(More) Firefighting Troubled Projects

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A.K.A.

About Me

- Chief Operating Officer Kuju
  - Over 15 years
- Kuju have multiple studios:
  - HEADSTRONG GAMES — Art Academy, House of the Dead: Overkill
  - zoë Mode — Grease, Disney SingIt, Zumba
  - VATRA — Silent Hill: Downpour
  - doublesix — Self publishing – e.g. Burn Zombie Burn
- Heavily production focused role
  - Previously did lots of tech work

Overview

- Real issues in real projects
  - Examples drawn from ~9 projects over 7 years – but many others that were OK
- Problem-by-problem
  - Not project-by-project: some names removed!
- Talk through solutions
  - Some worked, some didn't
  - My experiences I want to pass on to you
- Prevention better than cure ?
  - Better process, better people
  - But this is the real world, stuff goes wrong

Exception, not the rule!

2010   2009   2008   2007   2006

The Challenges

- Producer quits
- No lead engineer
- Project scope changed by publisher
- Publisher unhappy (progress or quality)
- Publisher not paying you
- Project running late - technical issues
- Team lacking "finishing" experience – delay

"Help! My producer just quit"

Missing Producer

- Good producers will make big difference to success of project
- However what if they leave
  - Fed up with the publisher
  - Become detached from project vision
  - Believe that goals are unachievable
  - Their own career ambitions
- Happened to us on a couple of occasions
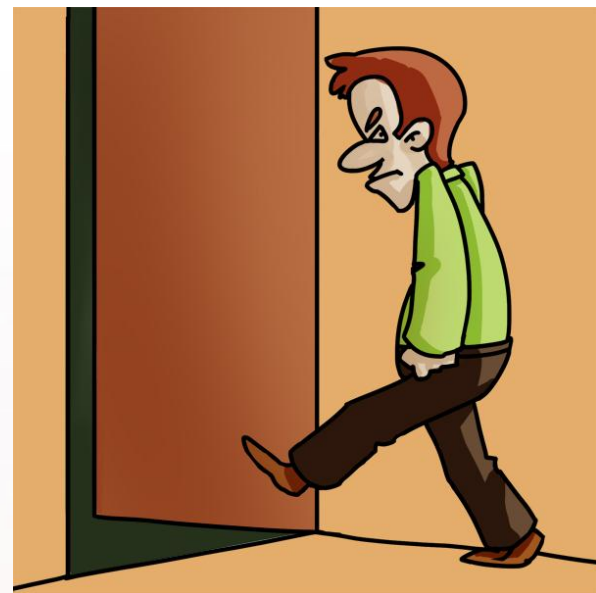
Missing Producer: Continued

- Why not just replace?
  - Like-for-like not adequate
- Intractable problems
- Solution: Draft in someone <u>WAY more senior</u>
  - Probably other things broken in the project
  - Need to catch up lost ground
  - Will cost more money

