

Prepare Yourself: The Real World is Coming

Ash Maruyama

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The Real World is Coming...

- Some general thoughts
 - It is everything people say it is
 - Fast-paced...extremely fast-paced
 - Writing well is more important than you think

The Educated Assumption

- Real-world problems are complex and ill-defined, multi-disciplined, and can have multiple solutions
- How do you fill in the blanks?
 - Engineering judgement
 - Experience
- Which solution is best?

Your Second Family

- Learn about your company
 - History
 - Values
 - Structure
 - People
 - Customers / Vendors
 - Cash flow
 - Resources
 - Trade secrets

Respect the Chain of Command

- Know your corporate structure
- Follow the ladder up
- Don't leave someone out
- Who needs to be aware? Who doesn't?

Under the Bus



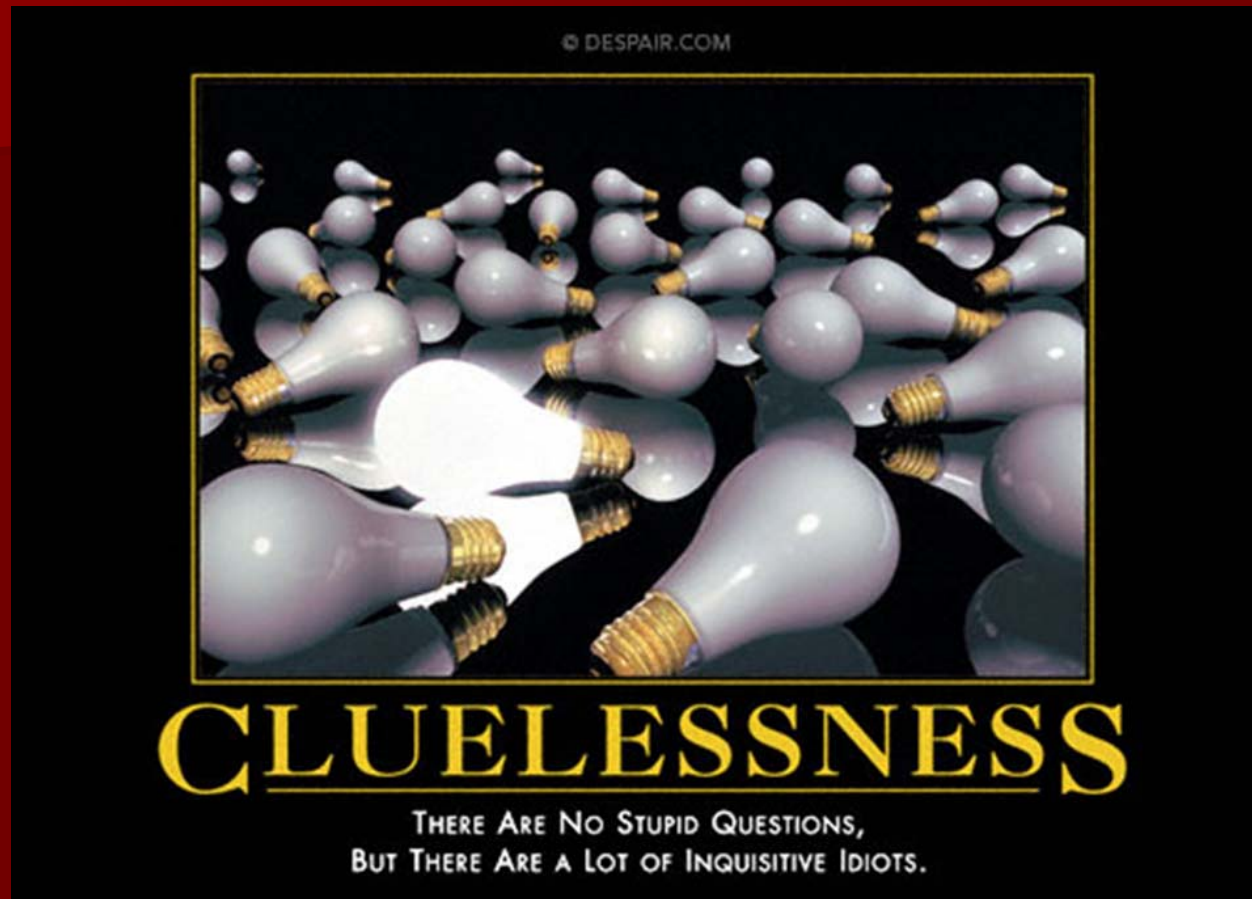
- Be very wary of this
- It's easier to do than you think!

