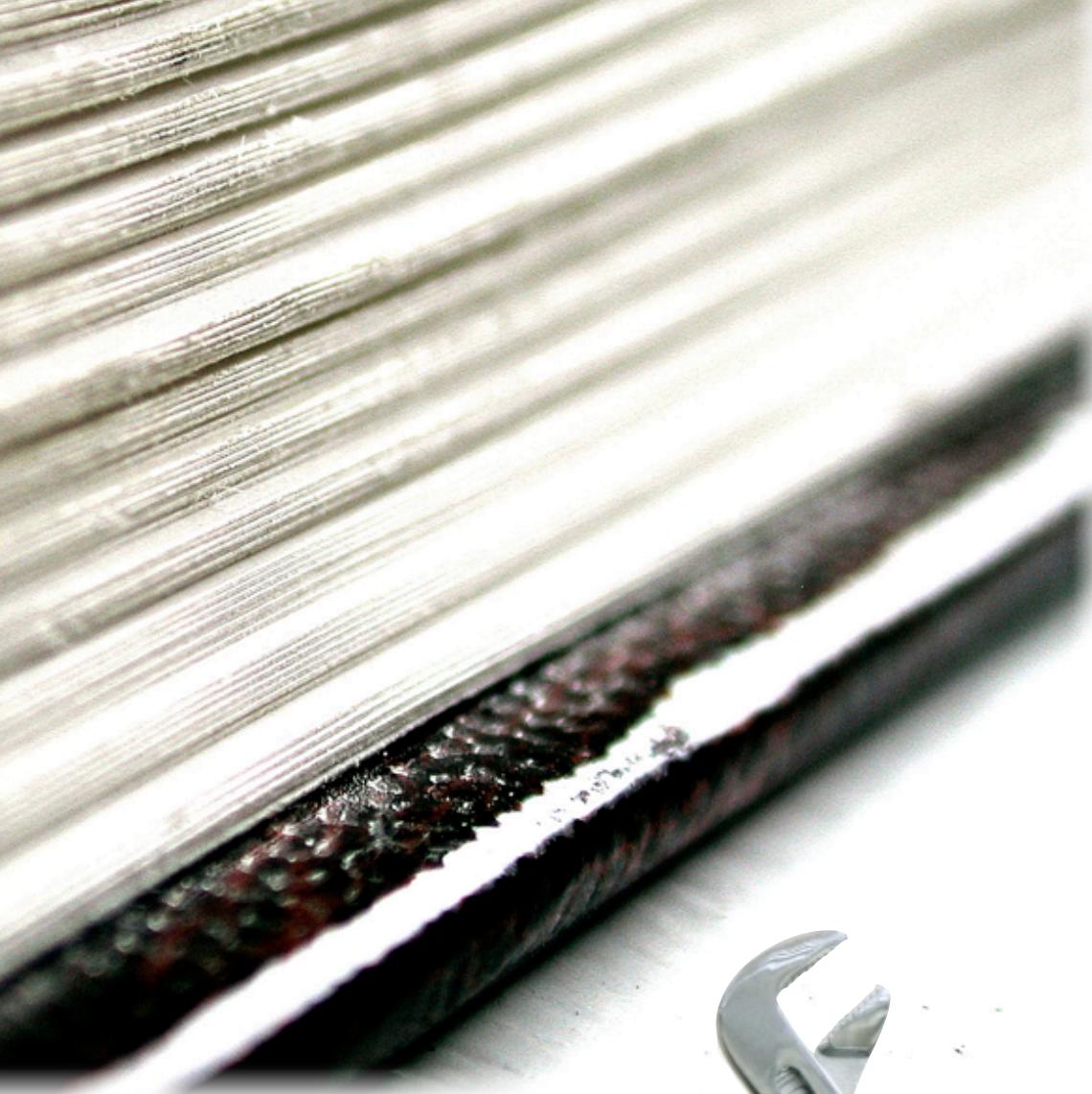




tooling & documentation



documentation



tools

tools

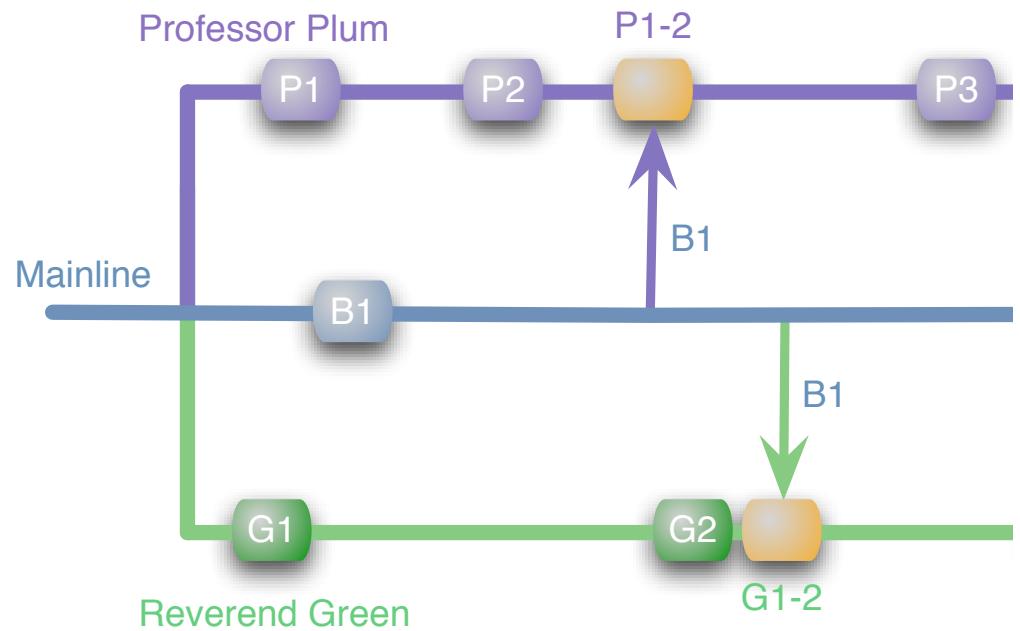




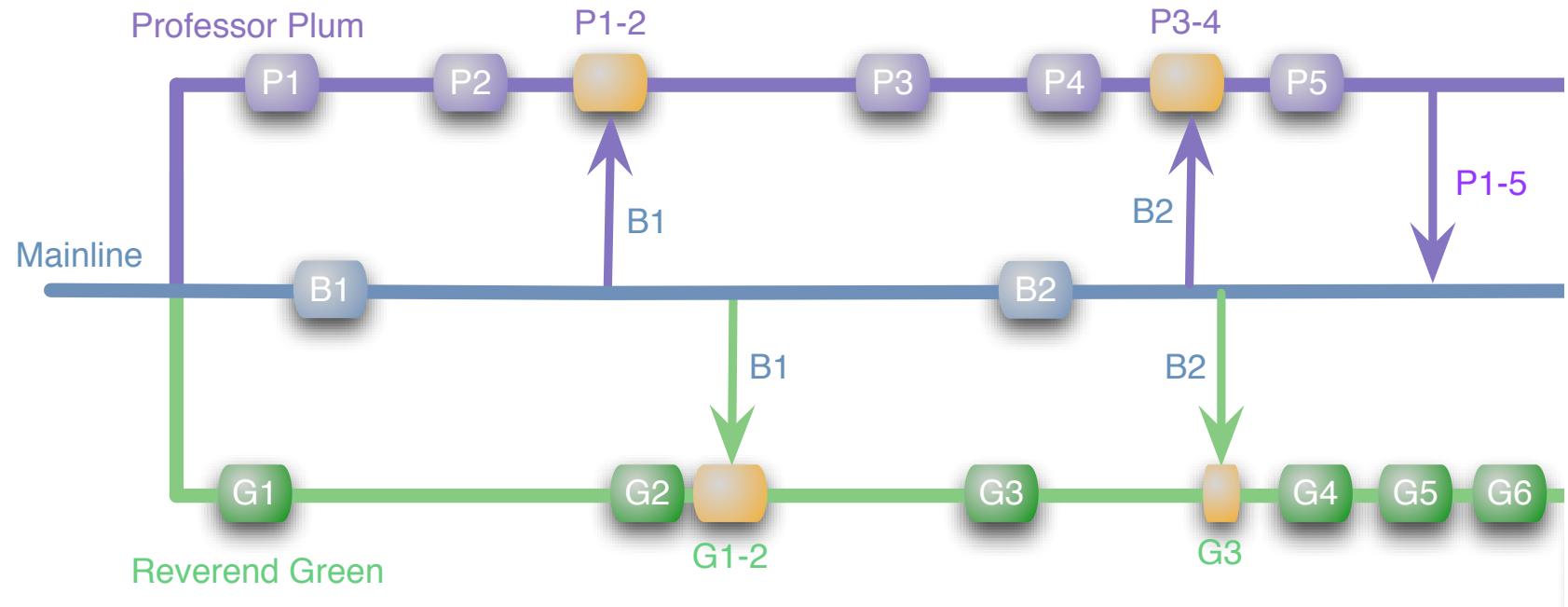
you get to
pick the tools
