

Organizational Culture and Structure at FreeBSD

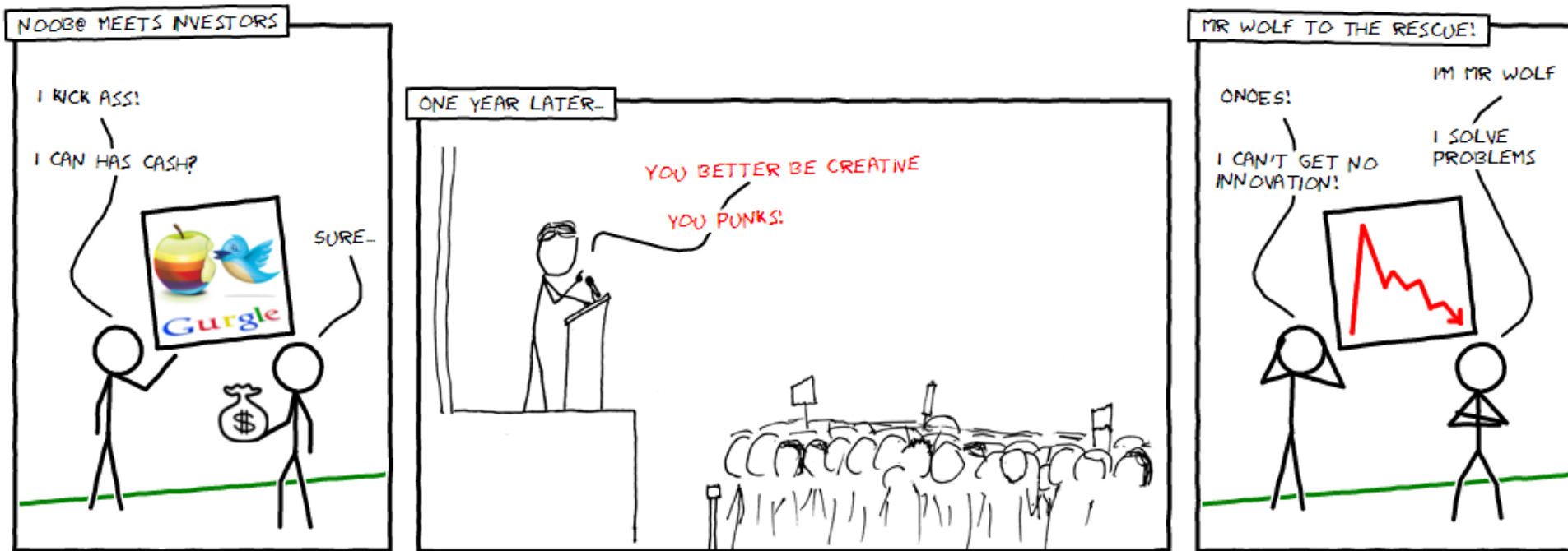
Nothing to learn from Business Schools ;)

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Naples, Italy
April 6, 2013

Trailer



Outline

▶ Trailer

▶ Organizational Culture

culture: wtf?

empowerment

motivation and pyramid of needs

creative swiping and NIH syndrom

playfulness

▶ Organizational Structure

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natural system

boundary spanning

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▶ Summary

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so what?

last thought



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*

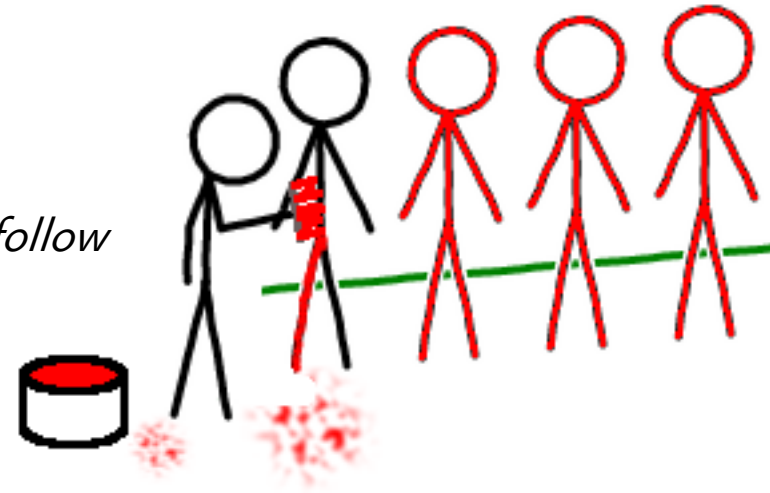
Organizational culture, wtf?

