HARD THINGS ARE EASY
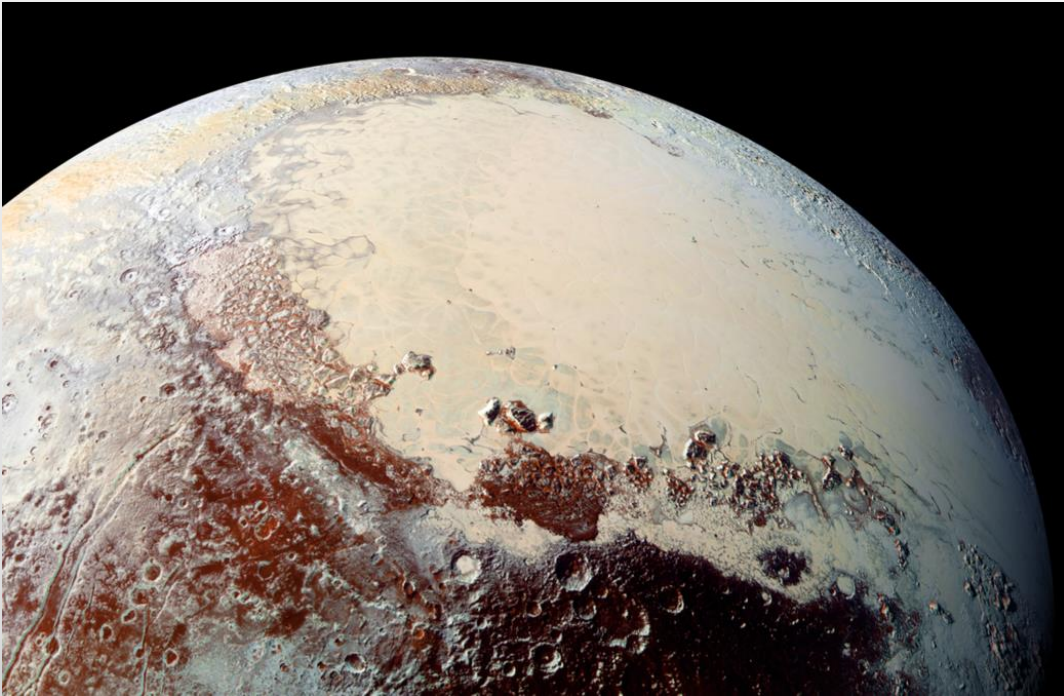
EASY THINGS ARE HARD

NEW HORIZONS MISSION

BEHIND THE SUCCESS

In 1988, and still a grad student, Alan started to ponder the possibility of sending a spacecraft mission to Pluto. He could see that the first, and in some ways biggest, hurdle to getting such a mission started would be more social and political than technical or scientific.

BEHIND THE SUCCESS

Nearly fourteen long years after it all began in 1989, a mission to Pluto was now approved for construction and its funding was finally secure. Behind them now, at long last, was the seemingly endless era of studies, funding battles, and politics. Ahead was a spaceflight project—building, launching, and flying New Horizons to explore Pluto and the Kuiper Belt—the final planetary frontier of our solar system.

THE CRITICAL PATH IS NEVER* TECHNICAL

SOME OF US SPEND A LOT OF TIME AND ENERGY CLEARING A PATH FOR PEOPLE TO DO THE "FUN" STUFF.

WE DON'T USUALLY TALK POLITICS.

