

# Failure Acknowledgment

It's OK...

Marc-André Decoste  
**Google** Montréal

On top of learning from our failures,  
we must properly acknowledge  
& accept their potential

In other words...

Don't be afraid of the F word!

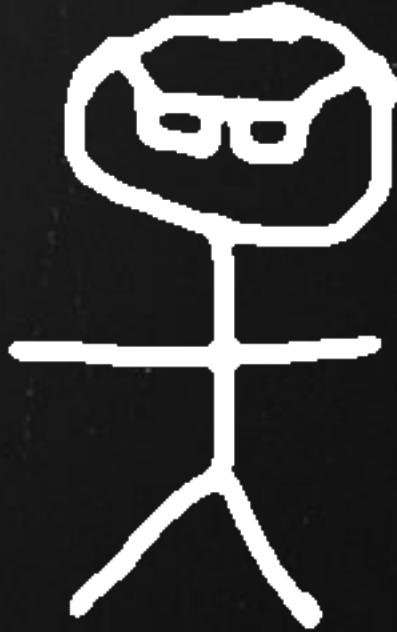
# Summary

- The natural selection analogy
- My path to success through failures
- Statistics are interesting, but...
- Google's success through innovation
- The good, the bad and the ugly decision
- The hardest decision of my career



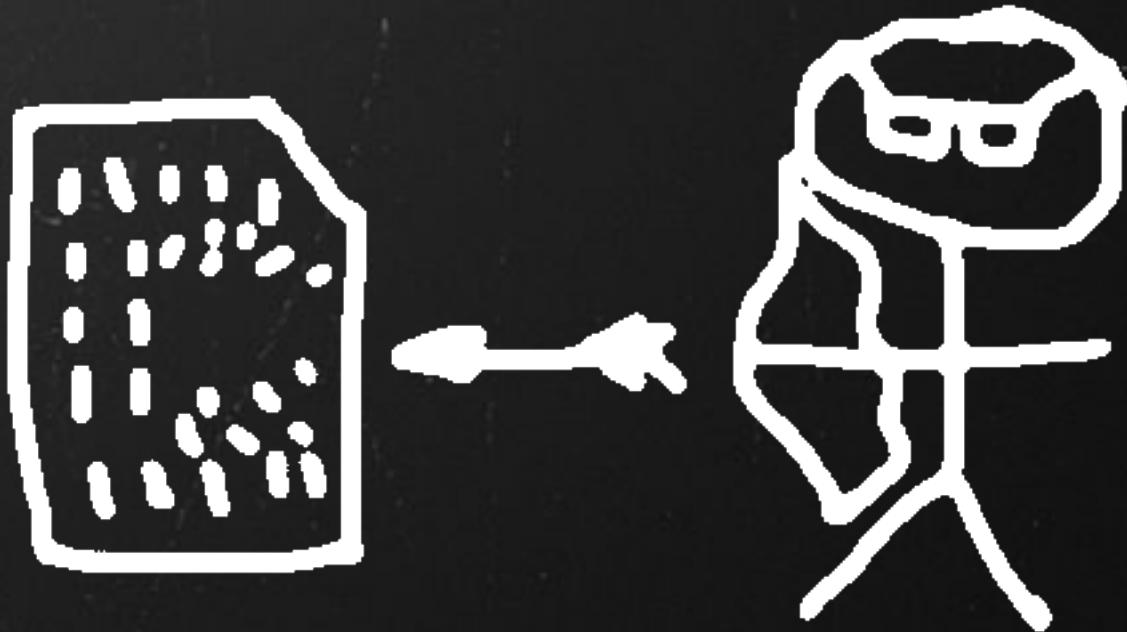
# The natural selection analogy

- Software engineering is about software & engineers



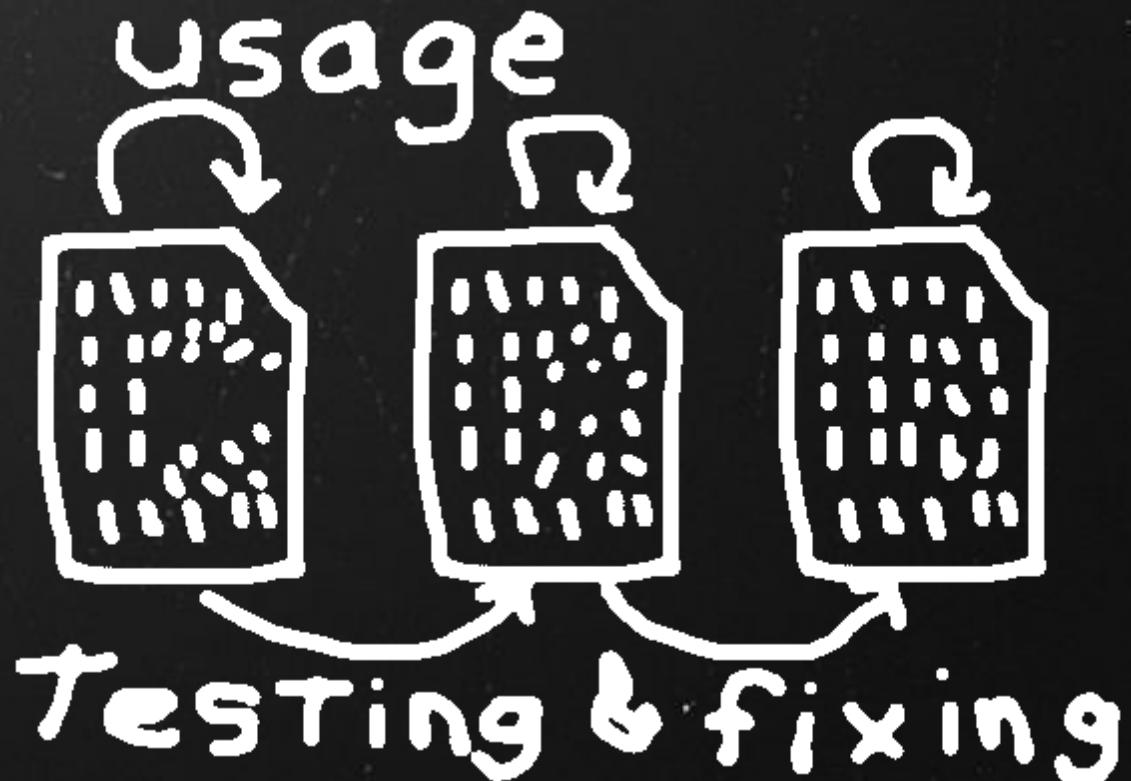
# The natural selection analogy

- Software engineering is about software & engineers
- Engineers are humans who make random mistakes



