



# Scaling your influence when you can only be in one place at once

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## Intro

- Principal Software Engineer at Skyscanner since January 2020 (a great time to join a travel company!) currently working across devex tooling/mobile platform/data emission
- This case study is very abbreviated- please talk to me after for any/all questions!



## Intro to Skyscanner

- Typical squad/tribe model
- Each tribe is cross-discipline and has a Director (management path) and at least one Principal Engineer (IC path)
- Squads/Tribes are also geographically distributed across our offices in multiple timezones



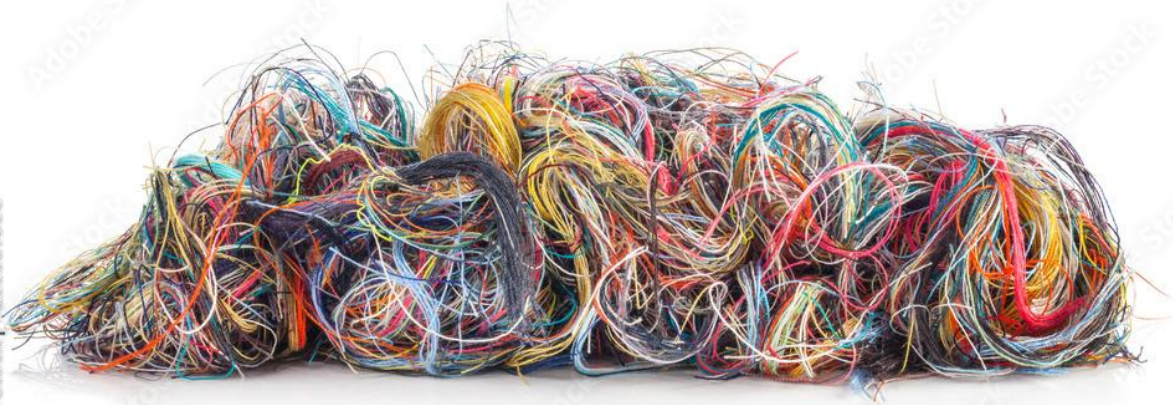
## Communication Paths

- There's a lot of them!
  - Director <> Director
  - Director <> IC
  - Director <> Engineering Manager
  - IC <> IC
  - IC <> Engineering Manager
  - IC <> Engineers
  - ...
  - ...
  - ...

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# Communication Paths

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# The Challenge

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**“I’ve been hearing about quality issues in our app from other directors. Can you investigate and put a strategy in place to address these?”**

**- My director to me, sometime last year**



# Investigating Quality Issues

- What do we mean by “quality”?
  - Reviews, performance/availability metrics are all good, so where’s the concern?
- The response was around the code quality being delivered



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**How did I start tackling this?**



## Metrics

- I knew we needed effective measurements
- We'd previously used a third-party static analysis tool but it was removed during Covid
- I started by investigating similar tooling, and how we could simplify our setup by using a SaaS provider

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**Step 1: Setting a vision and getting  
buy-in to make any plan a success**



## Getting buy-in

- I need buy-in from the engineers, as they're writing the code
- I need buy-in from the Principal ICs, as they support the engineers and provide direction
- I need buy-in from the Directors, as they set resourcing decisions and they raised the concern

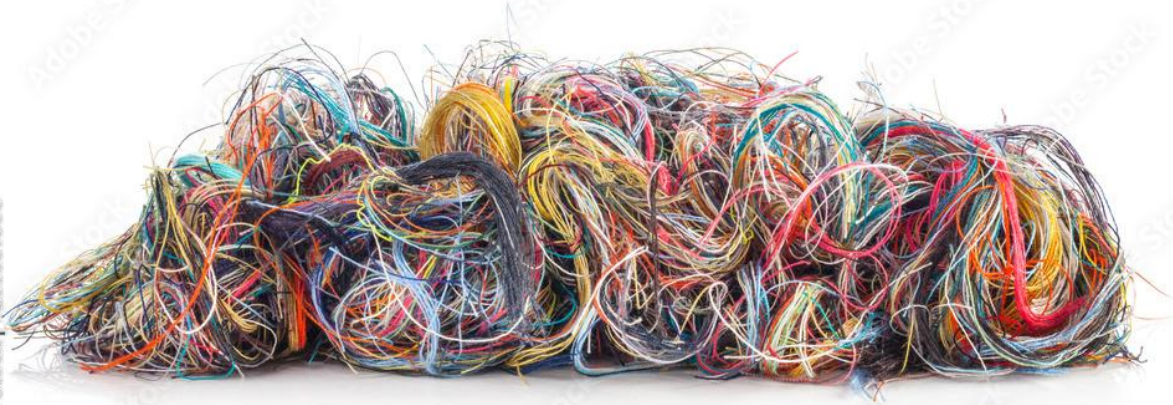
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**Having conversations is great,  
but...**

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# Communication Paths

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# My Calendar (potentially)





## **My Calendar (potentially)**

- Even if you thrive with a busy calendar and face time opportunities, others might not feel the same



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**Linking back to the title... how did I  
scale my influence to make this a  
success?**



## The Plan

- We decided on a static analysis tool, we made sure all the integrations were working, and once we were sure it was ready....