Poor planning on your part does not constitute an automatic emergency on my part

Ownership

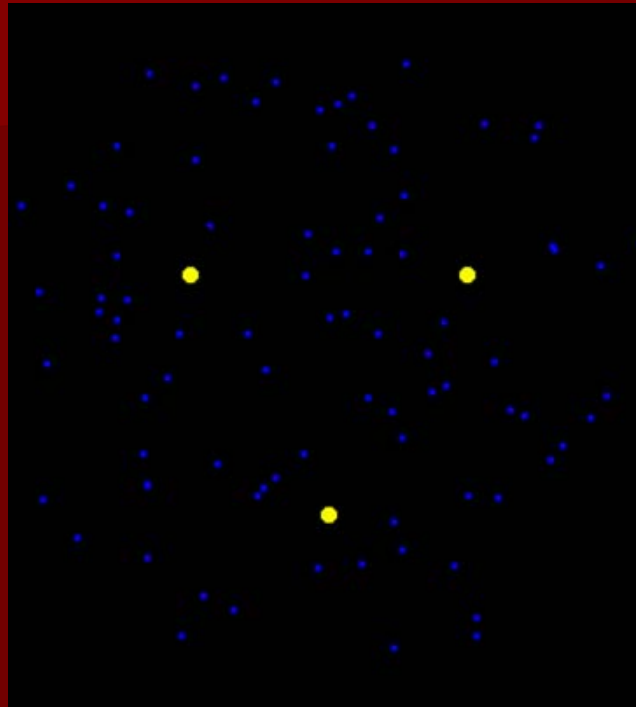
- The success or failure of a project depends on you
- Learn about all parts of the project – become multi-disciplined
 - Arm-chair management won't cut it
- Anticipate what is needed – be pro-active!

The Inquisitive Idiot



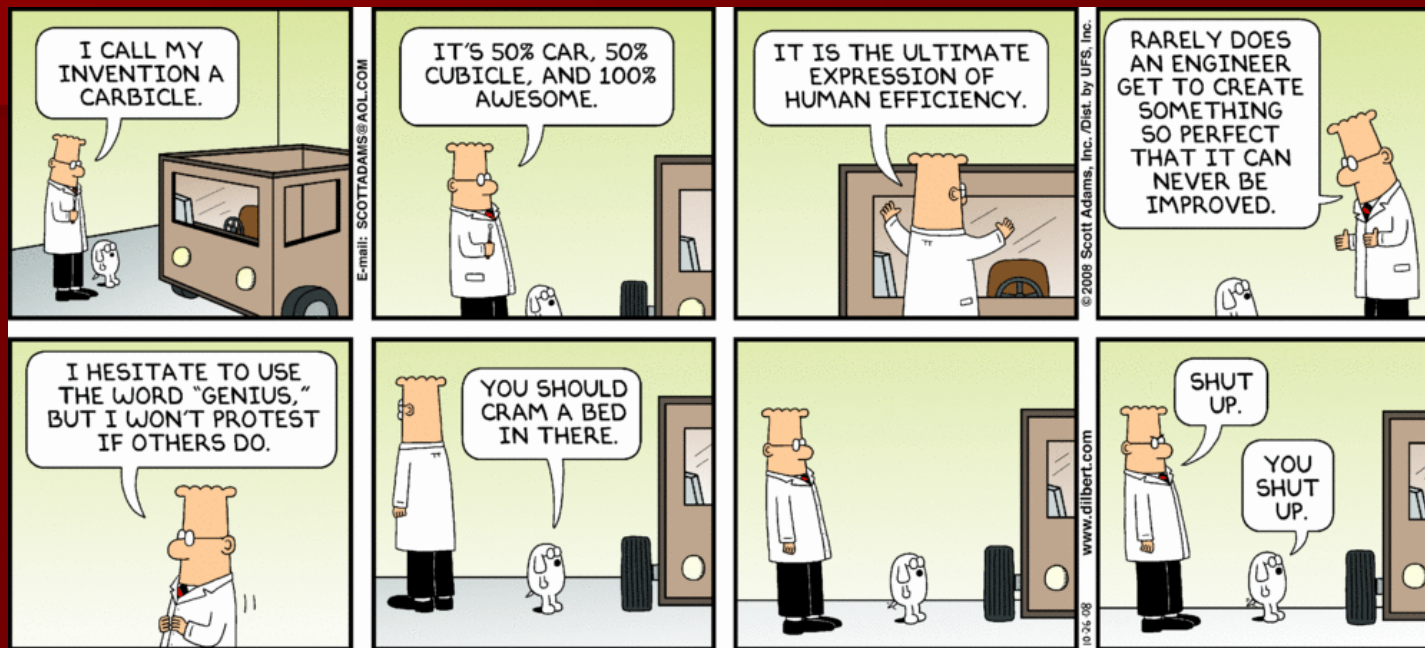
- Think before you ask!
- Do your research and provide your thoughts first

