

Supply Chain in Publishing – The Digital Transformation

Evolving New Strategies in a World of Changed Relevance

Abstract

The media supply chain or the publishing supply chain is evolving into digital supply chains and requires changes in strategies both in content management and in customer relationship management. New models of Remote and Federated management can definitely streamline and optimize a digital supply chain.

Introduction

The traditional supply chain of the publishing industry is changing as the industry undergoes a digital transformation. This digital transformation and the resultant evolution of business models have meant several challenges including automation. Automation includes dealing with unstructured content, managing the indexing, classification processes and entire taxonomy, and utilizing the increased relevance of Customer Relationship Management. The Publishing Industry has started looking at customer service, relationship management and multi-source ingestion as part of its solution map to address the changing trends and role of the publisher.

The Publishing Industry

The Traditional Supply Chain

The publishing supply chain, either in book, newspaper or magazine publishing, begins with product planning, market research, demand forecast, sales projection, possible authors, content creators etc. This process involves a lot of analysis and hypothesis around who the author is and what is to be published. Once a business case is established, the author is hired to write a manuscript or efforts are made to acquire pre-written content. Simultaneously, teams work on marketing copy, a cover page, plan production, finalize design, graphics, layout etc. Once the content is ready, compositors create the first copy of book. Editors review the first copy, after which a mass production plan is drawn. At this stage the geography, segment and type of customers to be targeted is determined. While that production is being done, the campaign to create awareness about the book is prepared. After the book is printed, it is launched in several markets after which the sales and marketing process begins.

Once the books are printed, they are sold to both retail and corporate consumers via physical ordering and online sales through portals, IVR or customer services divisions. After the order has been fulfilled, the book is shipped from the warehouse to the customer and the customer makes the payment. When the payment is made, there's a post-sale process of managing the customer relationship. With every sale of the book, the authors need to be paid royalties.

The Digital Transformation

The workflow between authors, editors and composers and having content available on that workflow is necessary to create collaborations among these user communities. Production managers then send them the manuscript and receive composed pages back, and work with the vendors to raise orders. The composition process is going through a lot of automation. At the same time, there is a growing concern on the digital transformation.

The industry and supply chain is going through a huge transformation. Within the print space, the digital supply and the aspect of digitalization is coming in very handy. Today the content delivery platforms are more interactive. People can listen to audio when they read online. They can make notes, highlight content and save it – create custom books and have their own personal libraries.

Changing Business Models

Publishing companies are evolving into multimedia platforms with the advancement of technology, especially broadband and handheld devices. Publishers have far more options available to monetize their long tail. Leveraging the internet is becoming a new revenue model as customers are willing to pay a premium for the user experience and ubiquitous access. As mass-customization and micro-billing is contemplated it becomes a digital asset management challenge where one has to associate rights and permissions and business rules and other sorts of technical parameters in terms of what's in the file, and how to transform it.

The Challenge for Aggregators - Automation

Dealing with Unstructured Content

HCL has identified this as a business challenge with its customers. It has invested in a framework that helps harvest a lot of information from the web, with its own structure, and applies artificial intelligence-based technology to simulate a vertical search on that content, and get context of that content into a structured fashion, so that the process of content classification is automated.

The notion of micro transactions logically leads to itemizing content. Itemization of content then leads to automation strategies for classifying the content which in turn leads to other sorts of challenges on how to create a unified view of content and so on

Indexing, Classification Processes and Managing Taxonomy

Automated technologies are required for managing taxonomy, classifying content and storing that content in intelligent ways. After that high-speed search technologies are required to make sure that the content that is retrieved is relevant and involves very limited effort as far as extraction is concerned.

Increasing Relevance of Customer Relationship Management

Today, publishing is all about customer service. If a firm can provide customer service, it can get a lot of premium. In essence, this is about the growing phenomena of self-publishing and models like Lulu.com - where you can go ahead and create yourself a publishing community and moderate that.

Publishers today have huge underleveraged and un-optimized value chains that they need to invest in to be more agile and to take publication faster to market on multiple delivery channels. Hence, they need to monetize that content. Companies like an Ingram or an Amazon can move upstream into the creator community and enable first of all a highly automated online digital workflow creation process. What happens if that example were to be extended to aggregators such as Google and Yahoo, etc., who have great customer access available?

These aggregators are going back to newspaper companies and are trying to bring their catalogue online. When that revenue model is analyzed it is seen that seventy percent of that revenue goes to the aggregator and that thirty percent goes to the creator.

Publishing Industry's Solution Map

Publishers of late have started investing a lot of money in marketing departments and are also looking at customer service and relationship management. The relationship management can be a great source of feedback coming from the market. And with that feedback, it can lead to the product innovation and better development processes. A Philip Kotler book in India will carry case studies of local companies as compared to – for example, AT & T or Cingular.

Addressing the Changing Role of the Publisher

The following diagrams exemplify how publishers and aggregators, today, are trying to undertake these initiatives on a multi-source foundation. By offering value out of so-called technology-centric peer-review processes within their organization, they are addressing a large, untapped market.