People

Historical

Production Issues

Relationship

Creative
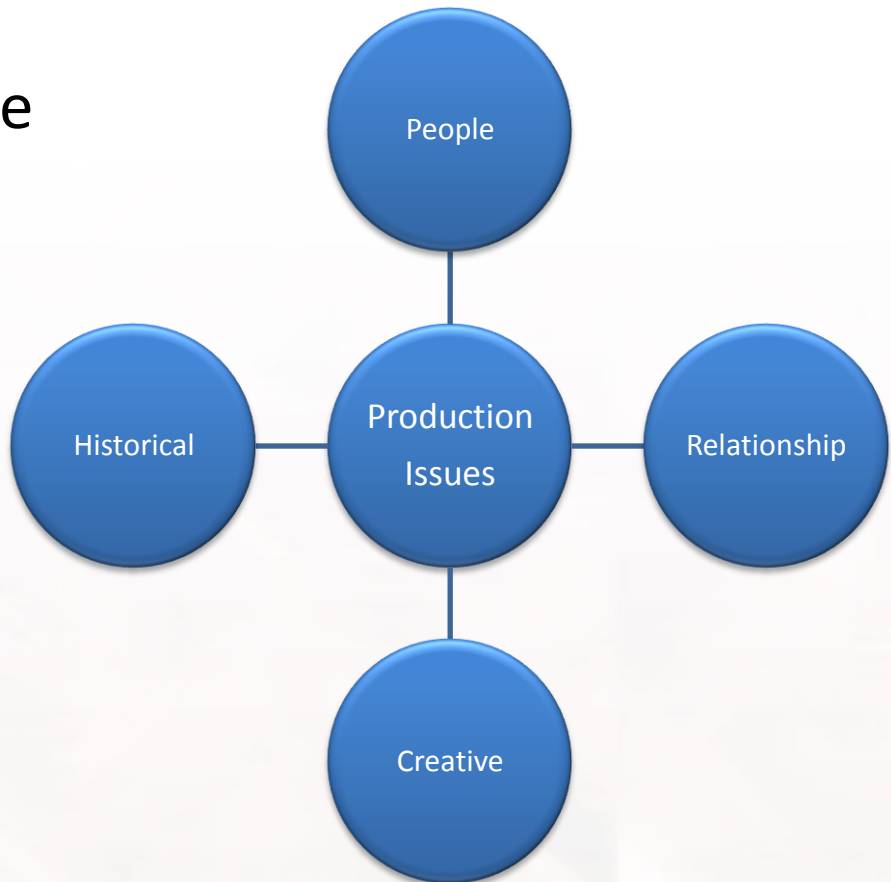
Stand-in Producer: Lessons Learnt

- Was a slippery slope – the more you know the more you are needed
  - Hence need <u>lengthy commitment</u>, not temporary solutions
- New senior producer will rework the schedule
  - Answers not always popular
- When I tried it: team <u>did</u> hit revised schedule

"I wish my producer would quit!"

Underperforming Producer

- Had a situation where producer was out of their depth
- Consider forcible change of personnel mid way through a project
- Never a good time to do it, many reasons against it …
- **Bite the bullet**: may pay off quicker than you think
- Got very close to doing it (made a job offer in fact)
- Ultimately brought someone in **more senior** to manage + mentor them

"No-one is running the code team!"

No Lead Engineer

- A number of symptoms
- Happened on a couple of projects:
  - Battalion Wars
  - Rail Simulator
- Problems more tractable than losing producer
- Solution: draft in someone more senior (TD etc.)
  - But can be temporary
  - Stopgap whilst replacement sought: easier to handover than production
- Benefits from a fresh pair of eyes
  - I led major refactor of codebase
  - Troubleshooting and simple improvements of tool chain

The Firefighter

- Don't always have the luxury to parachute someone in
- Maintaining a stand-in not affordable for smaller companies
- Debate whether you transfer someone from another project
  - Generally fall on side of <u>not</u> "robbing Peter to pay Paul"
- Solution: draft in outside expert

"Their new honcho wants to change everything!"

Project Scope Change

- A number of changes can happen at publisher

- Very dangerous time for a project

- Initiates a scope change

- Good if funded by them
  - Additional time/funding attractive of course

- However …

Project Scope Change (Dangers)

- Less in our control compared to developer initiated change

- Additional time/funding can be used to mask slippage

- $ signs in your eyes can cause mis-estimation

Scope Change Solutions

- Intervene in estimation/negotiation process
  - Someone needs to scrutinise the estimates
- Set appropriate contingency
  - Typical 20% not sufficient – high risk tasks
  - But existing benchmarks useful

# "They're really p***ed off!"

Unhappy Publisher

- Can be multiple causes:
  - Project late
  - Mismatched quality expectations
  - Breakdown in relationship
- Unfortunately have had to deal with this more than once

Unhappy Publisher - Elevation

- Publishers like someone to elevate to
  - even small studio can setup a chain
- Sometimes enough to vent
- But other times … consider intervention
  - Will be appreciated
- Has actually happened at the publisher's request
  - Kuju invited to see them
  - Presented their issues
  - Got a kicking!