# The natural selection analogy

- Software engineering is about software & engineers
- Engineers are humans who make random mistakes
- Software evolves through usage, testing & fixing



# The natural selection analogy

- If you believe Darwin:
  - Nature gave birth to humans by mutations

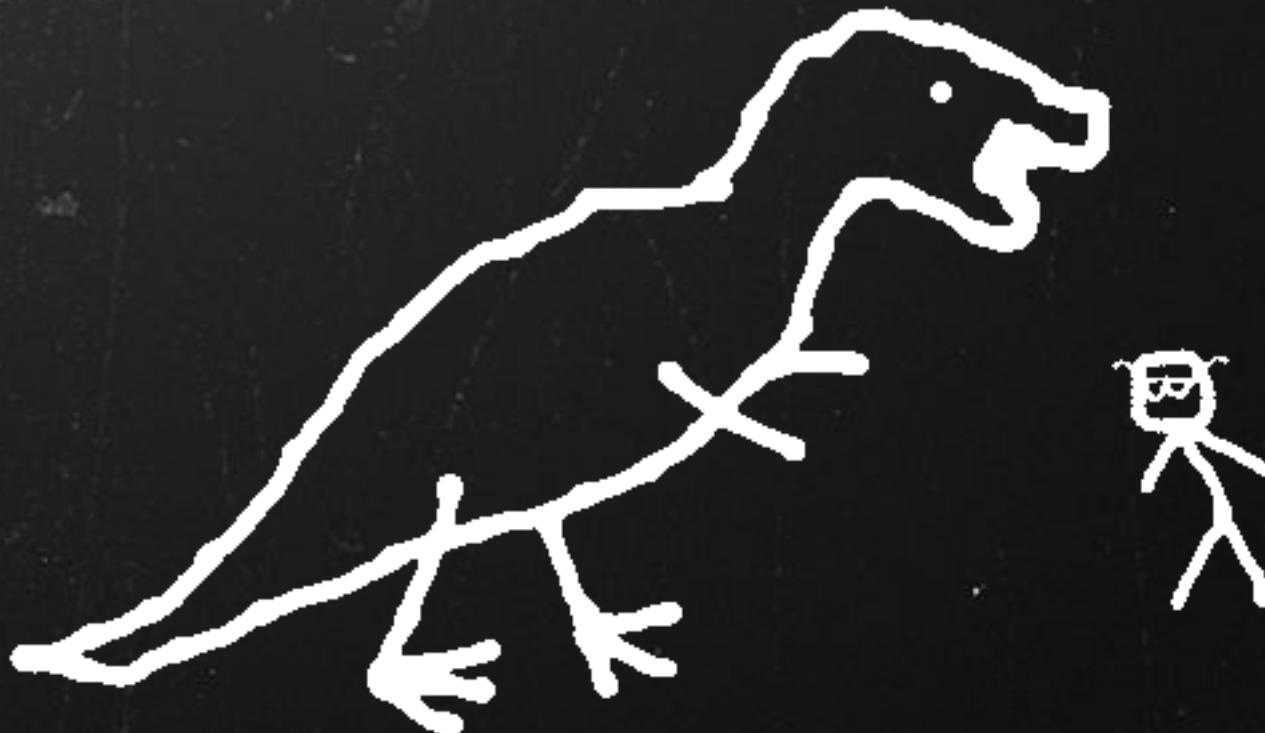


# The natural selection analogy

- If you believe Darwin:
  - Nature gave birth to humans by mutations
  - Mutations are reproduction failures

# The natural selection analogy

- If you believe Darwin:
    - Nature gave birth to humans by mutations
    - Mutations are reproduction failures
- But some failures turn out to become advantages