& practices!

now what?!?

example

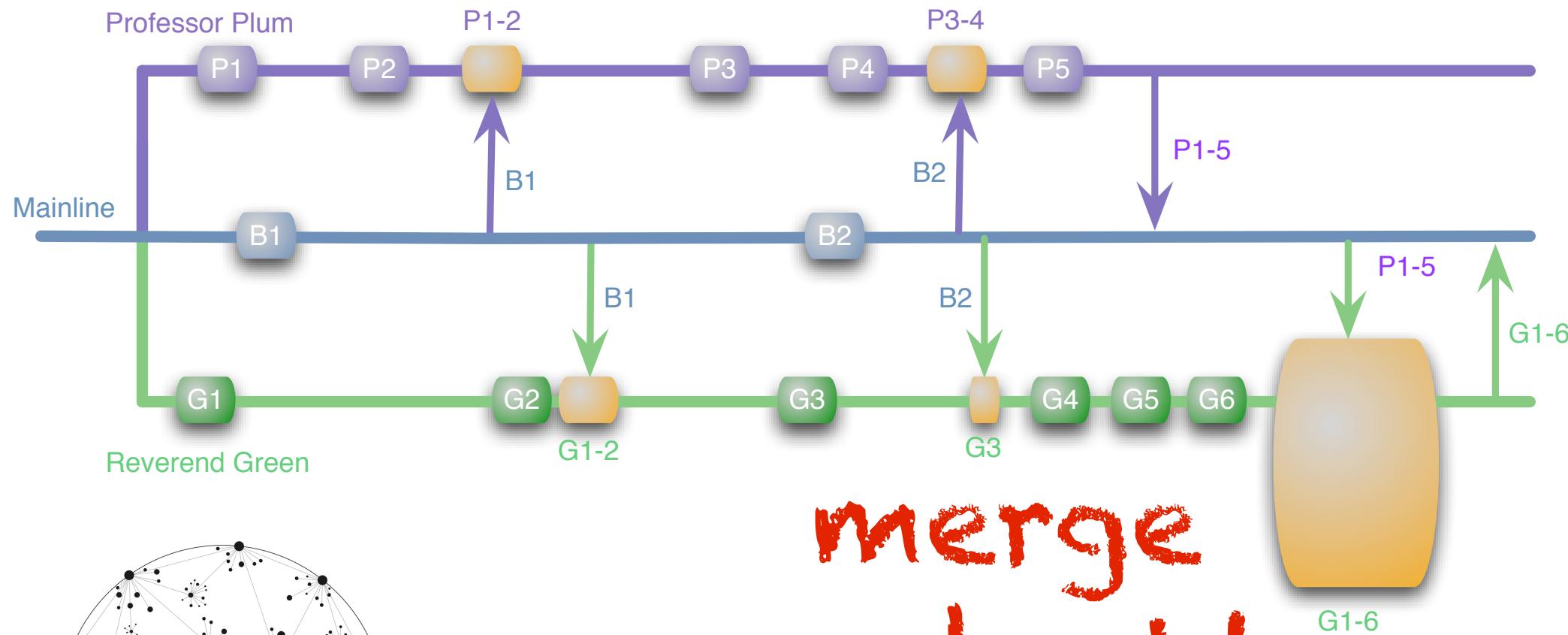


Feature Branching

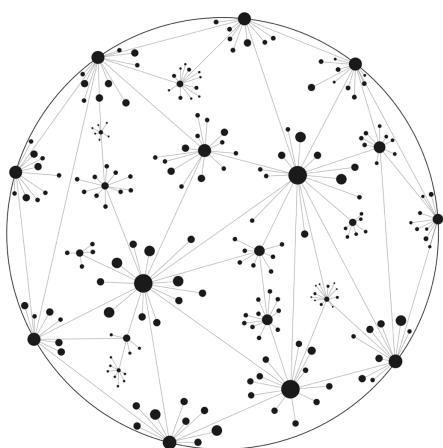


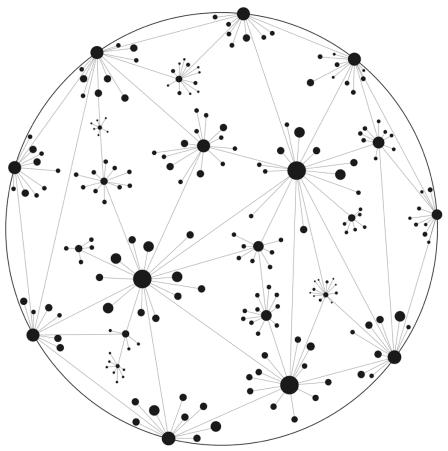
Feature Branching

copy/paste
reuse !!



