

Multi-supplier Development with Magnolia

Michael Aemisegger
Jan Wloka
Quatico Solutions AG

Quatico Solutions

Crafting Software

A small software engineering shop in Zurich.

We build tailored web applications often with non-trivial server logic and digitalize business.

Our aim is to deliver very good results not just because our customers demand it, but because we're craftsmen, and we are proud of the results of our work.



www.quatico.com

Why multiple suppliers?

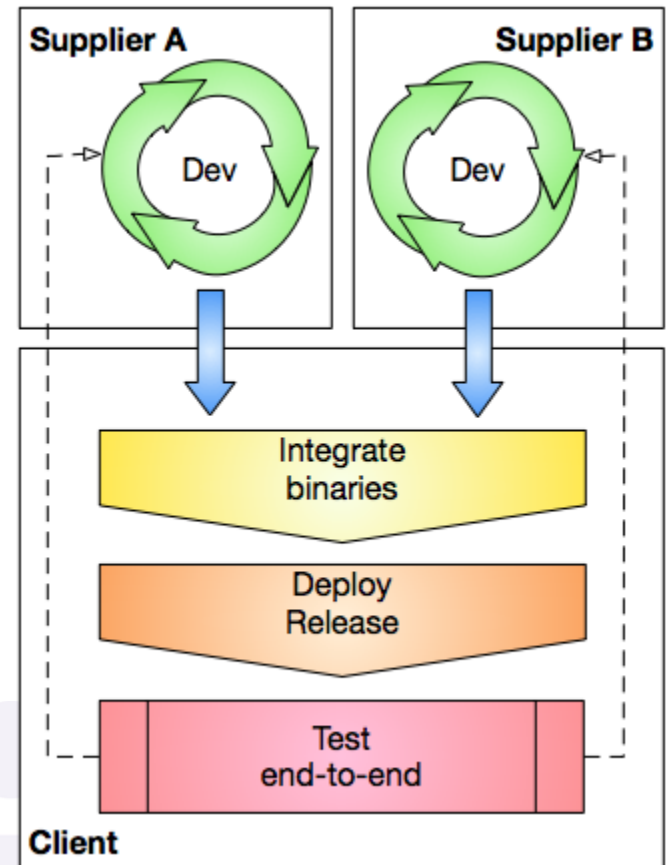
- Scale with business demands
- General company policy
- Need for specialized suppliers
- Extend your development team



A common approach:

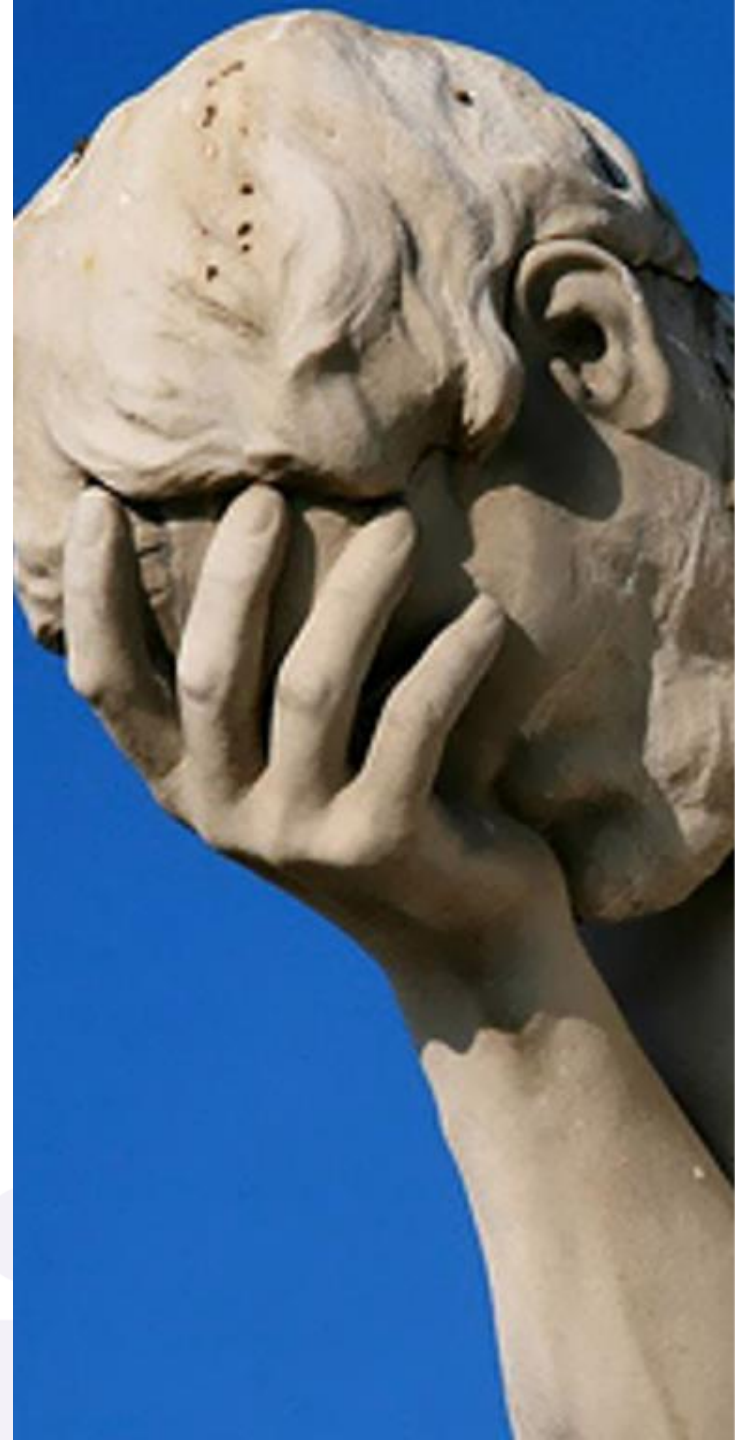
Develop off-site,
Integrate, deploy and test on-site.