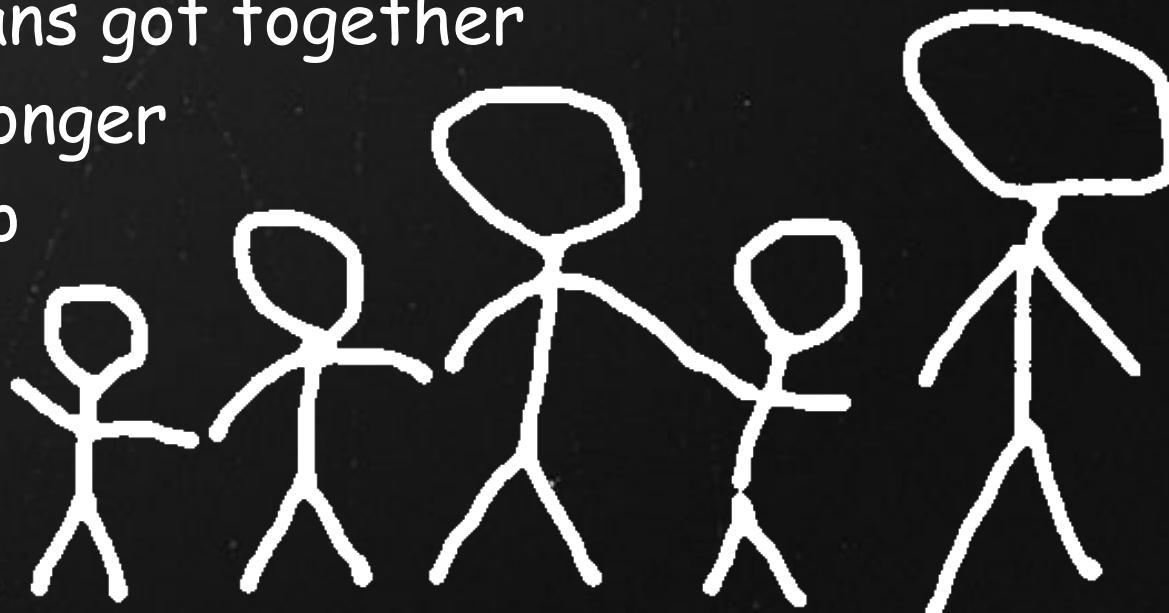


# The natural selection analogy

- If you believe Darwin:
  - Nature gave birth to humans by mutations
  - Mutations are reproduction failures
    - But some failures turn out to become advantages
  - The survival of the fittest elected winners

# The natural selection analogy

- If you believe Darwin:
  - Nature gave birth to humans by mutations
  - Mutations are reproduction failures
    - But some failures turn out to become advantages
  - The survival of the fittest elected winners
    - And humans got together  
to be stronger  
as a group



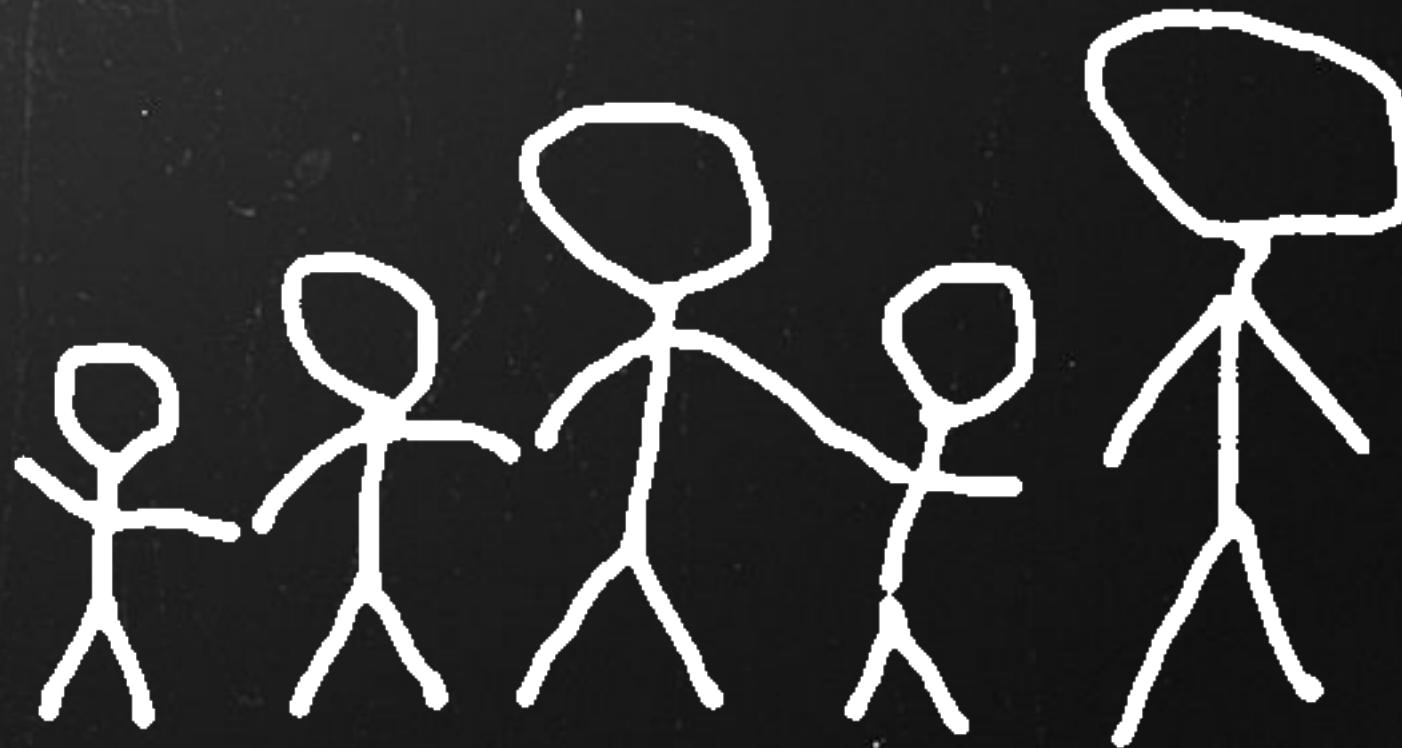
# The natural selection analogy

- So being open to failures is to be open to evolution



# The natural selection analogy

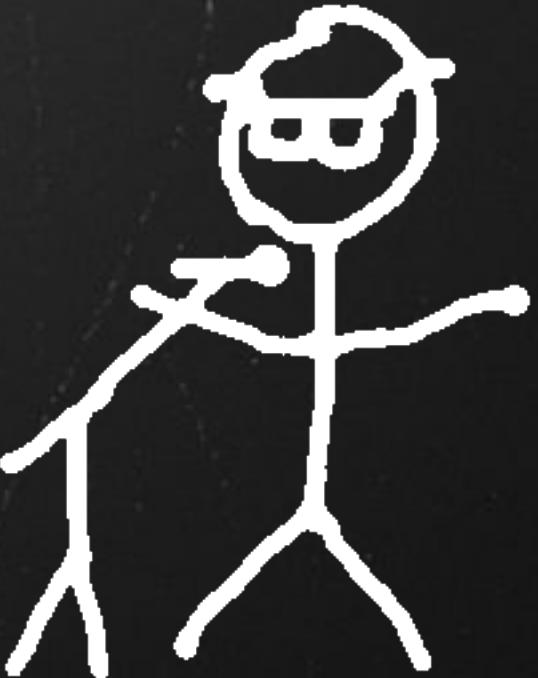
- So being open to failures is to be open to evolution as long as we work together and don't step on each other