Tunnel Vision



- Don't lose sight of the big picture
- View the picture from all angles
 - What you do could affect someone else's job

The Enemy of Good...



- Perfection does not exist
- Learn to define and accept "acceptable"

The Paper-Trail

- Document, document, document!!
 - Company requirement
 - You will forget, papers don't
 - CYA = Cover Your @\$\$
 - It's not what you know, it's what you can prove
- Organization is key
 - Organized mess doesn't work anymore

I Can Write Good

Every year, we buy ten cases of paper at \$35 each; and every year we sell them for about \$1 million each. Writing well is very important to us.

- Bill Browning, President of *Applied Mathematics, Inc.*

I'm sorry I wrote you such a long letter. I did not have time to write you a short one.

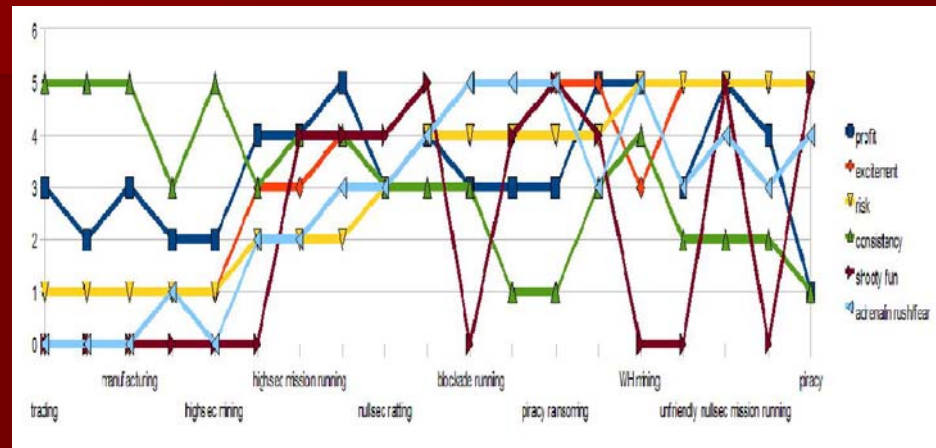
- Blaise Pascal

- Everything must be well-written
 - Reports, papers, memos, emails, everything
- Choose your words carefully, there can only be one meaning
- Remember your audience

Stage-Fright

- Presentations are inevitable – be prepared!
- How do you prepare yourself?
- What makes a good presentation?
 - What makes a bad presentation?

The longest title I could come up with so this slide seems really important and consequently draws attention away from me



- I think we can all agree that this is an example of a bad presentation
- There is so much text on this slide that it's hard to make anything out
- Plus, I'm reading this slide to you so 1) I'm not even facing you, and 2) don't lie, you're trying to read this while I'm reading it to you
- So why am I even up here talking? You're not listening to me and there's no reason to listen to me because I'm not adding anything to this slide. I could just as easily have given you the slide to read yourself and you would have gotten the same amount of information from it

Stage-Fright

- Presentations are inevitable – be prepared!
- How do you prepare yourself?
- What makes a good presentation?
 - What makes a bad presentation?
- Practice, practice, practice!

The Practical Engineer

- The “pie-slice” approach
 - Less is more
 - What is negligible?
 - Work smarter, not harder
 - Computer simulation vs. hand calculation

Random Thoughts

- You will make mistakes
- GIGO = Garbage In, Garbage Out
- Start saving your money now
- Leave work at work

In The End

The Real World is Coming...

Be confident, you are ready!