- Team talks and coordinate every week
- Testing after integration of binaries
- Test - Bugfix cycle may take weeks
- Client responsibilities
 - Integrate binaries
 - Manual testing of releases



Results are...

- Delayed discovery of conflicts
- Bugs found by end-to-end tests
- High management efforts
- Unsatisfying progress & quality
- Higher costs than expected



Main reasons...

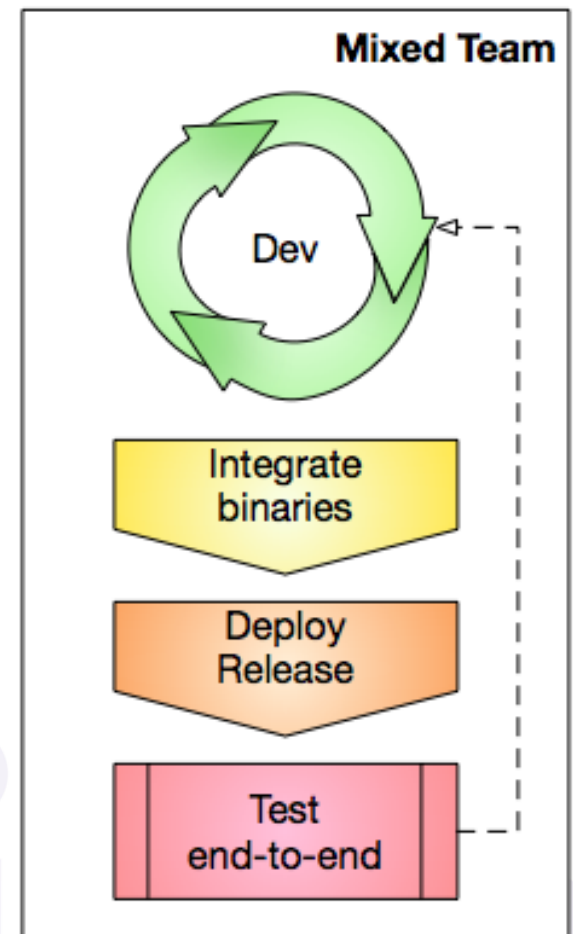
- Results integrated infrequently
- Testing late in process
- No separated responsibilities
- Too many manual tasks



Another approach:

Develop, integrate, deploy and test on-site.