# My path to success through failures

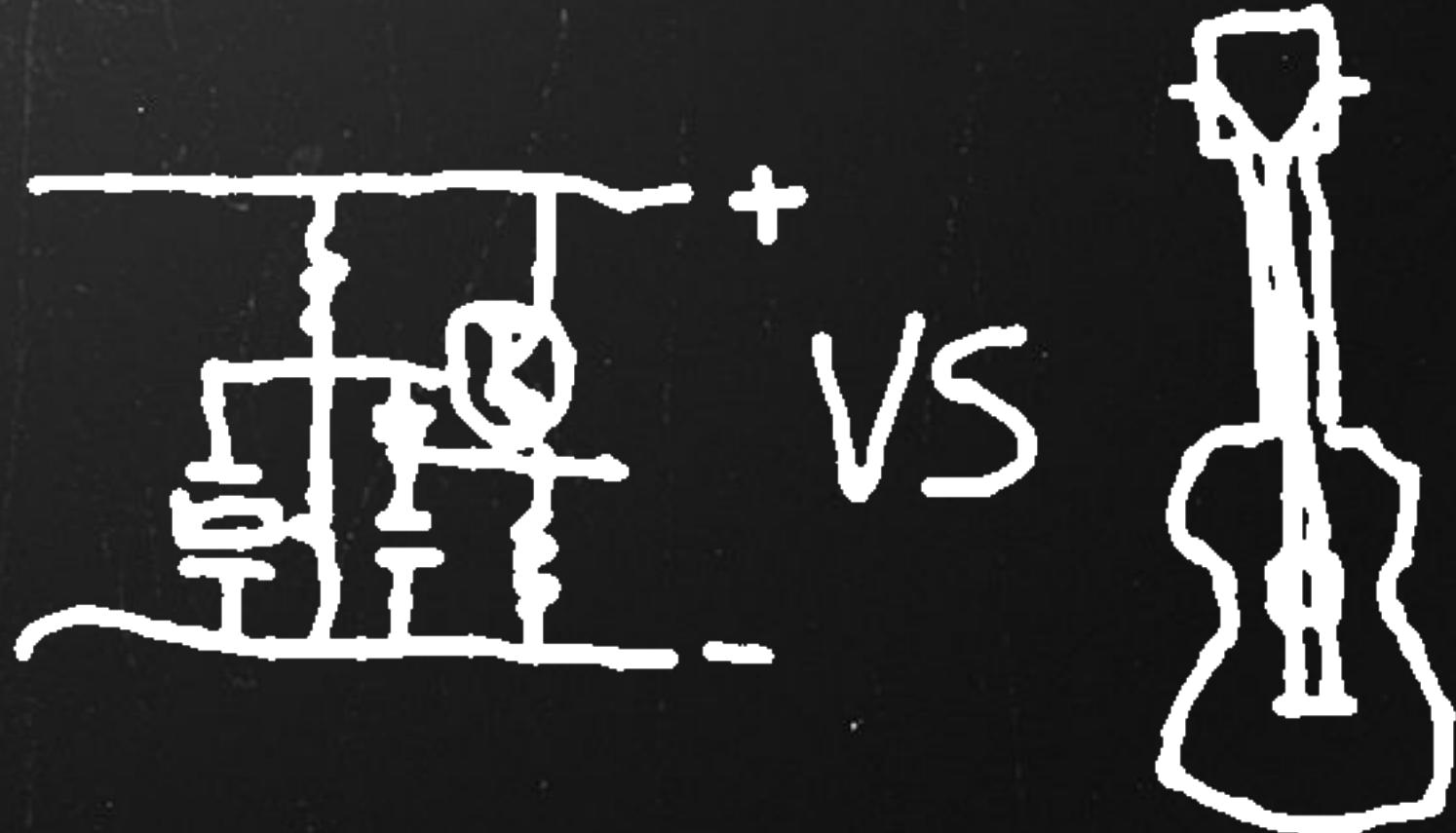
# My path to success through failures

- A rock star soul in a nerd's body



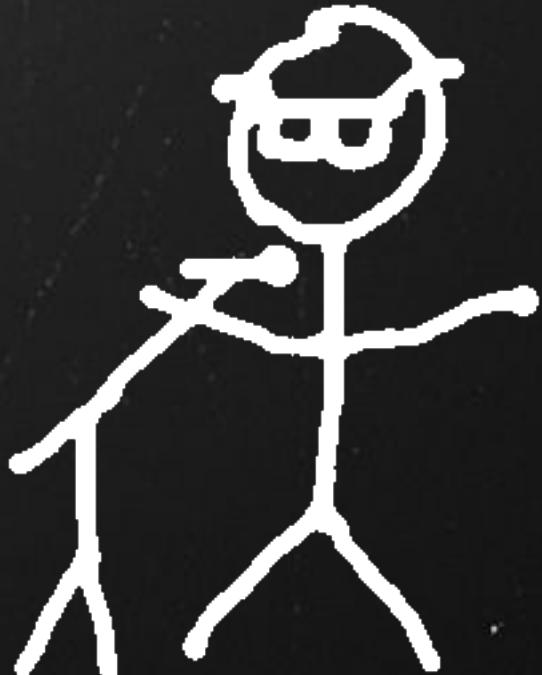
# My path to success through failures

- A rock star soul in a nerd's body
- The hard choice: Polytechnique VS Vincent d'Indy



# My path to success through failures

- A rock star soul in a nerd's body
- The hard choice: Polytechnique VS Vincent d'Indy
- Drop out once after failing to like electrical engineering



# My path to success through failures

- A rock star soul in a nerd's body
- The hard choice: Polytechnique VS Vincent d'Indy
- Drop out once after failing to like electrical engineering
- Back to school after failing to make it as a rock star