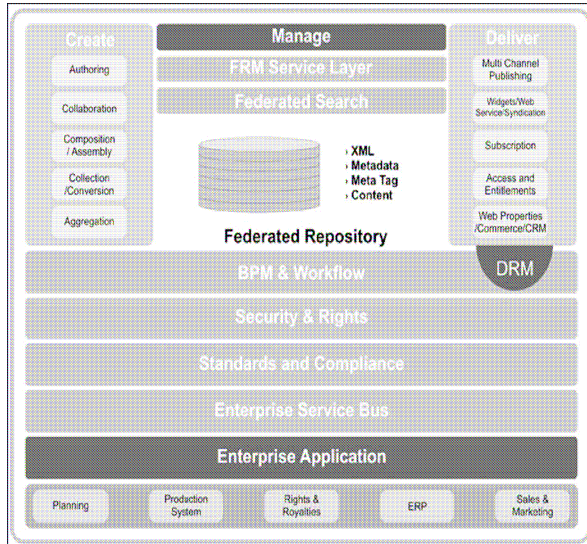


Figure 1: "Content 2.0: A Network Publishing Platform for New Age Publishers". A Network Publishing Platform enables content first authoring, collaboration, composition automation, multi-channel publishing and delivery (<http://www.hcltech.com/hcl-research/> for Content 2.0 white paper)

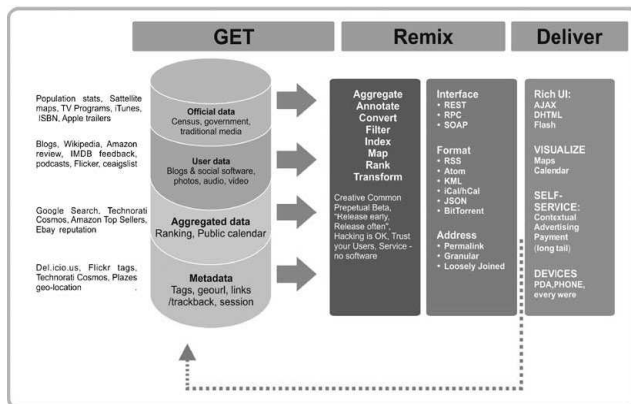


Figure 2: The changing role of the publisher. Multi-source ingestion: content acquisition and transformation, aggregation, annotation, filtering mapping, ranking and indexing essentially mean having a common view of this disjointed data.

In the past, there was just a single source of data. Now there several types of data and several sources of data available too. This data is obtained and value is created out of it. One of the growing trends in the publishing community is multi-source ingestion.

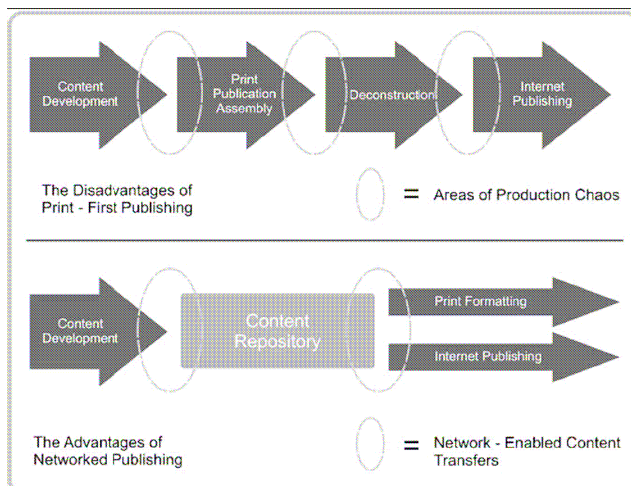


Figure 3: **Essential structural shift.** Advantages of networked publishing include efficient content creation, repurposing and multi-channel delivery strategies

HCL has evolved strategies and tools to counter these challenges and changing trends in the publishing industry, some of which are showcased below.

Remote Infrastructure Management (RIM) is becoming quite popular. It means that a publisher and his client can have multiple systems and platforms. HCL Technologies can actually remotely manage the data center in such a model, whether it's an end-user infrastructure or a digital infrastructure.

Knowledge Process Outsourcing (KPO)

The whole markup indexing and classification is being outsourced as KPO.

- **Business Process Outsourcing (BPO)** is within two different areas in the publishing industry. The first area is where the creative brief is given by a customer, the content is created, it is illustrated and animated, or composed for print or online publishing. The second area is imaging and digitalization.
- **Content 2.0** is a publishing platform for New Age Publishers. It is an integrated publishing platform which can help streamline and optimize the digital supply chain and also support the print supply.

Federated Repository Management Services (FRM) essentially means you can have your digital assets repositories interfaced with content management repositories and file system databases.

All these are made available through several channels of delivery, and managed well in terms of rights authentication, encryption and subscription management. It's also important that it all ties into the business processes and systems that are in place. This is a futuristic investment aimed at transforming the whole publishing business, optimize content syndicated workflow, and enforce a lot of accountability. Forecasting can also be improved in the schedule and time-to-market can be reduced by allowing one to get books faster into the market.

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- Head - Vertical Solutions Group for Publishing, Education and eLearning
- 12+ years of experience
- Past five years with world's leading publishers in Education, Trade, STM and LTR spaces
- Oversees the Publishing micro-vertical and is responsible for HCL's Content 2.0 Network Publishing Platform from concept to implementation covering book, newspaper and magazine publishing.

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