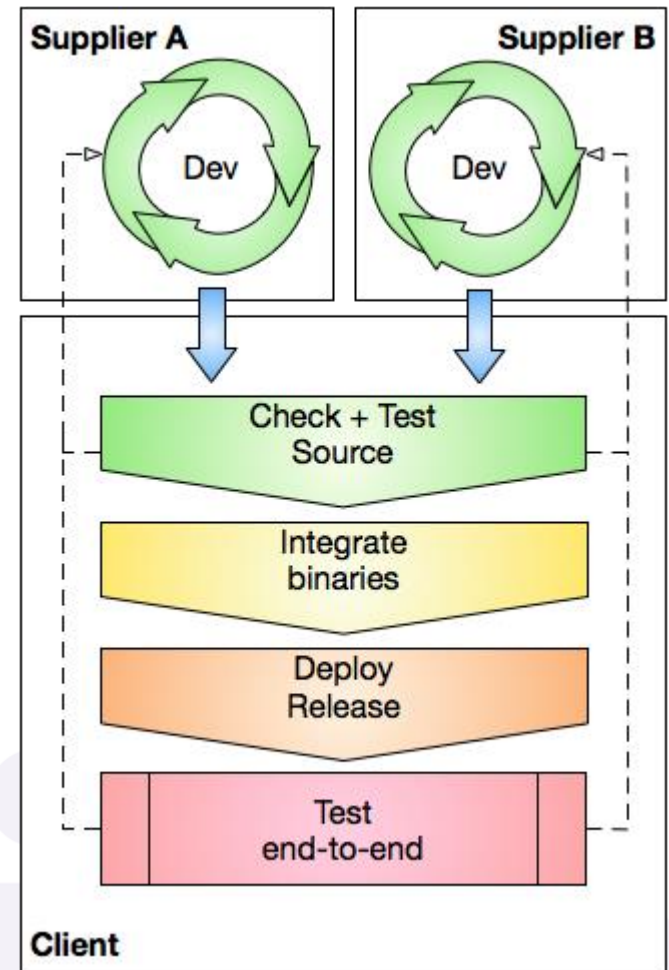
- Often not accepted
- Supplier's development process
- Supplier's tooling and infrastructure
- Inefficient and expensive