# My path to success through failures

- A rock star soul in a nerd's body
- The hard choice: Polytechnique VS Vincent d'Indy
- Drop out once after failing to like electrical engineering
- Back to school after failing to make it as a rock star
- Drop out again...  
from PhD to  
Softimage



# My path to success through failures

- Climbed the hierarchy yet failed to enjoy management

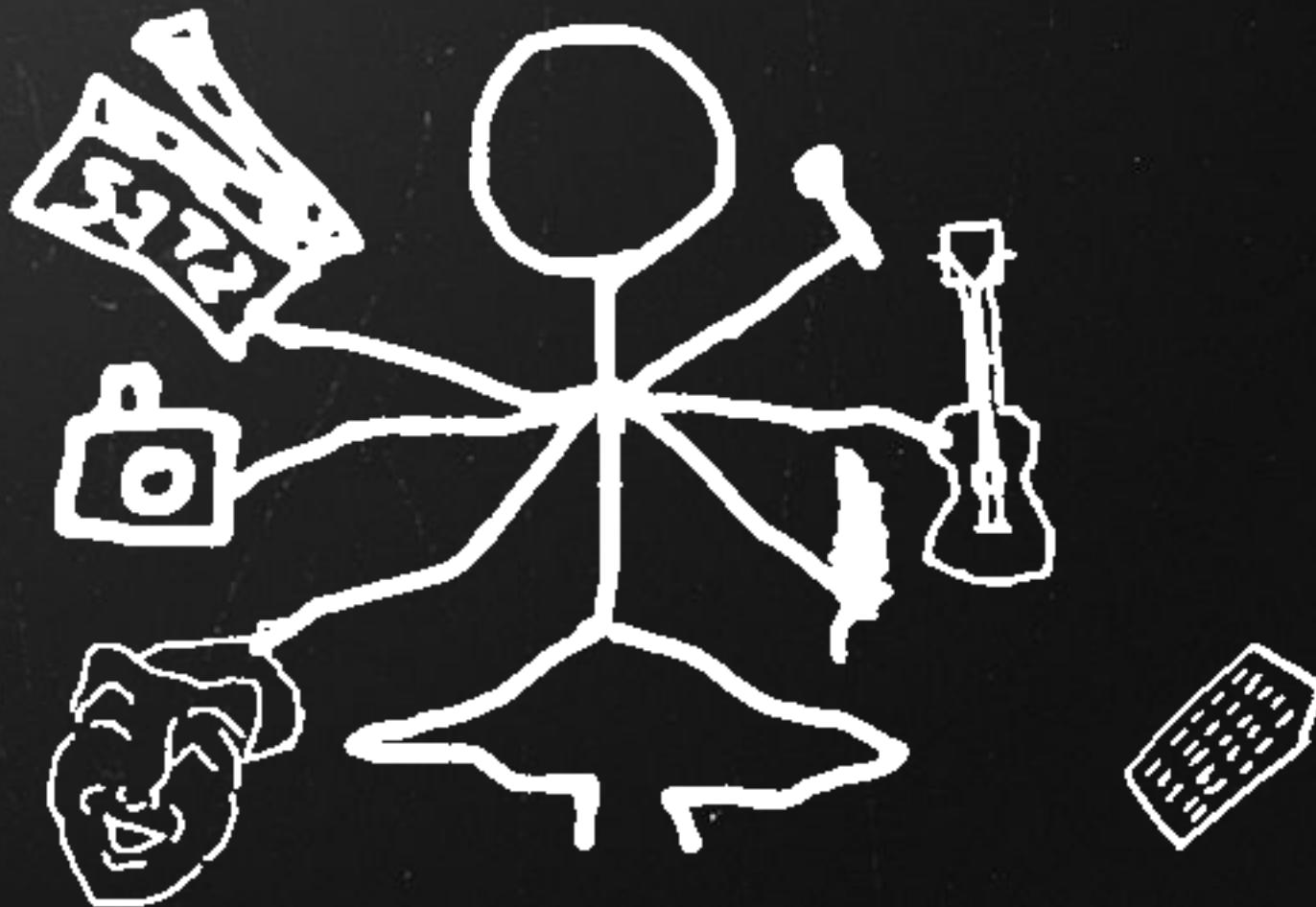


# My path to success through failures

- Failed to stay in a band, started writing...
- And then photography, acting, film making, etc...
- Every decision point has failure potential
- Quick acknowledgment & turnaround time is critical
- Failure avoidance is not the key here...

# My path to success through failures

- I now have a gazillion hobbies... :-)



# Statistics are interesting, but...

"Statistics are like a bikini. What they reveal is suggestive, but what they conceal is vital."

- Aaron Levenstein

- Computing estimates accuracy
- Per-developer coefficient
- Like weather forecast, unpredictable chaotic results
- Better prediction of time left, but...  
schedule slipped, software failed, project derailed

# Statistics are interesting, but...

"Statistics are like a bikini. What they reveal is suggestive, but what they conceal is vital."

- Aaron Levenstein

- So analysis of the past can't prevent future failures

ACCEPT IT!!!