Feature Branching

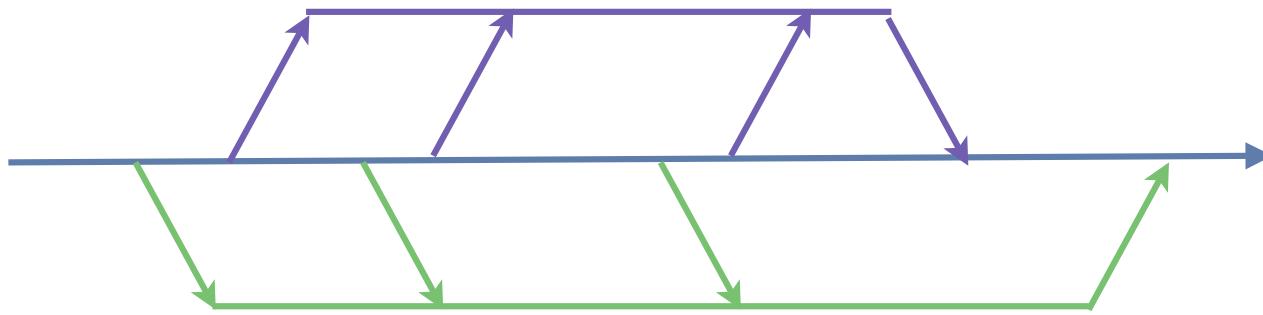




holistic approach to engineering practices

don't over-optimize around a particular tool
or practice and harm your overall
engineering efficiency

Feature Branch



Continuous Integration

everything interconnects

you can't separate process (continuous delivery) from architecture

tools offer a primrose path

heavenly while on the road

hellish to take a detour



[http://kent.spillner.org/blog/
work/2009/11/14/java-build-tools.html](http://kent.spillner.org/blog/work/2009/11/14/java-build-tools.html)

“Maven builds are an infinite cycle of despair that will slowly drag you into the deepest, darkest pits of hell (where Maven itself was forged).”

composable

BASH

Rake Gant



languages

contextual



PowerShell



maven



frameworks

more context

more “out of the box”

better contextual intelligence

less flexibility

less ability to evolve

composable

less implicit behavior

better building blocks

greater eventual power

less initial power

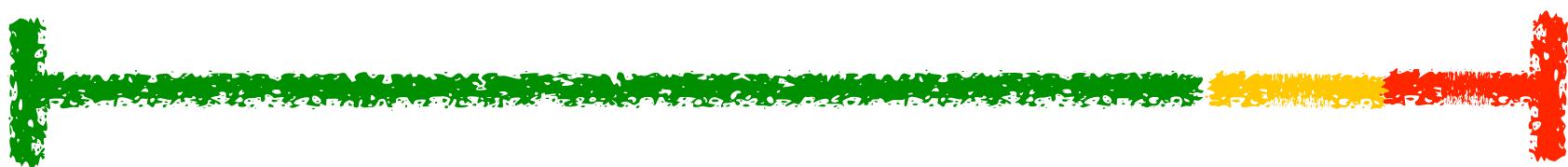
more flexibility

Dietlzer's Law

"Users always want 100% of what they want."

80%

10% 10%



what the user wants

how do you choose?!?



generic



opinionated

start with easiest...