► Deal and Kennedy (1982): culture defined as “*The way we do things around here*”

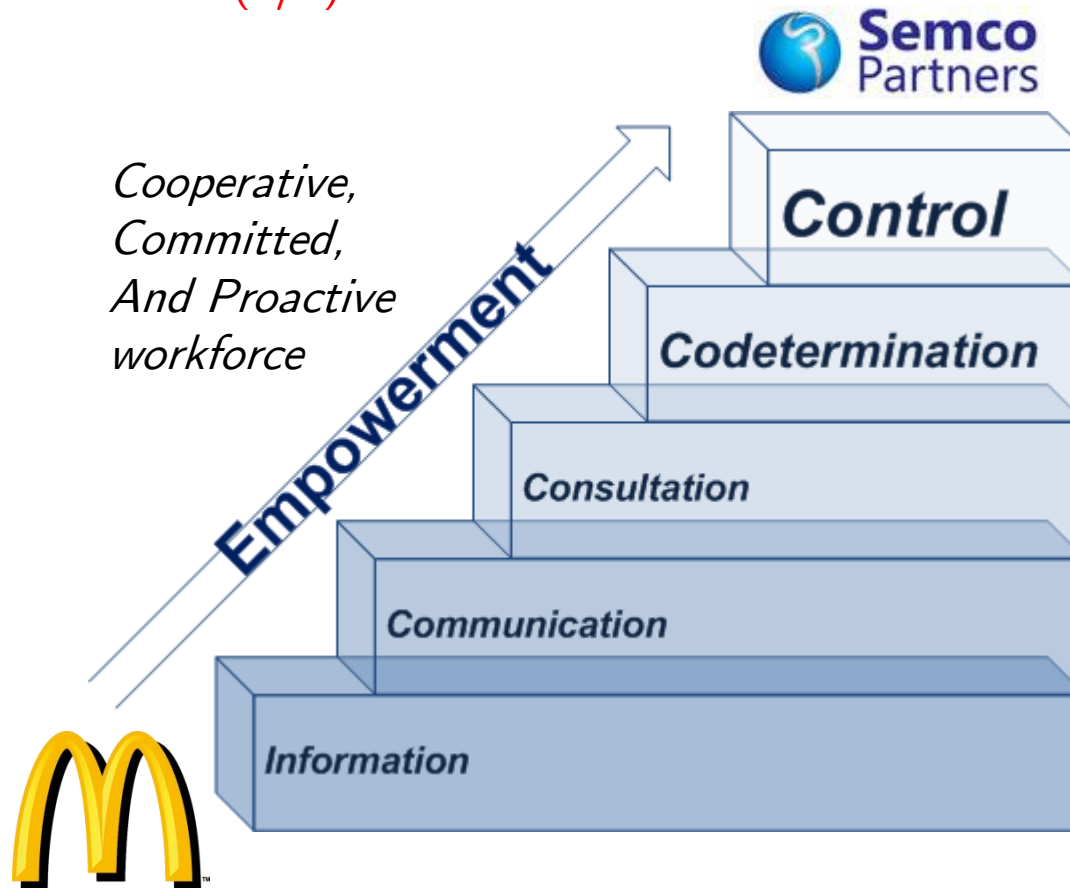
→ refers to the **attitudes, rituals, symbols, values** within an organization

► Examples of **core values**:

we challenge traditional thinking and bureaucracy
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
...



