INTRODUCTION TO THE PRISM SOURCE VOCABULARY

ABOUT IDEALLIANCE

- IDEAlliance is a global community
- More than 1,000 member companies
  - Identifies specifications and best practices for efficient end-to-end digital media workflows
  - Focus on real-world solutions
PUBLISHER PARTNERS

- AARP/Publications
- American Media, Inc.
- Brown Printing Company
- Hearst Magazines
- Meredith Corporation
- National Geographic Global Media
- Rodale, Inc.
- Source Interlink Media
- Time Inc.
- U.S. News Media Group
- Wolters Kluwer

ASSOCIATION PARTNERS

- Magazine Media Association (MPA)
- Ad-ID (a Company of 4A's & ANA)
- JMPA (Magazine Publishing Association)
THE TWO WORLDS OF PUBLISHING

- Since the mid 1980’s the publishing world split into two distinct worlds
  - Focus on Content
    - Tech Pubs
    - Legal
    - Scholarly Publishing
  - Focus on Design
    - Magazines
    - Marketing/Advertising
    - Display Books
CONTENT-BASED PUBLISHING

- Publications where content is central
  moved toward XML-first publishing models
  - SGML and XML authoring to enforce document structure
  - Content Repositories based on document structure
  - Automated layout based on XML structures

DESIGN-BASED PUBLISHING

- Design-based publications have employed only minimal automation
  - Design comes first! You can’t automate design!
  - Content created to follow design
  - No way to standardize document models
  - XML an afterthought
IN APRIL 2010 THE WORLD CHANGED!

APRIL 2010; Everything Changed

CALL TO ACTION!

- Everyone across the media supply chain was scrambling to develop new workflows and meet deadlines!
- New solutions had to be found!
  - For publishers
  - For agencies
- IDEAAlliance took a leadership role by launching the nextPub Initiative
nextPUB INITIATIVE

- Brings publishers and technology providers together to work as partners to address the publishing challenges for the future
- Define a standards-based architecture for delivering dynamic content across devices and publication channels
- Technology incubator for tools for tomorrow’s productivity

TODAY’S WORKFLOWS DON’T SCALE!

- Immediate Challenge: Produce a new layout and design for publication on each device
- Add rich media and content layers
- Compile into a different app for each OS!
- No increase in staffing!
- No easy way to automate the process
DYNAMIC CONTENT ARCHITECTURE

- Leading analysts and strategists began to envision monetizing content beyond the delivery of traditional “publications” and “issues”
- Publishing across media channels was the initial challenge, but it is not the ultimate goal!
- A “dynamic content” architecture should enable delivering content as new collections beyond publication titles via channels that don’t yet exist
  - Subject-based channels
  - Personalized channels

THE SOURCE IS THE SOLUTION

- Over the past 18 months our vision and strategy has evolved!
- From packaging, delivery and display
- To designing an architecture for dynamic content publishing
- PSV defines a new paradigm for design-based publishing
### PRISM SOURCE VOCABULARY SPECS

- PRISM Source Vocabulary (PSV)
- PRISM 3.0 Specifications

### PSV SPECS

<table>
<thead>
<tr>
<th>Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRISM Source Vocabulary Specification Overview (PSVSO)</td>
<td>The Overview to the PRISM Source Vocabulary provides an introduction and a non-technical overview of the PRISM Source Vocabulary.</td>
</tr>
<tr>
<td>PRISM Source Vocabulary Specification (PSVS)</td>
<td>The PRISM Source Vocabulary Specification defines semantically rich for source metadata and content markup that can be transformed and served to a wide variety of output devices including eReaders, mobile tablet devices, smart phones and print.</td>
</tr>
<tr>
<td>PRISM Source Vocabulary Markup Specification (PSVMS)</td>
<td>The PSV Markup Specification documents the XML tags in the PSV namespace that are used to encode XML Source Content.</td>
</tr>
<tr>
<td>PAM to PSV Guide (PAMPSVGUIDE)</td>
<td>This Guide documents mappings from PAM XML to PSV XML. It is normative only.</td>
</tr>
</tbody>
</table>
PSV: NOT BASED ON DOCUMENT MODELS

- The PSV framework is not based on modeling document structures and hierarchy (i.e. XML)
- For design-centric content this simply is not possible!
- Document-model-based content management is:
  - Rigid, expensive and fragile
  - Unnecessarily intrusive on the creative process
  - Limits the future

