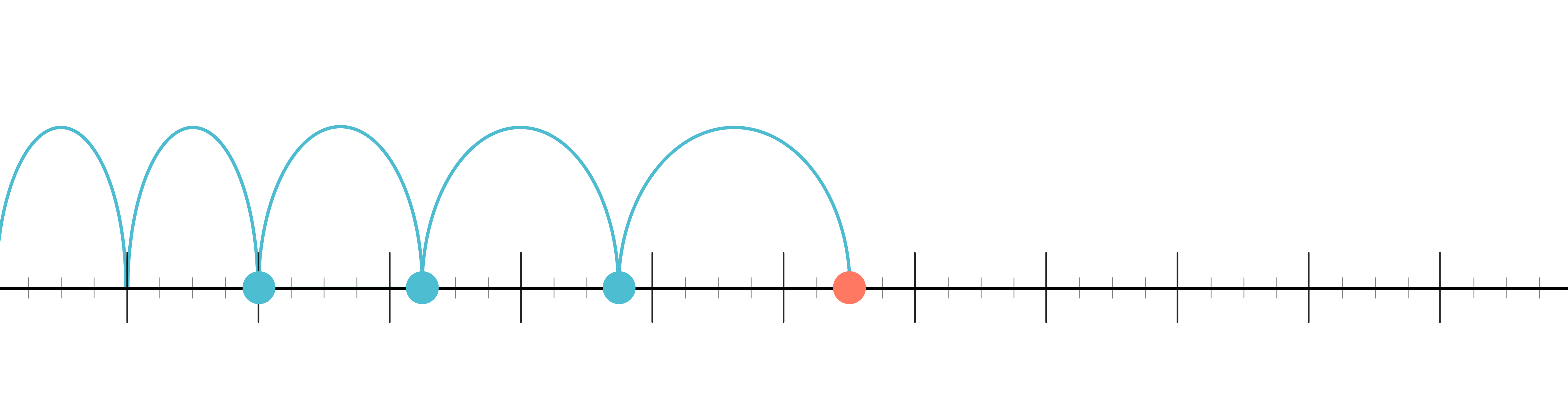


YOUR ORGANIZATION IS KILLING YOUR SOFTWARE

Raffi Krikorian

@raffi & raffi.krikorian@gmail.com

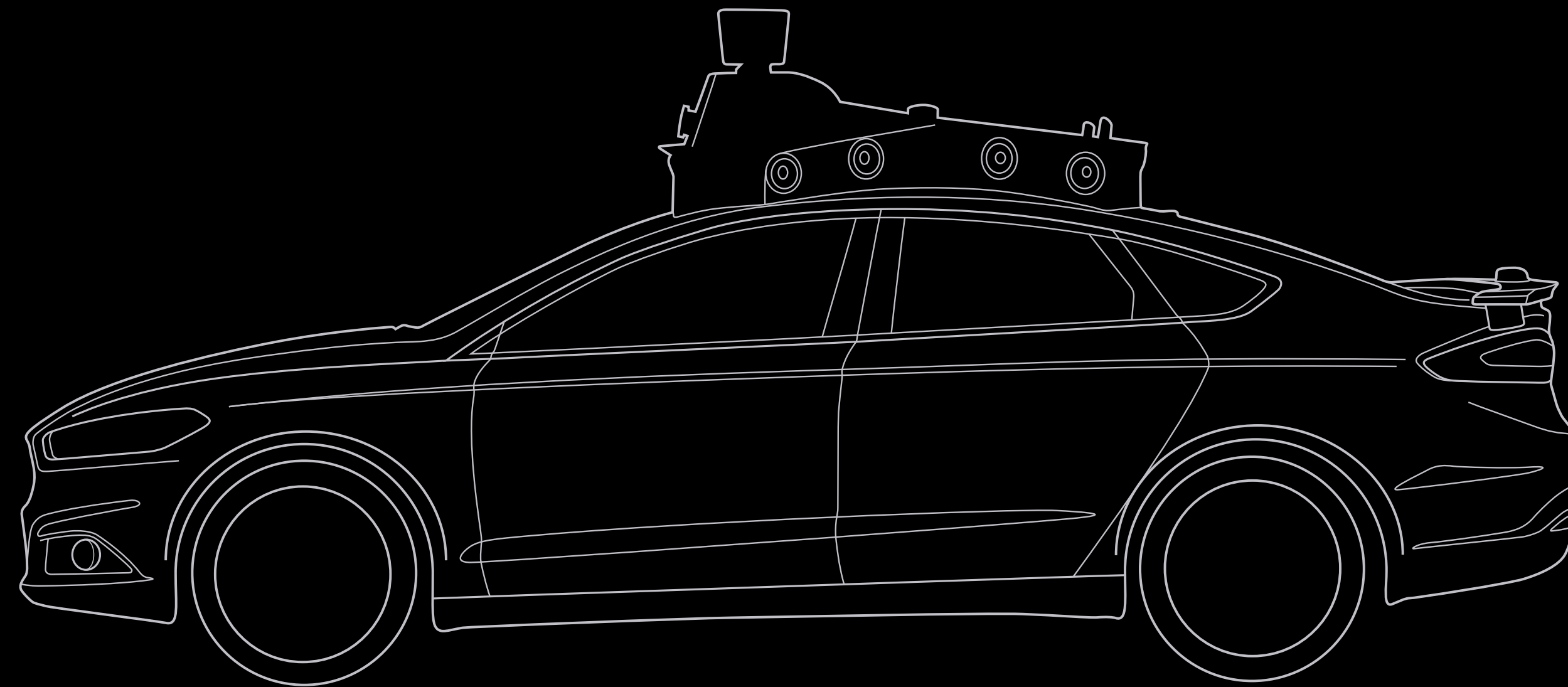


Speed



UBER

Advanced Technologies Center



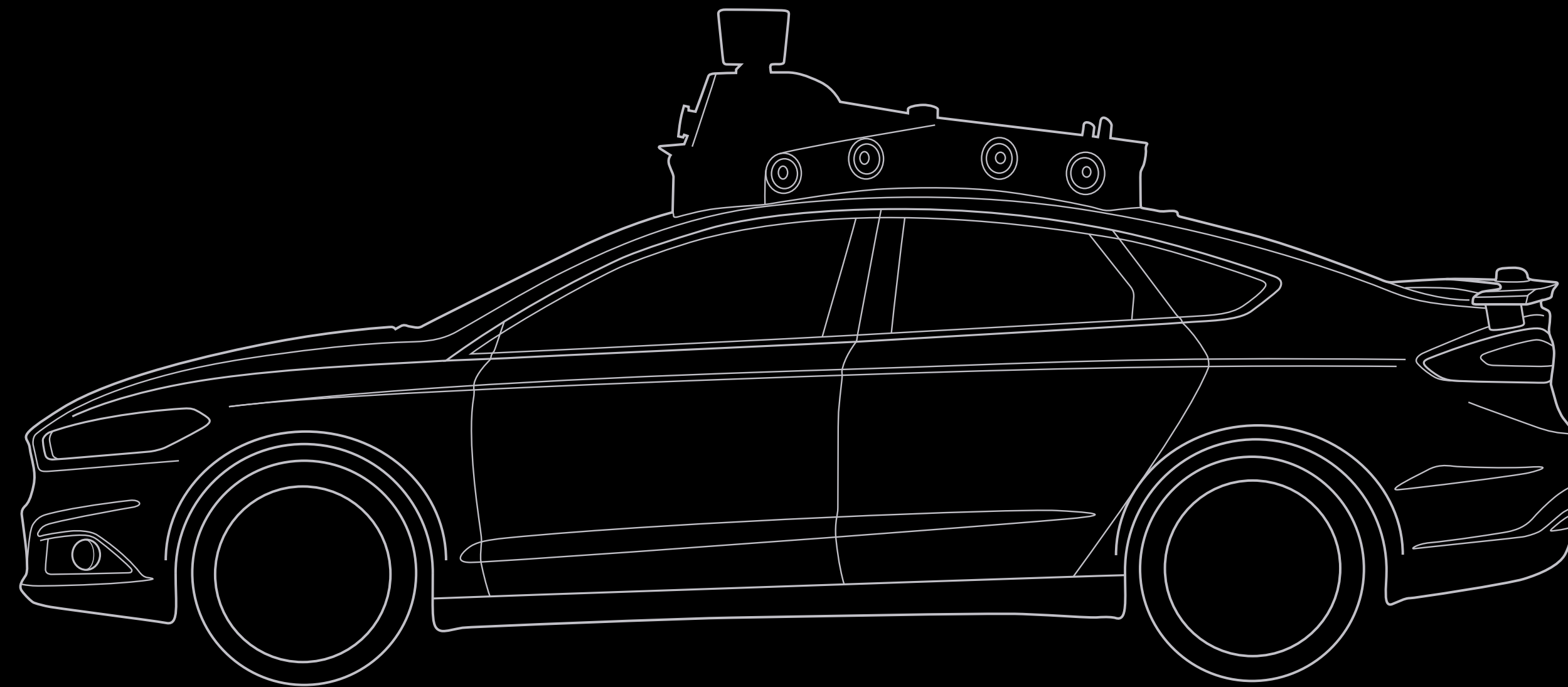
Mapping

| Safety

| Autonomy

UBER

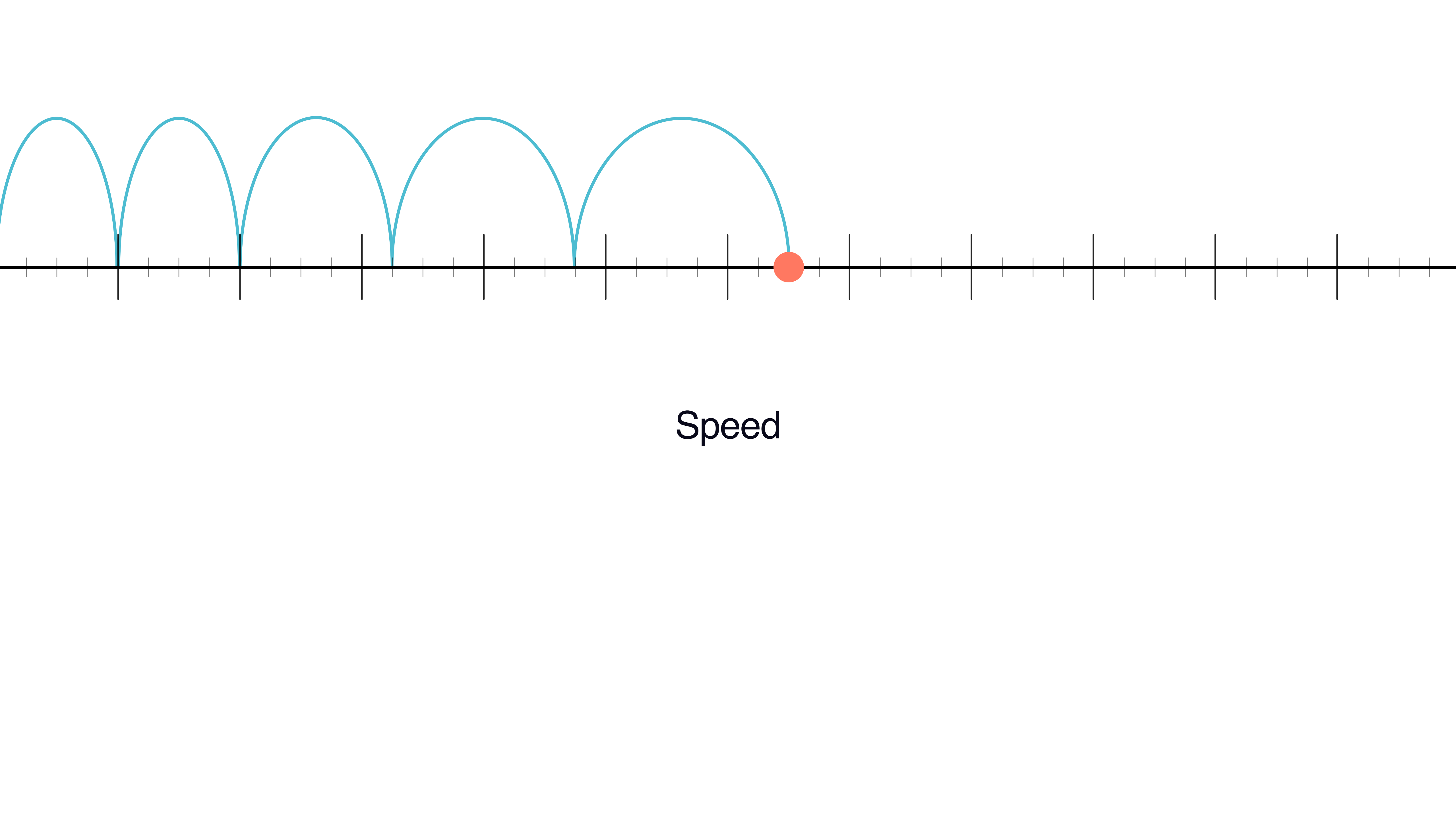
Advanced Technologies Center