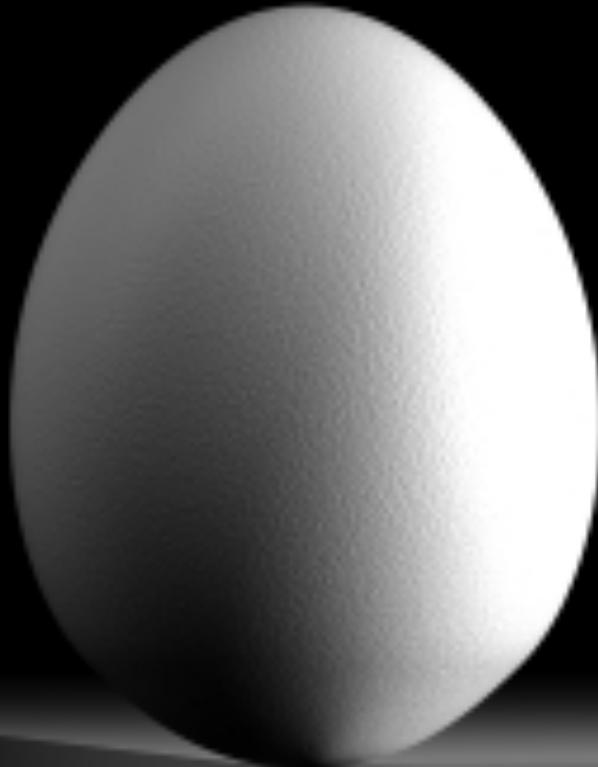


rigid



dogmatic

never
wonderful
again





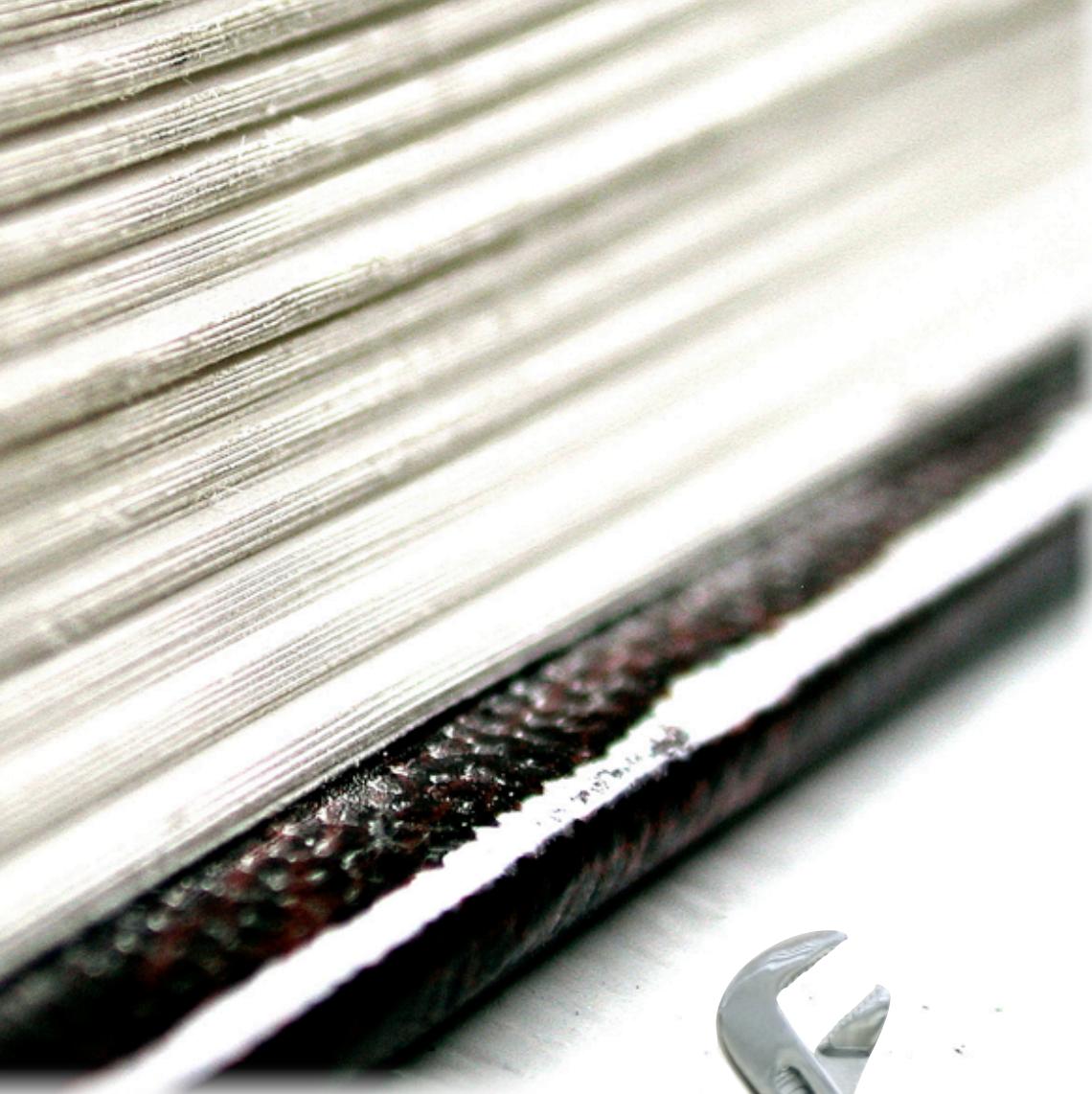
architect for change

pick the best tool for the job & the
lifecycle station

reevaluate when friction appears

invest in suitable replacements

