Organizational Culture and Structure at FreeBSD
Nothing to learn from Business Schools ;)

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Trailer

NOOB MEETS INVESTORS

I KICK ASS!
I CAN HAS CASH?
SURE-

ONE YEAR LATER-

YOU BETTER BE CREATIVE
YOU PUNKS!

MR WOLF TO THE RESCUE!

OMG!
I CAN'T GET NO INNOVATION!

I'M MR WOLF
I SOLVE PROBLEMS
Outline

► Trailer

► Organizational Culture
   culture: wtf?
   empowerment
   hierarchy of needs and motivation
   creative swiping and NIH syndrom
   playfulness

► Organizational Structure
   self-organization
   natural system
   boundary spanning
   virtual teams

► Summary
   FreeBSD traits
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Sustaining innovation: is organizational culture involved?

“An organization’s culture is what determines how people behave when they are not being watched.”

-- Tom Tierney, former managing partner, Bain Consultancy
Organizational culture, wtf?

- Deal and Kennedy (1982): culture defined as “The way we do things around here”
  - refers to the **attitudes**, **rituals**, **symbols**, **values** of an organization

- Examples of organizational values:
  - we lead by example
  - we respect the individual
  - we act with integrity
  - fast is better than slow
  - focus on the user and all else will follow
  - you can be serious without a suit
  - ...

Deal, T. E., Kennedy, A. A.
Empowerment (1/2)

Cooperative, Committed, And Proactive workforce

Marchington, M., Goodman, J., Wilkinson, A., Acker, P.,

Semler, R.,
FreeBSD developers control when, on what and with whom they want to work truly self-managing work teams with almost no limits to their autonomy high-involvement work system which can be very effective.

Motivation and pyramid of needs

- **Need for self-actualization**: (challenging projects, opportunities for innovation and creativity, learning at a high level...)
- **Need for self-esteem**: (recognition of strength – intelligence, prestige and status...)
- **Social needs - belonging**: (acceptance, group membership, love and affection...)
- **Need for safety and security**: (physical safety, economic security, comfort, peace...)
- **Physical survival needs**: (water, food, sleep, health, sex...)

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Creative swiping, no NIH syndrom (1/2)

- Peters (1987): Put NIH (*Not Invented Here*) behind you – and learn to copy (with unique adaptation / enhancement) from the best

⇒ PFE (*Proudly Found Elsewhere*)

- Huston and Sakkab (2006): creative swiping improves the rate of innovation

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Peters, T.,

Huston, L., Sakkab, N.,
Creative swiping, no NIH syndrom (2/2)

- pf
- ZFS
- DTrace
- MAC
- ...

I wonder if they will advertise win 8
LOOK WE PUT A DUMBED DOWN TABLET INTERFACE ON A PC OS
HOW BRILLIANT
isn’t it what’s freebsd trying to do?
it is
we run great on PDP11-based tablets
Playfulness

► Schrage (2000): “Innovation is less the product of how innovators think than a by-product of how they behave. [...] You can’t be a serious innovator unless you are willing and able to play.”

Schrage, M.,
Sustaining innovation: which organizational structure to set up?

“Structure follows strategy as the left foot follows the right.”

Self-organization

► Workers organize their day-to-day work in a professional manner

► Semler: “Semco’s standard policy is no policy”

do not instill a few values to be respected by all employees, but
promote autonomy and diversity

Semler, R.,
Natural system (1/2)

- Scott: “a collectivity whose participants share a common interest in the survival of the system and who engage in collective activities, informally structured, to secure this end”

- informal structure

- variety of interests and plurality of goals

- evolves and adapts depending on changes in both internal and external environments but does not rely on strict plans and strategies

Scott, W.,
Natural system (2/2)

➤ Segmentation of work and interests (3 types of commit bits):

```
src
ports
docs
```

canadabald | icanhasarm: you want pictures of me, in my underwear, hacking freebsd while watching sci-fi?
icanhasarm | do you happen to hack freebsd?
canadabald | icanhasarm: you know i don’t really, I just hack Makefiles for ports
icanhasarm | oh of course, that
Boundary spanning (1/2)

▶ Aldrich et al. (1977): boundary spanning -> information brought to the organization from outside, by networking across traditional organizational borders

▶ Newell et al. (1990): the more boundary spanners an organization has, the higher its degree of innovativeness


Boundary spanning (2/2)

- comitters are students or have official jobs
- opportunity to discuss with other engineers
- ability to keep pace of latest developments in various areas
- facilitates inward flows of information
Virtual teams (1/2)

► members are based at different locations and connected electronically to each other

► teams are able to work continuously on projects over 24 hours

► Young (1998): “powerful way of working, new production units of knowledge and innovation” BUT “the notion of control goes out of the window, along with management in its strict sense”

► Storey et al. (2005): few examples of successful implementation of such teams
Virtual teams (2/2)

- FreeBSD: living proof that virtual teams can bring great success to an organization
- Live 24/7/365

Summary

tacoz | icanhasarm: sorry I only pay attention half of the time

tacoz | but keep on talking, it’s interesting :)

Taco

| I can see your arm. Sorry I only pay attention half of the time. | But keep on talking, it’s interesting.

I'm just half paying attention, sorry.
FreeBSD traits

► A post-industrial organization
► A natural system
► A missionary structure

► flat hierarchy
► full decentralization
► flexible and informal structure
► norms as a mean of coordination and control
► variety of interests and plurality of pursued goals
► permeable boundaries between insiders and outsiders
► use of advanced communication and computing technologies
► little planning and control, no strict strategy but focus on adaptation instead
So what?
“[treat] employees as volunteers just as you treat customers as volunteers, because that’s what they are. They volunteer the best part – theirs hearts and minds.”

Questions?

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