# Google's success through innovation

- Google's philosophy:

<http://www.google.com/corporate/tenthings.html>

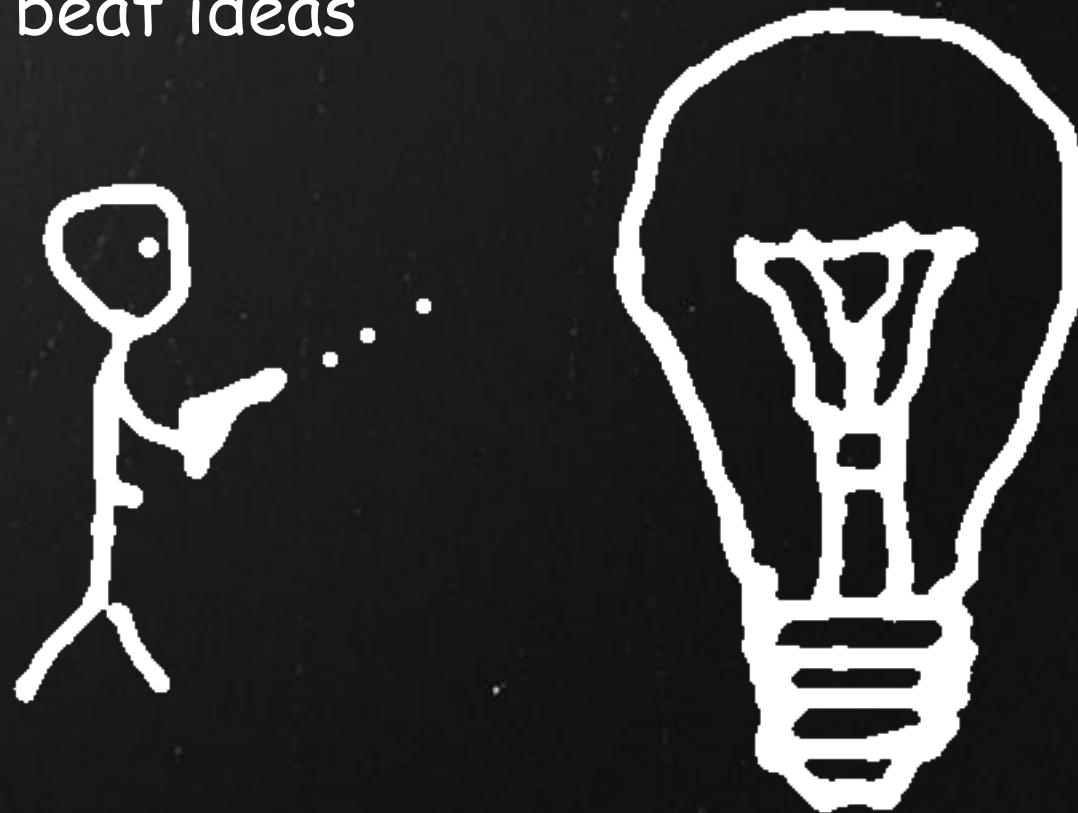
- Fast is better than slow
- Great just isn't good enough
- Focus on the user and all else will follow

[...]

- You can make money without doing evil
- You can be serious without a suit

# Google's success through innovation

- preotyping.org manifesto from innovation@google  
Do the right IT, before doing IT right...
  - Innovators beat ideas



# Google's success through innovation

- preotyping.org manifesto from innovation@google  
Do the right IT, before doing IT right...
  - Innovators beat ideas
  - Data beats opinion



# Google's success through innovation

- preotyping.org manifesto from innovation@google  
Do the right IT, before doing IT right...
  - Innovators beat ideas
  - Data beats opinion
  - [...]
  - Failure IS an option

# Google's success through innovation

- Very strong no-non-sense fundamentals
- Then let the organism evolve

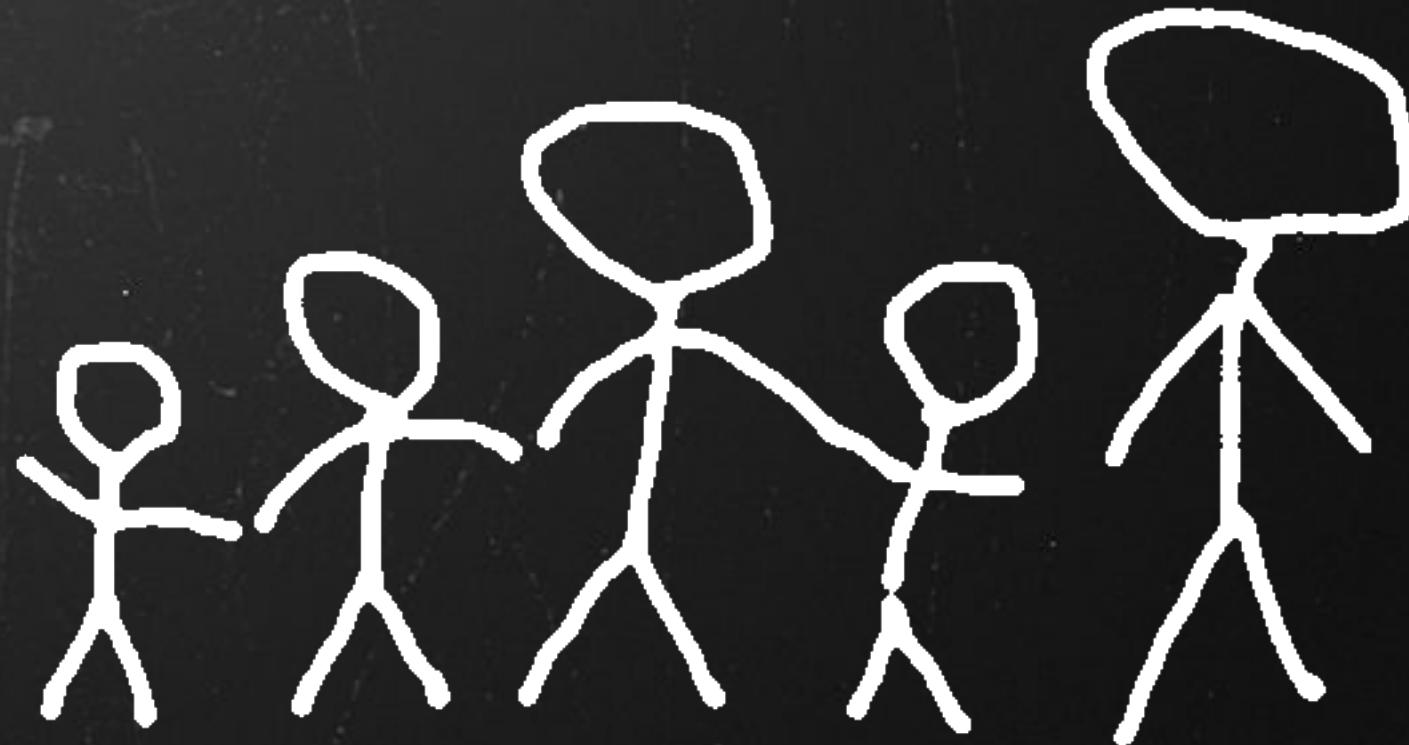


# Google's success through innovation

- Very strong no-non-sense fundamentals
- Then let the organism evolve
- Ask not for permission, beg for forgiveness
- But never twice for the same thing...
- Process is blasphemy...
- Unless it's a good transparent process
- Weekly snippets and code reviews just work