Empowerment (1/2)



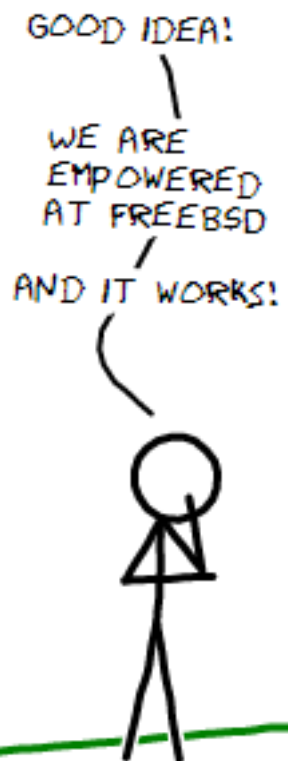
Marchington, M., Goodman, J., Wilkinson, A., Acker, P.,
New Developments in Employee Relations, Research Series, No. 2, Sheffield, UK: Employment Department, 1992.

Semler, R.,
Why My Former Employees Still Work For Me, Harvard Business Review, Vol. 72, No. 1, pp. 64-71, 1994.



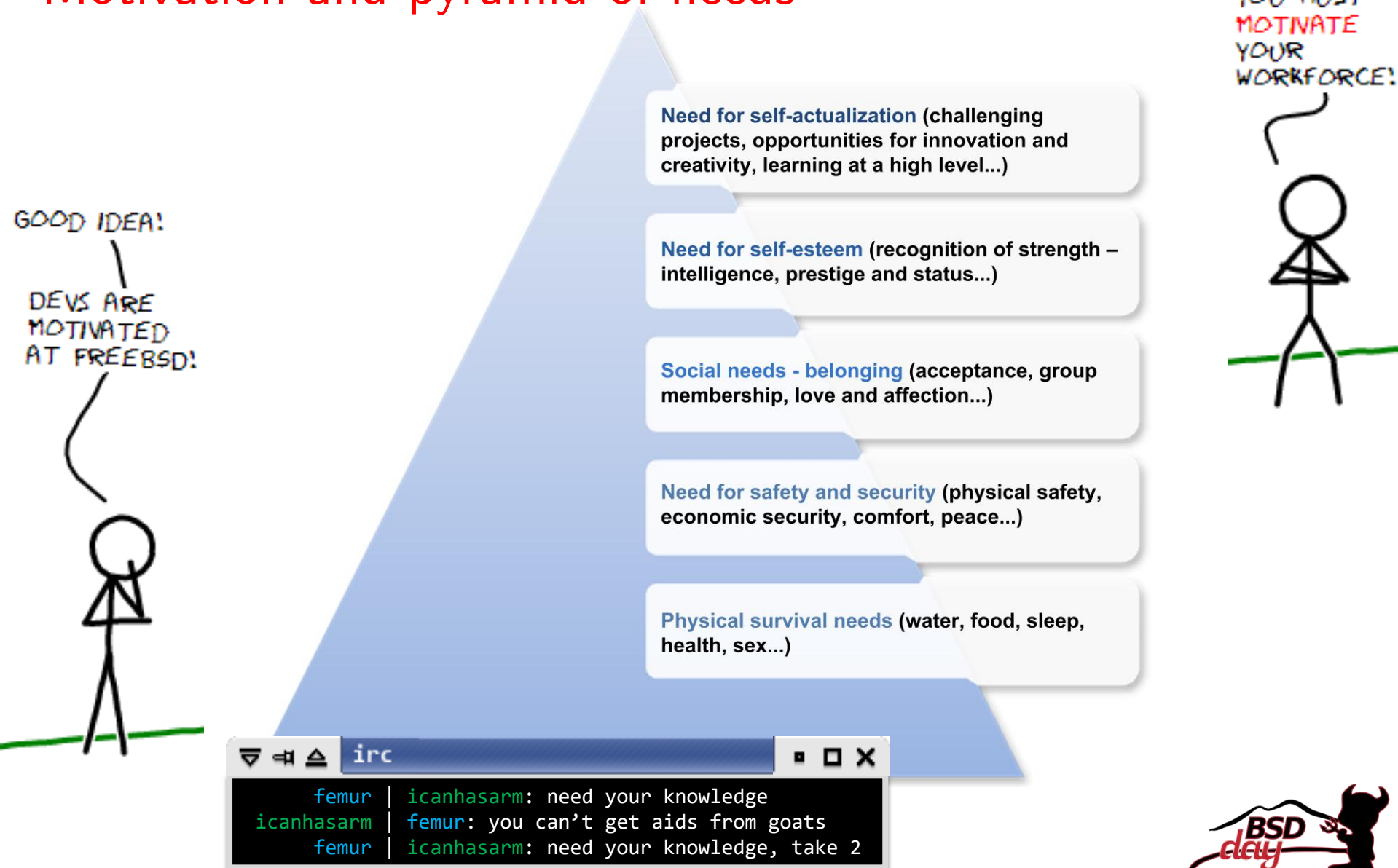
Empowerment (2/2)

