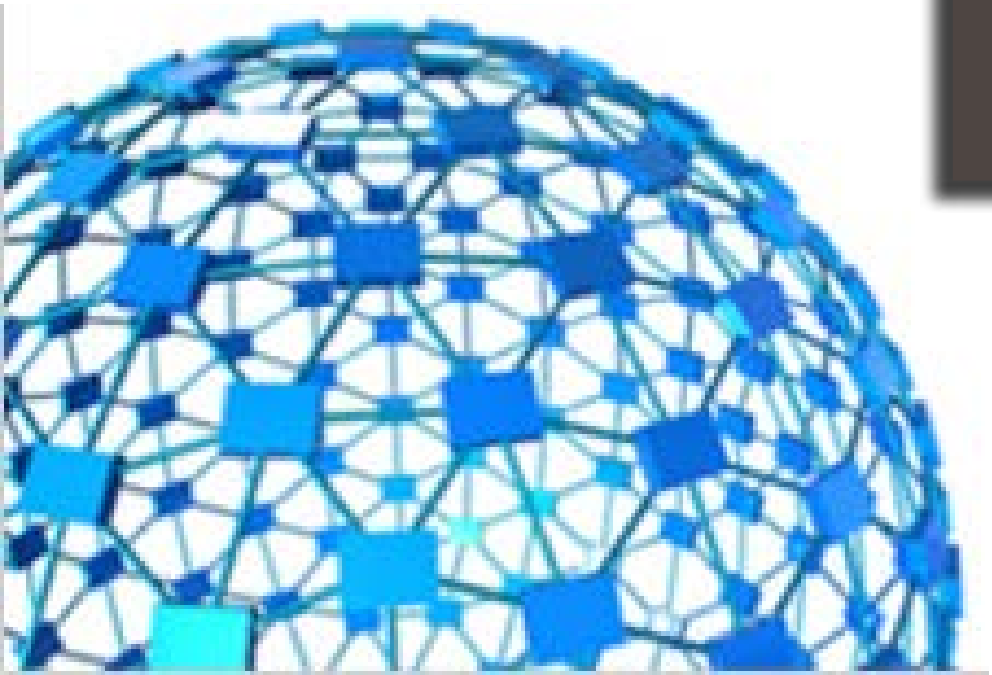
The Grand Convergence

How increasingly interdependent publishing standards are creating an interoperable publishing ecosystem

Bill Kasdorf

VP and Principal Consultant, Apex Content Solutions
Member of IDPF Board, EPUB 3 WG, W3C DPUB IG



Not a news flash:

We live in an interconnected world.

INTERCONNECTEDNESS

leads to

INTERDEPENDENCE.

APEX
Content Solutions

INTERCONNECTEDNESS

leads to

INTERDEPENDENCE.

This is not a bad thing:

We don't have to start from scratch when developing standards and building technologies.

APEX
Content Solutions

INTERCONNECTEDNESS

leads to

INTERDEPENDENCE.

This is not a bad thing:

We don't have to start from scratch when developing standards and building technologies.

The new mandate:

INTEROPERABILITY.