PSV DESIGN DECISIONS

Design-based content cannot be highly structured
- Modular and Flexible framework
- Metadata-based content object management
- Flexible, content encoding based on semantics
- Embrace emerging technologies
- Build on existing systems
- Foster the development of new dynamic display/layout technologies
FOUNDATIONS OF PSV

- Build on existing repositories and technologies (PRISM 3.0)
- Leverage emerging technologies (HTML5)
- Flexible/Modular Framework or Building Blocks

THE MAGIC IS IN THE METADATA

- PSV provides a standard metadata schema that is:
  - A Blueprint for quickly configuring content object repositories
  - A Rosetta stone for federating existing repositories
  - Semantics by which to automate dynamic layout and design
  - A standard interface to integrate repositories with creative, production workflow and delivery tools
THE PSV PUBLISHING MODEL

- Digital Early!
- Platform-Agnostic
- Capture Rich Semantics
- Federated Content Repositories

WHY PRISM?

- Implemented widely among magazine publishers
- New PRISM 3.0 has been extended to support PSV
- Family of 10 Metadata Specs
- 30+ Controlled Vocabulary Specs
### PRISM 3.0 SPECS

#### General Documents

<table>
<thead>
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</tr>
</thead>
</table>
| **PRISM Introduction** (PRISMINT)  
or  
http://www.prismstandard.org/specifications/3.0/PRISM_introduction_3.0.htm | Overview, background, purpose and scope of PRISM; examples; contains no normative material. |
| **PRISM Compliance** (PRISMCOMP)  
or  
http://www.prismstandard.org/specifications/3.0/PRISM_compliance_3.0.htm | Describes three profiles of PRISM compliance for content and systems; includes normative material. |

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### PRISM 3.0 METADATA SPECS

<table>
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| **The PRISM Basic Metadata Specification** (PRISMBSM)  
http://www.prismstandard.org/specifications/3.0/PRISM_Basic_Metadata_3.0.htm | Describes the basic metadata elements contained in the PRISM namespace to describe article content; includes normative material. |
| **PRISM Advertising Metadata Specification** (PRISMMDS)  
http://www.prismstandard.org/specifications/3.0/PRISM_Advertising_Metadata_3.0.htm | Describes advertising metadata elements including those drawn from AdXML, GWG and AdHD; includes normative material. |
| **The PRISM Subset of Dublin Core Metadata Specification** (PRISMDCMS)  
http://www.prismstandard.org/specifications/3.0/PRISM_Dublin_Core_Metadata_3.0.htm | Describes the metadata elements from the Dublin Core namespace that are included in PRISM; includes normative material. |
| **The PRISM Image Metadata Specification** (PRISMINMS)  
http://www.prismstandard.org/specifications/3.0/PRISM_Image_Metadata_Specification_3.0.htm | Describes the metadata elements contained in the PRISM Metadata for Images Namespace and other related image namespaces, includes normative material. |
| **The PRISM Recipe Metadata Specification** (PRISMRMS)  
http://www.prismstandard.org/specifications/3.0/PRISM_Recipe_Metadata_3.0.htm | Describes the metadata elements contained in the PRISM Recipe Metadata Namespace, includes normative material. |
| **The PRISM Usage Rights Metadata Specification** (PRISMRUMS)  
http://www.prismstandard.org/specifications/3.0/PRISM_Usage_Rights_Metadata_3.0.htm | Describes the metadata elements contained in the PRISM Usage Rights Namespace; includes normative material. The namespace will supersede elements in both the prism and gpl-namespaces version 3.0 of the specification. |
PRISM CONTROLLED VOCABULARIES

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<tr>
<td>The PRISM Controlled Vocabulary Markup Specification (PRISMCVS) <a href="http://www.prismstandard.org/specifications/3.0/PRISM_Controlled_Vocabulary_Markup_3.0.htm">http://www.prismstandard.org/specifications/3.0/PRISM_Controlled_Vocabulary_Markup_3.0.htm</a></td>
<td>Describes the metadata fields in the PRISM Controlled Vocabulary Namespace that can be used to describe a controlled vocabulary. Actual PRISM controlled vocabularies are now placed in the PRISM Controlled Vocabularies Specification [PRISMCVS].</td>
</tr>
<tr>
<td>The PRISM Controlled Vocabularies Specification (PRISMCVS) <a href="http://www.prismstandard.org/specifications/3.0/PRISM.CV.Spec.3.0.htm">http://www.prismstandard.org/specifications/3.0/PRISM.CV.Spec.3.0.htm</a></td>
<td>The PRISM Controlled Vocabularies are now documented in this document.</td>
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WHY HTML5?