- ▶ 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



```
irc
icanhasarm | moin tacoz
tacoz      | hey icanhasarm, wanna help me procrastinate?
icanhasarm | I don't know I'm kinda tired
```

Motivation and pyramid of needs



Creative swiping, no NIH syndrom (1/2)

- ▶ Peters (1987): Put **NIH** (*Not Invented Here*) behind you and **learn to copy** (with unique adptation/enhancement) from the best
→ Proudly Found Elsewhere
- ▶ Huston and Sakkab (2006): creative swiping **improves the rate of innovation**



Peters, T.,
Thriving on Chaos, London, Macmillan, 1987.

Huston, L., Sakkab, N.,
Connect and Develop, Harvard Business Review, Vol. 84, No. 3, pp. 58-66, 2006.



Creative swiping, no NIH syndrom (2/2)

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

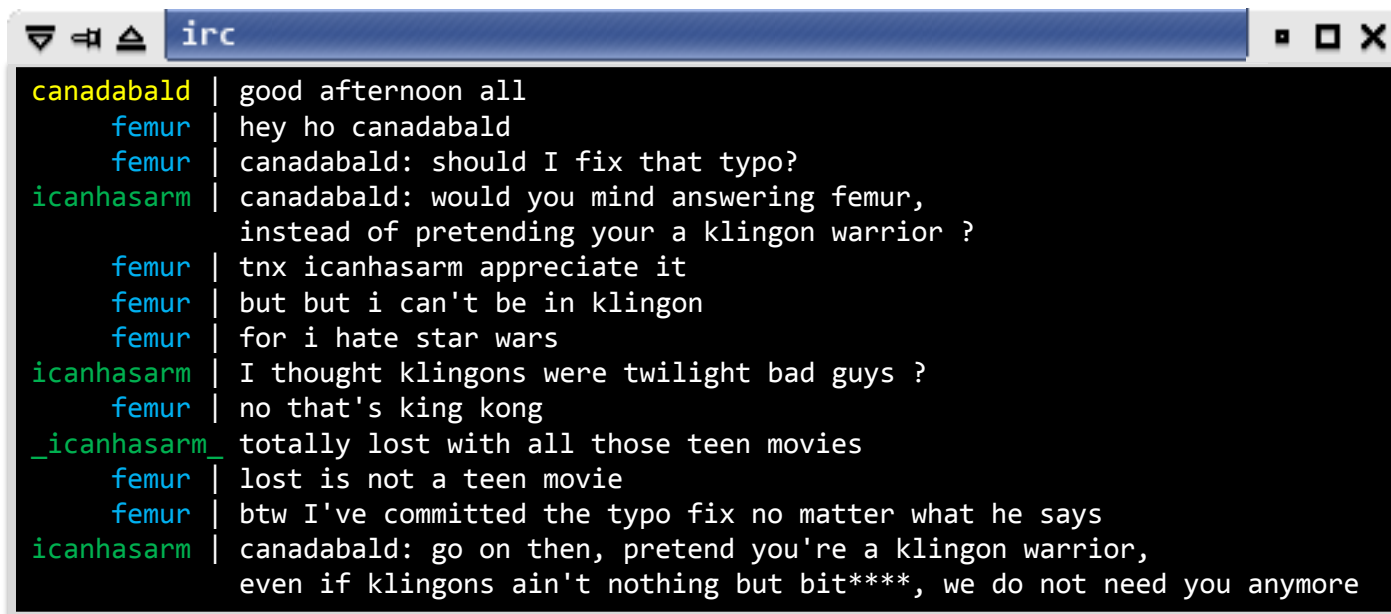


TRUE...
WE DON'T HAVE
THE NIH SYNDROM
AT FREEBSD

```
irc
icanhasarm | I wonder if they will advertise win 8
icanhasarm | LOOK WE PUT A DUMBED DOWN TABLET INTERFACE ON A PC OS
              HOW BRILLIANT
taco       | isn't it what's freebsd trying to do?
icanhasarm | it is
icanhasarm | 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.**”