WE GENERALLY LIKE TO DESCRIBE TECHNICAL SUCCESSES AND "WHAT'S NEXT" INSTEAD

THIS PRESENTATION IS ABOUT "CLEARING THE BRUSH" ON VOLUNTEER OPEN SOURCE PROJECTS.
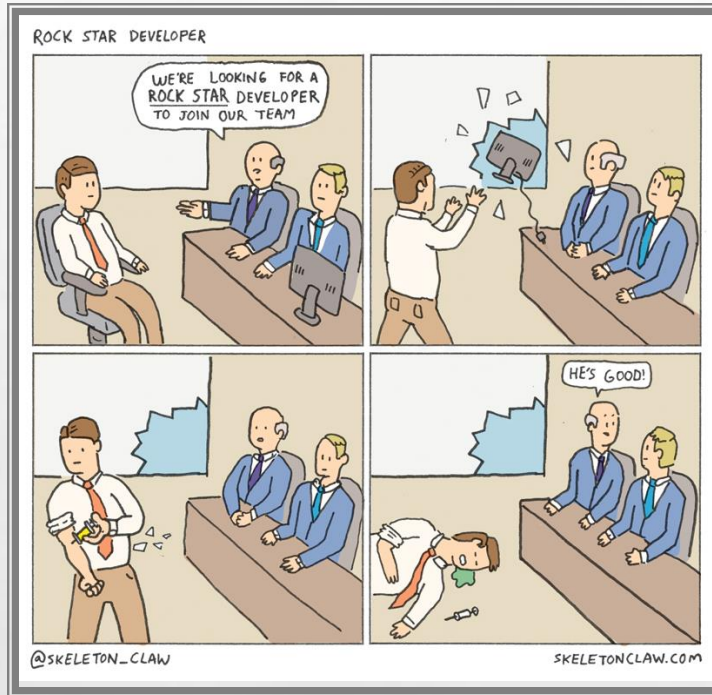
WHAT KIND OF OPEN SOURCE PROJECT?

BENEVOLENT DICTATOR FOR LIFE

- STEERED BY A UNIQUE LEADER
- CAN BE AUTOCRATIC TO DEMOCRATIC
- TOP DOWN
- SIMPLE
- LINUS TORVALDS AND LINUX

MERITOCRATIC

- PARTICIPANTS GAIN INFLUENCE OVER A PROJECT IN RECOGNITION OF THEIR CONTRIBUTIONS.
- THERE'S USUALLY SOME SORT OF SCORE OR VOTE.
- BOTTOM UP
- COMPLEX
- APACHE SOFTWARE FOUNDATION

TAXONOMY

TOXIC VOLUNTEERS

ACTIVELY DESTROY YOUR PROJECT.

GET RID OF THEM.

NO MATTER HOW "TECHNICALLY GIFTED".

YOU'VE BEEN GHOSTED

THEY SHOW UP. YOU TALK. THINGS GO WELL!

THEY COMMIT! IT SOUNDS GREAT!

AND... THEY VANISH.

"ACTUALLY..."

YOU CAN GET TARPITTED VERY BADLY WITH ANY OF THESE CATEGORIES

WE'LL TAKE TONE POLICE AS AN EXAMPLE.

#2: The Tone Police

How rude! Now we must postpone all discussion of your experiences until you can make me feel comfortable

You seem upset. Perhaps you aren't able to handle rational discourse

If you get angry, they win

The mouth on you! No wonder u got harassed

Name calling is hardly productive, madam

Piling on this guy isn't helpful. I bet he learned his lesson and was probably misunderstood

Such nasty vitriol! All I did was calmly point out that women are irrational & unfit to do science

by @shrewshrew and @sbarolo

aka Civility Patrol; Oh My Delicate Male Ears

Problem: Male comfort is priority #1

Warning: Will call you a b**** eventually

What he should do: Stop replying, start listening

"The tone police
They live inside of our head
The tone police
They come to our project
The tone police
They're coming to annoy us
Oh no"

Tone Police – with apologies to Cheap Trick

There is a big difference between tone policing and enforcing some boundaries of collaborative discussion, or civil discourse.

Are you criticizing the person that expressed the idea, or the idea itself? Are you confusing style with substance?

Have you put your opponent in the best possible light?

STRATEGY

TOXIC VOLUNTEERS

DOCUMENT EVERYTHING.

CONSISTENTLY APPLY THE RULES TO ALL.

NEVER TRASH TALK ABOUT THEM.

YOU'VE BEEN GHOSTED

REACH OUT, REASSURE.

FORGIVE.

MOVE ON! INCLUDE THEM LATER.

"ACTUALLY..."

THE MOST DIFFICULT CATEGORY.

TAKE IT CASE BY CASE.

MITIGATE AND CONTAIN THE DAMAGE.

MODEL AND REWARD BETTER BEHAVIOR.

BUFFER THEM TO AN OUTER LAYER.

