

SBML

Why it worked

Informing future standards
development

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Overview

- The essentials for standard development
 - Credibility
 - Roadmap
 - Products
 - Team
 - Community
 - Process
- Hard Stuff

Credibility

- Institution
 - Reputation Blah Blah
 - Geography can be significant
- Funding
 - Ongoing
 - ***Visibly*** sustains team and process
- Endorsements
 - Developers of key platforms
 - Key Users
 - Leaders
- Technical Success - *Already*

User Stories for a Roadmap

- What is the problem you are trying to solve?
- Where does the user get involved?
- Define success from the user's perspective
- What platforms will interact and how?
- If multiple users are involved what are their roles?

Roadmap

- Short Term
- Realisable
- Essential
- Simple
- Platforms exist
- Market exists

- Long Term
- Visionary
- Optional
- Complex
 - Multiple User Roles
- Typically requires infrastructure
- Market does not exist yet
 - Created by Standard

Products

- The Standard
 - Clearly identified
 - Formal
- Conformant Example Platforms
 - Should be the only conformant platform for a short period
- Interface Modules
- Conformance Test Infrastructure
- Infrastructure to support complex user stories
- Tutorial Documentation

Team

- Editors
- Implementers
- Web
- Team Leader
- Host
- Community Liaison
- 'Curation'
 - Infrastructure maintenance

Process

- Formal and Documented
- Important for credibility
- Should allow mechanism for correcting bugs and issuing new versions
- Should define who decides what and when

Community

- Integrated into process
- Supported by meetings
- Ideally involves users
 - Too dry
- Benefits
 - Peer Review
 - Support to platform implementers
 - Users can influence development
 - Collective contribution to standard development

Hard Stuff

- Standard Overlap
 - When you didn't get there first or at least that's what they think
- Community
 - It needs to change over time
- Platform Limitations
 - When platforms don't meet the vision
- Standards development cannot be research
 - Collaborative research is not efficient without standards

Platform Limitations

- Balance current platform capabilities against long term vision
 - Compromise is part of the process
- Explain carefully to platform implementers what you are trying to achieve
- Move components of platform into interface modules so that implementers can be lazy
- Careful use of defaults and implicit but defined semantics
 - Example: Look no units, Look units are defined

Standards development is not research

- Standards are for delivering interoperability using existing knowledge
 - Platforms exist or
 - Platforms conceivable with engineering effort
 - Note Plural
 - Semantics are well defined
- Standards create a solid foundation on which research can proceed
- Development of a straw man standard for incomplete or non-existent platform can be a research project but be prepared to be disappointed

Conclusion

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