

Beyond Doing Business

The Continuing Importance of Community Development

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Definitions

Community



- My English dictionary defines "community" as:
 - A body of people having common rights, privileges, or interests, or living in the same place under the same laws and regulations.
- We all participate in traditional communities
 - the towns we live in, the schools we attended
 - churches, sports teams, volunteer organizations
- The Internet enabled the formation of a new class of communities that did not previously exist.
 - People with common interests or values
 - Potentially broadly geographically distributed

Development



- Dictionaries have a lot to say about "development"
 - A state in which things are improving.
 - Changing gradually from a simple to a more complex level.
 - The act of making some area of land or water more profitable or productive or useful.
 - The process of analysis, design, coding and testing software.

Community Development



- Developers: The software development process most commonly associated with the Linux kernel, and adopted by many other projects including Debian.
- Customers: Expanding the addressable market for Linux and Open Source solutions.
- Citizens: Raising the level of technology literacy and economic potential of traditional communities in developing regions.



So?

Doing Business



- While it may have started as a hobby for many of us, Linux and related Open Source software is now big business.
 - Big companies aren't generally participating in the Linux marketplace for philosophical reasons... it's business!
 - Major ISVs treating Linux as a first-class platform.
 - Last year's media coverage of OSCON...
 - "Open for business"
 - "Ready for prime time"
 - HP's \$2.5 billion in Linux-attributable revenue last year.

Doing Business



"I like being able to put the \$ at the end of my geek code!"

Beyond Doing Business?



- How did we get to where we are?
- What makes Linux and Open Source "special"?
- Investing in the future with only vague notions of the potential returns...

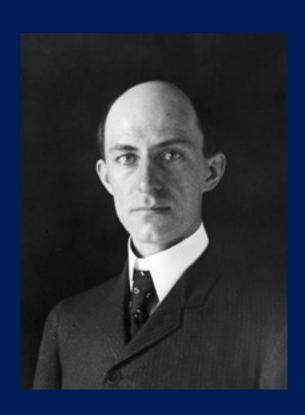
Beyond Doing Business?



- Where does innovation really happen?
- Surprisingly often, it comes because "amateurs" do something "industry" or "the establishment" doesn't believe they can do...

Recognize these guys?

