Creating value for the community through integrations, services and systems

Ian Mulvany, head of technology, eLife
a publisher’s business and to a library’s budgets and operations. Market economics and prevailing business models suggest a publisher should minimize costs focus on serving authors and prioritize new infrastructure to support one-off transactions with individuals over long-term relationships with institutions. What does all this mean for publishers nurturing OA programmes or thinking about starting one? Are there ways to ensure OA initiatives can be commercially successful without long-term subsidies or solely relying on article processing charges?
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Patterns of technical product development

photo: ian mulvany CC-BY
I should be OK there are no silver bullets!
STEVEN THE P.I.

“I want to support my lab team in developing their careers”

MANDY THE R.A.

“My job is to get a job.”

ANDREW THE POSTDOC

“My colleagues and I fully support open access, but we still have to play the game.”
Fair OA system
- Publons
- PubMedCentral
- EUPMC
- Commenting
- Hypothesis

Credit for early work
- Altmetric
- Kudos
- Preprint integration
- Google Scholar Profiles

Keep up to date
- Sparraho
- meta.com
- personalised email Alerts

Tools and Workflows
- Mendeley
- Binder
- ReadCube
XML + data

- task 1
- task 2
- task 3
- task n

Front End

Back End
Time course of parsing scrambled car (Experiment 2) (the actual stimuli were white outlines on a black background).
Six levels of `div` before hitting content 😨

No semantics in the markup 🍼

Using `strong` to indicate style 😞
XSLT … lot’s of folks hate it. It’s so amazingly powerful whilst also being irritating it’s Marmite.

- John Root
SOAP sparql RDF
RDF-a RSS PRISM
pubsubhubbub
graphql RPC XML
OAI-PMH JSON
JSON-Schmea
How standards proliferate:

(See: A/C chargers, character encodings, instant messaging, etc.)

**Situation:**
There are 14 competing standards.

**14?! Ridiculous!**
We need to develop one universal standard that covers everyone's use cases.

**Yeah!**

**Soon:**

**Situation:**
There are 15 competing standards.

https://xkcd.com/927/
“In Progress” always dwarfed by “TODO”
“Hofstadter's Law: It always takes longer than you expect even when you take into account Hofstadter's Law.”

– Douglas Hofstadter
Optimising the reusability of content tagged with JATS XML

Find out how & why to make your content reusable

Once upon a time, content was constrained to a bound journal on a library shelf. Today, rapid sharing of research is critical to the ultimate goal of advancing science and knowledge. But to achieve this goal, content must be reusable.  

Find out more

Control your content: learn about XML

XML is the core format for saving and disseminating scholarly content, so its accuracy and quality are critical. And who better to ensure this than the people closest to the content in your organization? XML is not just for technology people.  

Learn more

JATS4R participants

Atypon  BIR  BMJ  Cambridge University Press  Canadian Science Publishing  eLife  Europe PMC  F1000 Research
rontiers  HighWire  NCBI  OpenBook Publishers  PeerJ  PLOS  River Valley Technologies  SciELO
Pain in cancer. An outcome research project to evaluate the epidemiology, the quality and the effects of pain treatment in cancer patients

Giovanni Apolone  Oscar Bertetto  Augusto Caraceni  Oscar Corli  Franco De Conno
Roberto Labianca  Marco Maltoni  Mariaflavia Nicora  Valter Torri  Furio Zucco

the Cancer Pain Outcome Research Study Group

DOI: 10.1186/1477-7525-4-7

Background

Management of pain related to advanced or metastatic cancer, although the availability of several pharmacological and non-pharmacological interventions and the existence of well-known guidelines and protocols, is often difficult and inadequate. Evidence of the relative effectiveness of current options for treating cancer pain from comparative randomized studies is scanty.

Methods

In the context of a wider project, a multicenter, open label, prospective Outcome Research study will be launched in Italy in 2006 to investigate the epidemiology of cancer pain and of its treatments, the quality of analgesic-drug therapy and the effectiveness of alternative analgesic

https://github.com/codeforscience/sciencefair
Google Tag Manager Is Your Friend
Many features are common to the mammalian nephron and planarian protonephridia. (A) Image of a young adult planarian depicting the twelve pairs of sensory neurons in the anterior amphid individuals. Class carrying the few deleterious mutations at its endemic equilibrium. Class carrying the few deleterious mutations is defined as mutation class $k = 0$. Inset: variation in the basic reproductive rate $R$ of individuals (gray histogram) and variation in the net reproductive rate $R$ of individuals (red histogram) resulting from variation in the number of deleterious mutations carried by viruses.
Semantic HTML 5 👍

Few elements before hitting content 😎

Full separation of presentation and content 👏

Many features are common to mammalian nephron and

depicting the
twelve pairs of sensory neurons in the anterior amphid individu

mutations is defined

histogram) resulting
from variation in the number of deleterious mutations carried
viruses.
A kinase-independent function of AKT promotes cancer cell survival &...
A kinase-independent function of AKT promotes cancer cell survival &...
XML + data

1. task 1
2. task 2
3. task 3
n. task n

Back End

Front End
Summary

In Scholarly Publishing modifying platforms and systems tends to be slow and expensive (Word, XML, outsourced development, poor use of web standards are the culprits)

Make changes where they are cheap, e.g. in user testing, or using tag manager to test a feature

HTML first is a thing, it’s coming, but may not arrive uniformly

Next generation publishing platforms are in development, and they will be open, worth taking a look
Things I didn’t talk about

Front end design is not just how it looks, but how it works, the problem is everyone has an opinion on how it looks, and there is rarely agreement on how it should work.

We are fundamentally a software business, software is eating the world.

It’s very hard to kill a feature once you have deployed it, platform changes are a great opportunity to “lose” features.

Decisions around prioritisation should be data driven, but user narrative is the most powerful tool to win an argument.