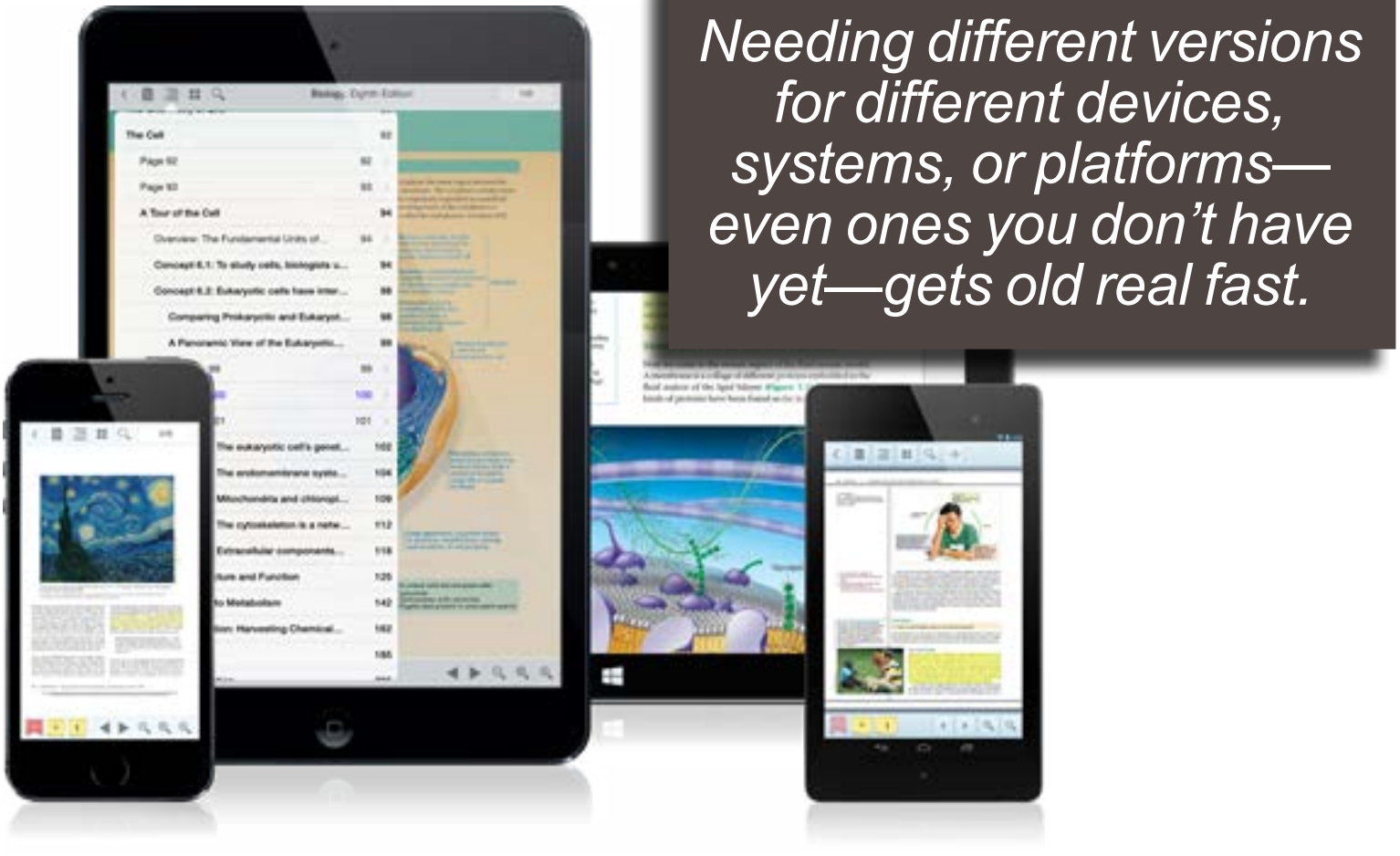
APEX
Content Solutions

INTEROPERABILITY

Enabling systems and processes to interoperate smoothly and predictably removes friction, resulting in efficiency, economy, and flexibility.