Mapping

| Safety

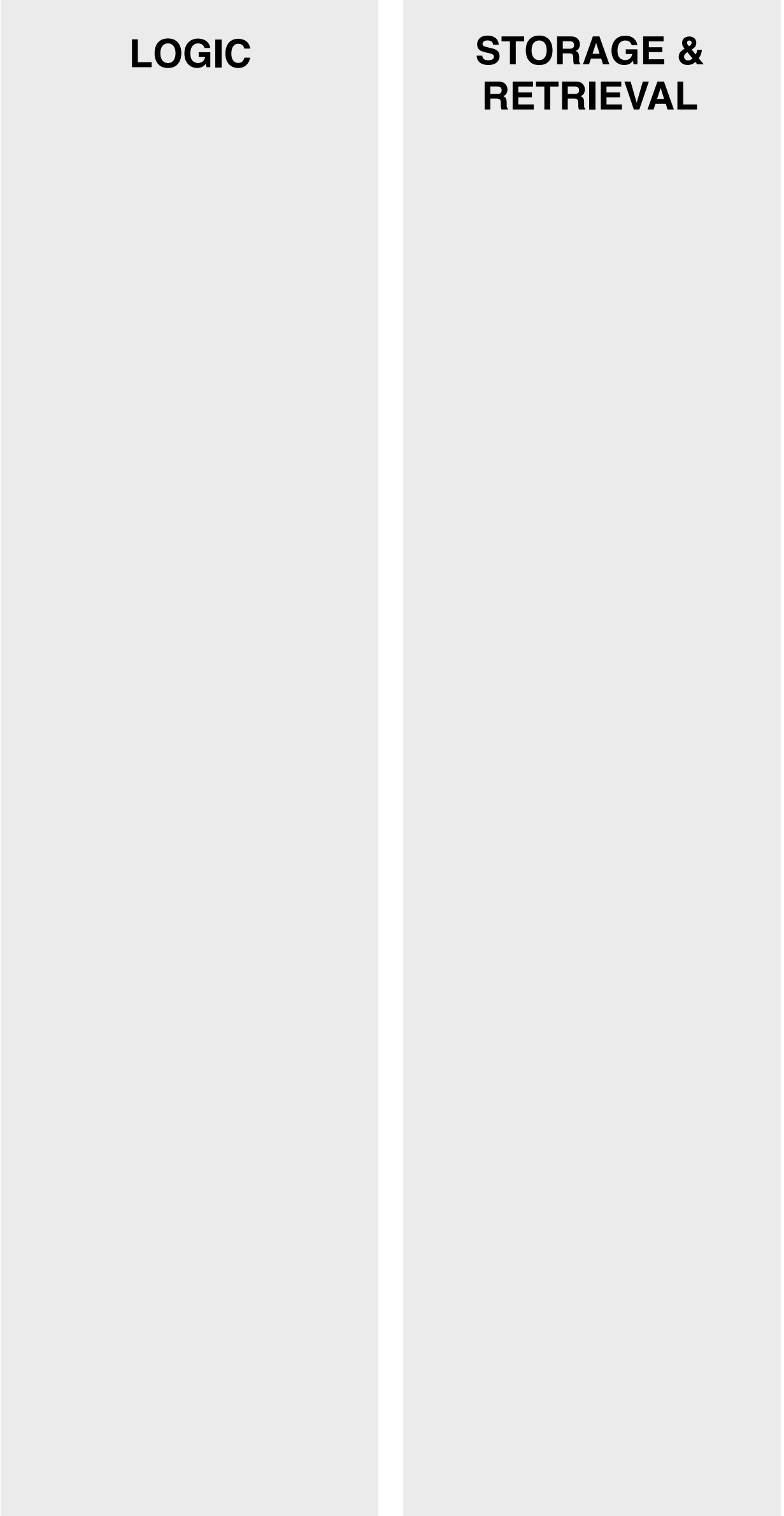
| Autonomy

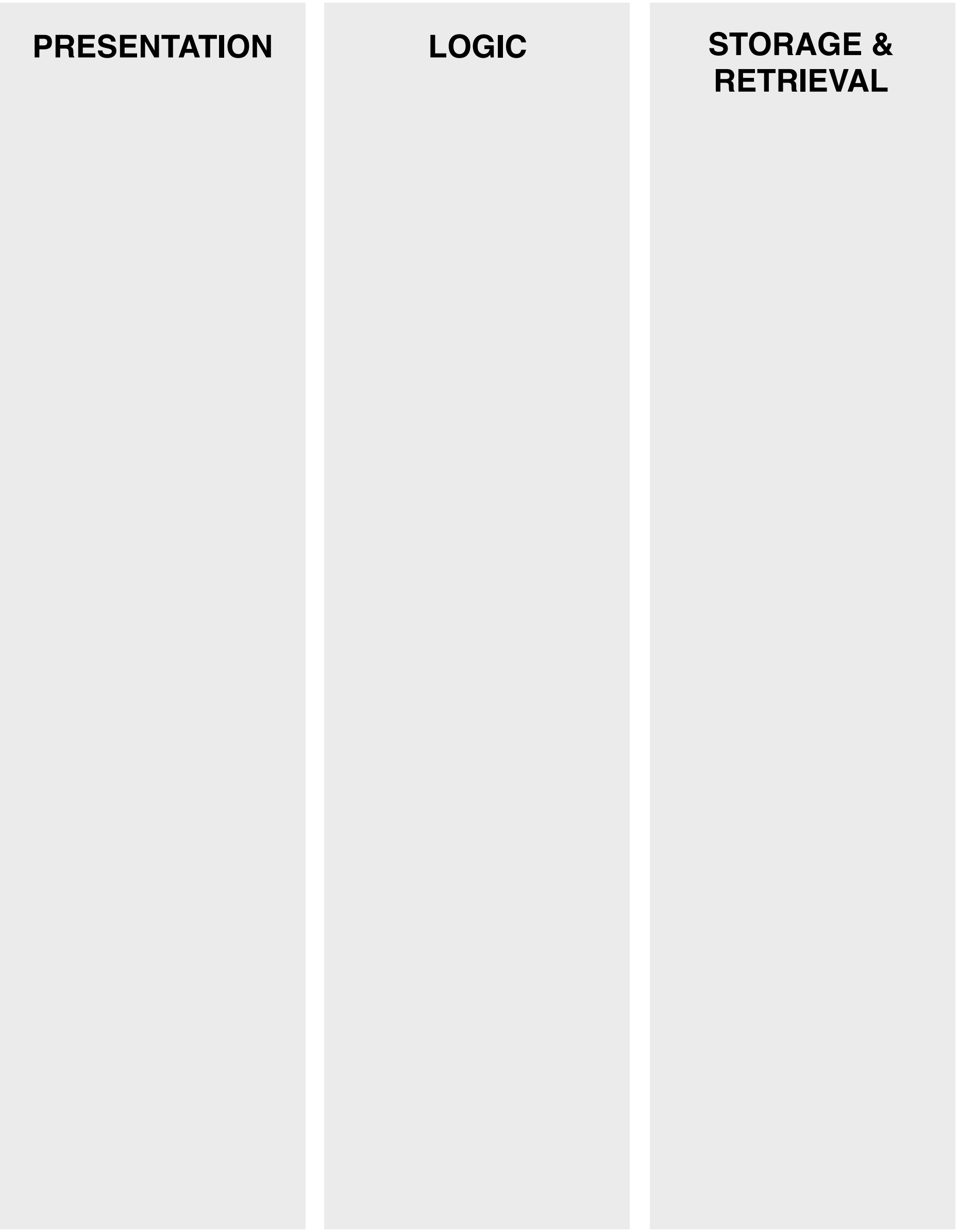


We're programmers. Programmers are, in their hearts, architects, and the first thing they want to do when they get to a site is to bulldoze the place flat and build something grand. We're not excited by incremental renovation: tinkering, improving, planting flower beds.

