- 3. Demand**  
Request, buy, use, and transact.
- 4. Recycle**  
Reuse, repurpose, retarget, and super-distribute.

Stages 1 and 2 depict a “linear value chain” for printing and publishing. The typical manufacturing process accepts a fixed source of content and produces a single product at the end of the workflow. For example, a manuscript is created at one end of the pipe line and a finished publication goes out at the other end.

The addition of stages 3 and 4 transforms the model of printing and publishing from a linear chain into a *networked value flow*—something multi-directional, cyclic, conversational, iterative, and interactive. Content once authored can participate in multiple value streams.

Networked publishing can support “pull” (customer initiated demand fulfillment) and “push” (publisher initiated demand fulfillment) models. Typically, the publisher prints and delivers a product. But, a customer could request a publication to be printed on-demand. It might be customized. Also, the customer could view an interactive version (e.g., of a catalog) that could process transactions in real-time based on customer interaction with the content delivered.

Reuse and recycling converts content into different forms for different uses. This happens at different points in the process, for example; outsourcing content acquisition, multi-purposing, and dynamically updating content.

Across its life cycle, content can generate value in several ways:

1. It's intended use is the first source of value.
2. Reuse of content generates added value.
3. Repurposing content for uses other than originally intended is a new source of value.
4. Licensing content to third parties for non-intended purposes or for superdistribution (successive redistribution of digital content with payment to rights holder) is yet another source of value.
5. Digital information has integral value. It is cheaper to work with digital information, and more flexible.

The cross-media publishing process depicted here takes place between just two businesses: an originator (publisher or consumer) and a producer. More complex business configurations are easily imaginable. The entire service cycle takes place across networks. The workflow includes the following stages:

### 1. Demand

The crossmedia publishing process begins when the originator researches capabilities of providers on the Internet. There are two demand activation points. “Push” demand initiates a content development process leading to output and delivery. “Pull” demand activates packaging and output from a predetermined content base.

### 2. Agreement

The agreement process starts with requests for bids and estimates, and continues until an agreement is executed. Service agreements define obligations between parties—what will be done, by whom, when and where, and with what resources and workflow.

### 3. Job Standards

Industry standards are applied where possible. These orchestrate business transactions, content formats, media process parameters, and digital communications. Job-specific conventions are established to manage aspects of the process that fall outside industry standards. Some areas requiring special consideration include (1) content structures for multipurposing, (2) design models for crossmedia delivery, (3) data structures for audience profiling and targeting, and (4) media process parameters for the intended outputs.

### 4. Set-up

Set-up steps configure the customer and supplier environments to the requirements of the service agreement. Before the job begins, set-up and confirmation procedures demonstrate that business, media, content and communications procedures are synchronized. Later on, prior to individual tasks, set-up steps tailor the resources.

### 5. Authoring

Crossmedia authoring has several dimensions. First is content development including text, imagery, illustration, animation, and video. Authoring may be outsourced across networks, in whole or in part. Also, legacy content may be recycled. Second is design for multiple products in one or more media. This is sometimes called *meta-design*. Third is audience targeting and profiling. This is the basis for customization and personalization. Fourth is specification of media process parameters such as type, color and appearance for different output choices. Content proofs are (transmitted and) printed digitally as needed. Fifth is versioning (and rights management). These pose additional considerations.

### 6. Digital libraries

The evolving content base is managed in a digital library accessible across the network. The information management process handles classification, indexing and search as well as archival. In addition, there may be a dynamic information update process.

### 7. Digital masters

Demand activation drives creation of digital master from the library. This master contains all content and meta-information needed to support the intended range of outputs.

### 8. Preflight

Preflight maintains the integrity of information and material flows between functions and organizations. It is a structural requirement for network printing. Preflight is performed before and following transfer to ensure that agreed service parameters have been met.

### 9. Digital communications

Jobs flow electronically across the NET—the emerging digital communications infrastructure based on intranet, extranet, and Internet protocols. Transfers may be point-to-point, or multi-point-to-multipoint.

### 10. Digital job management

Cross-media publishing processes are distributed and automated. Business transaction processing is integrated with content and media processes and driven from servers. Customers have 7day/24 hour access to their data as well as status information.

### 11. Digital prep

Prepress becomes *prep* (as in *preparation* for output). The scope of media management and content processing is greater. Prep is automated and server-based. Functions are pipelined and run in parallel to increase throughput. Color managed proofs are previewed, transmitted and displayed or (remotely) printed digitally as needed.

The cross-media publishing digital stream drives multiple output processes. These are overviewed in stages #12 through #17.

### 12. Direct printing

Direct printing images each page for each impression, bypassing a plate or unalterable carrier. Digital printing systems may run singly or in parallel.

### 13. Variable data printing

Variable data printing is direct printing which varies some or all of the page information on each impression. Customization processing is a unique feature of this output path.

### 14. Direct-to conventional press

Bypass use of film in making plates for conventional printing. Direct-to-plate images plates off-line, or near-line. Direct-to-press images plates on press.

### 15. Distributed printing

Distributed printing (using either conventional or direct presses across networks) redeploys resources closer to markets, customers, or sources of supply. This model is called “distribute and print.”

### 16. Digital media replication

Digital media output options replicate information on CD-ROM or other electronic/digital medium.

### 17. Interactive delivery

On-line distribution from servers linked to databases, intranets, and the world-wide-web. Applications software customizes content, delivery, interactions, and transactions with end-consumers.

### 18. Validation

Validation establishes successful completion of a task or process. Across networks, validation becomes remote digital proofing—both soft proofing on screen and digital printing.

### 19. Acceptance

Delivery of the final output fulfills the service agreement, and triggers final payments and disposition activities.

## CALL TO ACTION

1. Get digital.
2. Get networked.
3. Manage content and media assets digitally.
4. Re-engineer your publishing for delivery across networks.
5. Develop new cross-media products that have value to your customers.
6. Align with technology partners you can trust and who will be there when you need them.