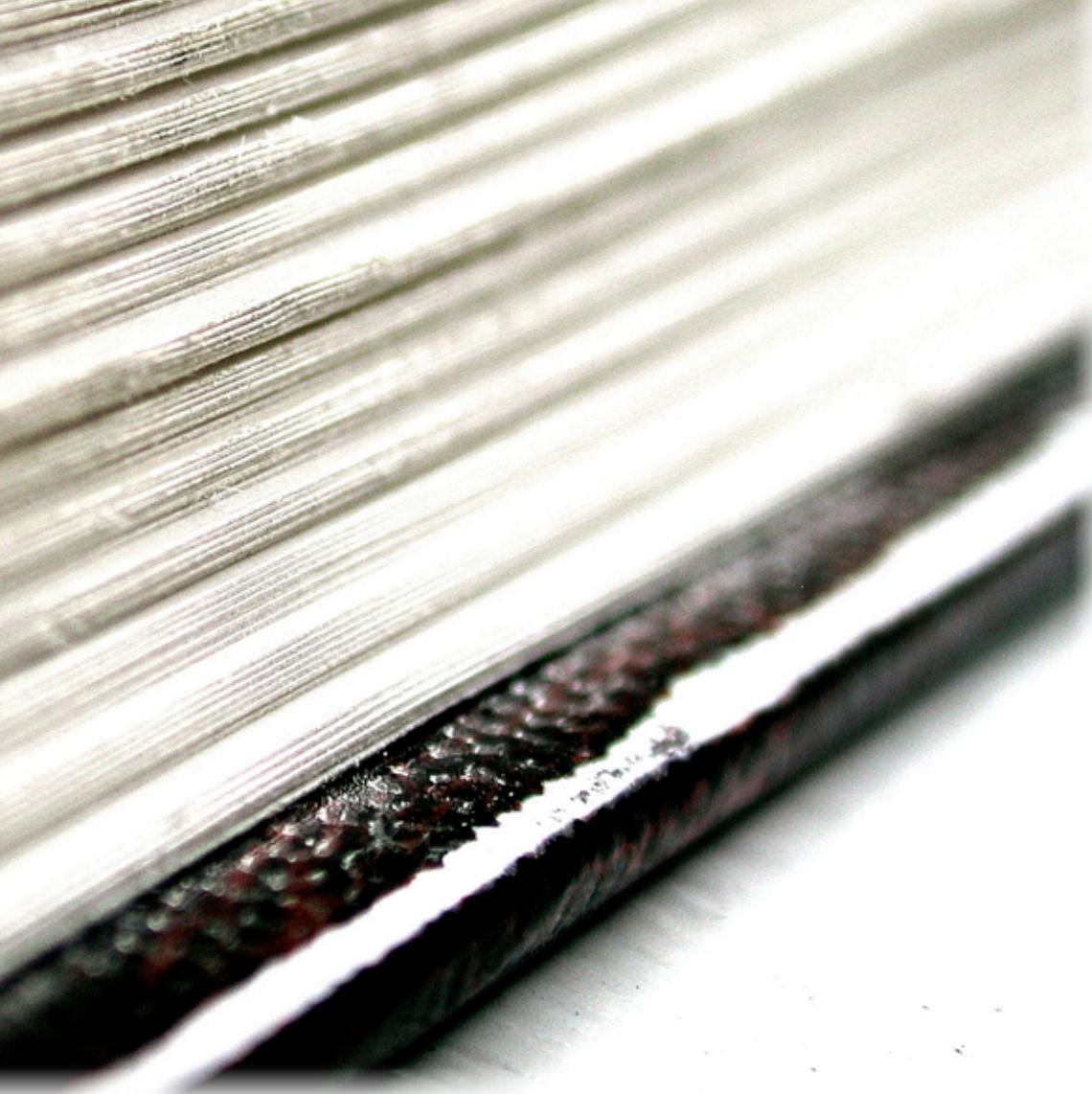
build anti-corruption layers



documentation



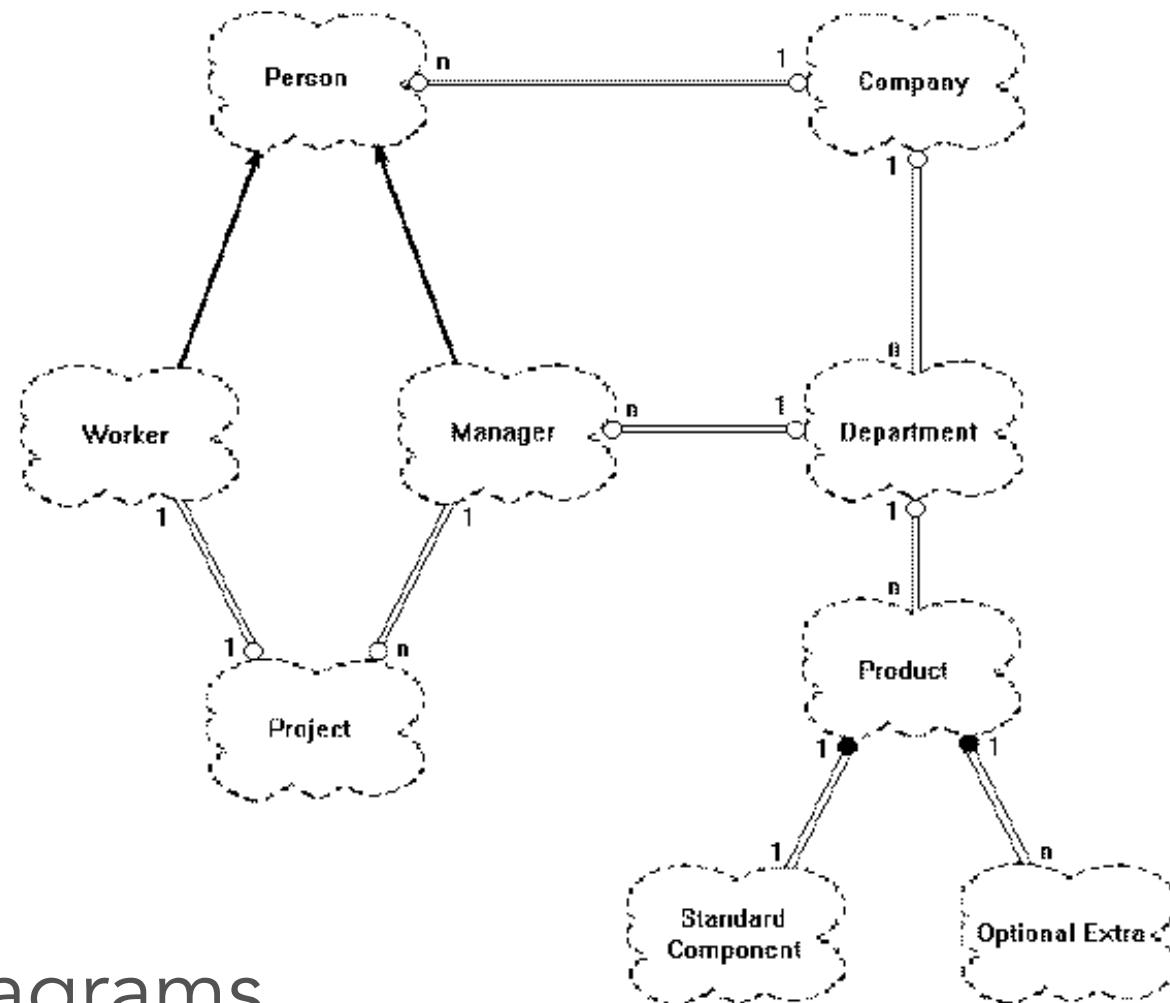
tools



documentation

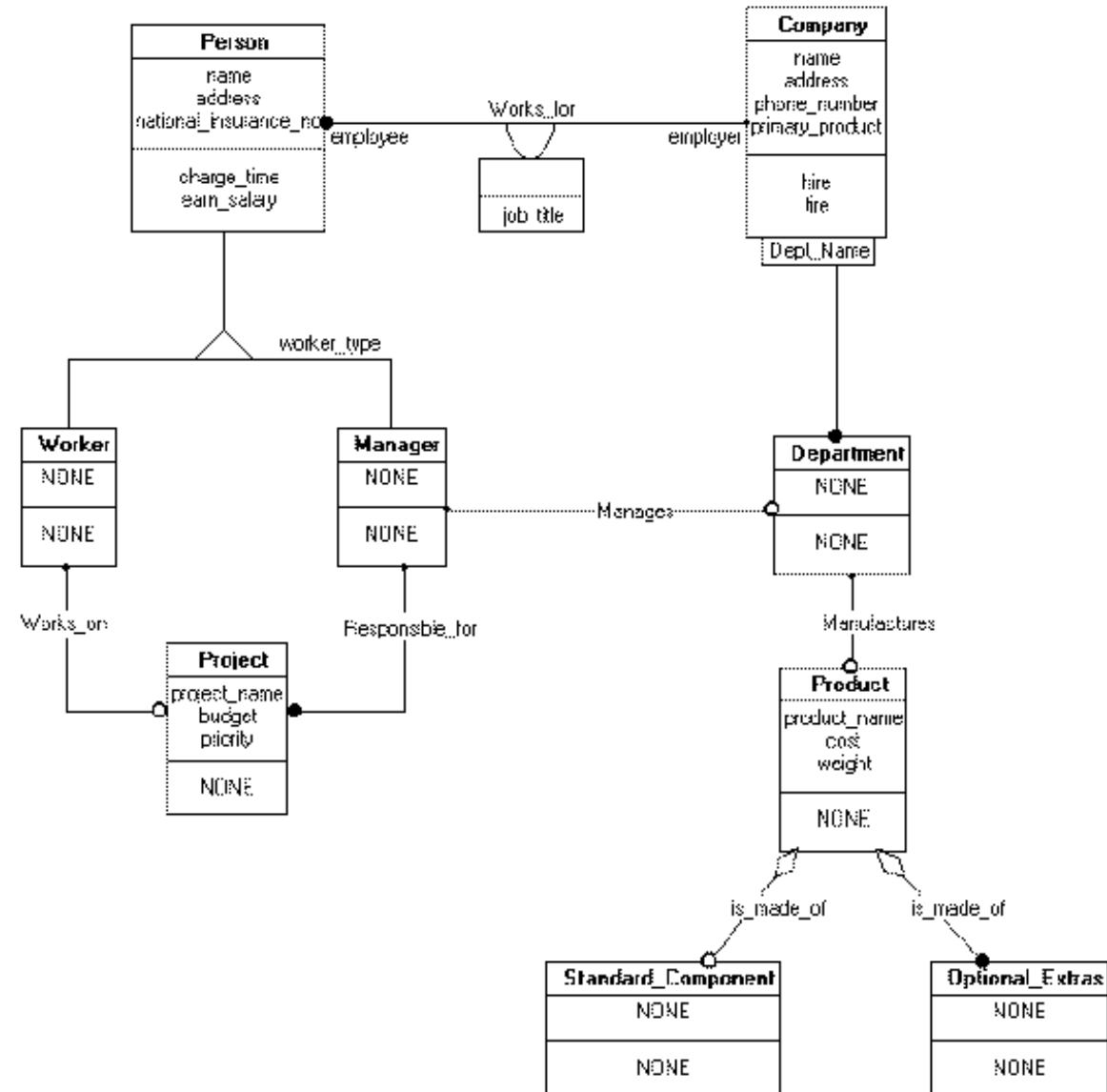
how do you document
architecture?

way back when...