```
irc
canadabald | good afternoon all
femur      | hey ho canadabald
femur      | canadabald: should I fix that typo?
icanhasarm | canadabald: would you mind answering femur,
            | instead of pretending your a klingon warrior ?
femur      | tn timericanhasarm appreciate it
femur      | but but i can't be in klingon
femur      | for i hate star wars
icanhasarm | I thought klingons were twilight bad guys ?
femur      | no that's king kong
_icanhasarm | totally lost with all those teen movies
femur      | lost is not a teen movie
femur      | btw I've committed the typo fix no matter what he says
icanhasarm | canadabald: go on then, pretend you're a klingon warrior,
            | even if klingons ain't nothing but bit****, we do not need you anymore
```

SURE! :)

DON'T
FORGET
TO
HAVE FUN!

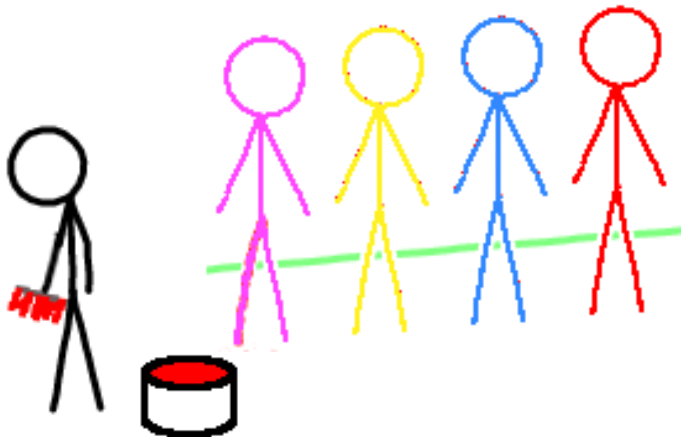
Sustaining innovation: which organizational structure to set up?

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

Mintzberg, H, *The Design School: Reconsidering the Basic Premises of Strategic Management*,
Strategic Management Journal, Vol. 11, pp. 171-195, 1990.

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**



```
irc
canadabald | man, waiting for chromium to build is like
              waiting for a frenchman to win a war
icanhasarm  | not fair, you know it will fail in the end
canadabald  | touche!
canadabald  | if only the french had a way of conveying the
              sentiment of touche...
```

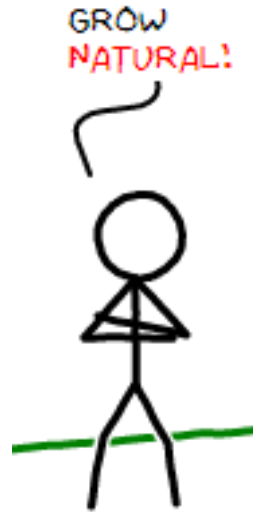
Natural system (1/2)

▶ 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



Natural system (2/2)

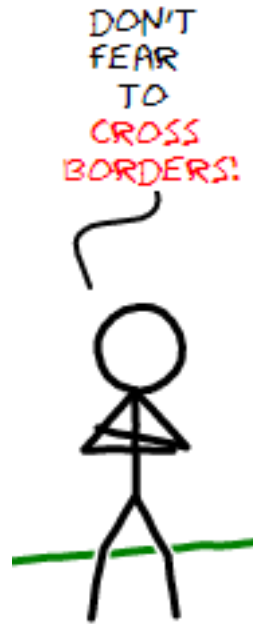
- Segmentation of work and interests (3 types of commit bits):
src, ports, docs



```
irc
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 accross traditional organizational borders**
- ▶ Newell et al. (1990): **the more boundary spanners** an organization has, **the higher its degree of innovativeness**



Aldrich, H., Herker, D.,
Boundary Spanning Roles and Organization Structure, The Academy of Management Review, Vol. 2, No. 2, pp. 217-230, 1977.