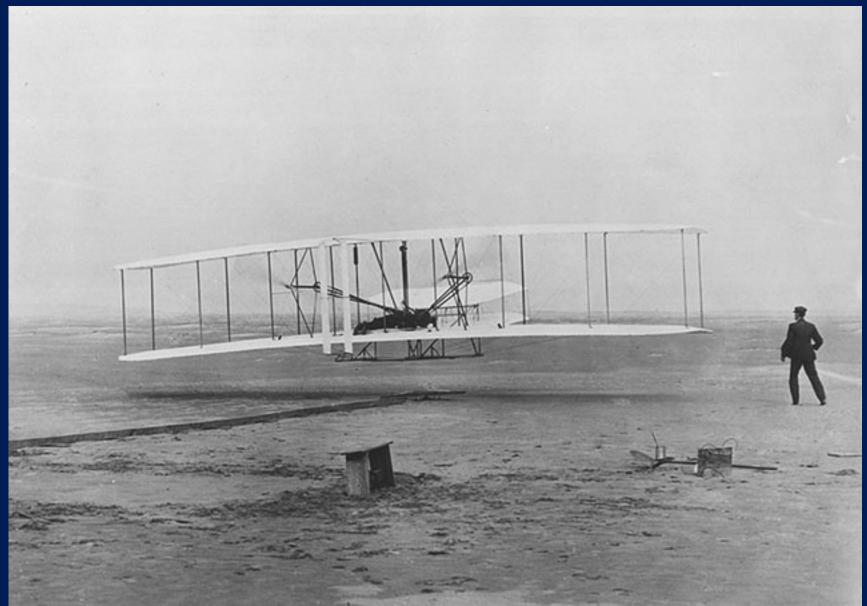






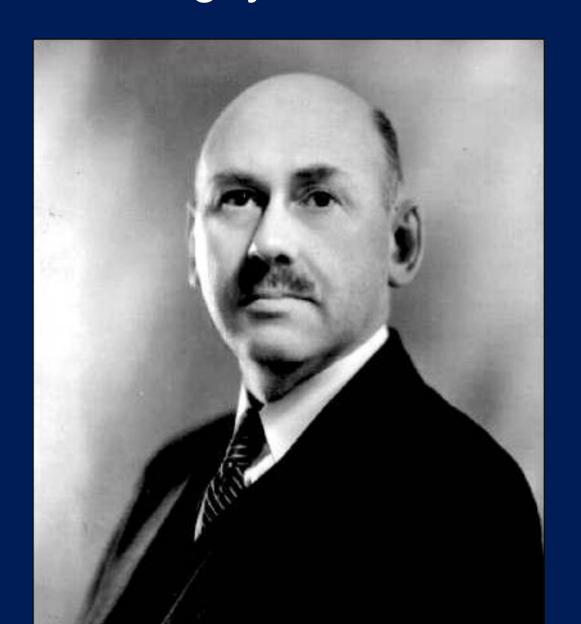
Does this help?



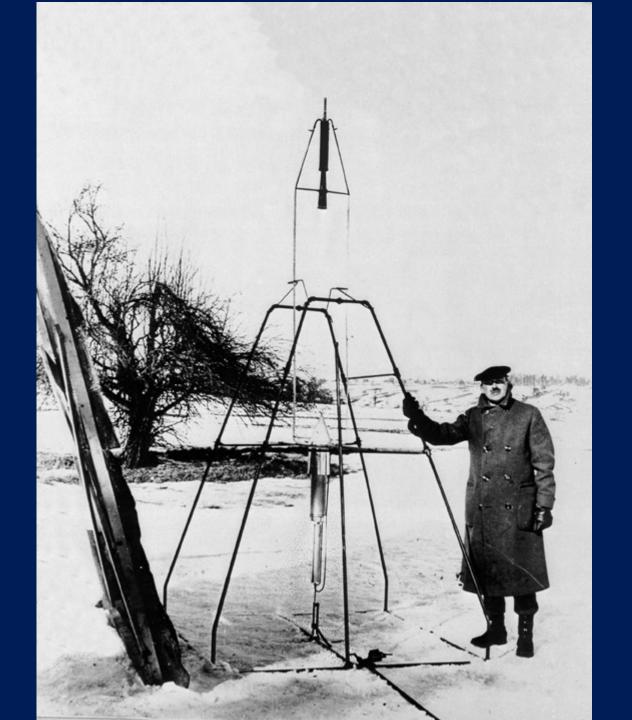


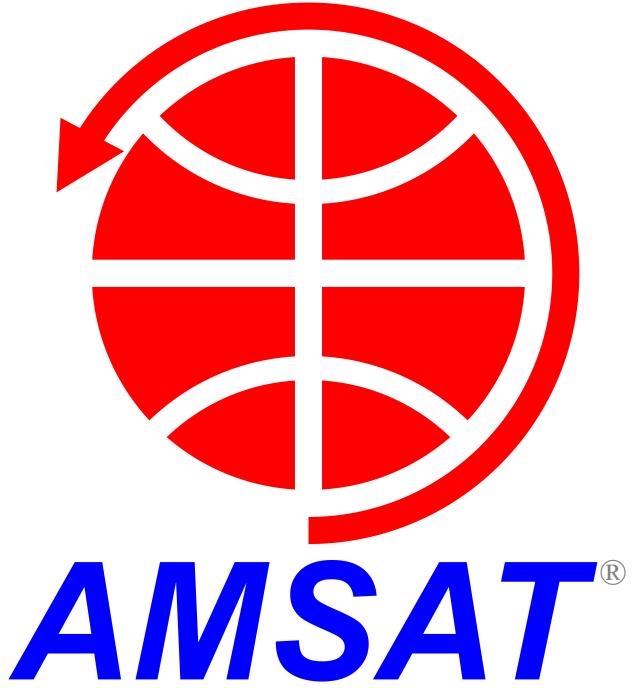
How about this guy?