"BE EXCELLENT TO EACH OTHER"
"DON'T BE EVIL"
"DON'T BE AN ASSHOLE"

WHAT ARE THESE?

WHY DO THEY FAIL?

CODES OF CONDUCT

BE EXCELLENT TO EACH OTHER

THIS QUOTE COMES FROM THE MOVIE BILL AND TED'S EXCELLENT ADVENTURE.

IN THE FUTURE, EVERYONE ON EARTH ENJOYS LIVING IN A UTOPIAN SOCIETY BASED ON THE IDEAS OF THE TWO MAIN CHARACTERS.

EMPHASIS ON <u>UTOPIAN</u>.

DON'T BE EVIL

DON'T LAUGH.

GOOGLE

IN THEIR 2004 FOUNDERS' LETTER, LARRY PAGE AND SERGEY BRIN ARGUED THAT THEIR "DON'T BE EVIL" CULTURE <u>PROHIBITED CONFLICTS OF INTEREST</u>, AND REQUIRED OBJECTIVITY AND AN <u>ABSENCE OF BIAS.</u>

DON'T BE AN ASSHOLE

OFFERED AS THE SOLE TEXT FOR A CODE OF CONDUCT FOR A 300 PERSON WEEK-LONG TECHNICAL CONFERENCE WITH A TRADITION OF LARGE AMOUNTS OF <u>ALCOHOL CONSUMPTION</u> AND <u>DIVERSITY ISSUES</u>.

Wait. What's wrong with "don't be an asshole"? That sounds perfectly fine to me! Problem: It's way too simple.

GOOD PROJECT GOVERNANCE IS HARD

WE RELIED ON HOMOGENEITY

WE'RE ALL FRIENDS

WE ALL THINK THE SAME

WE ALL HAVE THE SAME VALUES

WE CAN TAKE CARE OF STUFF ON OUR OWN

IF WE HAD A CODE OF CONDUCT, PEOPLE WOULD THINK SOMETHING WAS WRONG WITH US

EVERYTHING IS FINE! YOU'RE THE PROBLEM!

WE HAD AN INCIDENT

"THAT BITCH CALLED LAW ENFORCEMENT!"

DENIAL AND ISOLATION

ANGER AND RETRIBUTION

BARGAINING

DEPRESSION

ACCEPTANCE

WE TOOK ACTION

COMMON SENSE SAFEGUARDS, OR "GET A CLUE"

DIVERSIFY LEADERSHIP*

STOP "REACTING" AND LISTEN

TRANSPARENCY

ENFORCE REPERCUSSIONS

LET TOXIC VOLUNTEERS QUIT

GOES WITHOUT SAYING,

BUT IT'S ALWAYS BETTER WITH.

AT NO POINT SHOULD ANYONE HAVE TO TOLERATE VIOLENCE, THEFT, COERCION, OR THREATS.

GOOD PROJECT GOVERNANCE IS HARD

TRAINING

ADOPT OR ADAPT A CODE OF CONDUCT

SET A STANDARD

GIVE EXAMPLES OF UNACCEPTABLE BEHAVIOR

CLEARLY STATE WHO IS RESPONSIBLE

SET THE SCOPE

DEFINE ENFORCEMENT

ENFORCEMENT

"THAT BITCH CALLED LAW ENFORCEMENT!"

THE PROOF OF EFFECTIVENESS IS WHEN MEMBERS FEEL COMFORTABLE ENOUGH TO VOICE CONCERNS AND BELIEVE THAT THE ORGANIZATION WILL RESPOND WITH APPROPRIATE ACTION.

A BIG INCREASE IN REPORTS IS NOT A FAILURE. IT MAY BE A STRONG SIGN OF SUCCESS.

MEASUREMENT

TRANSPARENCY MEANS KEEPING TRACK OF AND REPORTING CODE OF CONDUCT VIOLATIONS, APPEALS, AND JUDGEMENTS.

A PROCESS FOR MEASUREMENT MUST EXIST.

IF IT'S NOT MEASURED, YOU HAVE SHOWN THAT YOU DON'T CARE ABOUT IT.