- HTML+ CSS + JS
  - Shift from Layout to Semantics
    - Separates content from styling!
    - Adds new document structures
    - Enables embedding semantics at the element level using the global class= attribute
HTML5 VS HTML4

HTML5
A vocabulary and associated APIs for HTML and XHTML
W3C Working Draft 29 March 2012

The majority of presentational features from previous versions of HTML are no longer allowed. Presentational markup in general has been found to have a number of problems:

Using media-independent markup, on the other hand, provides an easy way for documents to be authored in such a way that they work for more users (e.g. text browsers).

It is also worth noting that some elements that were previously presentational have been redefined in this specification to be media-independent: b, i, hr, s, small, and u.

Elements, attributes, and attribute values in HTML are defined (by this specification) to have certain meanings (semantics). Authors must not use elements, attributes, or attribute values for purposes other than their appropriate intended semantic purpose, as doing so prevents software from correctly processing the page.

PUBLICATIONS in nextPUB SCOPE

- Designed to support:
  - blog
  - book
  - bookazine
  - catalog
  - feed
  - journal
  - magazine
  - manual
  - newsletter
  - newspaper
  - report
  - pamphlet
  - whitepaper
  - other ***
PSV: FLEXIBLE BUILDING BLOCKS

PSV is a framework made up of a set of building blocks

SCENARIO #1

Simple content repository from which content can be assembled into a print and into a digital edition on a monthly basis
SCENARIO #2

- Content Repository to assemble print and tablet editions
- Assemble year-end “best of” special edition for print and tablets
- Track usage and usage rights for content

THE MAGIC IS IN THE METADATA

- Each building block offers many standard metadata fields
- These fields come from the PRISM 3.0 Specifications
CONTENT ENCODING: HTML5 + PRISM

- Flexible tagging structures
- Add PRISM semantics with the global class= attribute
- *Just enough* structure for design-based content!

Definition and Usage
The `<article>` tag specifies independent, self-contained content. An article should make sense on its own and it should be possible to distribute it independently from the rest of the site. Potential sources for the `<article>` element:

- Forum post
- Blog post
- News story
- Comment

PSV IS NOT

- A standard XML tag set for authoring content
- An XML schema for configuring an XML document-based content management system
- A packaging, delivery or content display format
- A message to send content to aggregators
PSV PROVIDES

- A standard, robust set of metadata fields and controlled vocabularies to describe, manage and assemble content and media objects
- Recommendations for encoding design-based content using HTML5 + PRISM semantics
- Implementation guide with sample use cases and schemas to serve as a starting point for implementers

FEDERATING YOUR CMS SYSTEMS

- PSV may be used to implement a new CM/DAM
- PSV may provide an integration/mapping layer among systems you already have in place
A CLOSER LOOK AT PSV

CONTENT TYPE

- The Content Type is the highest level indication of the content object that is being stored, managed and aggregated
- PSV supports a basic set of content types

- Advertisement
- Article
- BlogEntry
- BookChapter
- ClassifiedAdSection
- ContentBlock
- FrontCover
- Index
- Introduction
- Masthead
- NavigationSidebar
- OtherCover
DESCRIPTION

- 25 fields to describe a content object
- From dc: and prism: namespaces
- <meta enables bringing fields from other namespaces

A WORD ABOUT <genre

- <genre is a description metadata field
- <genre is intended to be used to refine contentType
  - acknowledgements (refines bookChapter)
  - advertorial (refines advertisement)
  - answers (refines bookChapter or contentBlock)
  - backCover (refines cover)
  - bibliography (refines bookChapter)
  - cartoon (refines contentBlock)
  - coverStory (refines article)
  - fashionShoot (refines article)
  - recipe (refines contentBlock)
RELATIONS

- Link two content objects by expressing their relationship

USAGE RIGHTS

- Used to express usage rights for the content object
- Note that most have a distributionChannel= added as rights vary from channel to channel
- pur: namespace is the PRISM Usage Rights namespace
Components are content objects that occur within larger objects such as an article or chapter that are often created independently and have their own metadata.