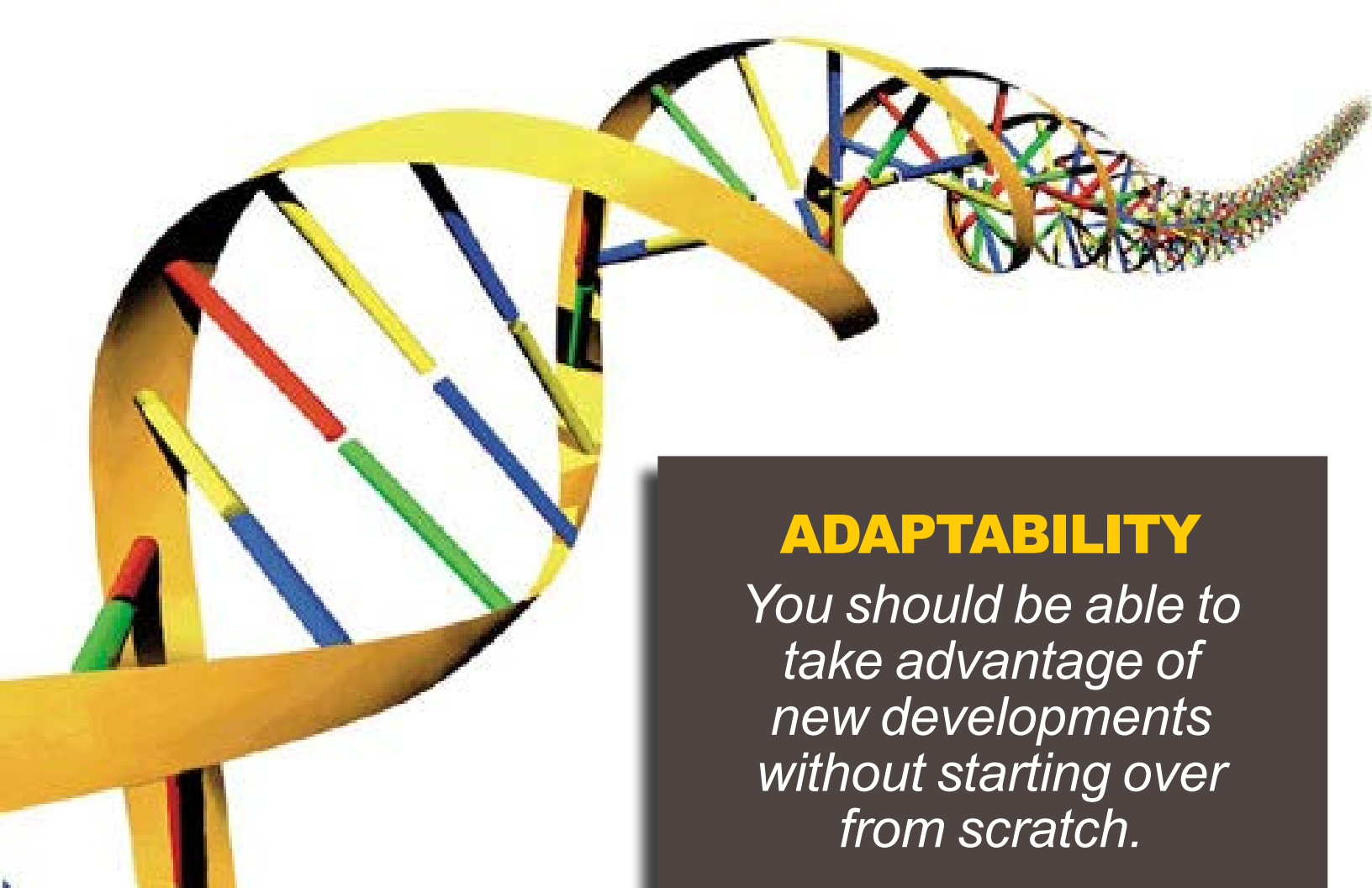
RELIABILITY

Things need to "just work" when you move or access content between devices and systems.



PORTABILITY

Needing different versions for different devices, systems, or platforms—even ones you don't have yet—gets old real fast.



ADAPTABILITY

You should be able to take advantage of new developments without starting over from scratch.

INTERCONNECTEDNESS

leads to

INTERDEPENDENCE

which requires

INTEROPERABILITY

which leads to

CONVERGENCE

which is created by

COLLABORATION.

APEX
Content Solutions

The Grand Convergence that is underway now in the publishing ecosystem is the result of multidimensional collaboration.

APEX Content Solutions

The Grand Convergence
that is underway now
in the publishing ecosystem
is the result of
multidimensional collaboration.

Cross-sector collaboration.

APEX
Content Solutions

The Grand Convergence
that is underway now
in the publishing ecosystem
is the result of
multidimensional collaboration.

Cross-sector collaboration.

Global collaboration.

APEX
Content Solutions

The Grand Convergence
that is underway now
in the publishing ecosystem
is the result of
multidimensional collaboration.

Cross-sector collaboration.

Global collaboration.

Standards based on standards.

APEX
Content Solutions

The Grand Convergence
that is underway now
in the publishing ecosystem
is the result of
multidimensional collaboration.

