

Starting A Business With No Just a Little Money

By

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Chairman Emeritus: Wit

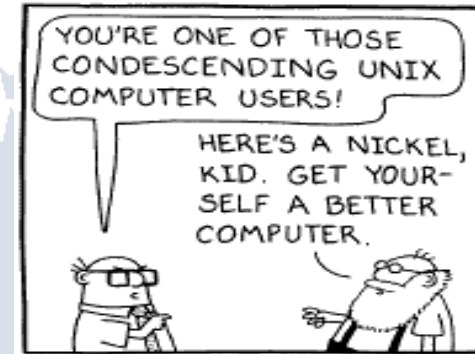
Board Chair: Linux Professional Institute

President: Project Cauã

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Who Is maddog?

- *Half* Electrical Engineer, *Half* Business, *Half* Computer Science
- “Open Source” since **1969**
 - Mainframes 5 years
 - Unix since 1980
 - Linux since 1994
 - **Latin America since 1994**
- Companies (mostly large): Aetna Life and Casualty, Bell Labs, Digital Equipment Corporation, SGI, IBM, Linaro, Caninos Loucos, Wit.com
- Programmer, Systems Administrator, **Systems Engineer**, Product Manager, Technical Marketing Manager, University Educator, Author, **Businessperson**, Consultant
- Taught OS design and compiler design
- *Extremely* large systems to *extremely* small ones
- Vendor *and* a customer
- **Pragmatic**



Strange Ideas

No one ever buys a computer!

Two Companies

- Digital Equipment Corporation
- LinuxCare

Other Interesting Thoughts

- Industrialized Countries
 - About 86% of GDP comes from Small to Medium Businesses (SMB)
 - Small: 1-30
 - Medium: 30-300
 - About 90% of all Intellectual Property comes from SMBs
- 50% of Small Businesses disappear in 2.5 years
 - Not all of this is bad news!

Many Resources Are Free or Online

- Internet searches are your friend
- Library books are your friend
- Other executives can be your friend
 - Small Business Associations
 - Rotary Club
 - Retired Executives

Do not be afraid to ask!

You Have An Idea for a Solution

- Create a Business Plan
 - Service? Product? Both?
 - How to you make money?
 - Who are your competitors?
 - Why should someone buy your product/services?
 - What is the scope of your sales area?
 - What is the cash flow?
- Add a Marketing and Manufacturing Plan

Licensing Strategies

How does licensing affect your customers?

- “Closed Source”, “Open Source” or “Free Software”?
- “Loosely Coupled”
- Dual licensing?
- Patent or Publish?
 - Protective

What Is Organization of Company?

- Non-Profit?
 - Stakeholders, not shareholders
- For Profit?
 - Sole Owner?
 - Partnership?
 - Corporation?
 - Cooperative?
 - Worker owned?
 - Customer owned?
- Think about a Board of Directors

Think Small

- Setting up a large company
 - can take a long time
 - can cost a lot of money
- Micro-entrepreneurship
 - 1-2 people company
 - Could use to get started

Create a Prototype

- Use FOSS(H)
- Get prototype working
- Test prototype with potential customers
 - Non-Disclosure/Confidentiality Statement

SourceForge/GitHub/GitLab

430K+ projects

3.4M+ developers

26 Million developers

Speaking of Git*

- Create Support mechanisms
 - Download areas
 - Bugtracking
 - News areas
 - Mailing lists

Types of Prototyping Tools

- Databases
- Geographical Information Software (GIS)
- Office Packages
- Graphical Tools (GIMP, Inkscape, Blender)
- Audio tools
- CAD tools

Start To Think About Marketing

- Set up infrastructure of company
- Website
 - Build in container or VM
 - Start on small server
 - Transfer to larger server/service as needed
 - Use FOSS based CMS (Joomla, Drupal)
 - Make it lightweight and fast

More Marketing

- Social Media is your friend
- Think about Crowd funding
 - Think about it *EARLY!*
 - Having a working prototype really helps
- Write articles and blogs
- Attend conferences and give talks

Raising Capital: Beware Losing Control

- “Angel Investors”
 - Early investors
 - High Risk, Fast payback, High interest
 - Can provide valuable input
- Venture Capitalists (Vulture Capitalists)
- Bond sales (Friends and Family)

Good Prototyping and Market Research Lowers RISK and Interest

Other Compensations

- “Sweat Equity”
 - People work for future reward
- Token payments
 - Board Members
 - Technical expertise
- Consultants rather than employees
 - Trade off of expense vs time-to-market
- Commissioned sales