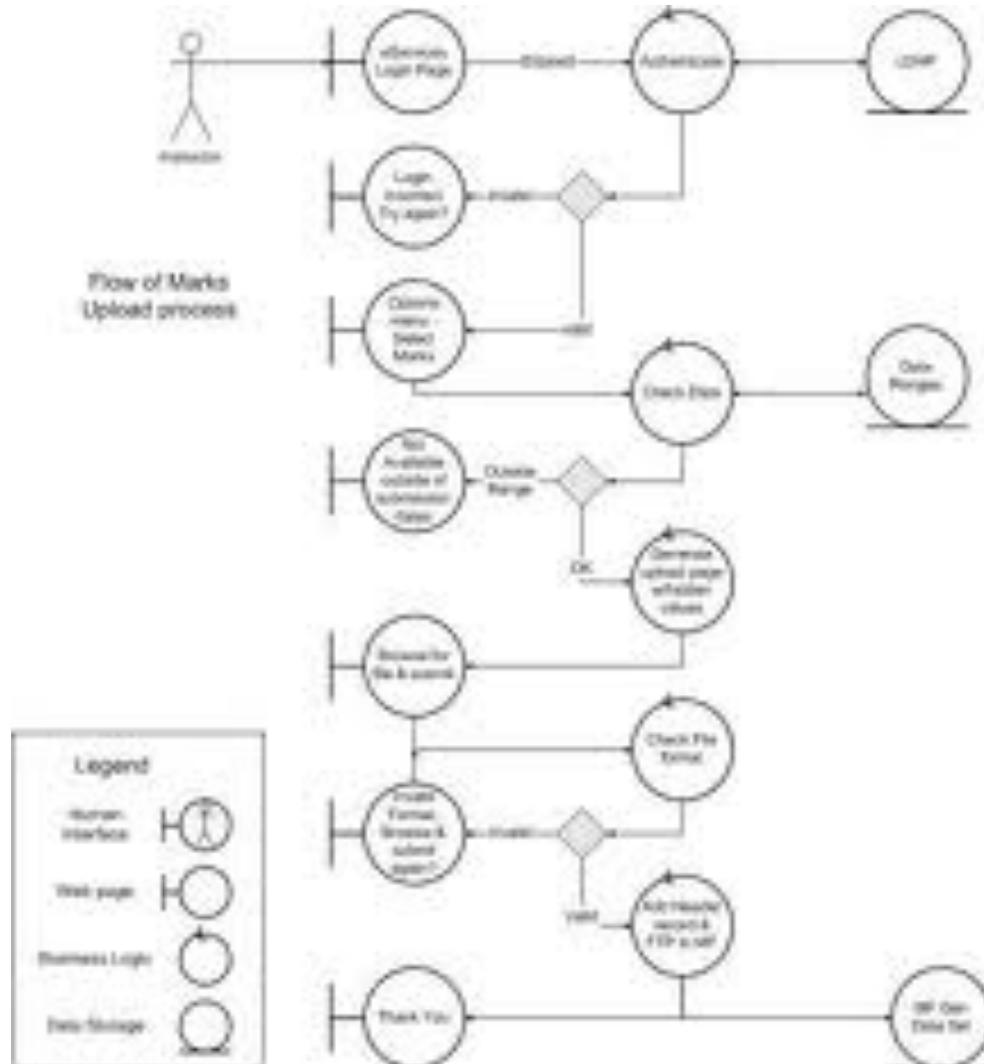
Booch diagrams

way back when...



Rumbaugh diagrams

way back when...