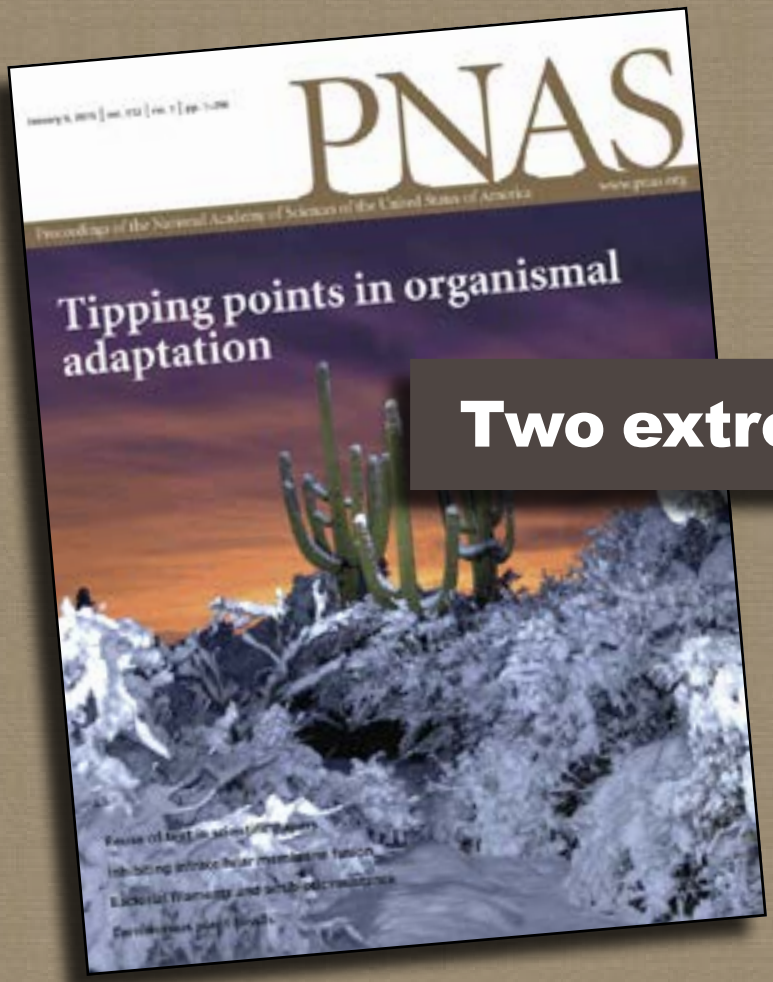
Cross-sector collaboration.

Global collaboration.

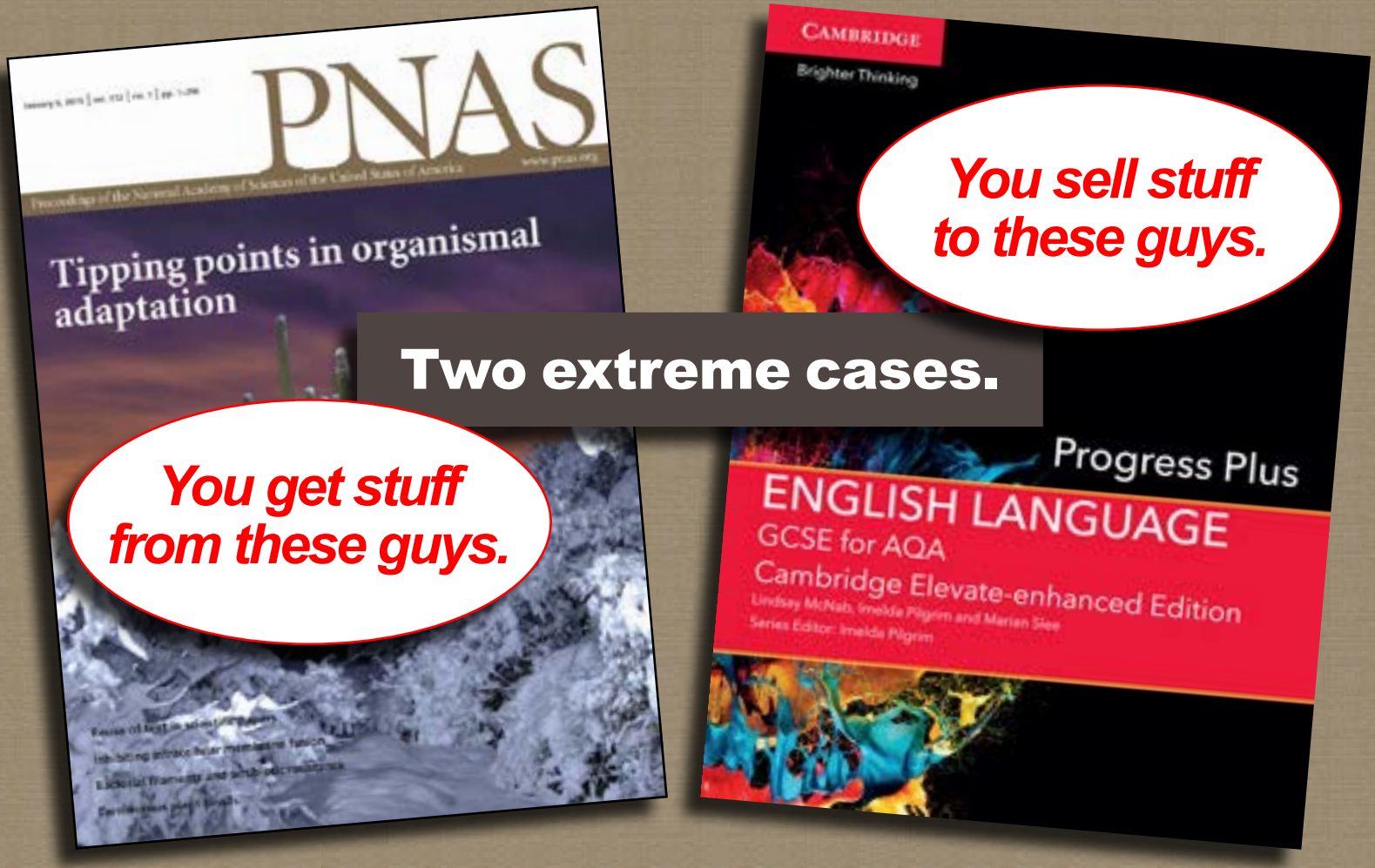
Standards based on standards.