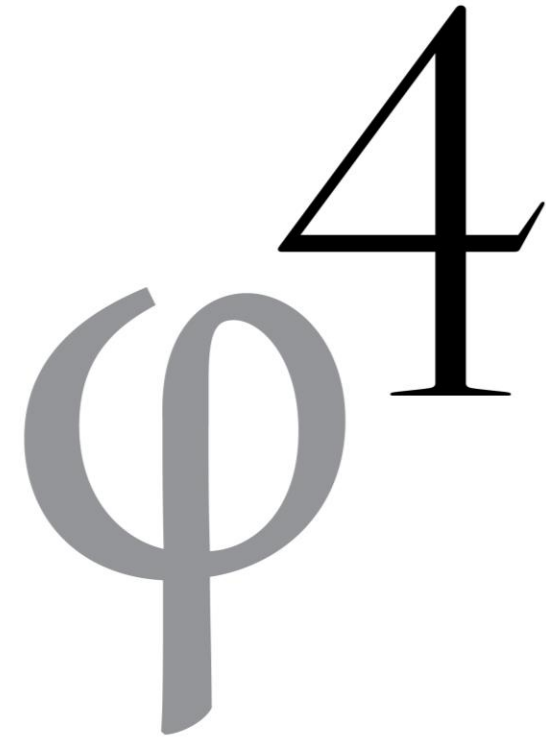THIS DOESN'T HAVE TO BE COMPLICATED.

FOR EXAMPLE, DEFCON ANNUAL REPORTS.

LOTS OF ENTHUSIASM! *IS THE PROBLEM??*

- IDEAS ARE CHEAP AND PLENTIFUL.

- IDEAS HAVE LITTLE VALUE.

- IMPLEMENTATIONS ARE EXPENSIVE AND RARE.

- IMPLEMENTATIONS HAVE GREAT VALUE.

- <u>ENTHUSIASM HELPS TREMENDOUSLY</u>, BUT WILL NOT MOVE YOU FORWARD.

- TRANSLATING ENTHUSIASM TO RESULTS IS THE CENTRAL CHALLENGE OF OPEN SOURCE PROJECTS.

- EVEN VERY SUCCESSFUL WIDELY-USED PROJECTS DIE BECAUSE OF A LACK OF ACTIVE VOLUNTEERS.

POLITICS

WHERE AND HOW HAS EXTERNAL POLITICS AFFECTED TECHNICAL WORK ON PHASE 4 GROUND?

φ⁴

POLITICAL TIDES!

ITAR/EAR

REGULATORY PARTICIPATION

DVB-S2/X

STANDARDS ARE NOT ABOUT THE BEST TECHNICAL SOLUTION.

WHILE DVB-S2/X IS AN EXCELLENT STANDARD, THE DVB ORGANIZATION, COMMUNITY, AND TECHNICAL DOCUMENTS ARE ALL VERY POLITICAL.

SOLUTION: DELIBERATELY ADAPT THE STANDARD TO AMATEUR RADIO, SPEAK UP FOR HOBBYIST USERS TO DVB.ORG

THE INTERNATIONAL TRAFFIC IN ARMS REGULATIONS AND THE EXPORT ADMINISTRATION REGULATIONS ARE U.S. EXPORT CONTROL LAWS THAT AFFECT THE MANUFACTURING, SALES AND DISTRIBUTION OF TECHNOLOGY.

WE COMPLY WITH THE PUBLIC DOMAIN SECTIONS OF ITAR AND EAR.

SURPRISINGLY CONTROVERSIAL, FUD FUD FUD

GRCON18 BLOCK PARTY

WE ADVOCATE FOR OPEN SOURCE.

WE PARTICIPATE IN THE REGULATORY PROCESS.

❑ NOTICES OF PROPOSED RULEMAKING.

❑ DISCUSSIONS WITH LEGISLATIVE STAFF.

❑ WORK WITH ORGANIZATIONS.

UNSURPRISINGLY CONTROVERSIAL, FUD FUD FUD

Thomas Daede @enginetankard · 10h
Replying to @enginetankard
Some governments require laws to reference standards in such organizations. One of the intents is to avoid accidentally giving monopolies or favoritism. For example, if a law mandating fire alarms specified a particular brand of sensor, it would give them a monopoly.