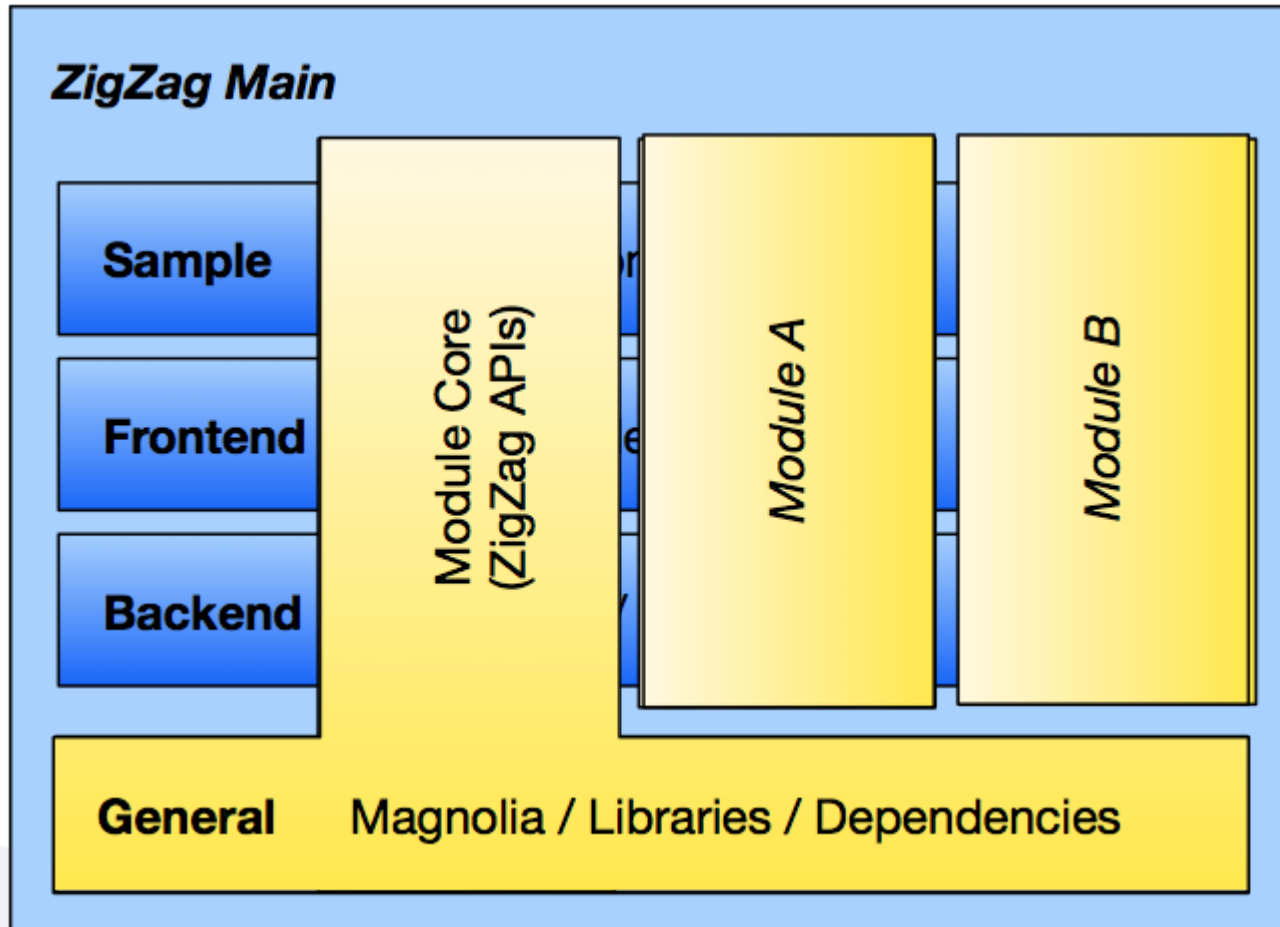
Source Integration Strategy

Develop off-site,
Integrate source and test-on-site

- Scalable Architecture
- Automated Integration
- Extended Organization



Scalable Architecture



Automated Integration

- Module Generator
- Fully automated build chain
- Off-site module builds
- On-site integration and release builds