Here are some examples.

APEX
Content Solutions



Two extreme cases.


PNAS
Proceedings of the National Academy of Sciences of the United States of America
www.pnas.org
Tipping points in organismal adaptation
CAMBRIDGE
Brighter Thinking
You sell stuff to these guys.
Two extreme cases.
You get stuff from these guys.
Progress Plus
ENGLISH LANGUAGE
GCSE for AQA
Cambridge Elevate-enhanced Edition
Lindsay McNab, Imelda Pilgrim and Marian Sise
Series Editor: Imelda Pilgrim

SIMPLE SINGLE-SECTOR EXAMPLE:

A problem quickly solved.

APEX
Content Solutions

JOURNAL

Fundamental issue:
is this article open access or not?

JOURNAL

Fundamental issue: is this article open access or not?

Simple solution: ALI

(NISO Recommended Practice: Access and License Indicators)

Two metadata elements:

<free-to-read>

(with optional start and end dates)

<license-ref>

(points to stable URI w/ license terms, e.g., on platform or Creative Commons)

ALI: NISO Access and License Indicators

Why was this so easy to do?

Very homogeneous ecosystem.

Virtually all journal access is online, article-based.

Established support systems (host svcs, CrossRef).

Only concerned with the article,
not components of the article.

Easy to incorporate in JATS metadata header
and <meta> in HTML.

COMPLEX MULTI-SECTOR EXAMPLE:

A huge problem needing to be solved.

