Unlocking content value and reducing production costs with Hidden Metrix™

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Emerging Trends in STM Publishing: A Few Observations

Changes in the way articles are written
• Authorship by multi-disciplinary groups
• Articles vs. database entries
• Free text mixed with links, terms and identifiers

Changes in the way content is consumed
• Non-linear reading habits
• Content is searched or mined rather than read
  - Machine vs. human readers
  - Information/Knowledge Extraction
Current challenges in STM Publishing

Increased volume of submissions
Pressure to reduce:
- Time to publication
- Cost to publish
Maintain quality and reputation of publications
Keep readers engaged with content

Technology has solved some of the problems, but…
The hard problems are the social problems

An army of volunteers
• Provide the required domain expertise
• Expensive
• In short supply and high demand
• Outside of publishers’ direct control

Unlikely we can replace them, but can we build tools that make them more effective and productive?
A simple proposition

The promise of semantic technology
- Tend to be focused on readers’ perceived need
- Difficult to assess value

What happens if we shift focus to the editorial workflow?
Who are we?

A Michigan State University spin-off company.

A team of software developers, knowledge engineers and domain experts with a proven record.

Focused on applying a novel semantic technology to solve real problems for authors, editors, reviewers, readers and publishers.
What is Hidden Metrix™

A novel method of extracting and repurposing knowledge from document collections.

Based on the premise that every document has a “semiotic fingerprint” that consists of a pattern of words.

We combine that domain knowledge with semantic methods to solve practical problems in publishing.
Our semantic annotation employs a combination of professionally curated and domain-specific resources.
Challenges

Validation against style sheet
Completeness of submission
- Author metadata
- Graphics format and quality
- Assignment to handling editor
- Initial communication with author

NamesforLife Solutions

Validation service and Scribe service are offered as:
- Hosted web service
- REST API
- Easily customized to meet publisher-specific needs
Challenges
Initial evaluation
• Quality/scope
• Factual review
Peer-review
• Reviewer selection
• Evaluation/consolidation of reviews
Instructions to author

NamesforLife Solutions
Extended Scribe service
• Detailed fact-checks
• Verifies linked content identifiers
Reviewer recommendation
• Selects reviewers based on their publication record
• Avoids conflicts of interest

Recommendations include supporting data and contact information to simplify crafting a meaningful invitation to potential reviewers.
**Challenges**

Document conversion
- Manuscript to XML
- Validation of XML (schema/DTD)
- Reference linking
- Semantic linking

**NamesforLife Solutions**

- Document conversion/validation integrated at each step
- Flags technical errors in content
- Annotations are reversible
- No side-effects on document
- Compositor specific features
- Easily integrated into existing platforms
Challenges

- Final conversion
  - HTML, PDF, print
- Content linking and hosting
- Deposit into archives
- Limited exposure of new content

NamesforLife Solutions

- Provides deep semantic linking to authoritative resources
- Increases exposure of content to broader audience via semantic citation paths
- Avoids link-rot
Challenges

- Limited “shelf-life” of content
- Limited ability to repurpose back content
- Use tracking
- Limited reader engagement

NamesforLife Solutions

- Content exposed to broaden audience via semantic citation paths
- NamesforLife Guide delivers rich information to readers while retaining them on your content
- A novel way to refresh content and assess use and impact over time
Our design philosophy

Hidden Metrix™ was built from the ground up to be:
• Generally applicable
• Integrated at multiple points of existing workflows
• Standards compliant
• Play well with other systems (no side effects)

Currently deployed in several publishing environments
Do these problems sound familiar?

If so, stop by and see us in stand 3B36.

We want to talk with you about how you can solve your content production problems with our tools and services.