Joel Spolsky

**STORAGE &
RETRIEVAL**





ROUTING

PRESENTATION

LOGIC

**STORAGE &
RETRIEVAL**

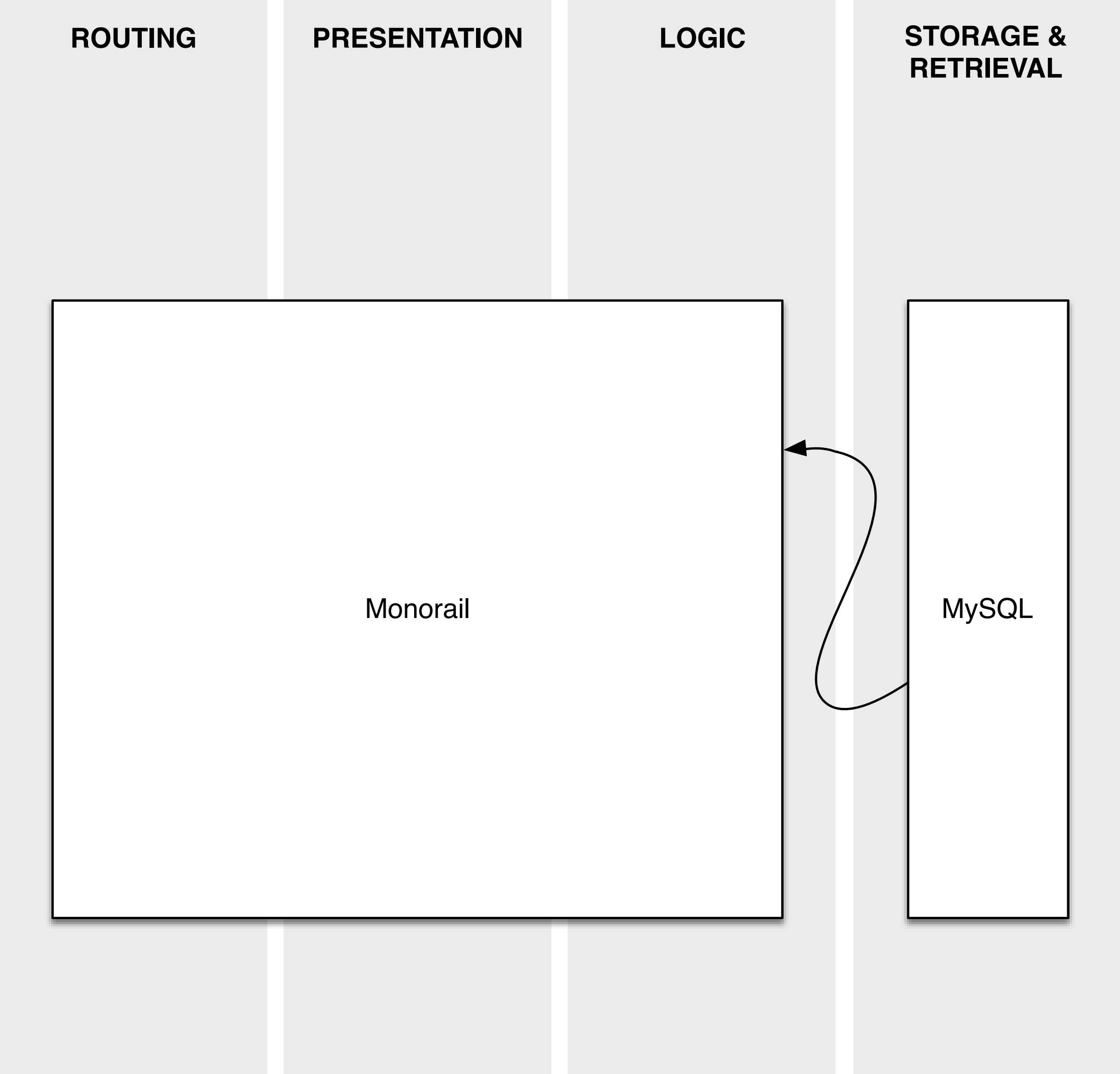
ROUTING

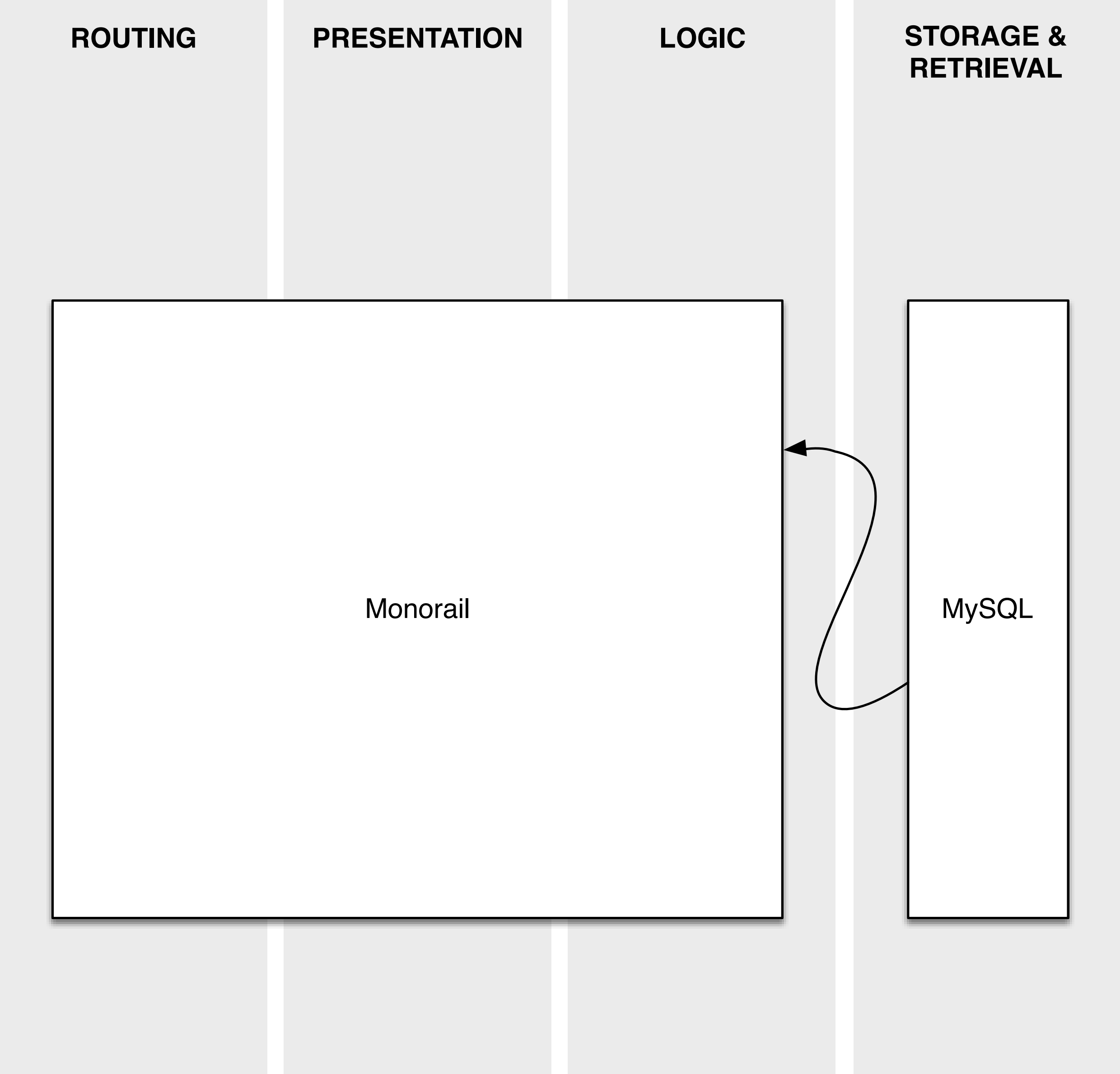
PRESENTATION