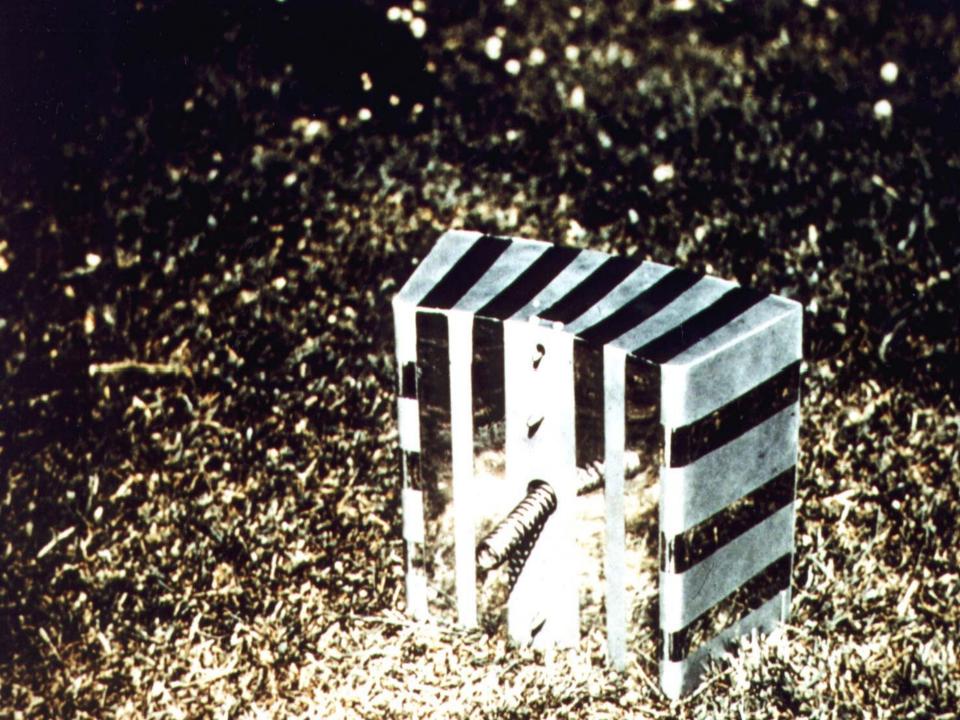






Satellites

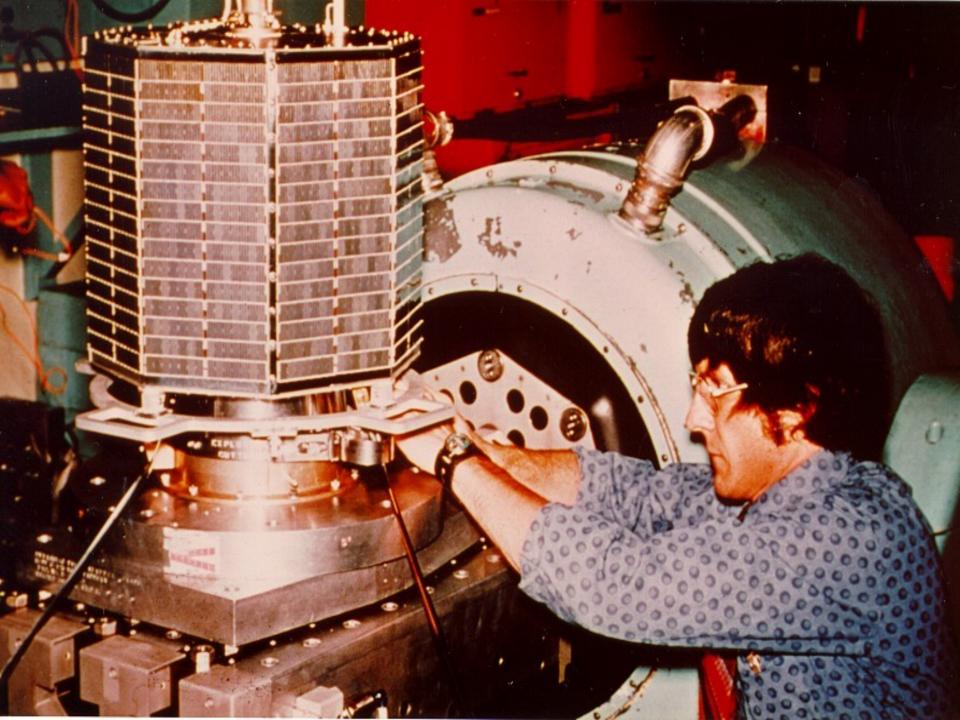
- On 4 October 1957, Russia shocked the world by launching Sputnik 1, the world's first manmade orbiting satellite.
- On 31 January 1958, the USA launched Explorer 1, the "free world's" first successful satellite.
- On 12 December 1961, amateur radio operators in the USA launched their first Orbiting Satellite Carrying Amateur Radio, or "OSCAR".
- Since then, radio amateurs have successfully launched 51 satellites, about half of which are still working!





OSCAR-7

- Launched in November of 1974.
- In 1981, the batteries failed.
- In 2002, an amateur radio station heard familiar-sounding noises, and investigated... OSCAR-7 was transmitting again!
- OSCAR-7 is currently AMSAT's oldest operational satellite... almost 30 years after launch!