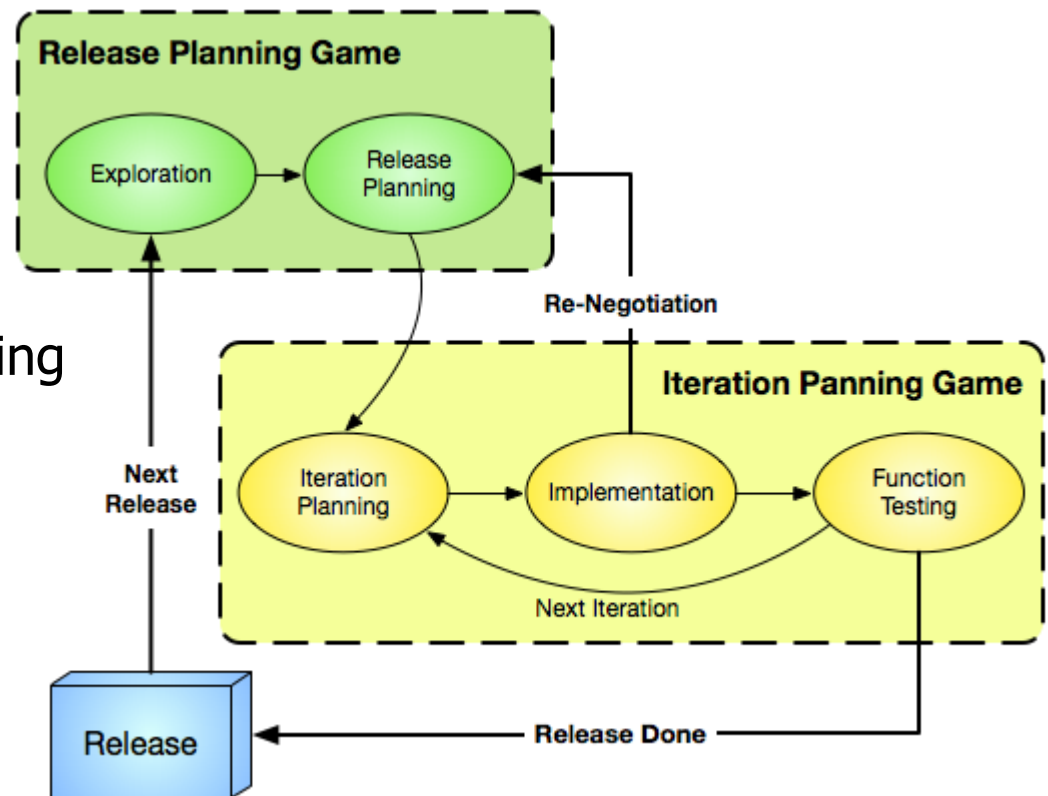
Extended Organization

- Supplier teams (on-/off-site)
 - Individual planning/development
 - Implement all layers
- Core Module team
- Release Team (on-site)
 - Run CI Infrastructure
 - Build releases, inspect results



Orchestrated Releases

- Separate Release planning
- Cherry picking
- Managed API changes



What do you gain?

- Clear responsibilities
- Release ownership
- No supplier lock-in
- Speed



Clear responsibilities

- Between core and additional suppliers
- Automatically enforced conventions
- Less side effects
- Less blame game



Release ownership

- Automated gathering of quality metrics and test coverage
- Releases with cherry picked binaries
- Customer decides what is released

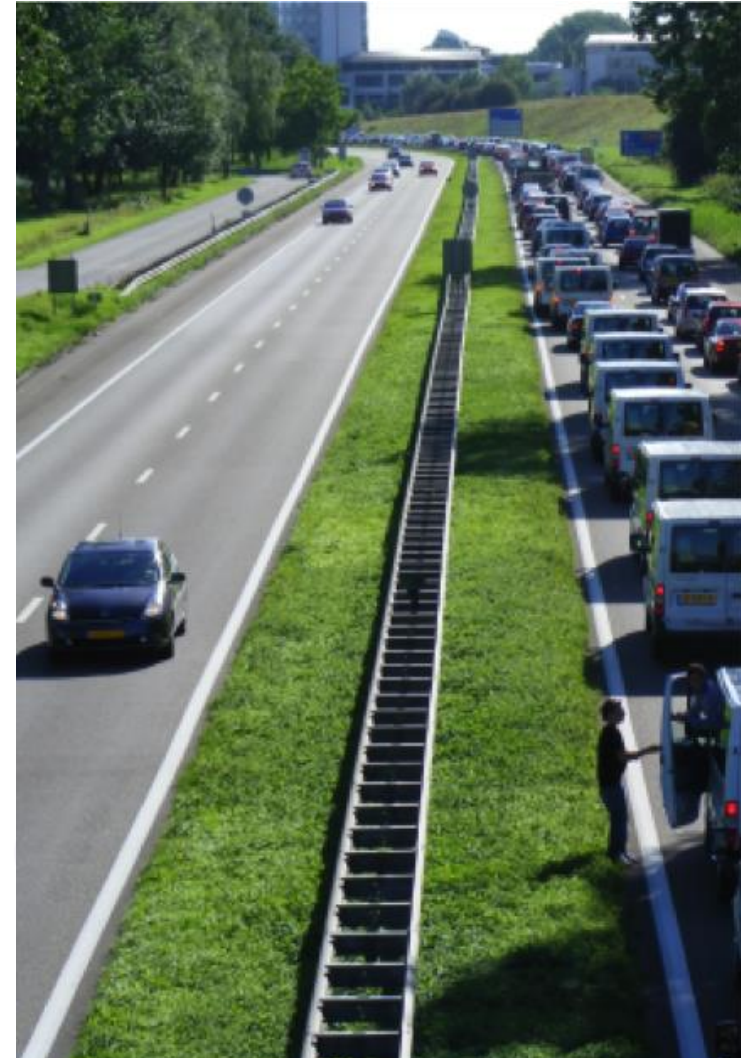
No supplier lock-in

- Little system knowledge needed
- Creative Freedom for suppliers
- Exchange suppliers with little overhead