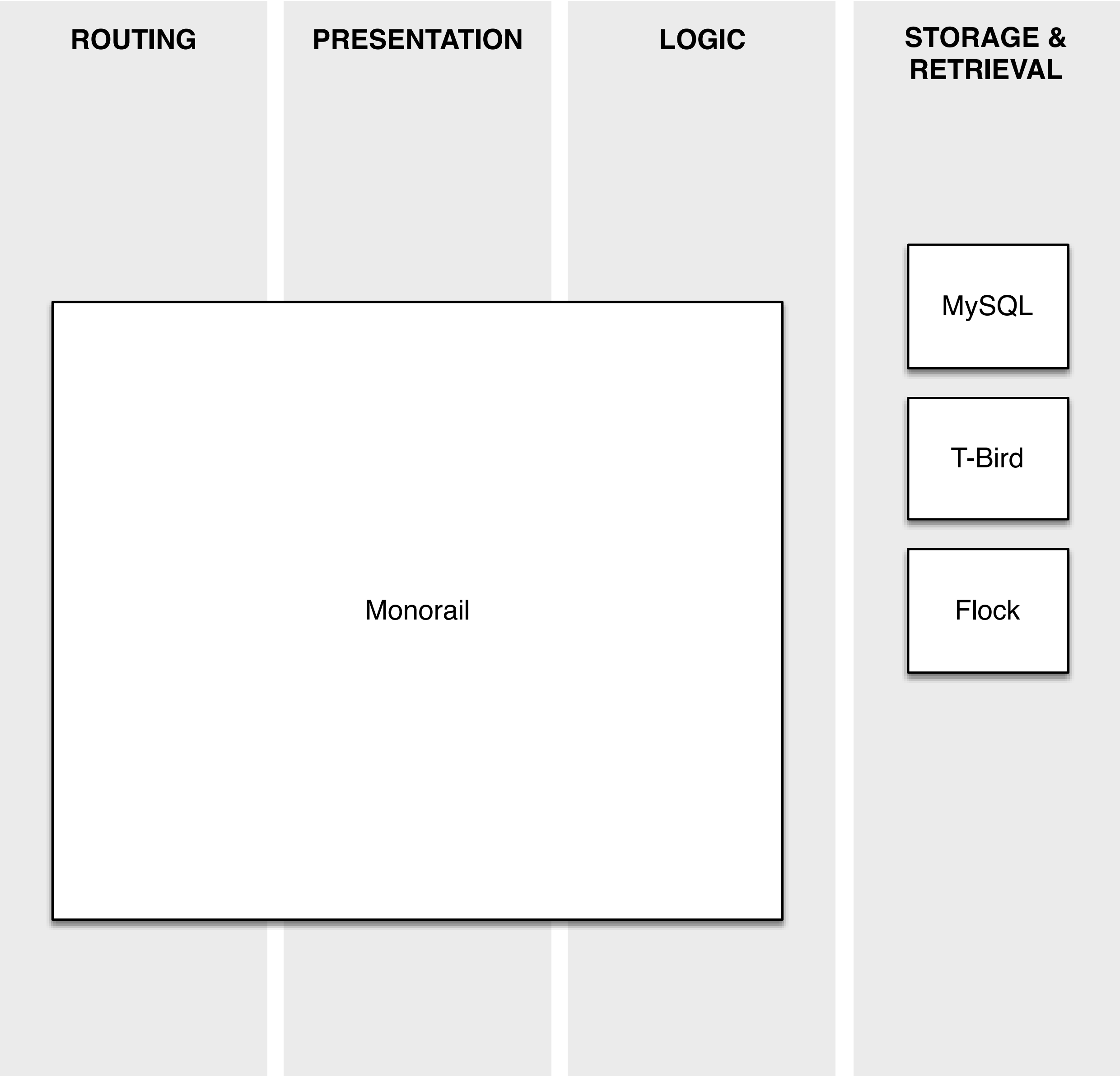
LOGIC

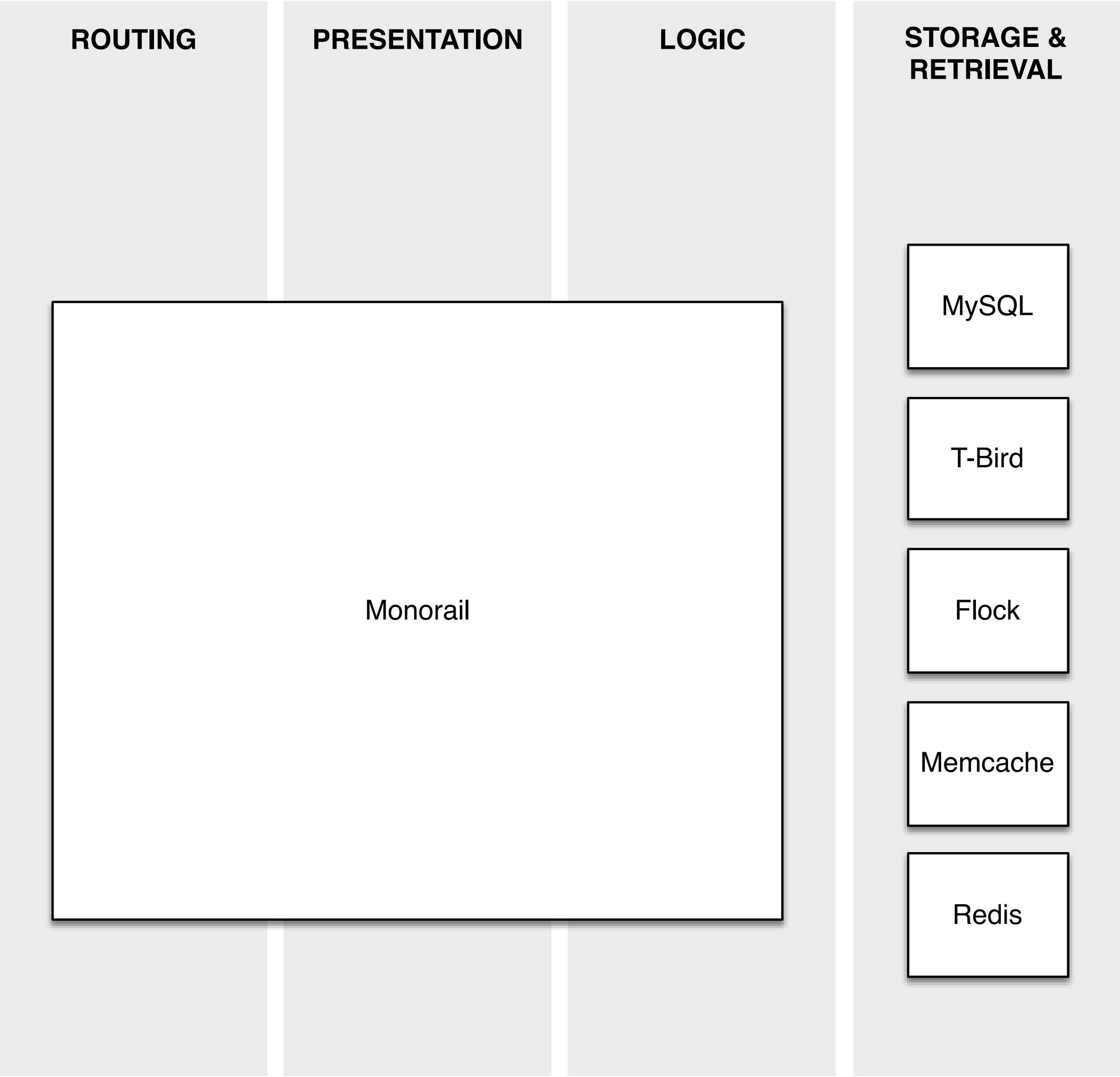
**STORAGE &
RETRIEVAL**

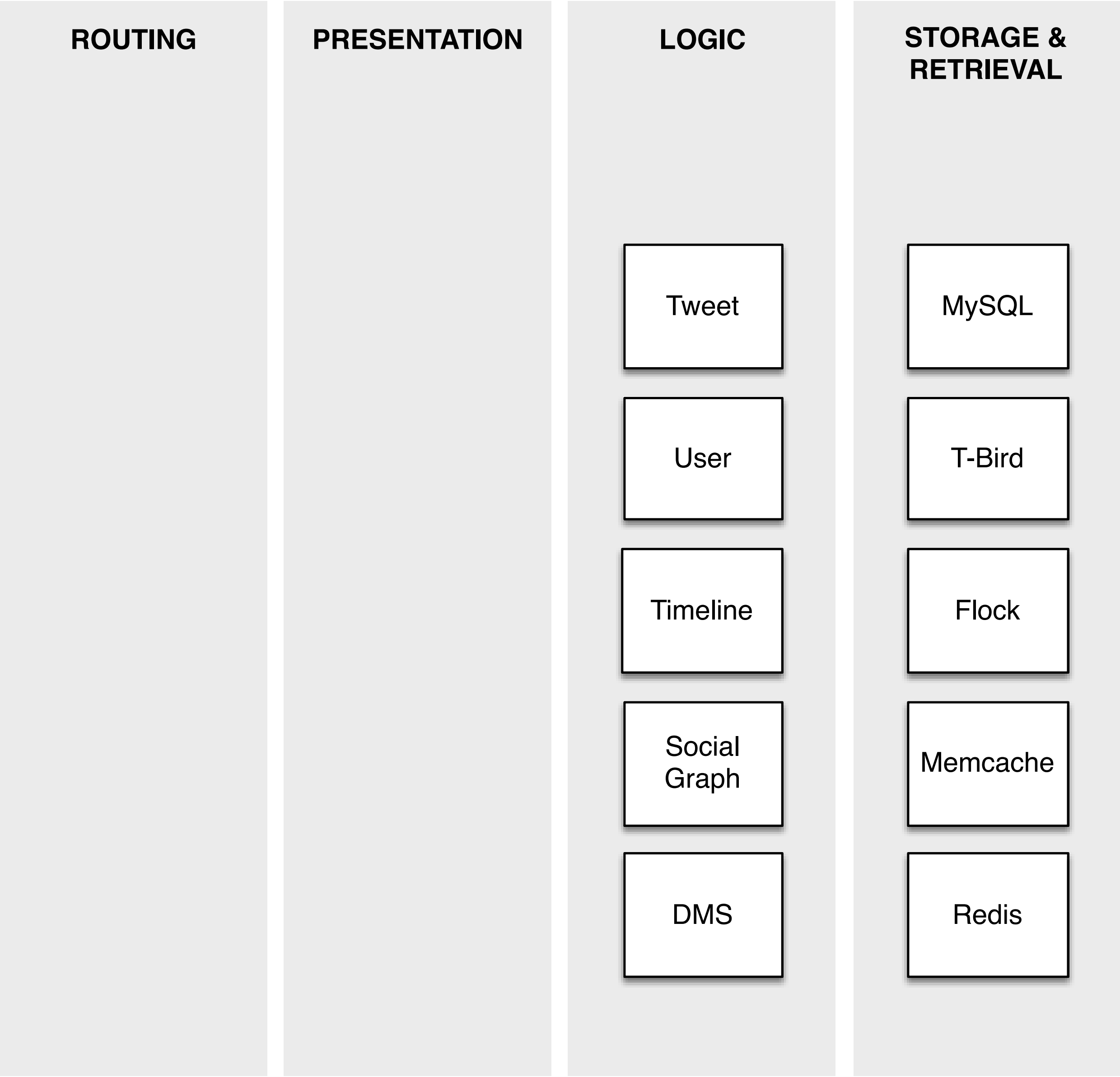
MySQL

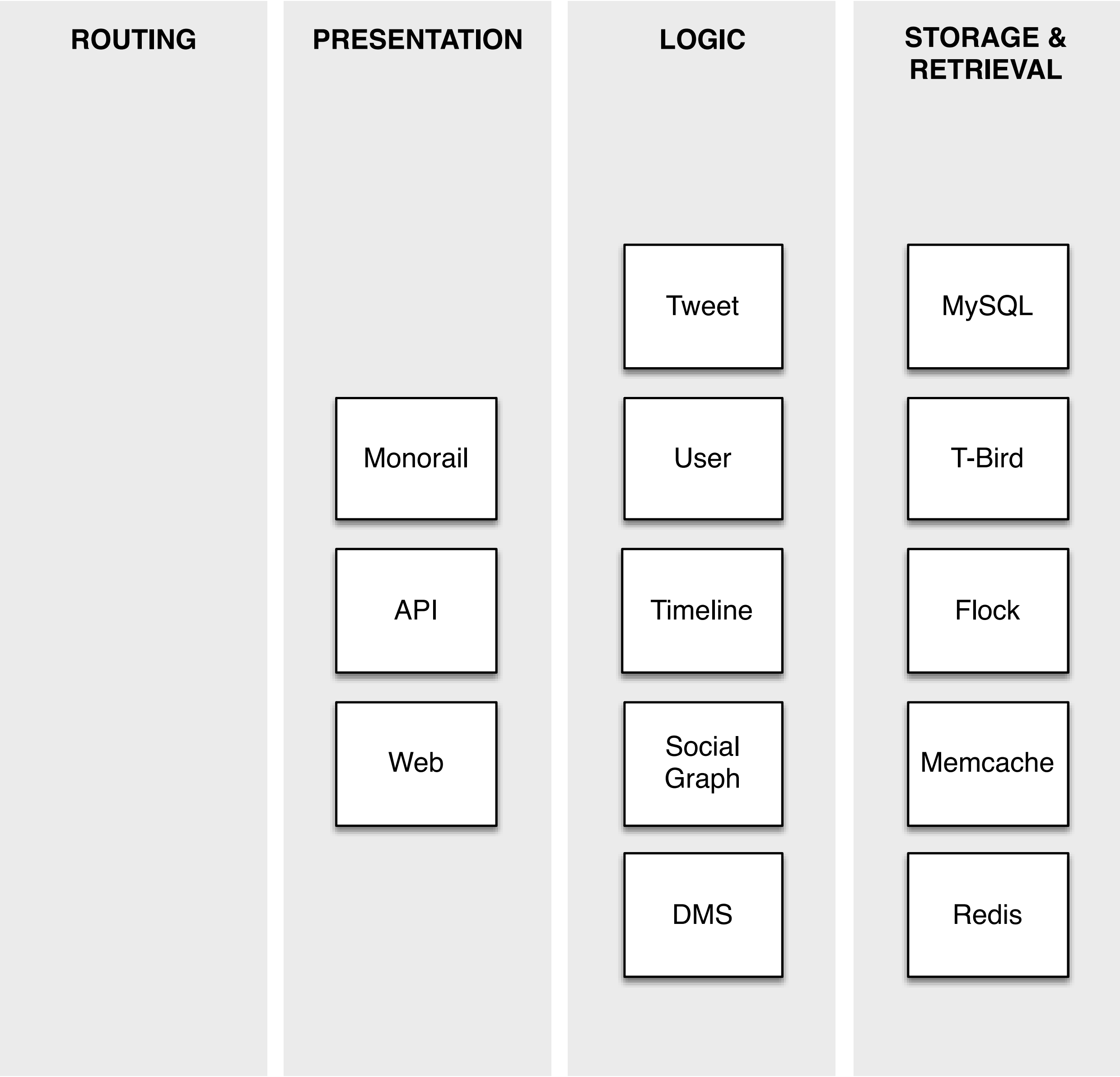


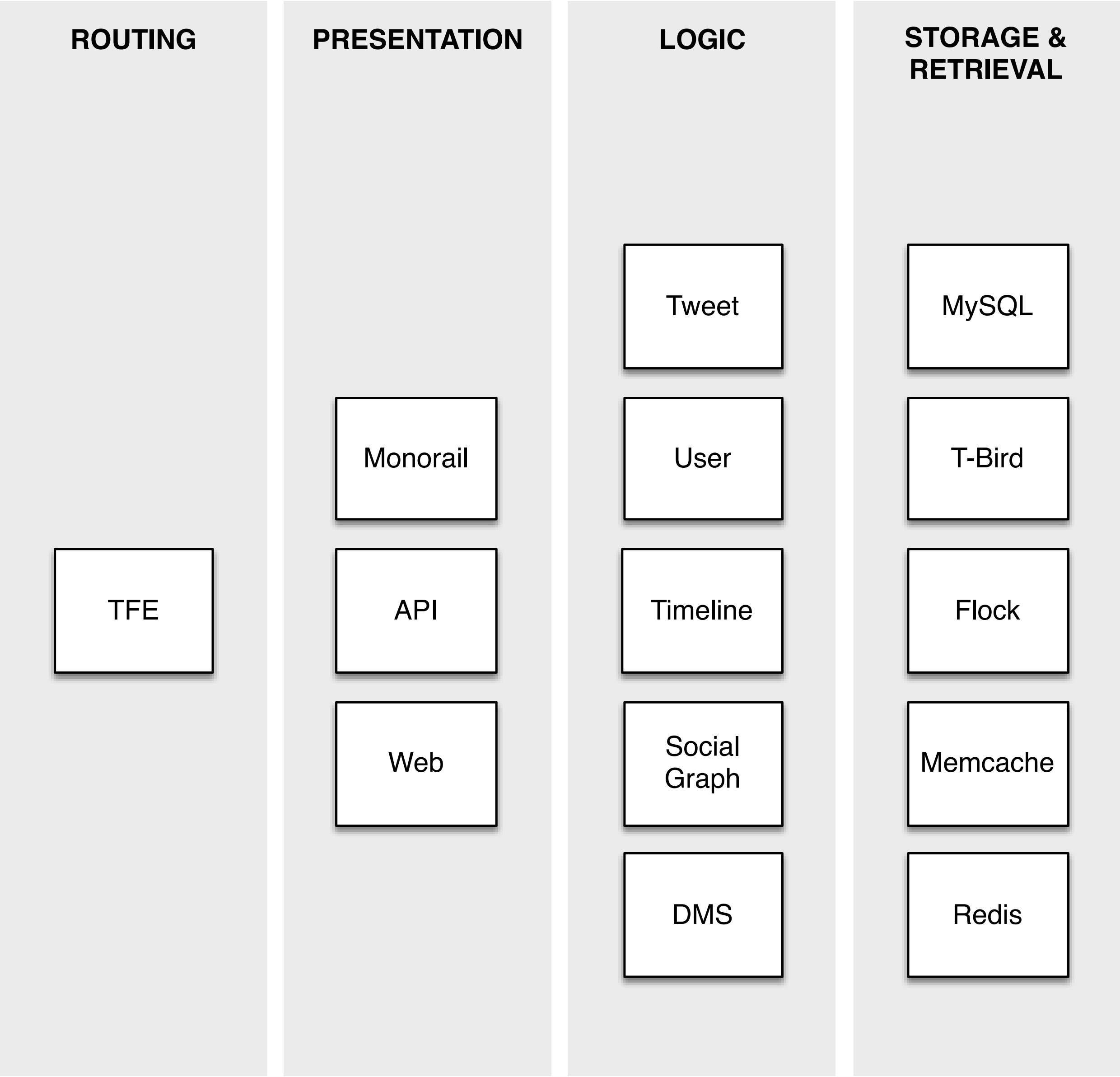