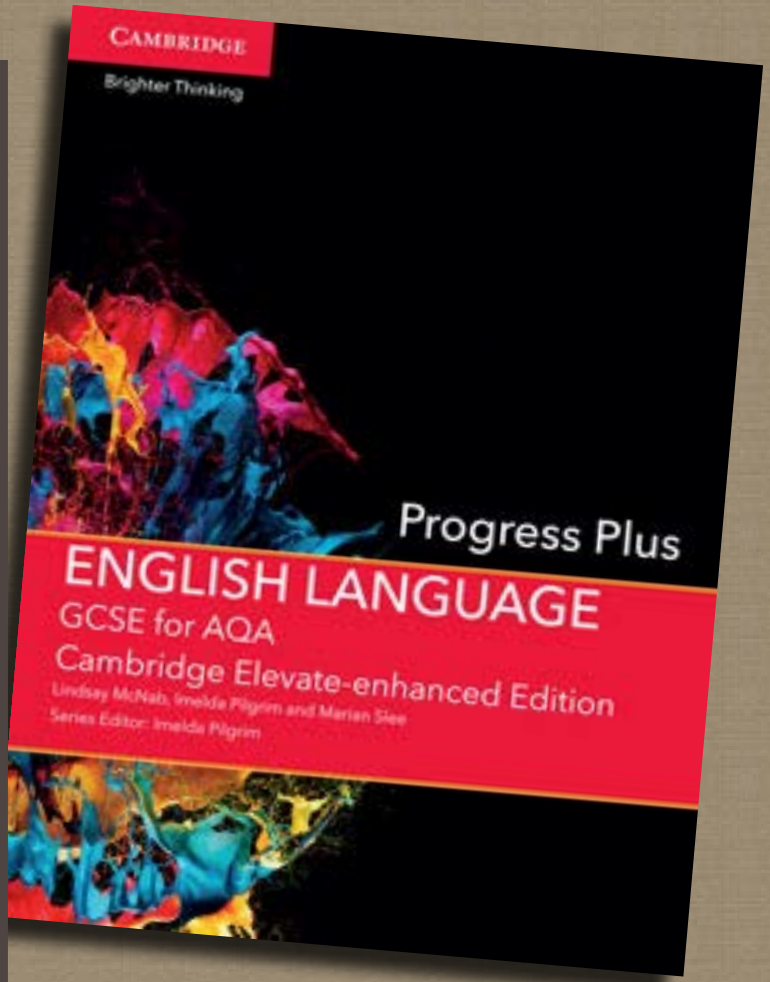
APEX
Content Solutions

TEXTBOOK

(Print, ebook, and platform)

Could contain:

Video from Condé Nast
Interview from the BBC
Photo licensed from Getty
Article from PNAS
Commissioned illustration
Text from The Goldfinch
Educator-created content
Student-created content



TEXTBOOK

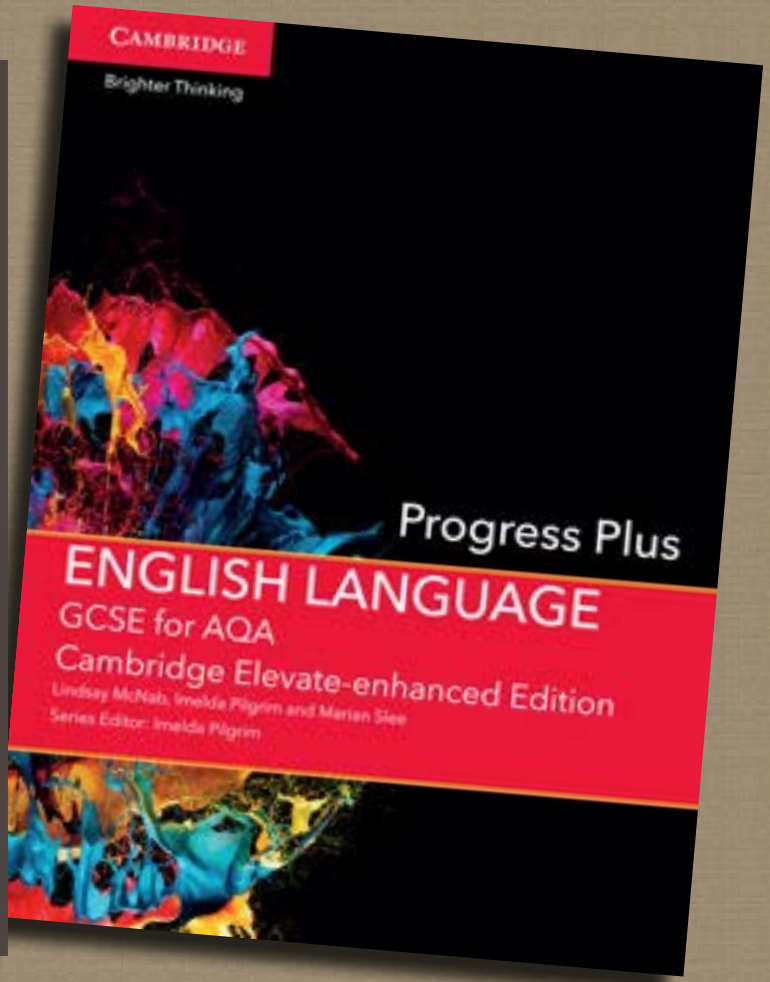
(Print, ebook, and platform)

What rights did they obtain for each of those assets?

What formats are the assets provided as?

What metadata came with them?

Do any of them have embedded assets, with embedded rights?



Not simple!

Those assets are all from different sectors.

The file formats may all be different. They may not just plug right in.

The sectors don't all use the same rights metadata, and most of it is not machine-resolvable.