Publisher

Developer

CEO ↔ CEO

SVP Production ↔ CTO

Executive Producer ↔ Studio Head
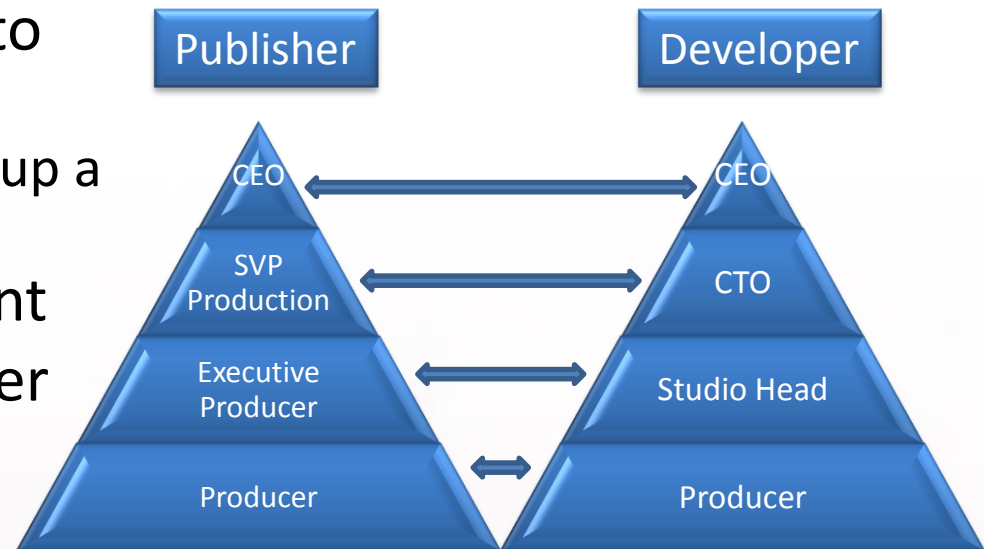
Producer ↔ Producer

Unhappy Publisher

- Examples of issues quoted at us:
  - Team not ambitious enough
  - Response times too slow
  - Lack of consistent producer coverage
  - Animation quality poor
  - Documents delivered late
  - Milestones not defined properly

Feeding Back to Team

- Can be difficult to feed publisher's complaints to team
  - Studio management definitely had a different take
- Frank discussions with individual team members
  - e.g. lead coder responded differently to me
  - context/language barrier/respect

Diplomacy

- Valuable being the diplomat
  - Hearing both sides of the argument
  - Not leaping to conclusions or judging too soon
  - Both individual <> individual and developer <> publisher
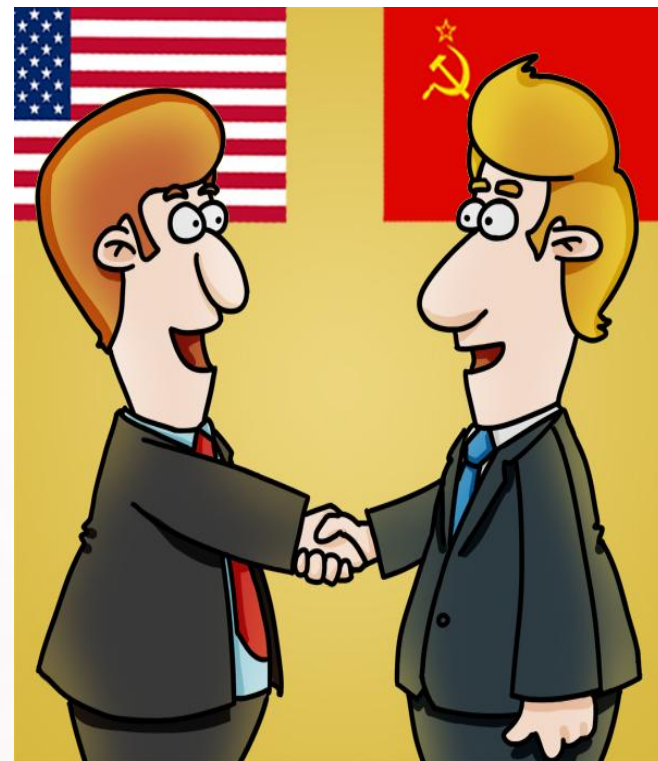
Perils of Publisher Bashing

- Very easy to moan about the publisher
    - Get into a downward spiral of blame
- Lots of this is your team ass-covering
    - Or at least misguided / misunderstanding
    - Usually out of your control
- Solution: the diplomat
    - Diplomat needs to maintain neutrality
- Who it is depends on structure of <u>your</u> organisation

Marriage Guidance

Long Term Relationship?