Component metadata is linked to objects within the content that have been given unique IDs.

Usage tracking enables publishers to track where each content object is used.
A WORD ABOUT CONTENT ENCODING

- HTML5 Head is allowed, however use of <meta is discouraged as we want all metadata within the PSV <metadata block
- <HTML5 Body
  - PSV does not extend HTML5 <body
  - Semantics are added using global class= attribute
  - PSV recommends using <article as the root element for content
  - Other new semantic tags such as <aside are recommended

PSV RELEASE SCHEDULE

- Launch: CreateASphere NYC
  - September 27-28
- PRISM 3.0 to follow on October 1, 2012
NOW IN DEVELOPMENT

If you start with:

* PSV XML files for each article
* Media files: images, audio & video files (jpeg, mp3, mp4, etc.)

You can package it all in an EPUB3 package by:

* Including PSV metadata in the opf file
* Transforming XML article files into XHTML files
* Creating a standard toc file with a nav element for the table of contents
* Creating a CSS stylesheet for rendering

Incorporating PSV Metadata

PSV XML’s publication name, cover date, edition, and issue name elements together can become the EPUB3’s package title for newsstand display:

PSV
<prism:publicationName>The Sporting Magazine</prism:publicationName>
<prism:coverDisplayDate>August 27, 2012</prism:coverDisplayDate>
<prism:issueName>The Olympic Commemorative Issue</prism:issueName>

EPUB3
| The Olympic Commemorative Issue</dc:title>
Incorporating PSV Metadata

Any PSV XML element can be included in the EPUB3’s <meta> element in the opf file:

```xml
<meta property="[psv element name]">[element value]</meta>
```
as in:

```xml
<meta property="prism:issueType">regularIssue</meta>
```

PSV article-specific metadata can be indicated in the opf file using IDs from the PSV XML:

```xml
<manifest>
  <item id="A12345" href="psv_final_round.xhtml" media-type="application/xhtml+xml"/>
</manifest>
```

```xml
<metadata>
  <meta refines="#A12345" property="dc:title">The Final Round</meta>
  <meta refines="#A12345" property="prism:subTitle">The game lived up to the hype</meta>
</metadata>
```

Incorporating PSV Metadata

**Issue metadata:**
- `<prism:issueIdentifier>`
- `<dc:language>`
- `<dc:publisher>`
- `<pur:copyright>`
- `<prism:publicationName>`
- `<prism:coverDate>`
- `<prism:volume>`
- `<prism:number>`
- `<prism:edition>`
- `<prism:issueName>`
- `<prism:issueType>`
- `<prism:onSaleDate>`

**Article metadata:**
- `<prism:contentType>`
- `<dc:title>`
- `<prism:subTitle>`
- `<dc:creator>`
- `<dc:contributor>`
- `<prism:genre>`

[The lists above are not comprehensive. Any metadata can be included.]
PSV XML’s body content readily fits into EPUB3. Tags essentially remain the same.

PSV HTML5 body

On the night last June when the Mavericks beat the Heat in Miami for the NBA championship, James drove to his house in Coconut Grove and did not come out for two weeks. “I couldn’t watch TV because every channel—doesn’t matter if it was the Cartoon Channel—was talking about me and the Heat,” James says.

<figure class="prism:photo" id="a03">
<img src="149186_WIRE000006423.jpg" alt="LeBron James"/>
<p class="prism:mediaTitle">HIGH REGARD</p>
<p class="prism:credit">ROBERT DUVAIN/LETTY IMAGES</p>
<figcaption>James in the paint.</figcaption>
</figure>

EPUB3 XHTML body

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<figcaption>James in the paint.</figcaption>
</figure>

A stylesheet is required in EPUB3!

There must be CSS stylesheet file order to have a valid EPUB3 package and render the content on a device.
THE FIRST PSV IMPLEMENTATION

3 USE CASES

- Deliver a Complete PDF Issue to Aggregators/Distributors
- Deliver a Complete Issue Made Up of PDF Components to Aggregators/Distributors
- Deliver a Complete PSV Tagged Digital Issue to Aggregators/Distributors