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Habits of Highly Effective Teams

Martijn Verburg (@karianna)

http://www.jclarity.com - @jclarity

My Background

- **Martijn Verburg (@karianna)**
  - CEO at jClarity
  - Run Adopt a JSR & Adopt OpenJDK programs
  - Speaker, Author, Troublemaker
  - aka **"The Diabolical Developer"**

- **Focussed career on running tech teams**
  - Open Source, Govt, Enterprise's, Tier-1 IBs
  - And recently on small, disruptive start-ups

- **Have seen *lots* of ineffective teams**
  - And the privilege of working in some great ones

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The 9 Habits I'll cover

1. **Social interactions at the fore**

2. **Strong leadership throughout**

3. **Empowerment over control**

4. **Shared Goals**

5. **Respect and Trust**

6. **A Common Culture**

7. **High Levels of Automation**

8. **Debate is Encouraged**

9. **Value Diversity**

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1. Social Interactions at the fore

Social interactions

- **Humans are tribal based creatures**
  - You only have to look at Sports or OSS projects!

- **Them and us…**
  - Leads to finger-pointing
  - Leads to lack of collaboration

- **There's a 'buzz' about a vibrant group**
  - Choirs, Bands etc

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Social interactions at the fore

- **Lots of interaction points**
  - Instantaneous communication
  - Daily stand-ups / Retrospectives / Code reviews

- **Inclusive of the whole team**
  - No "Boys club" or "Girls club"
  - Aware of cultural norms

- **Doesn't exceed Dunbar's number (150)**
  - 150 stable relationships
  - Thanks in part to modern technology

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"Lone coder in the corner"

VS

"The Tiger team"

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2. Strong Leadership Throughout

"Lead, follow or get the F*&k out of the way"

Strong Leadership Throughout

- **Leadership happens at all levels**
  – Leader != Manager != Mentor

- **Leadership is shared**
  – Ivory Tower Architects need not apply

- **Servant leadership is evident**
  – There are strong leaders who wish to serve

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THAT'D BE GREAT.

3. Empowerment vs Control

- **Organisations tend towards structure**
  - Research in the 80's and 90's on org structure
  - Lead to massive tall hierarchies, e.g. Oracle

- **Rigid structure leads to inflexibility**
  - Damaging to companies in fast moving markets
  - Which is almost every business

- **Leads to the Peter Promotion principle**
  - Promoted to your level of incompetence

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Empowerment Over Control

- **Allowed to make tactical decisions**
  - People on the ground know best

- **Decision buy-in**
  - No "Ivory Tower Architects" dictating design
  - Everyone is behind the overall strategy