💬 1   🔁   ♡ 8   ⬆️

Thomas Daede @enginetankard · 10h
Unfortunately, this didn't work quite as intended. Groups like the ISO decided to ignore something critical - patents, a government granted monopoly. Even if you aren't listed by name, if you can get a patent on something in the standard, you're golden.

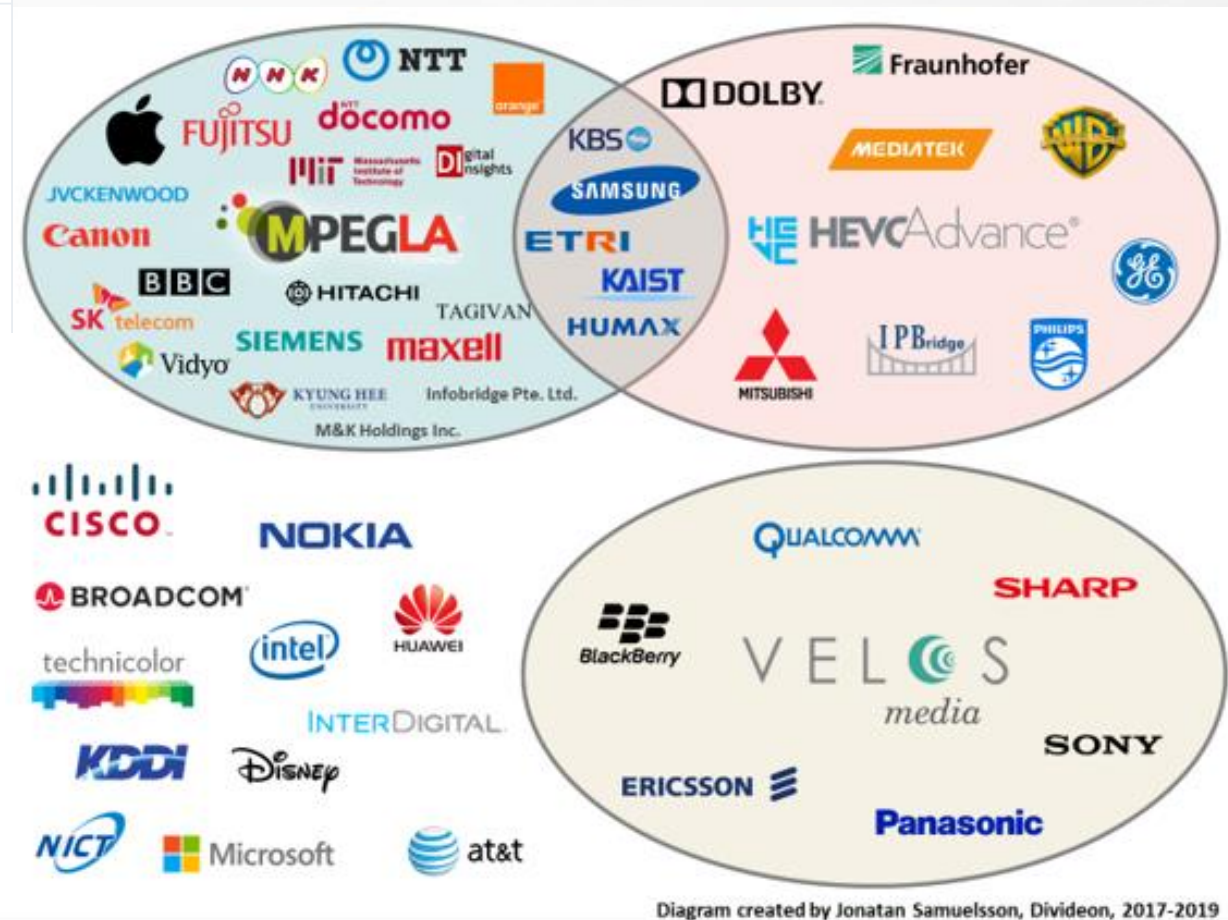💬 2   🔁 4   ♡ 16   ⬆️

Thomas Daede @enginetankard · 10h
Years of gaming this system has been disastrous for standards such as MPEG (part of ISO). At this point there are thousands of patents to license, with many separate licenses to negotiate. Some of them require you to sign an NDA to even see the price. (img by @JonatanDivideon)

Diagram created by Jonatan Samuelsson, Divideon, 2017-2019

Wow what a mess.
Why bother with trying to comply with standards?
Open Standards enable <u>interoperability</u>, <u>lower costs</u> for parts, and <u>marketable, relevant skills</u> for your volunteers.