Jacobson use cases

UML

Covers through Version 2.0 OMG UML Standard

UML DISTILLED THIRD EDITION

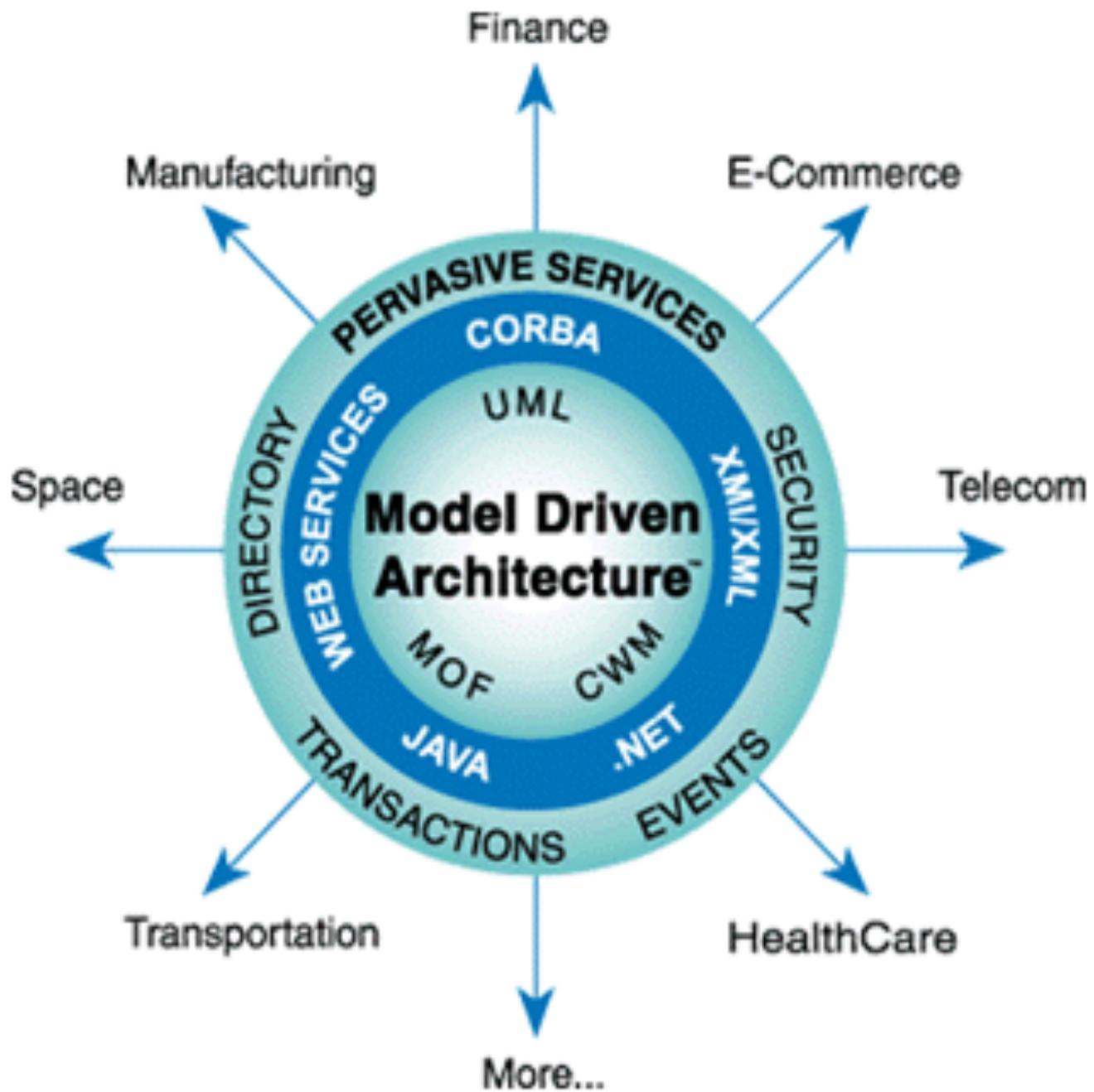
A BRIEF GUIDE TO THE STANDARD
OBJECT MODELING LANGUAGE

MARTIN FOWLER

Forewords by Cris Kobryn, Grady Booch,
Ivar Jacobson, and Jim Rumbaugh



M D A



DOA



UML & the Goldilocks problem:

UML is too technical for non-technical people but not technical enough for technical people.

N M L

documentation downsides

infinite regress problem

who is it for?

effort vs benefit

fungibility / malleability

always (potentially) out of date

building an API

Java-doc level documentation...

...at the end of the project

refactoring

emergent design

building an application

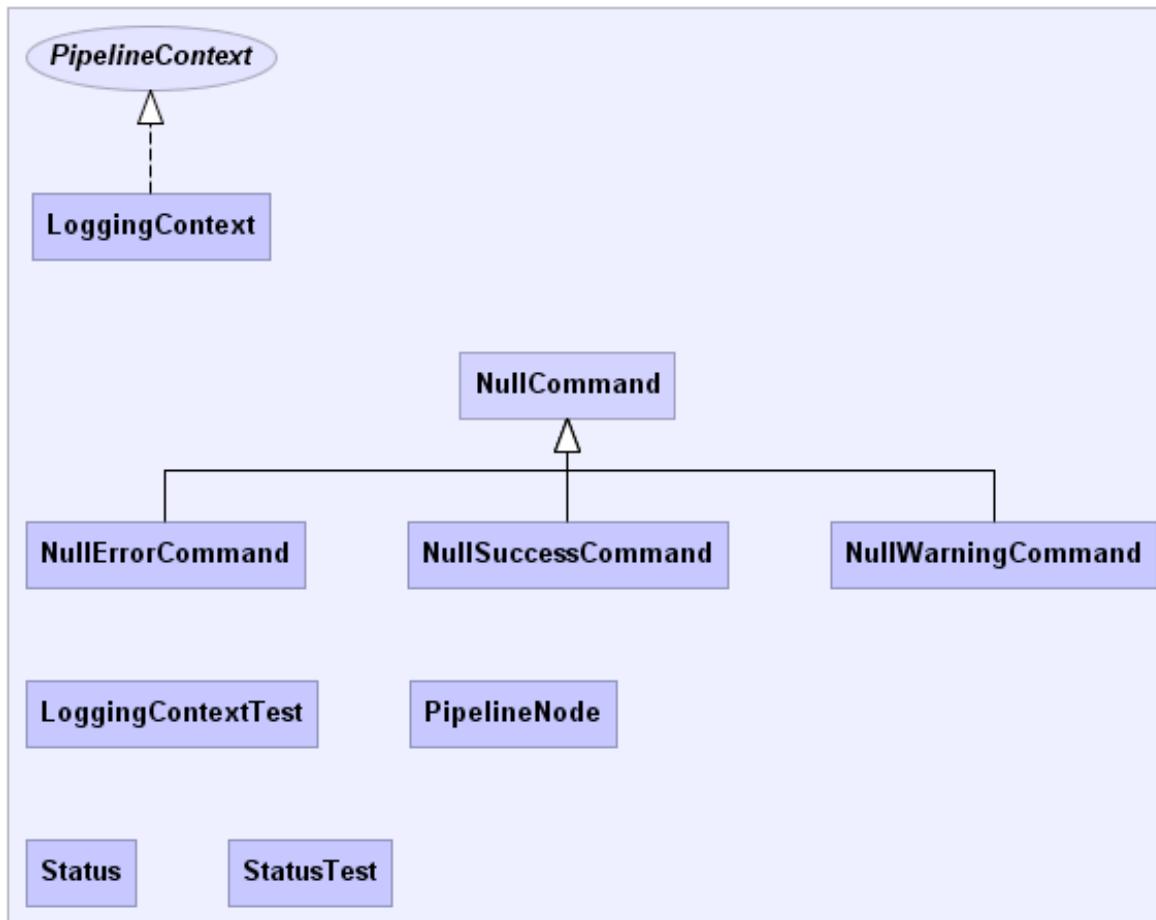
balance effort and reward

what are you documenting?

for what reason?