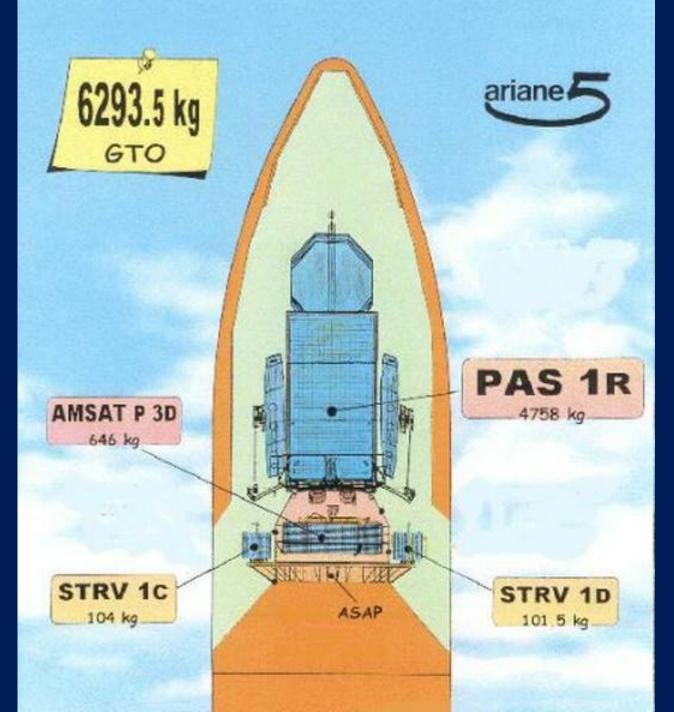
Fast-Forward to OSCAR-40

- The largest, most complicated amateur satellite ever built... it took over 10 years to build and launch, and cost over 4.5 million dollars... all of which were donated!
- In addition to serving as an amateur radio communications satellite, AO-40 also carried some interesting science experiments:
 - radiation measuring system
 - earth imaging cameras
 - -GPS receivers















Ariane Vol 135 - PAS 1R, AMSAT P3D, STRV 1C & 1D - 15/11/2000





Back to Open Source...



Debian?

What is Debian?



- 'The Debian Project is an association of individuals who have made common cause to create a free operating system.'
- More specifically, Debian
 - is one of the most popular GNU/Linux distributions
 - is a completely open volunteer organization
 - is quite international
 - works with companies to develop and maintain software
 - is Focused on Freedom
 - is well represented in the Free Software world
- Strong proof of the viability of the Linux kernel model of community-based software development.

Evolution of the Debian Community



- Ian Murdock's Debian Manifesto attracted people excited by the idea of Free Software to join the project
- The Social Contract and associated Debian Free Software Guidelines articulated the core set of shared values of the growing Debian community. Acceptance of these values became a criteria for acceptance into the community.
- As the community continued to evolve, a constitution was drafted to clarify roles and responsibilities, and to provide for conflict resolution and decision making.
- The Debian community continues to evolve, but the results already speak for themselves...

A Few Debian Statistics



- Debian runs on everything from handhelds to mainframes
- 11 released architectures
 - alpha arm hppa i386 ia64 m68k mips mipsel powerpc s390 sparc
- unreleased port to x86_64 architecture
- also working with non-Linux kernels
- Debian's technology, policies, and packages form the basis for a rich variety of custom and derived distributions.
 - 1371 people
 - -8912 source packages
 - 15393 binary packages

Map of Debian Developers







Applying the results of community development... to developing community.

Extremadura



- A region in the South-West of Spain, near the Portugese border, with a population of about one million people.
- One of the poorest regions in Spain, facing difficult economic challenges.
- A place where 80,000 Linux desktop computers were deployed in schools, one for every two students in the public education system!
- A model for successful large-scale Linux deployments in government and education that many hope to duplicate.

Closer to Home



- Linux User Groups
- Help a non-profit organization become more effective through the application of technology.
- Chuckle less when you overhear strangers trying to explain computers to each other, and think about what you can do in your own real-world communities to increase technology literacy!



So, what does this all mean?



- Motivated communities of people with a common interest can accomplish astounding things, even when there's no direct economic return.
- Companies like HP working hand in hand with partners, competitors, and individual developers around the world to advance technology with a minimum of legal and financial overhead... is a beautiful thing!
- If you really want to "help make the world safe for bits", put your skills and experience to work applying Open Source code and principles in your real-world communities...