Newell, S., Clark, P., A.,
The Importance of Extraorganisational Networks in the Diffusion and Appropriation of New Technologies: The Role of Professional Associations in the United States and Britain, Knowledge: Creation, Diffusion, Utilisation, Vol. 12, No. 2, pp. 199-211, 1990.



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

TRUE...
WE ARE ALL
BOUNDARY
SPANNERS
AT FREEBSD



```
irc
icanhasarm | I have a trick, I have a windows desktop
icanhasarm | it's so cool because you can use communicator
icanhasarm | and do you know what communicator have?
              ANIMATED SMILEYS
bsdng       | wow like caramail chat!
icanhasarm  | a bit, except they are professional smileys
icanhasarm  | because communicator is a serious tool
icanhasarm  | look how professional it looks
```

Virtual teams (1/2)

- ▶ different locations, electronic communications, projects live 24/7
- ▶ 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



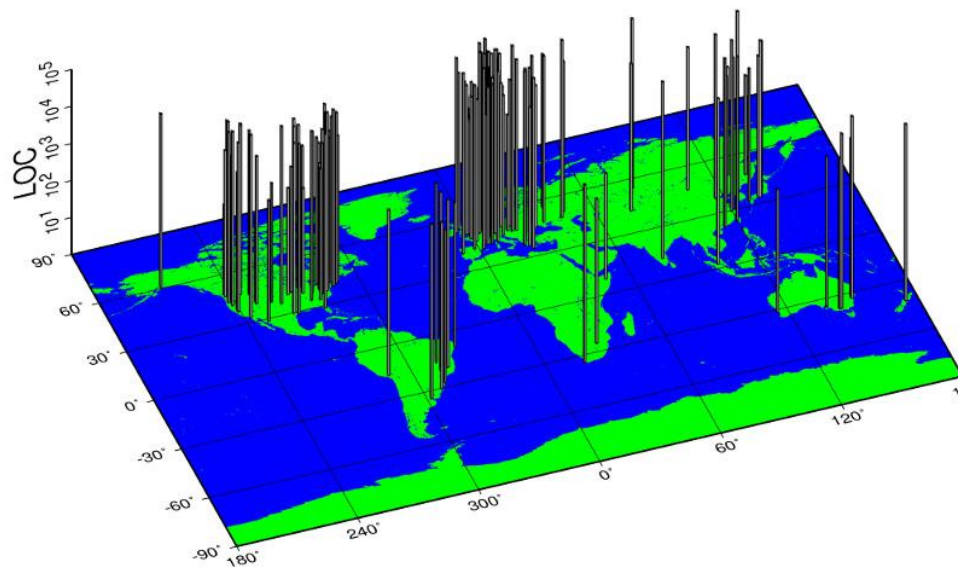
Young, R.,
Virtual Teams: the Wide-Awake Club, People Management, Vol. 4, No. 3, pp. 46-49, 1998.

Storey, J., Salaman, G.,
Managers of Innovation: Insights into Making Innovation Happen, Oxford, Blackwell, 2005.



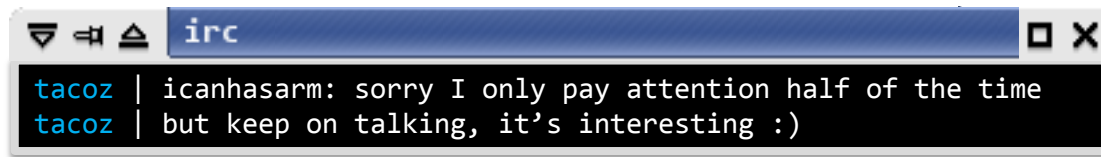
Virtual teams (2/2)

- ▶ FreeBSD: living proof that **virtual teams** can bring great success
- ▶ Live 24/7/365



```
irc
icanhasarm | I wrote almost 50 LoC today,
              that's certainly enough
taco2       | I wish I had that much productivity
```

Summary



```
tacoZ | icanhasarm: sorry I only pay attention half of the time  
tacoZ | but keep on talking, it's interesting :)
```