- **No Seagull managers!**

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"Hire driven people who are smarter than you and get the f^%k out of their way"
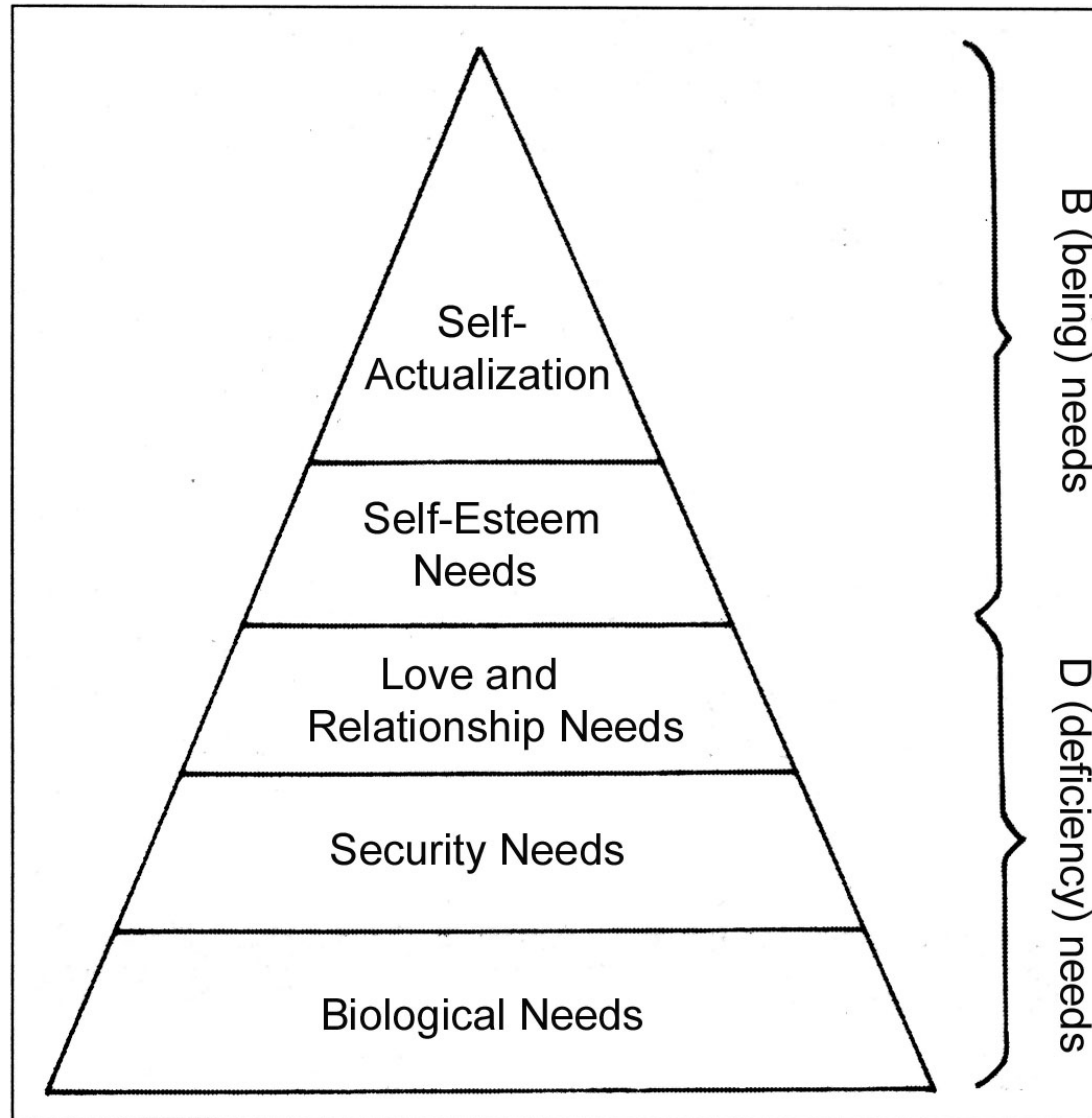
- The Diabolical Developer

"The Army Platoon"

VS

"The rescued Space Shuttle"

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4. Shared Goals

Everyone has Private Goals

Shared Goals

- **Effective teams have shared goals**
  - That they all actually agree on
  - That they're passionate about

- **Those goals are SMART goals**
  - **S**pecific
  - **M**easurable
  - **A**ttainable
  - **R**elevant
  - **T**ime-Bound

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"Some giant tech firms"

VS

"The Shoreditch Village Hall"

5. Respect and Trust

"Respect is an unassuming, resounding force.

It is the stuff that equity and justice are made of."

Respect and Trust

- **Does your team have trust?**
  - Do all of your team have PRD access?
  - Does everyone perform code reviews?

- **No respect / trust leads to resentment**
  - People misbehave in order to 'gain' respect

- **Poor communication undermines trust**
  - People start to guess & play politics

Effective Teams have Respect and Trust

- **Respect is assumed not earned**

- **People are trusted by default**

- **Performance is measurable**

- **People are given responsibility**

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"The Dutch national football team"

6. A Common Culture

Culture

- **Common language of behaviour**

- **Culture binds people together**
  - Or drives them apart

- **Culture is not the company motto**
  - But a good one helps

- **Culture is not the ping pong table**

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Effective Teams have a Common Culture

- **It is deliberately built**

- **It is clear on how to have influence**

- **It is inclusive**

- **There are shared values**
  - Do we resist against Doing Evil when offered £?

"Take them to the pub!"

vs

"Tech Fridays"

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7. Automation and Tools

Automation and Tools

- **Manual tasks are incredibly wasteful**
  - Deploying to QA, pre_PRD, PRD….