POLITICAL TIDES!

TURF WARS

COMMERCIAL INTERESTS

OPEN SOURCE CAN BE DISRUPTIVE TO REVENUE STREAMS.

IF YOU'RE DOING IT RIGHT, THEN THE REPLACEMENT REVENUE IS MUCH LARGER THAN THE THING YOU OPEN SOURCED.

BUSINESS DIFFERENTIATING FUNCTIONS!

SOLUTION: ARTICULATE THE BUSINESS BENEFITS OF OPEN SOURCE AT EVERY OPPORTUNITY

GATEKEEPING IS A REALITY.

ENTRENCHED INTERESTS EXIST.

POWER IS ADDICTIVE (ESPECIALLY WHEN YOU DON'T HAVE ANY, IN ANY OTHER AREA.

PEOPLE BELIEVE IN ZERO SUM.

PEOPLE DON'T LIKE CHANGE.

TONE POLICING WITH"HAVING TOO MUCH FUN" OR "TAKING IT WAY TOO SERIOUSLY"

SOLUTION: DON'T TAKE THEIR BAIT. REFUSE TO LET THEM STOP YOUR PROJECT.

DONATIONS

VOLUNTEER OPEN SOURCE PROJECTS ARE OFTEN FUNDED 100% FROM DONATIONS

FUNDRAISING IS HARD, TAKES TIME

WHAT IF A SUBSTANTIAL DONATION IS GIVEN, AND IT TURNS OUT THERE'S A LOT OF STRINGS ATTACHED?

SOLUTION: BE READY TO SAY NO THANK YOU IF THE STRINGS ARE REALLY CHAINS TO AN ANCHOR THAT WILL SINK THE PROJECT.

POLITICAL TIDES!

NON PROFITS

IF YOU'RE ALSO A NON-PROFIT OR 501, YOU HAVE SUBSTANTIAL ADDITIONAL CHALLENGES

"LASO": LEGENDARY, ALL SKULLS ON

REGULATIONS ARE BY THEIR VERY NATURE, VERY POLITICAL IN ORIGIN AND ENFORCEMENT

SOLUTION: HIRE/RECRUIT PROFESSIONAL HELP, GET TRAINED, BE PRAGMATIC

VOLUNTEER LUMPINESS

PEOPLE WANT TO WORK WHAT THEY'RE INTERESTED IN. WHAT THEY'RE INTERESTED IN MAY END UP BEING AT CROSS PURPOSES TO PROJECT GOALS

REFUSE TO USE PROJECT TOOLS

REFUSE TO GIVE CREDIT TO OTHERS

HEAD FAKE WITH TAKING DIRECTION

SOLUTION: DIVERSIFY, FIND THE PONY, MOVE ON

COMPETING SOLUTIONS

EVERY ASPECT OF A COMPLEX TECHNICAL PROBLEM HAS MULTIPLE SOLUTIONS.

WHEN PEOPLE INVEST A LOT OF TIME IN SOMETHING THEY WANT TO SEE IT USED.

WILL THERE BE FUD OVER NOT BEING SELECTED?

SOLUTION: PUBLISH AND CREDIT EVERYTHING AND EVERYONE AT EVERY POINT. MAKE IT WORTHWHILE FOR ALL CONTRIBUTORS.

What's the biggest leadership challenges on GNU Radio?

1. getting contributions / support from heaviest users
2. getting focused & directed development done
3. providing support to users who aren't contributing anything back
4. political battles between open source philosophies
5. dealing with non-profit sponsorship / management
6. fighting FUD about how open source actually works
7. policing tone of discussion
8. IP / licensing headaches

QUESTIONS?

pol·i·tic

Origin

late Middle English: from Old French *politique* 'political', via Latin from Greek *politikos*, from *politēs* 'citizen', from *polis* 'city'.