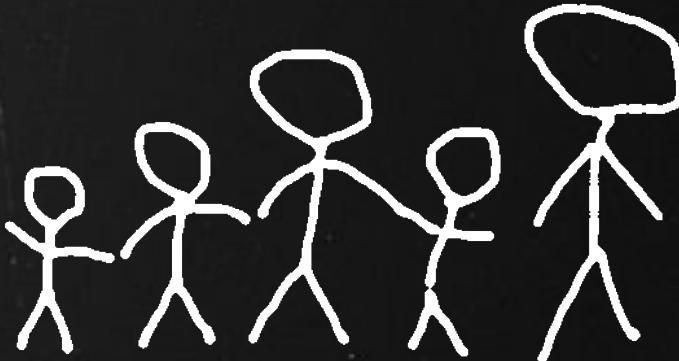
# Google's success through innovation

- GOOD PEOPLE!



# Google's success through innovation

- GOOD PEOPLE!
- A very strict hiring process...  
Oops P word!
- Humility, respect and strong will to do the right IT
- Learn a lot from eachother



# Google's success through innovation

- Home grown development tools
- Can't complain about it...



# Google's success through innovation

- Home grown development tools
- Can't complain about it... Fix it!



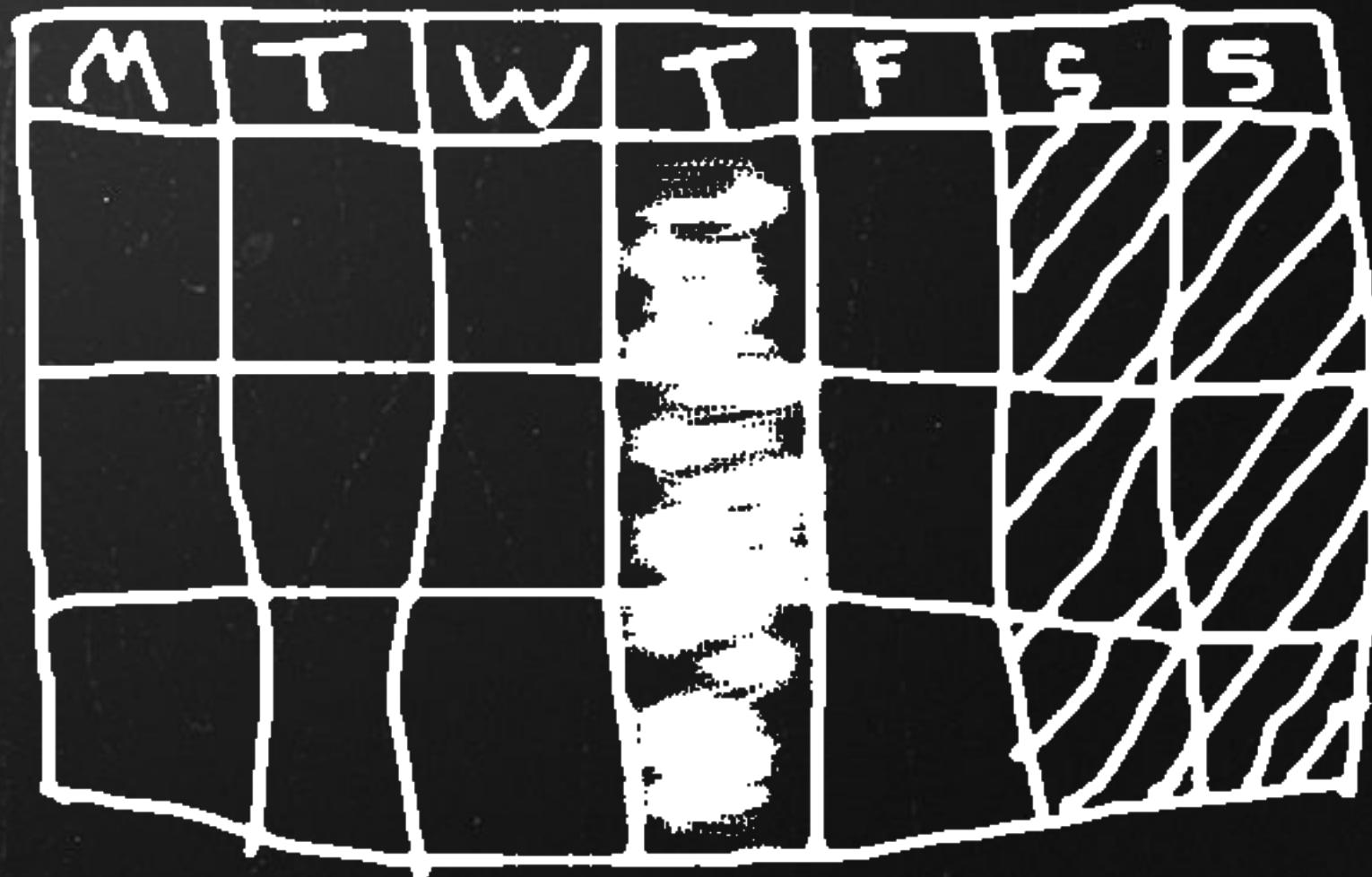
# Google's success through innovation

- Home grown development tools
  - Can't complain about it... Fix it!
- 
- I needed a new feature in bug tracker, I added it
  - I needed support for Windows, I created it...
  - TWICE!!!
  - Good tools benefit everyone... Open source them:  
<http://code.google.com/p/googletest/>