And a big textbook/platform has hundreds of such assets.

APEX Content Solutions

OMG! OMG! OMG!

What a mess!

This calls for
MULTI-SECTOR COLLABORATION.

APEX
Content Solutions


BISG
EDItEUR
W3C
IPTC
Idealliance
Let's look at rights activities in some standards groups.


BISG
Focus on authors and agents.
Royalty tracking
is a nightmare, especially for ebooks, especially for agents.


BISG
Focus on authors and agents.
Controlled vocabulary:
Rich, modular, structured.
Designed for machine/human interoperability.


BISG
Focus on authors and agents.
Payment spec:
Very complex, detailed model aligned with CV.
Based on CCC payment spec.


EDItEUR
For books,
BISG CV
is based on ONIX
For journals,
ONIX-PL
(ONIX for
Publication Licenses)
For libraries,
ONIX-RS
(ONIX for Rights
Information Services)

ODRL

(Open Digital Rights Language)

Framework for the machine-readable transmission of rights metadata.

Enables expressing:

Policy Types
Actions
Constraints
Parties and Roles
Relations

Wait . . . is that a real Web standard?

Wait . . . is that a real Web standard?

Well, not quite . . . but stay tuned.

It's from a CG, not a WG, but it's about to get on a "rec track" to become a formal W3C Recommendation.

And it's already used by some big players . . .

News Sector: IPTC RightsML

Profile of ODRL.

Machine processable metadata embedded in a variety of asset types as XML, RDF, or JSON.

Magazine Sector: Idealliance

Developing rights model: Contract Management, Asset Management, & Rights Management as PRISM metadata and based on ODRL.

Collaborating with IPTC.

Photo Industry: PLUS Coalition

(Picture Licensing Universal System)

Very broad membership (creators, distributors, users, RROs, etc.) in 154 countries.

Collaborating with IPTC, LCC, ODRL, ISNI, EIDR, Idealliance, etc.

What do all these have in common?

The Open Web Platform.

Web technologies and
web services are
the context of the convergence.

They're what enable
INTEROPERABILITY.

APEX
Content Solutions

Interoperability across
virtually all aspects of publishing.

Infrastructure.

Structure and semantics.

Rendering in all media.

Delivery in all formats.

Discovery. Dissemination.

Repurposing.

APEX
Content Solutions

The Open Web Platform

Over 100 W3C specs: XML, HTML, CSS, SVG, MathML, many more.

HTML5
The structure.

CSS3
The styling.

JavaScript
The functionality.

Remember:
it's not just about your website.

The Open Web Platform
is fundamental
to the how content is

Developed

Discovered

Delivered

APEX
Content Solutions

EPUB 3 is basically packaged Web content.

It's for the interchange and distribution of digital publications and documents based on Web standards.

It's the free, open, accessible, non-proprietary standard for delivery of publications based on the OWP.

Wouldn’t it be great if there was no difference between an online publication and an EPUB?

Wouldn’t it be great if
there was no difference between
an online publication
and an EPUB?

We’re working on it.

It’s called PWP:
Portable Web Publication.

The Portable Web Publication Vision:

ONE FILE FOR BOTH ONLINE AND OFFLINE USE.

The same content in two different “states”:

Packaged for offline and archival use;

Unpackaged for online or cached use.

APEX Content Solutions

COLLABORATION

to achieve

CONVERGENCE

Wait a minute.

Everything's going mobile, now, right?

Browsers are too damn slow.

It's all about apps now!

Not so fast!

ALMOST ALL APPS ARE BASED ON WEB TECHNOLOGIES.

Where we're going:

MAKING CONTENT AGNOSTIC AS TO MODE OF DELIVERY.

APEX
Content Solutions


EPUB is packaged and predictable.
Highly engineered.
Reading systems know what they'll get.


HTML is like an
All Terrain Vehicle.
Goes everywhere.
Not as disciplined.
[Thanks to Wendell Piez for this analogy!]


Apps are like a Tesla.
Fast, efficient, modern.
Stays on the roads,
but there are lots of roads.

The vision:

UNDER THE HOOD(s) THEY ALL USE THE SAME TECHNOLOGIES.

And we're finally starting to get there.

APEX
Content Solutions

Thanks!

Bill Kasdorf

bkasdorf@apexcovantage.com

+1 734 904 6252

@BillKasdorf

APEX Content Solutions