Understanding the importance of API standards from the perspective of API design

Arnaud Lauret
API Governance Lead
Arnaud Lauret

- @apihandyman
- Author of The Design of Web APIs
- API Governance Lead at Postman

WIPO FOR OFFICIAL USE ONLY
From familiarity to standardization

Source: The Design of Web APIs, Arnaud Lauret, Manning
What is a “standard” API?
An API following some API standard/guidelines

- A mix of customs and actual standards
- Customs (Organization, Domain, Global)
- Actual standards
  - Community (JSON:API, ...)
  - Technological standards (IETF, HTTP, RFC7807, ...)
  - General and domain standards (ISO, ISO8601, ISO20022, ...)
A fully fledged actual or de-facto standard API

- Actual Standards
  - FHIR® (Fast Healthcare Interoperability Resources)
  - PSD2 (Payment Service Directive 2)

- De-facto standards
  - AWS S3

- Relying on standards
The benefits of API standardization
The benefits of API standardization for API users

- Developer experience
- Productivity, quality, less errors
- Happiness and trust
The benefits of API standardization for API creators

- More value
- Designer/creator experience
- Productivity, quality, less errors
The benefits of API standardization for the (API) ecosystem

- Interconnection simplicity
- High-level interoperability
- Fostering growth and innovation
The challenges of establishing and using API standards
The challenges of using APIs leveraging standards

- Needs fulfillment
- User-friendliness and efficiency
The challenges of using API standards when creating APIs

- Discoverability
- User-friendliness and implementation
- Extensibility
- Standard API vs. right API
The challenges of establishing API standards

- Defining useful, usable, reasonable, realistic and accepted standards not reinventing the wheel
- Not forgetting users and end-users
- Fostering adoption
- Dealing with evolutions
Beyond bringing interoperability, standards must solve actual problems in a user-friendly way.
Thank you