## The Plan

- We decided on a static analysis tool, we made sure all the integrations were working, and once we were sure it was ready...
- **We disabled every single check.**



## The Plan

- Trying to suddenly introduce many checks overnight would not have gone well
- We decided to start with only one key check- code coverage
  - I know this isn't perfect! I only have 10 minutes, please talk to me after!
  - We updated exclusion rules, analysed the areas that were lacking coverage, and interviewed engineers to understand what mattered most



## The Plan

- We wrote up guides on how to improve code coverage
- We made sure our internal documentation was up-to-date



## Custom Integrations

- PRs, so all new code has to meet a quality threshold
- Internal dashboards to allow you to quickly visualise these checks by module/file/squad
- Tribe-level reports that are generated weekly to help plan long-term improvements



## Custom Integrations

- Thankfully we have a culture of trust at Skyscanner so there was no shaming, just informing
- This was all to reduce the “friction” of introducing a new tool
  - It took longer to work on all of these than the main tool integration
  - **Even finance approval was quicker!**



## Scaling

- We tracked where squads “opted-out” of checks to help us identify what we’d missed. We wanted to provide guardrails and not barriers
- We made sure everything was being communicated via Slack/documentation/appropriate meetings (I couldn’t avoid all of them)



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**What did this mean?**

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**“Michael and his tribe are focusing on increasing code quality and code coverage”**

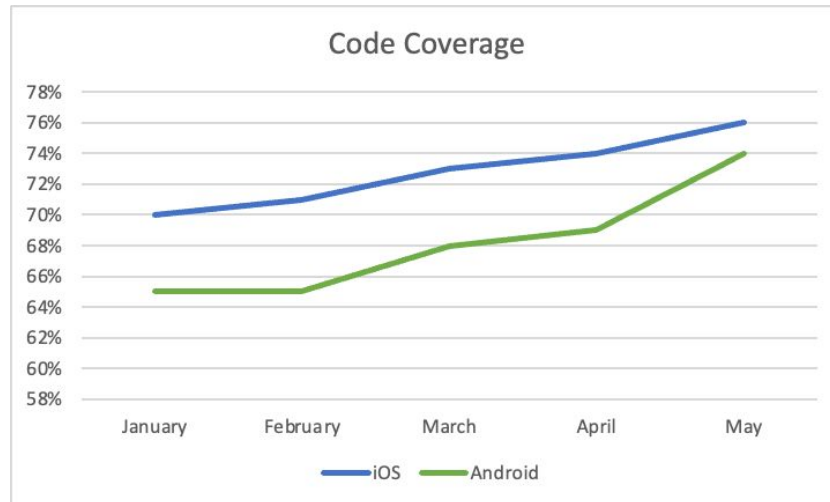
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**This also gave us one number to share when asked about progress**



# “How are things progressing?”

(All numbers illustrative only!)





## Linking to the original communication structures

- Engineers are getting immediate PR feedback alongside detailed documentation



## Linking to the original communication structures

- Principal Engineers can do the same, and can do deep-dives into the data to understand and guide where needed



## Linking to the original communication structures

- Directors can view the weekly tribe-level reports to understand progress and work required



## Platform Engineer Motivation

- We've been able to use the same tools/metrics to see the impact of our work scaling across the company
- We're also holding ourselves to the same high standards of addressing our code!





# Outcomes

# My Calendar





## Outcomes

- We're seeing steady sustainable growth in our code coverage, not just a short-term initiative that's forgotten about
- Engineer feedback shows it's now embedded in our way of working



## Outcomes

- “Rather than increasing the code coverage on this legacy code, we decided to push for the final migration and delete it instead. Is this OK?”
  - 🤨 🎉 🥰



## Outcomes

- We're now looking at what other checks we can enable
  - Very careful not to break trust!



# Lessons Learnt



## Lessons Learnt

- Keep metrics small and focused
- Be transparent to build trust
- Tailor and communicate in the best way for your audience
- Add the documentation you *think* you need, and then add more

**Thank you!**