- It's not always as bad as it seems: don't write them off
- Working on M.A.C.H. in 2006
  - Late
  - Large technical challenges (e.g. PSP UMD loading times)
  - Publisher angry (threatened to go legal)
- But we turned it around
  - Changed producer (more experienced) and lead coder
  - R&D team time into loading times and frame rate
- Ultimately signed more (successful) work with them:
  - Geometry Wars Galaxies

"We need some money. NOW!"

Not Getting Paid

- Cashflow is very challenging for independent developers
- Milestone payments are the publisher's lever
- Often seen as a David vs Goliath struggle
- Payments withheld because:
  - Milestone fails to meet their standards
  - They CLAIM it doesn't meet their standards
  - They are pissed off about something else
  - They don't have the money
- But company still needs to pay staff, rent etc.

Not Getting Paid

- What you can do:
  - If you don't ask, you don't get!
    (Some can be oblivious to your problem)
  - Partial payments
  - Out of order payments (E3 demos for example)

- Downing tools generally a bad idea

- Elevation often needed
 - You may get a nice surprise

"My code team really screwed up"

Late Project (Due to Tech)

- What if the technology problem is severe and fundamental?
- Major systems take many months to come together
  - Lots of components to integrate
  - But sometimes it just doesn't happen

- E.g. Our shooter title had severely broken AI
- Needed lots of enemies, dynamic obstacle avoidance
- ... but code and team had a number of problems:

Tech Problems
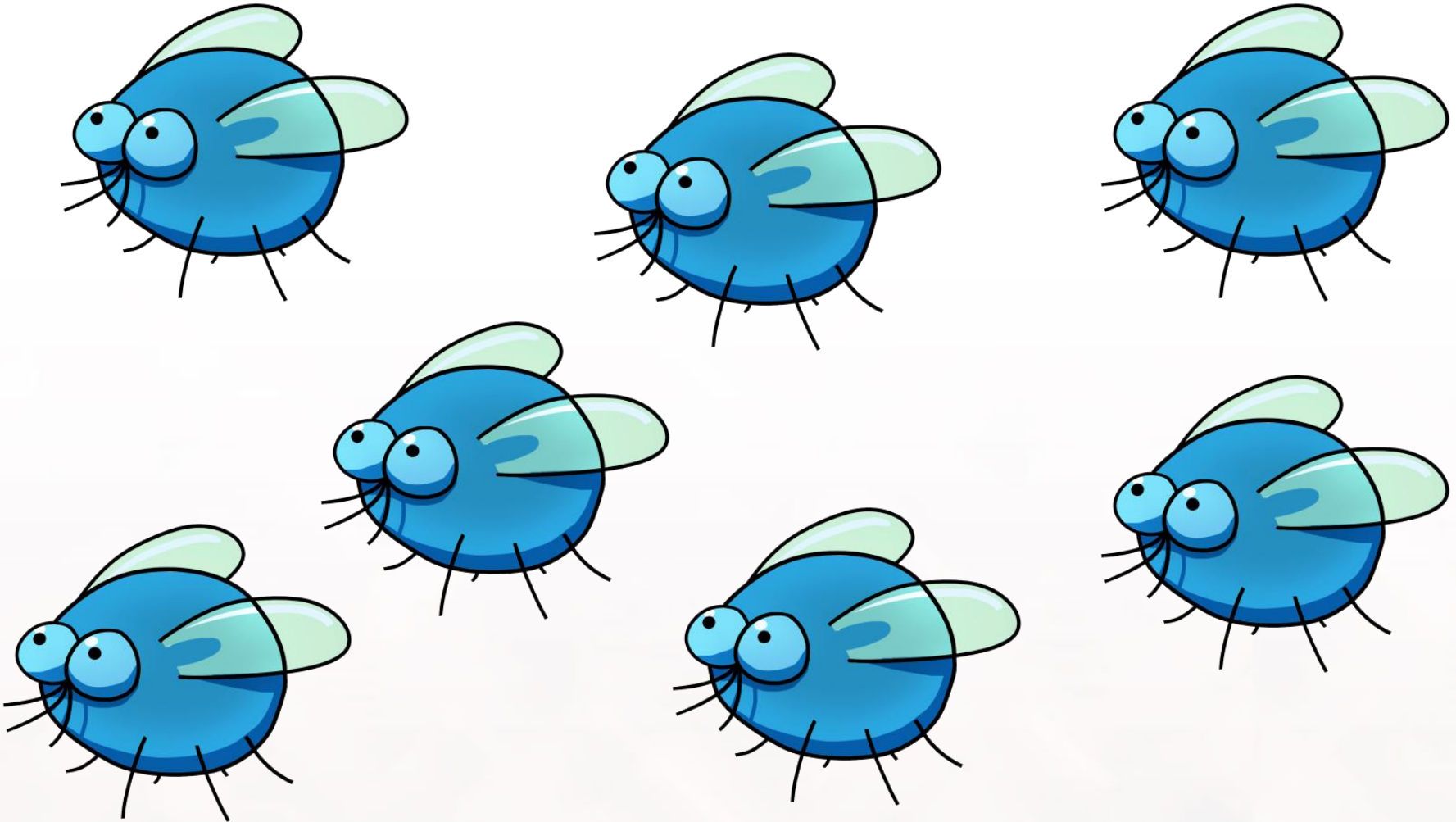
Drastic Solution

- Relocated the entire team to another studio
  - Built around existing core AI team
  - Very tightly defined scope
- Presented some huge personnel challenges
  - Things that normally would have been OK in a typical project
- But ultimately gave the team focus
  - Was the best available route at the time

"They can't get it in a box"

Finishing Skills

- In another recent example, Rush 'n Attack, the team had not actually shipped a PS3/360 title before, even for download
    - Didn't know TRC/TCRs
    - Didn't appreciate how stringent platform holders are
    - Were hit by the hard work required
- Hence project was running late
    - Though worth noting there were other issues

False Assumptions

Photo: Platon Shilikov, used under terms of Wikimedia Foundation / Creative Commons Share-alike license
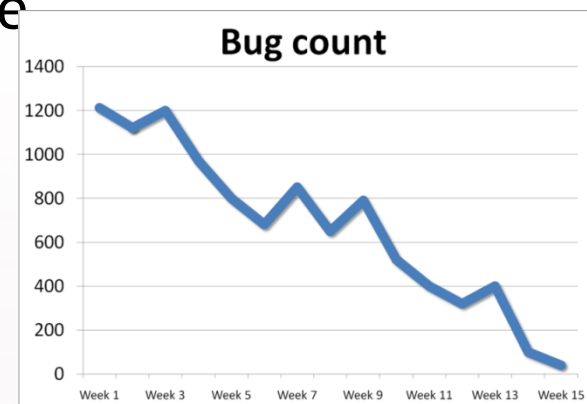
- An interesting evening in Brno
- 5'6": short compared to other players?
- I assumed that basketball players needed to be tall
- But scoring was amazing!

The Fact-Finding Mission

- You need to talk directly with team face-to-face
  - Don't have the message diluted
- On Rush 'n Attack, it was assumed main issue was PS3 skills
  - But in fact team were short on code resource generally
  - The assumption was false
- Only found this out by spending time with them
- Therefore additional solutions employed
  - Borrowing resource etc.

Fixing Process Flaws

- Be careful not to take "standard process" for granted
- Made false assumptions about bug triage process on Rush 'n Attack:
  - Producer had internal handle on bugs
- Needed to convince of need for visibility
  - To both us and the publisher
  - See trend lines, predict ZBR date
- Lead by example, top down
  - For bug triage, myself and studio head did a pass
  - Don't just send an email or write document

Bug count

(line chart: values from ~1200 at Week 1 declining to ~0 by Week 15; y-axis 0 to 1400, x-axis Week 1 through Week 15)

Conclusions

- No producer $\longrightarrow$ More senior replacement
- No lead engineer $\longrightarrow$ Rehire + plug gaps
- Publisher scope change $\longrightarrow$ Intervene, handle with care
- Publisher unhappy $\longrightarrow$ Elevation, diplomacy
- Not getting paid $\longrightarrow$ Elevation, get creative
- Fundamental tech issue $\longrightarrow$ Don't tinker, use drastic changes
- Team process flaws $\longrightarrow$ Lead by example

Fact finding is vital: <u>face to face</u>

Thank You!

- Questions?

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