- **You want to focus on core tasks**
  - e.g. Brian Goetz should not be 27/7 helpdesk

- **Timesheets etc**
  - Crush Morale

High Levels of Automation

- **Devops Pro!!**
  - Chef/Puppet/Vagrant/Maven/Gradle/Jenkins etc

- **Use 3rd Party SaaS services!**
  - Payroll
  - Expenses
  - Timesheets
  - Travel
  - EVERYTHING THAT IS NOT CORE

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"The 6 minute time-sheets"

VS

"Automating jClarity"

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8. Debate is Encouraged

Debate

- **Many people fear conflict**

- **Many cultures avoid conflict**

- **Assumptions need to be challenged**

- **Debates can lead to arguments!**

Debate is Encouraged

- **A framework for discussions is set**
  - No shouting, bullying etc
  - Mandatory breaks

- **Assumptions are challenged**
  - Empirical evidence trumps 'intuition'

- **Onus is on presenting new idea**
  - Leave no person behind

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"Blackberry"

VS

"The passionate experts"

Bonus: Measuring subjective decisions

- **Follow the "Matt Raible" principle**
  - Decision matrix on Java/JVM web frameworks

1. **Set out criteria**

2. **Add weightings**

3. **Run the numbers**

4. **Prototype the top two outcomes!**

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Comparison Matrix

Criteria	Struts 2	Spring MVC	Wicket	JSF 2	Tapestry	Stripes	GWT	Grails	Rails	Flex	Vaadin	Lift	Play
Developer Productivity	0.50	0.50	0.50	0.50	1.00	0.50	1.00	1.00	1.00	0.00	1.00	0.50	1.00
Developer Perception	0.50	1.00	1.00	0.00	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Learning Curve	1.00	1.00	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.50	1.00
Project Health	0.50	1.00	1.00	1.00	0.50	0.50	1.00	1.00	1.00	0.50	1.00	1.00	1.00
Developer Availability	0.50	1.00	0.50	1.00	1.00	0.50	1.00	0.50	1.00	1.00	0.50	0.00	0.50
Job Trends	1.00	1.00	0.50	1.00	0.50	0.00	1.00	0.50	1.00	1.00	0.00	0.00	0.50
Templating	1.00	1.00	1.00	0.50	1.00	1.00	0.50	1.00	1.00	0.50	0.50	0.50	0.50
Components	0.00	0.00	1.00	1.00	1.00	0.00	0.50	0.50	0.50	1.00	1.00	0.00	0.00
Ajax	0.50	1.00	0.50	0.50	0.50	0.50	1.00	0.50	0.50	0.50	1.00	1.00	0.50
Plugins or Add-Ons	0.50	0.00	1.00	1.00	0.50	0.00	1.00	1.00	1.00	1.00	1.00	0.50	1.00
Scalability	1.00	1.00	0.50	0.50	0.50	1.00	1.00	0.50	0.50	0.50	0.50	1.00	1.00
Testing	1.00	1.00	0.50	0.50	1.00	1.00	0.50	1.00	1.00	0.00	0.50	0.50	1.00
i18n and l10n	1.00	1.00	1.00	0.50	1.00	1.00	1.00	1.00	0.50	0.50	1.00	1.00	1.00
Validation	1.00	1.00	1.00	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Multi-language Support (Groovy / Scala)	0.50	0.50	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.50
Quality of Documentation/Tutorials	0.50	1.00	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Books Published	1.00	1.00	0.50	1.00	0.50	0.50	1.00	1.00	1.00	1.00	0.50	0.50	0.00
REST Support (client and server)	0.50	1.00	0.50	0.00	0.50	0.50	0.50	1.00	1.00	0.50	0.50	0.50	0.50
Mobile / iPhone Support	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00
Degree of Risk	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50
Totals	14.5	17	15	13.5	15	14	17	17.5	17	13.5	15.5	11.5	14

http://bit.ly/jvm-frameworks-matrix

9. Diversity

- **Technology is outward looking**
  – Boldly go where…..

- **Monocultures tend to look inwardly**
  – And deliver poor technology solutions

- **Software is a complex creative domain**
  – Lots of viewpoints from unusual angles is good

Value Diversity

- **Diverse hiring policy**
  - Not just Computer Science grads with a 2:1

- **Diverse styles of working**
  - Not all in a Dilbert cube farm

- **Allow exploration of new ideas and tech**
  - 20% time, Brown Bag sessions

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"Nokia"

VS

"The London Java Community"

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10. Bonus Habit: Technical Debt

- **Is a much bigger risk than people think**

- **It slows you down**

- **It makes you inflexible**

- **Boy/Girl Scout this heavily**
  - It's a major factor in keeping jClarity alive

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Goodbye Java/JVM Performance Problems

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Martijn Verburg (@karianna)