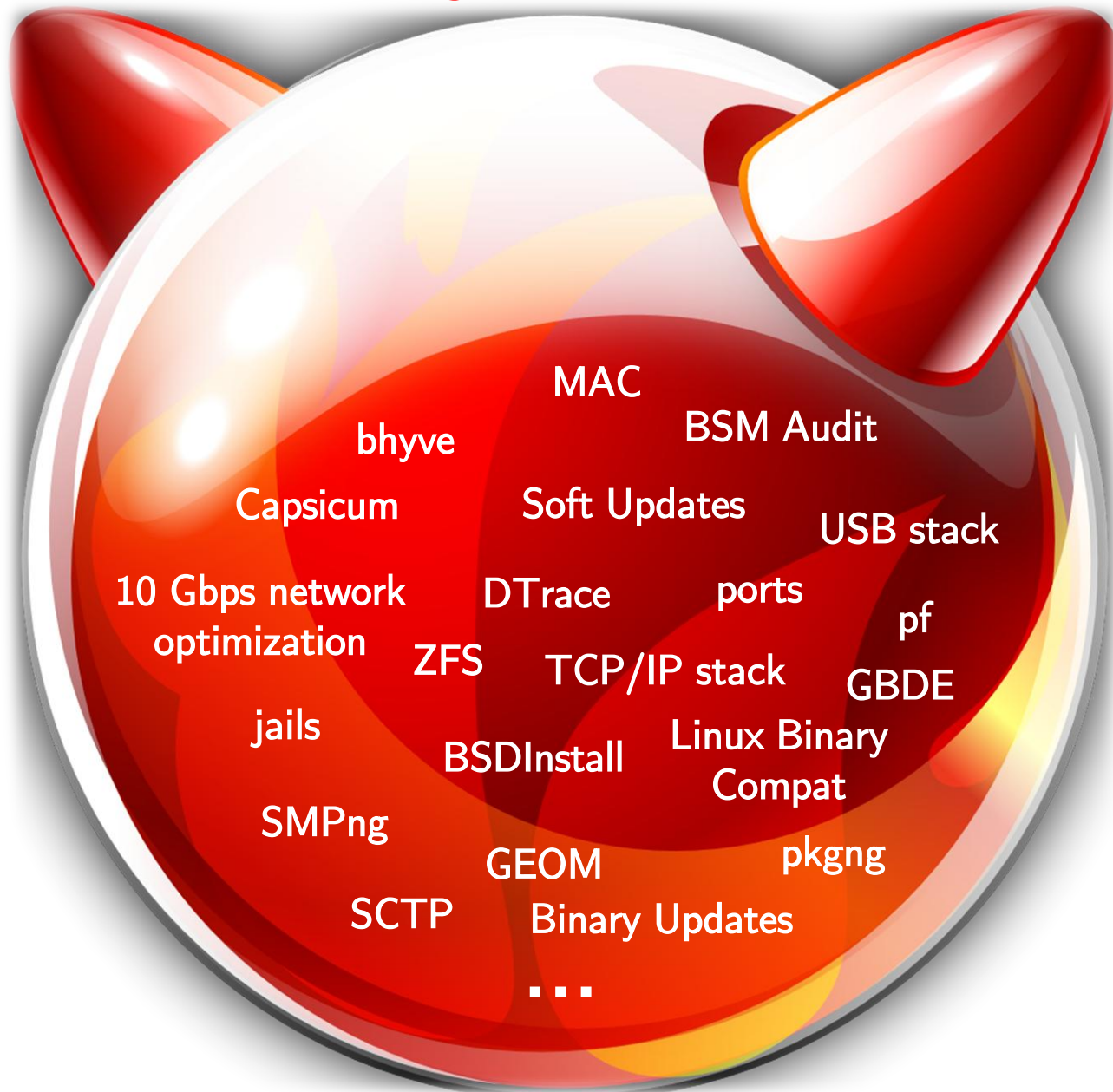
FreeBSD traits



BSD Magazine - 2013-02
<http://bsdmag.org>

- ▶ 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?



Last thought

“[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.”

Covey, S., R., *The 7 Habits of Highly Effective People*, Free Press, 2004.

Questions?

Thanks to:

- ▶ FreeBSD Foundation and Logos for financial support
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