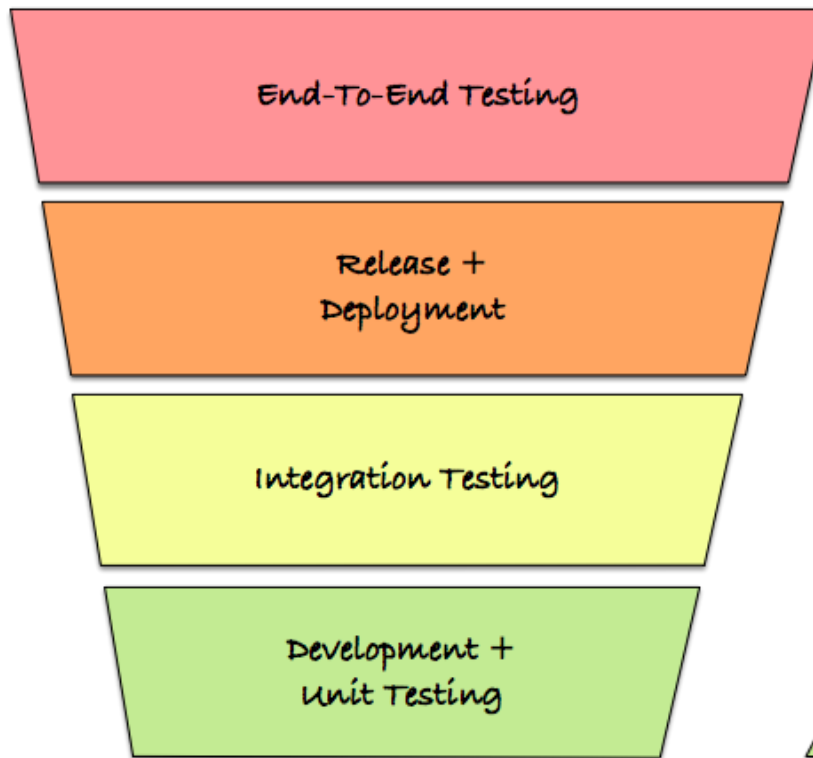


Speed through faster feedback

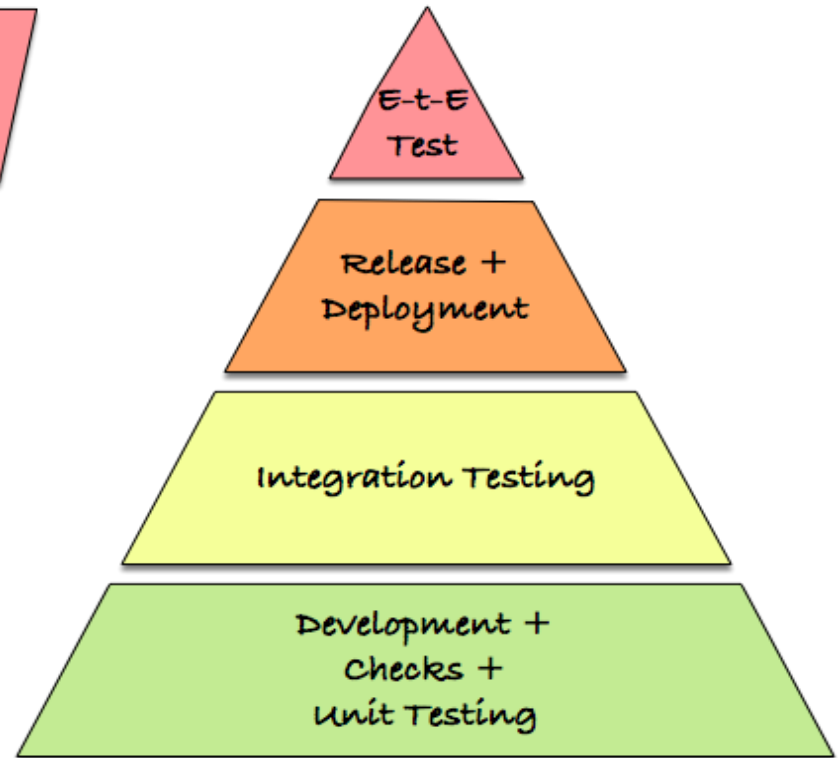
- More releases in less time
- Less manual testing
- Faster learning from mistakes
- Respond faster to business needs



The Big Picture



Other strategies



Source Integration Strategy

Thank You.



Michael Aemisegger



micheal.aemisegger@quatico.com



[@crashtester](https://twitter.com/crashtester)

Jan Wloka



jan.wloka@quatico.com



[@crashtester](https://twitter.com/crashtester)