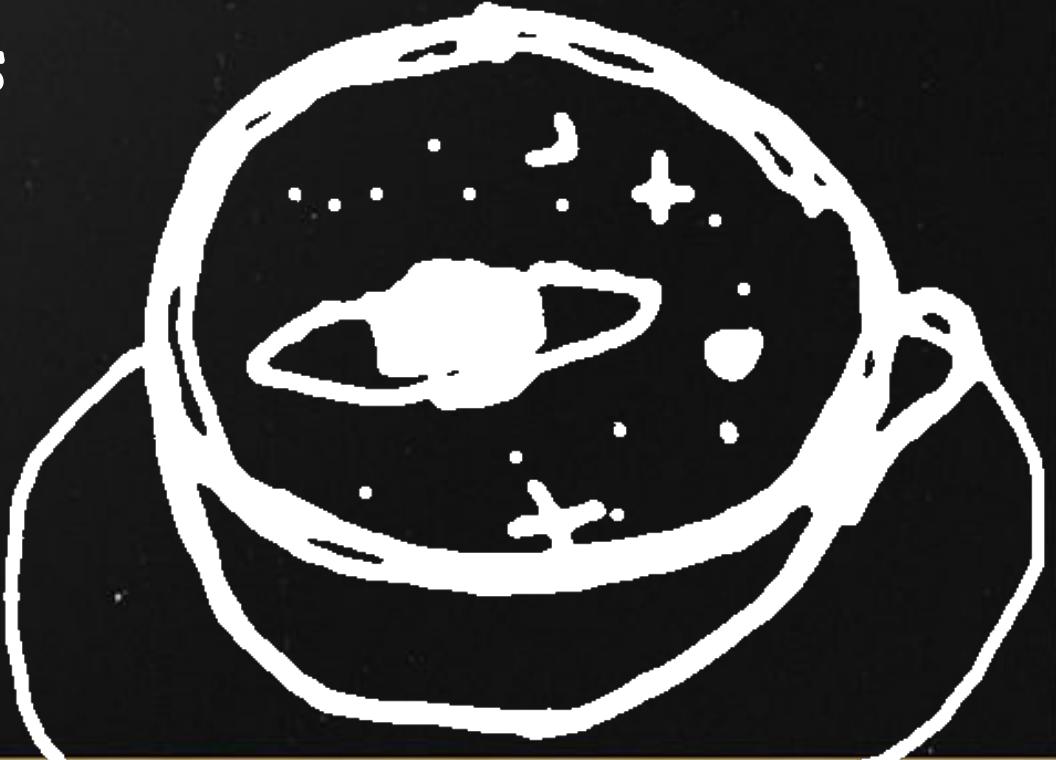
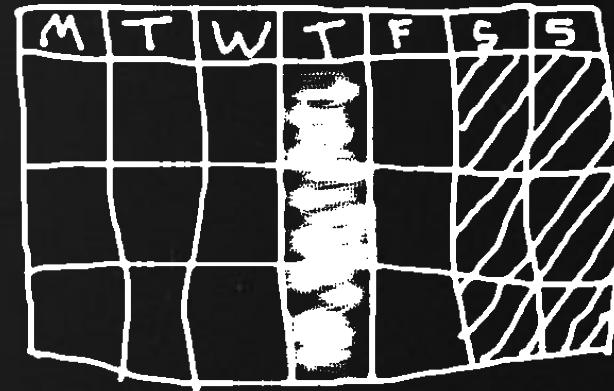
# Google's success through innovation

- 20 percent projects



# Google's success through innovation

- 20 percent projects
  - Not tracked or planned
  - Natural selection rises the creme to the top
  - Gmail is the most famous example



# Google's success through innovation

- Twice, I saw a good project "morphed"
  - Market changes faster than expected
    - Initially good decision, turns out to be a bad one
    - Better pull the plug earlier and reinvest the talent

# The good, the bad & the ugly...decision

- Always taking good decisions
- We all want to be Clint Eastwood...

But there can be only one!...



# The good, the bad & the ugly...decision

- High probability that a good decision now...
  - ... ends up being a bad one
- Lee Van Cleef is bad, but he always finishes the job!



# The good, the bad & the ugly...decision

- Ugliest decision is no decision by fear of a bad one
- Eli Wallach is comical and oafish...

but he's also dangerous!...



# The good, the bad & the ugly decision

- There's a lot of competition out there.

Don't wait for the perfect decisions, while...

Others are taking good ones or learning from bad ones



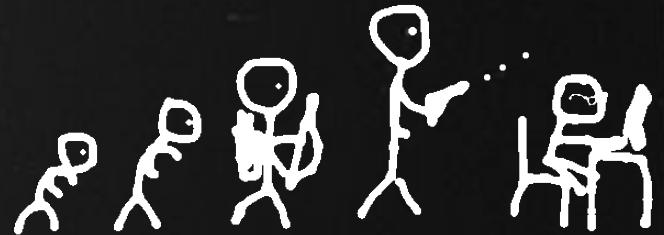
# The hardest decision of my career

- About to switch projects
- Promised to finish a feature
- Much harder than expected
- Want to finish! Want to finish! Before project switch...
- Let go... Admit failure... And move on...
- New project's needs are more important
- Properly documented failures can be more useful
- It takes maturity to know when to exit stage left



# In conclusion

- Fear of failure blocks creativity!
- Unlike computers, we make mistakes, we are mistakes!
- Society and culture make us better
- Culture of trust and respect empowers decision makers
- Good process helps benefit from failures
- Good people make the whole difference
- Let the better ones be an example for others to learn
- And allow them to fail





# Questions?

Or did I fail to make a point?