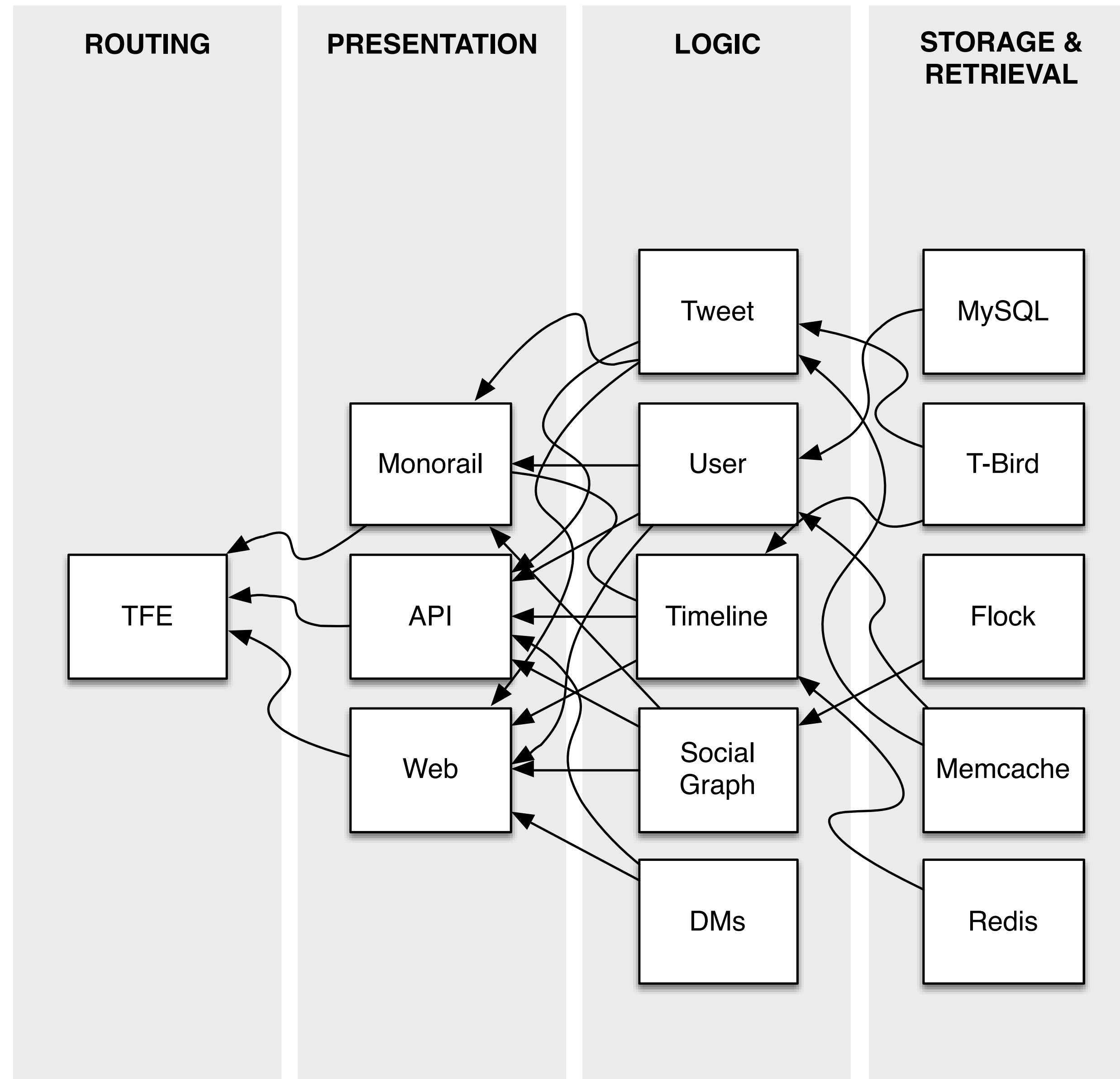


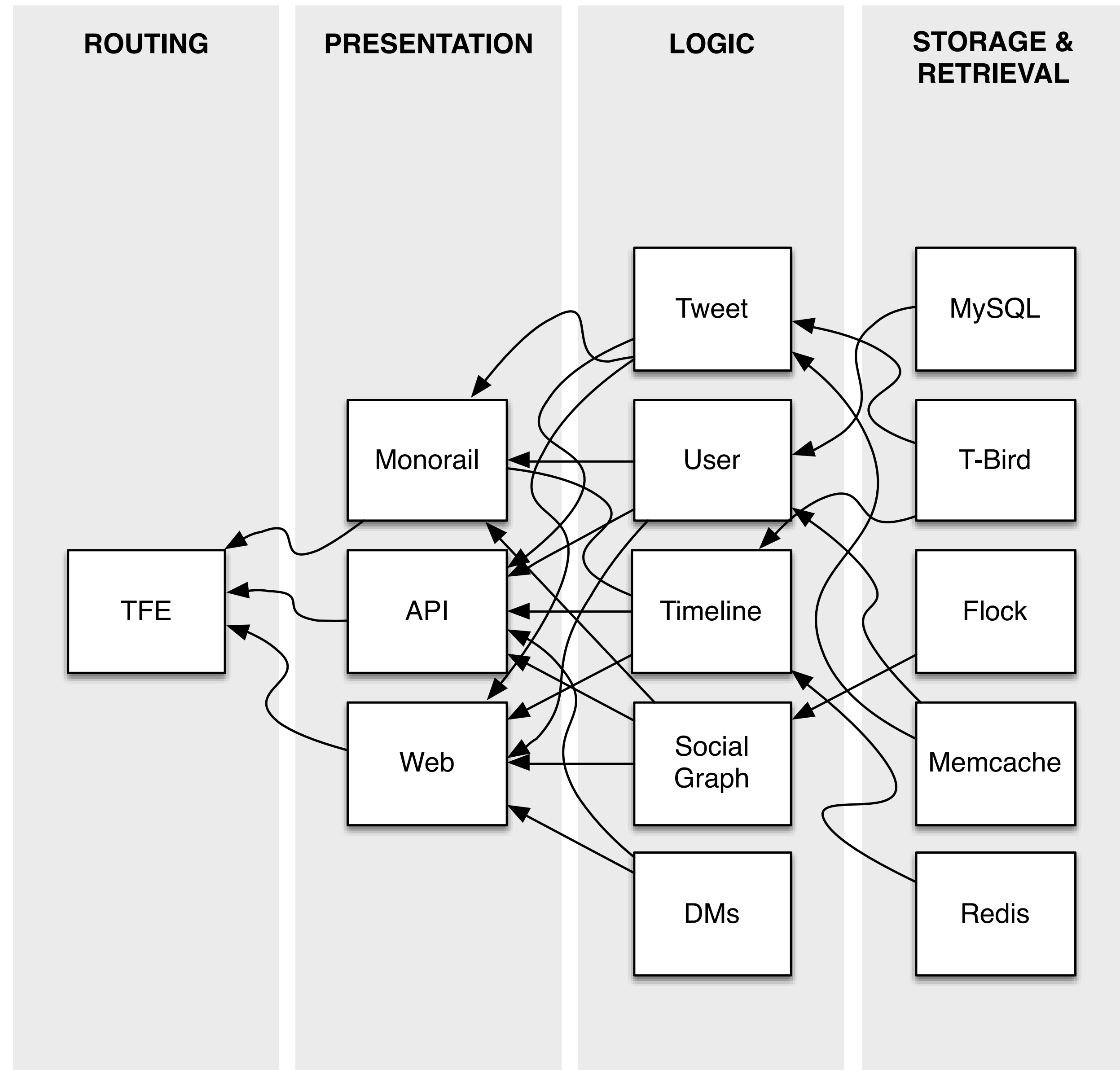


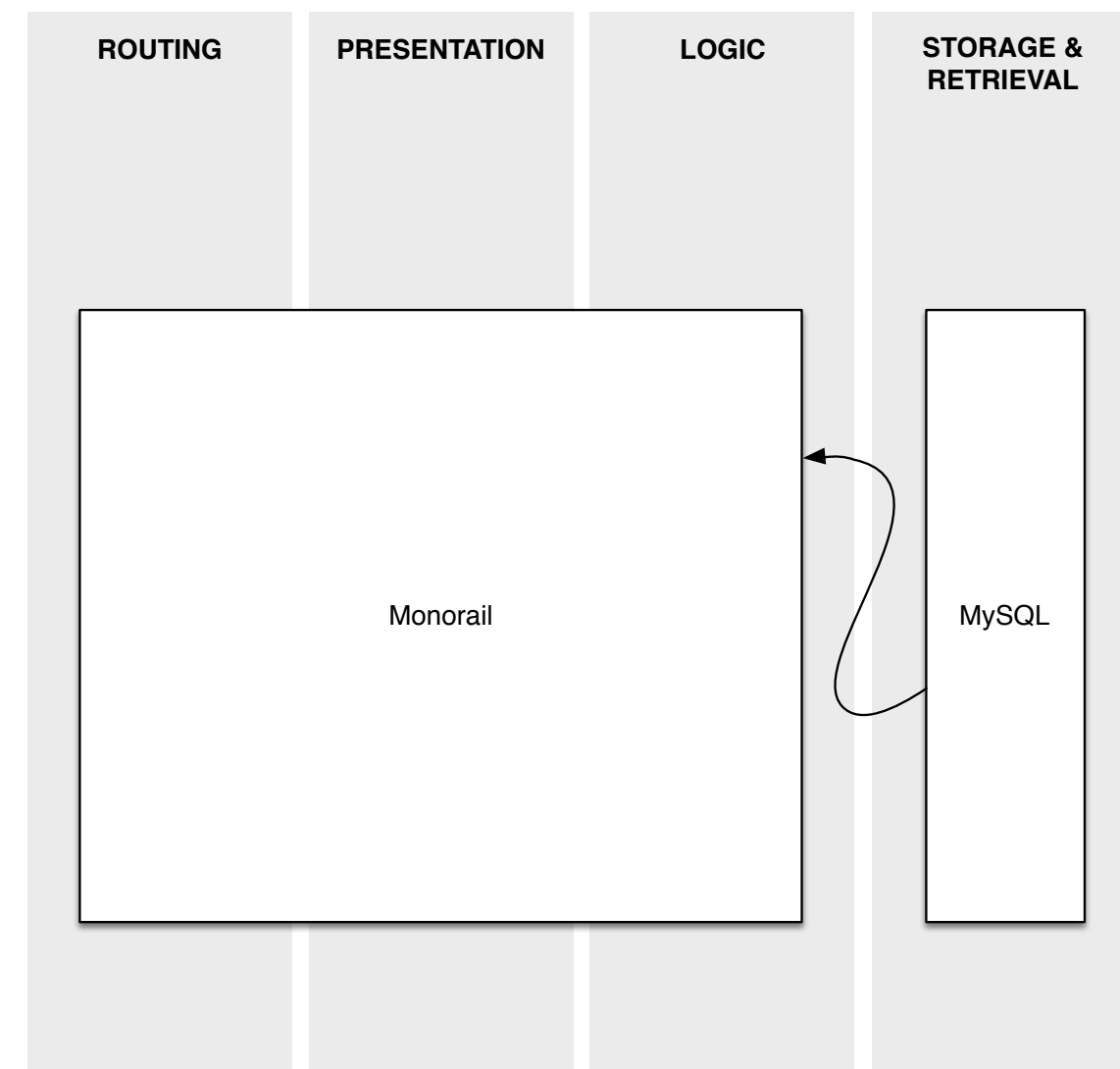




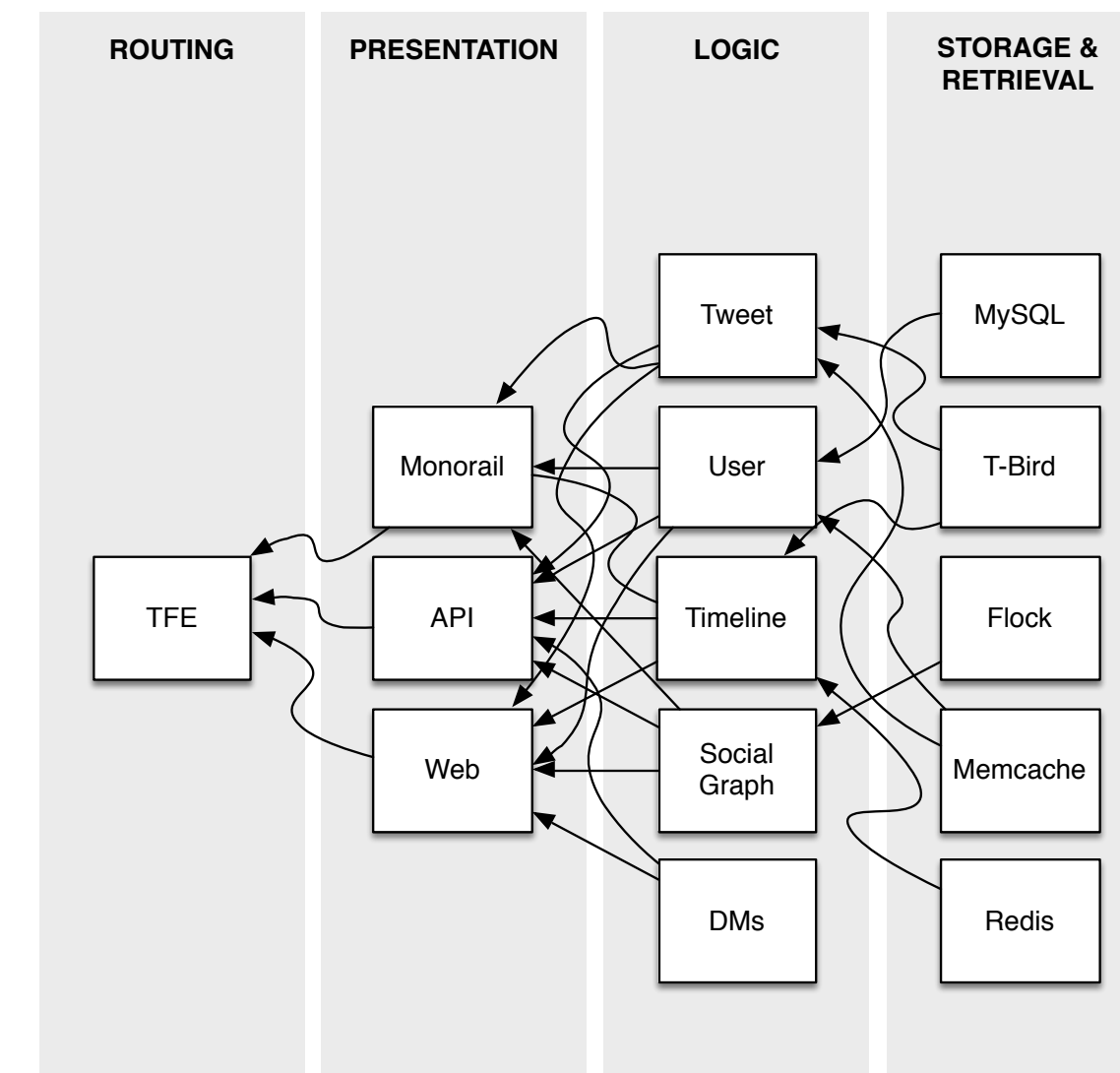








Single codebase
 All computational logic are in-memory
 Easy to scale horizontally
 Handled by a central operations team



Many smaller, clearly scoped services
 Single responsibility principle
 Independently managed
 Clear ownership for each service

Any organization that designs a system (defined more broadly here than just information systems) will inevitably produce a design whose structure is a copy of the organization's communication structure.

