

LIGHTWEIGHT APIS WITH HARVESTER.JS

Or how I learned to stop worrying and love Node.js APIs

DISCLAIMER

This presentation *is* a sales pitch

THE WHY OF APIS

- simple
- composable
- scalable

on simplicity...

SERVICE CALLING MADE EASY



RULE 1: SOAP IS MUCH MORE
POLITE THAN REST

THE WHY OF NODE.JS & MONGODB

- simple
- scalable
- expressive

THE WHY OF JSONAPI

- existing, documented standard
- defines URL routing & payload formats
- *no* bikeshedding

on standards...

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:

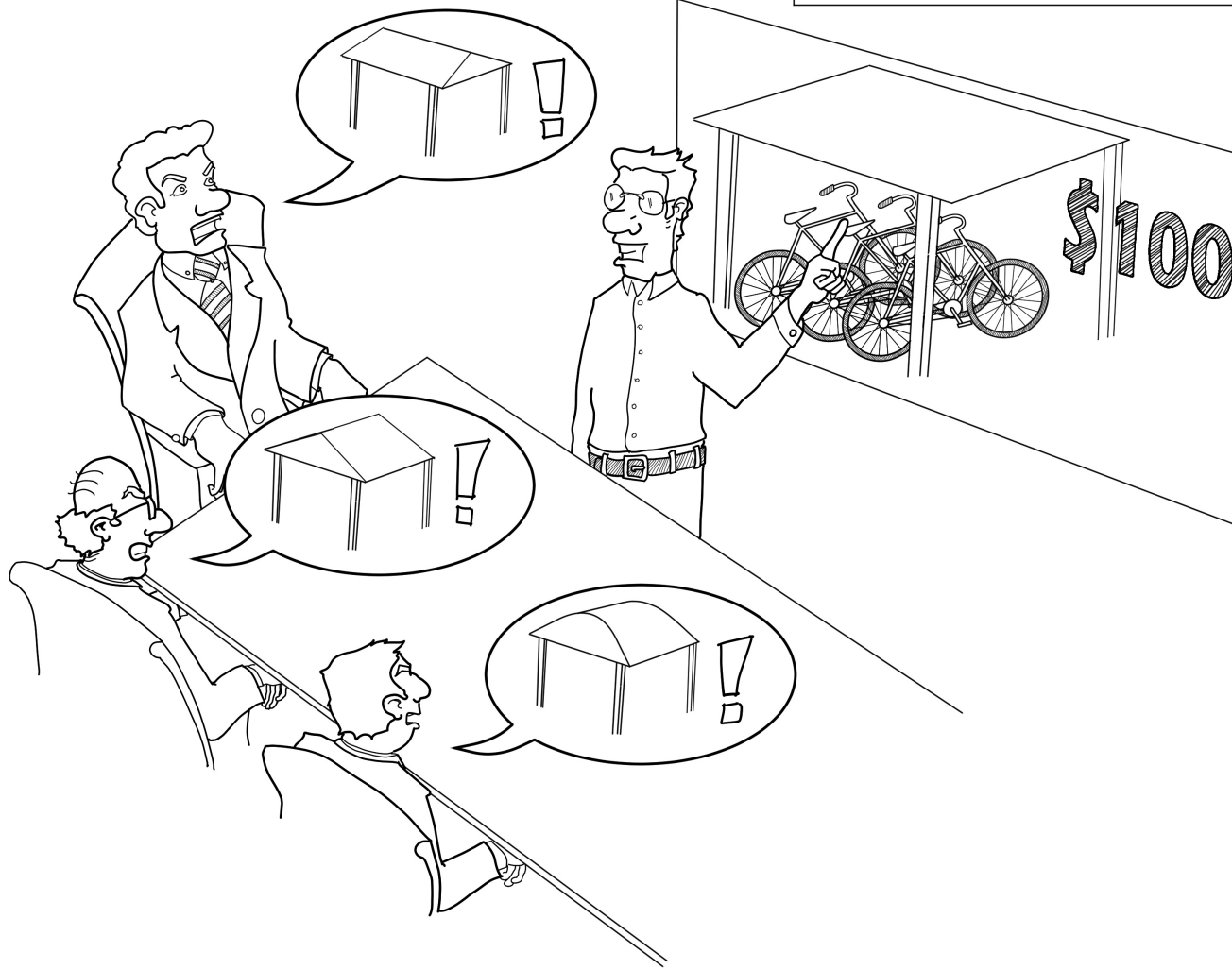
SITUATION:
THERE ARE
15 COMPETING
STANDARDS.

on bikeshedding...

IT MIGHT BE EASIER TO GET APPROVAL ON
THE CONSTRUCTION OF A \$ 1 BILLION
REACTOR, DUE TO ITS COMPLEXITY...



...THAN GETTING APPROVAL ON A \$100 BIKE
SHED IMPROVEMENT, DUE TO ITS
TRIVIALITY.



THE WHY OF HARVESTER.JS

- all of the above +
- *no* magic
- *no* boilerplate

on harvester.js...

THE WHAT OF HARVESTER.JS

- an AGCO-backed open-source project
- a clone of [fortune.js](#)
- a routing/mapping library
- an [npm](#) package

enough talk, show me the code!

basic CRUD, out of box

resource relationships*

filtering*

inclusion of linked resources*

BUT WAIT, THERE'S MORE!

- sparse fieldsets*
- sorting*
- errors*
- offset-based pagination
- node-swagger-express ready

LESSONS FROM THE TRENCHES...

automated (especially e2e) testing is your best friend

devops practices as enablers

break the heavy, bloated cycle

fullstack js: great, but no silver bullet

promises: easy to make, hard to keep. definitely worth it,
though

the hard art of choosing who handles more complex
operations

entity relationship: DDD FTW

make your APIs self contained, allow cross-domain links

consider indexing across APIs

EXTENDING HARVESTER.JS

- elastic-harvesterjs: harvester.js meets Elasticsearch
- passport-openam
- event-source-stream
- to-do: a DSL for v2.0

tkS.

INFO

- presentation libs: [reveal.js](#) and [reveal-md](#) (runtime)
- comics by [Geek and Poke](#), [XKCD](#), and Diogo Lucas (respectively)
- join our lean coffe meetings:
<http://portoalegre.leancoffee.org/>
- Diogo's contacts: <http://about.me/diogo.lucas>