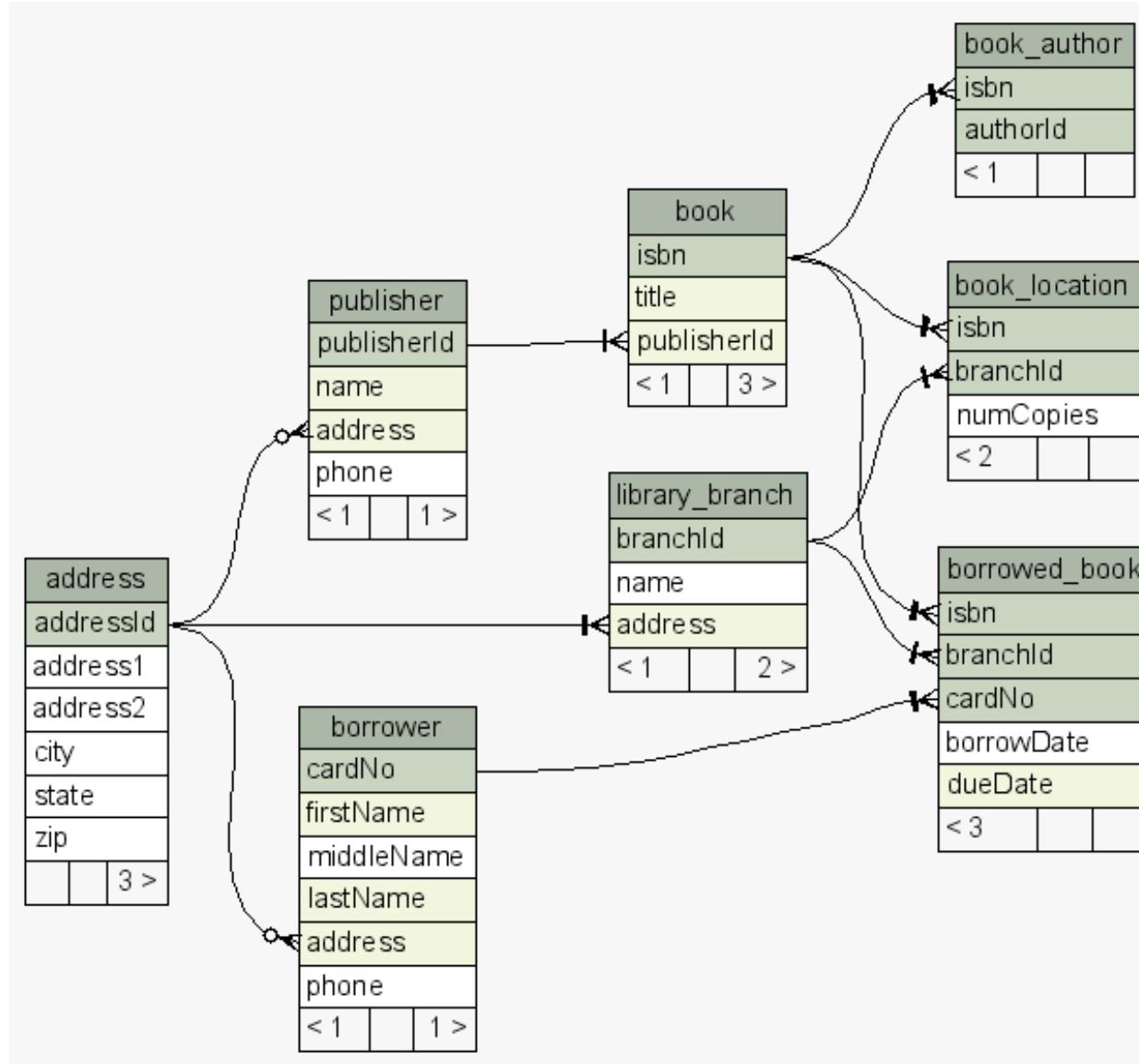
automate instead!

UML diagrams



Generated by yDoc Evaluation Version

database documentation



documentation tools

tools exist for all languages/version control

strike a balance between ceremony & essence

lightweight, in-situ design

capture in-situ design

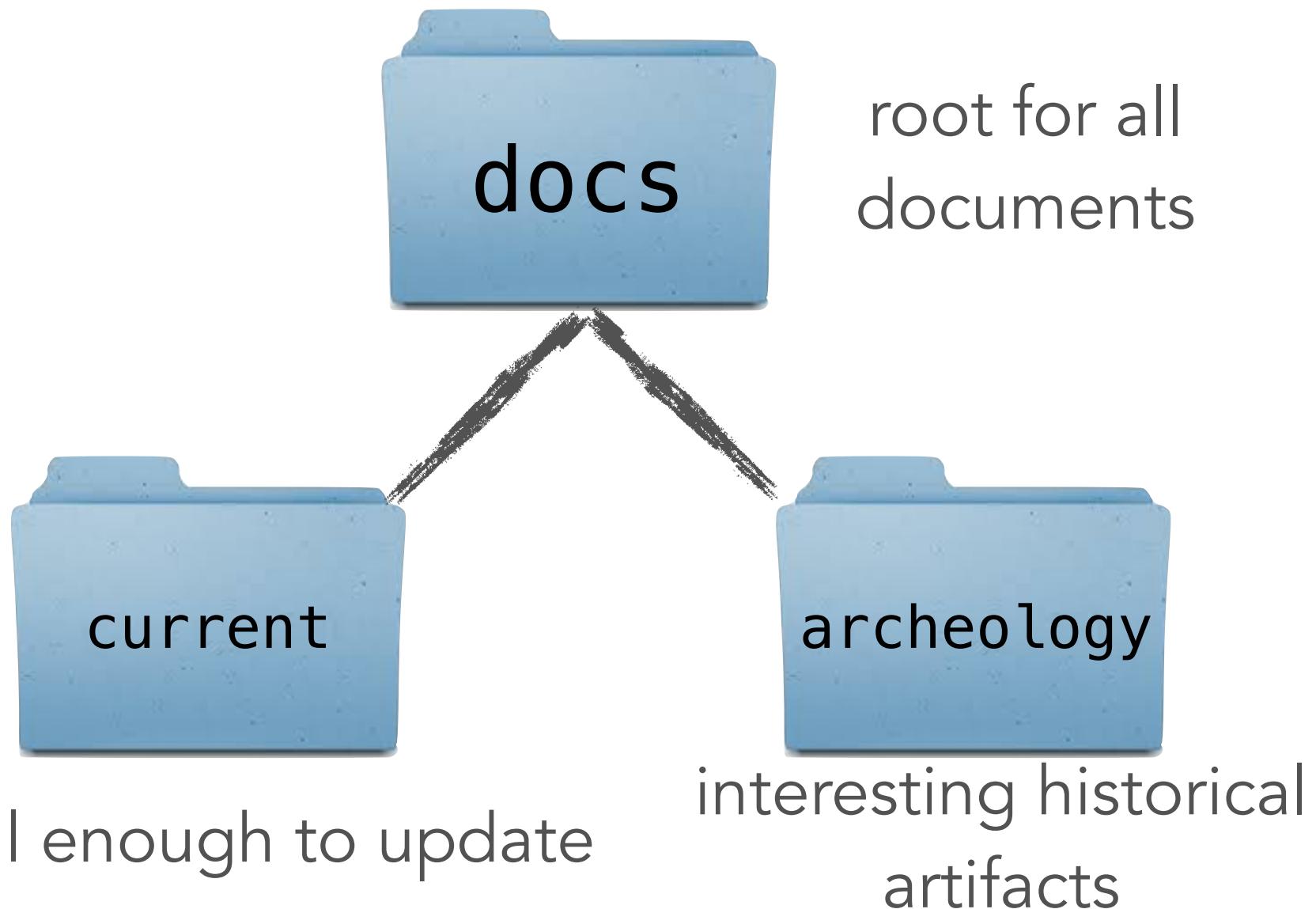
digital camera / smartphone

smart whiteboards

iPad hooked to a projector + note app

hand-crafted diagrams

archeology



? ' S



Mark Richards

Independent Consultant

Hands-on Enterprise / Integration Architect

Published Author / Conference Speaker

<http://www.wmrichards.com>

<http://www.linkedin.com/pub/mark-richards/0/121/5b9>

Published Books:

Java Message Service, 2nd Edition

97 Things Every Software Architect Should Know

Java Transaction Design Strategies



Neal Ford

Director / Software Architect /

Meme Wrangler

ThoughtWorks®

2002 Summit Blvd, Level 3, Atlanta, GA 30319, USA

T: +1 404 242 9929 Twitter: @neal4d

E: nford@thoughtworks.com W: thoughtworks.com