The Semantic Web for Interoperable Specs and Standards (SWISS)

... What do you Hire A Standard to do?



© 2016 XSB, Inc. All rights reserved



Agenda

- What is SWISS?
- Platforms and Exchanges What are they and why they matter
- $\circ~$ Swiss Value Proposition
 - For Standards Users (OEMs)
 - For SDOs
- Commercial model
- Demo (time permitting)



iStock Photo515366192 AleksandarNakic

3

Standards: Published as documents,but used as data



Where does the data go?



Turning Data into Actionable Assets

© 2016 XSB, Inc. All rights reserved

What is a manufacturing work instruction?





Work Instruction with change management

iStock Photo522144912 thomas-bethge

Usability of Spec and Standards



*US BLS Occupational Outlook Handbook http://www.bls.gov/ooh/



8

001011011010 1011011100 Hoto516790352 Hallshade

20032002IMTERNE OF O

The IoT Spec End User





Turning Data into Actionable Assets

© 2016 XSB, Inc. All rights reserved

SWISS: Smart, Connected, Documents





Strategy & Solutions for B2B Cloud Providers

SWISS Value Proposition and Commercial Model

April 24, 2017







Exchange Case Studies

- Leverage Amazon Eyeballs
- Optionally Leverage fulfillment
- Survey Customers
- Build Relationships
- Marketplace is more than 50% of Amazon sales

Amazon Marketplace

- One-stop shop
- Prime
- Reviews
- Comparisons
- Dash Buttons
- Alexa ordering



- Freelancers leverage eyeballs
- Pay lower fees
- Freelancers can advertise their skills
- Build relationships





Platforms are Exchanges "on Steroids"



Unleash the creative power of a community of users and developers

A Platform is an exchange or marketplace that has added any or all of the following:

- An integration layer
- A open development platform, and/or
- An app exchange on which third parties can build/sell complementary products and services

Result: an ecosystem that adds value for all participants and that further grows the number of users and the community

Most marketplaces or exchanges have added a platform element.



Examples of Successful Platforms

Amazon Marketplace

Buyers:

- Alexa, Dot, Echo
- Dash
- Fire, Kindle
- App store with 334,000 apps, many of which drive commerce

Suppliers provide tools and services:

- Calculate freight, ship goods
- List items faster
- Manage reviews
- Set optimal prices
- Handle returns and refurbs
- Optimize product listings for search
- AWS

Salesforce

Buyers and Suppliers:

- 1000's of apps for every industry and function
- 4 million installs
- Service providers and consultants
- All integrated into Salesforce.com

Other software companies:

 Salesforce actually licenses its platform software to other companies to build products: Veeva, FinancialForce, Fonteva 7

Likely Swiss Platform Developments



Unleash the creative power of a community of users and developers

OEM Tools and Services

- Integration with internal content, PLM, RFQ, BIM, BOM, testing
- Publish and share specs with supply chain
- Specialized calculators, analytics tools
- Convert existing derivative documents
- Incorporation into IoT, mobile, and other applications
- Public data converted to SWISS: Mil Specs, building codes, regs
- Create new derivatives, leveraging SDO standards

Users can buy, integrate, and consume SDO content no matter where they are, no matter what app they're in

SDOs and Other Publishers

- Tools and services to convert existing standards and technical docs
- Specialized, vertical or tasked-based bundles of stds suggested by the usage graph
- SSO, analytical, billing and other tools to help facilitate sales on the exchange or on SDO storefronts

Limits set only by imagination and need.



Total Cost of Ownership (TCO) for PDF

Estimate: Initial cost is only ~10% of TCO Quality costs from out of date stds

Slow time to market

Cost of Change Management

Cost of Derivative Creation

Cost of Navigation

Standard License





SWISS Benefits to Users

- Lower total cost of using standards in your organization, and in supply chain
- Speed time to market (safely)
- Reduce re-work, risk, and claims
- Design, not drudgery
- Consistency across enterprise and supply chain
- Employee satisfaction
- IP protection

BETTER DECISIONS FASTER



Value of SWISS to Publishers



Leverage community of app developers and service providers to further add value to their content, expand distribution and use cases.

Publishers sell on exchange...

- Margins are better than reseller margins
- SDOs can build and maintain customer relationships (rather than cede to resellers)

Content in SWISS format is sold at a premium over PDF. SDOs share in that premium.



SWISS Benefits to Publishers

- Generate new net revenue and earn higher margins
- Offer standards as digital data; be an innovator
- Win back your customers and keep them
- Expand the market
- Greater autonomy in content sales
- Reduce copyright violations
- Benefit from user and developer innovations



SWISS Commercial Model

PUBLISHER PAYS

- SWISS technology license/curation fee based on sales
- Member or maintenance fee to sit on the exchange
- Content conversion fee to SWISS (not a profit center)
- Overall, publishers earn higher top and bottom line revenue.

OEM PAYS

- Base subscription fee for PDF content
- Premium for SWISS content, associated software
- If sold on the exchange/marketplace, commission versus reseller fee added to Publisher fee
- Add-ons for content sharing , tools, services, apps, etc.



Easily connect, navigate, and tailor specification documents.

Welcome

XSB SWISS[®] + SPECTACLE[®]

The standard for document interoperability

SWISS® is an open data format that captures the structure and meaning of a document as an interactive digital model. Spectacle[®] enables users to view dynamic, interconnected content in the SWISS[®] format.

This open standard and technology platform enables seamless consumption of engineering data across the supply chain.

It's not a document, it's datait's SWISS



Ø

 \sim

...

@