Other Infrastructure and Needs

- Trademarks and Logos
 - Lawyers are expensive
 - Do as much yourself as you can
- Plan for your SLD...make it memorable
 - Build other services under ONE SLD.
- “Free” services can save a lot of money in the initial stages of your company

You Do Not NEED A Fancy Office

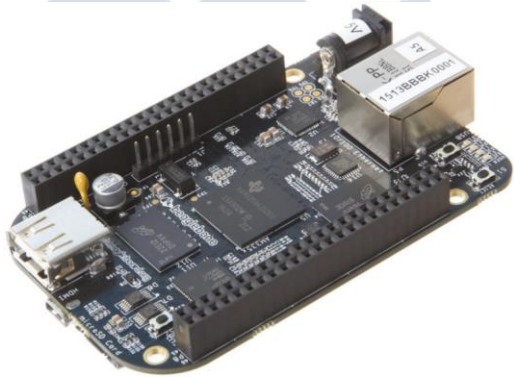
- Work from home
- Meet investors on their turf
- Look for Incubators

Be frugal!!

Hardware Stuff

We are not in Kansas anymore....

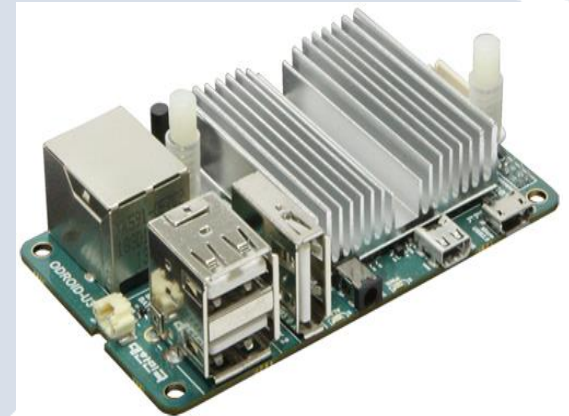
Many Little Computers: 45 USD – 199 USD



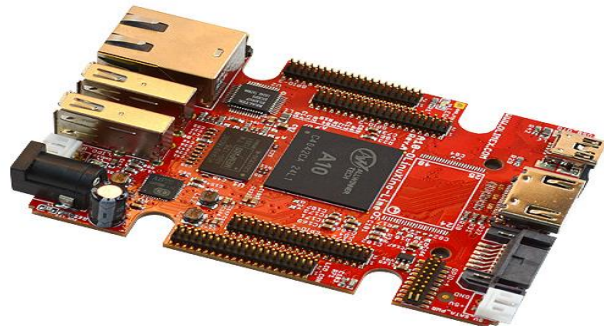
BeagleBoneBlack



Hackberry 10



ODROID-U3



OlimoX - LIME



Pandaboard



Galileo

Hardware Creation



- Today Livre tools:
 - KiCad – for printed circuit board design
 - Ngspice – for circuit simulations
 - FreeCad, LivreCad – other CAD software
- PCB foundries
- Silicon foundries

Examples of “Products” for Project Cauã Professionals (PCP)



Odoo – Open Point of Sale and ERP System

- Replaces >3000 USD proprietary system
 - Labrador
 - LCD panel, keyboard, mouse, USB scale, scanner, cash drawer, printer
- Already was ported to Raspberry Pi
- Supported by over nine companies in Brazil
 - Could be contracted for second level support
- PCP - sells unit, configuration, support

Kodi Multimedia, Security, IoT

- Kodi is multimedia system
 - Internet access (can also replace WiFi router)
 - Video (YouTube, Netflix, homegrown, DVDs)
 - Audio (Streaming, ripped CDs, DVDs, own)
 - Can display videos and audio from smart phone
 - Make VoIP telephone calls
- Attach webcam aimed at door – send picture of intruder to phone
- Run IoT software for home automation
- PCP installs and supports



Kodi as Multimedia System



Freedombox.org

Very small, *very secure* server for your most
precious of data.....
.....add this to ODOO or Kodi.

Summary

- Plan, plan, plan, plan, execute
 - Do not be afraid to change the plan
- Frugality, not cleanliness, is next to godliness
- Use free (and low cost) resources whenever possible
- Do legal legwork yourself
- Do not be afraid to ask for help
- Prototype, throw away, prototype, test, produce

Questions?



WORLD DOMINATION
THROUGH
WORLD COOPERATION