Melvin Conway

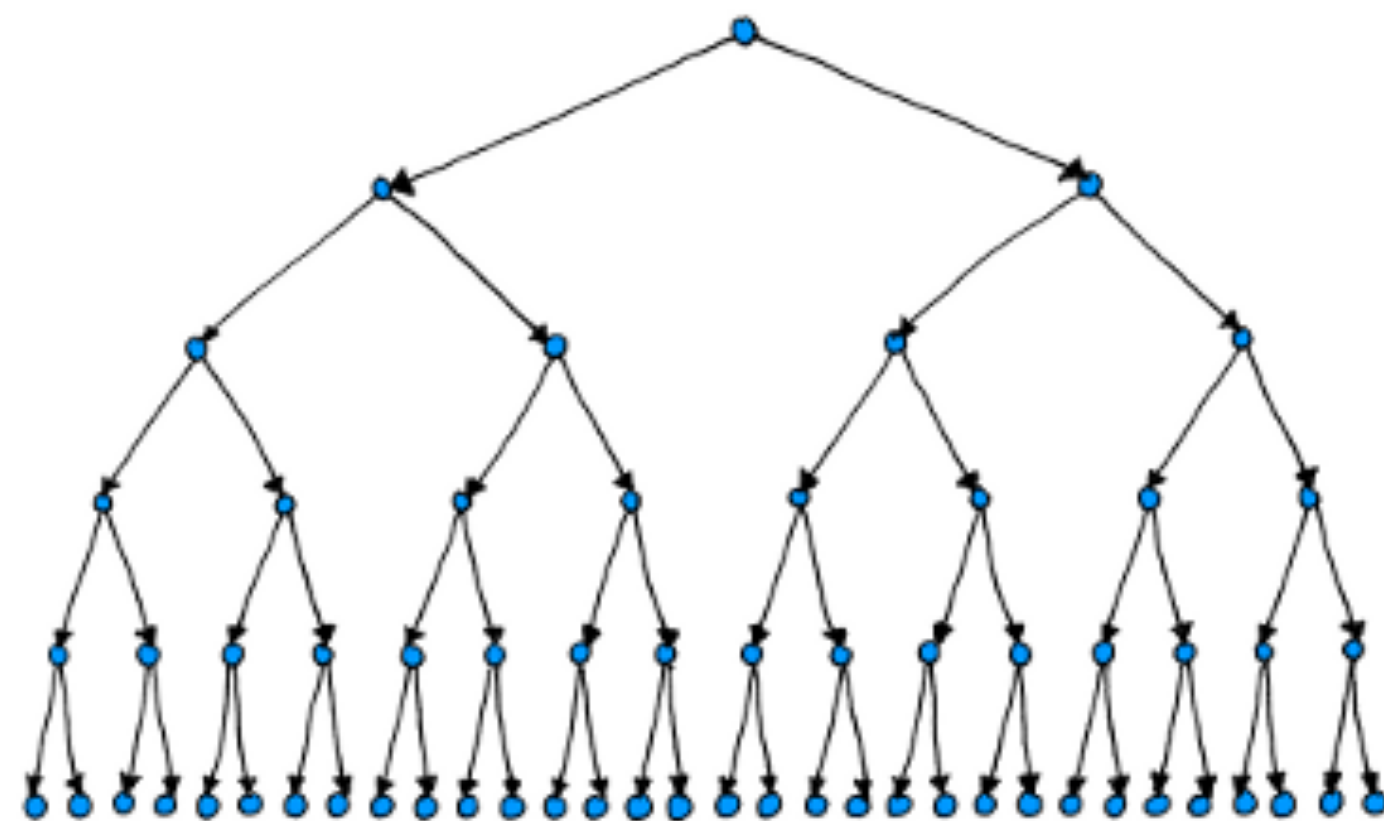
If you have four developers writing a compiler you will
get a four-pass compiler.

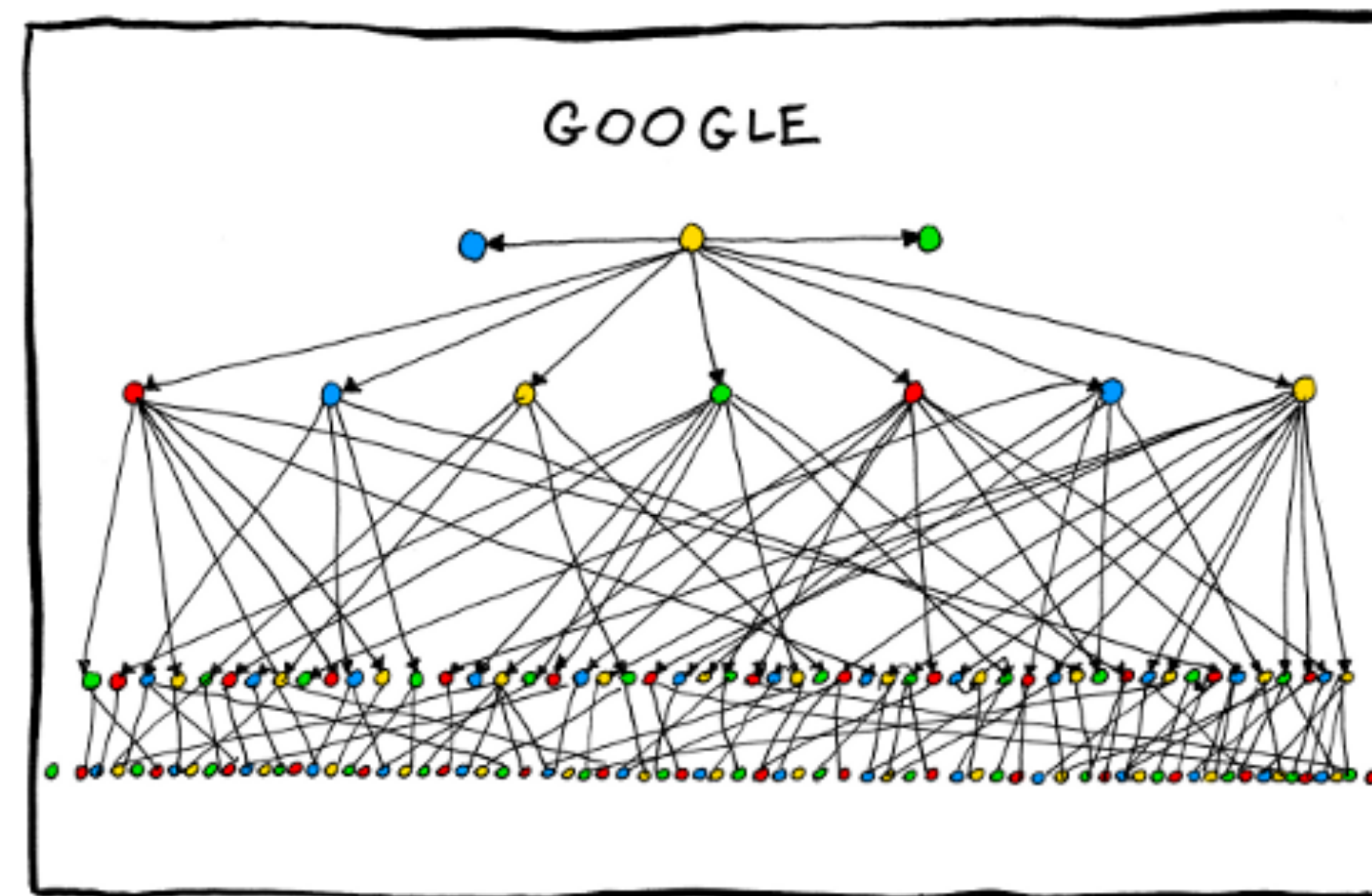
Eric Raymond

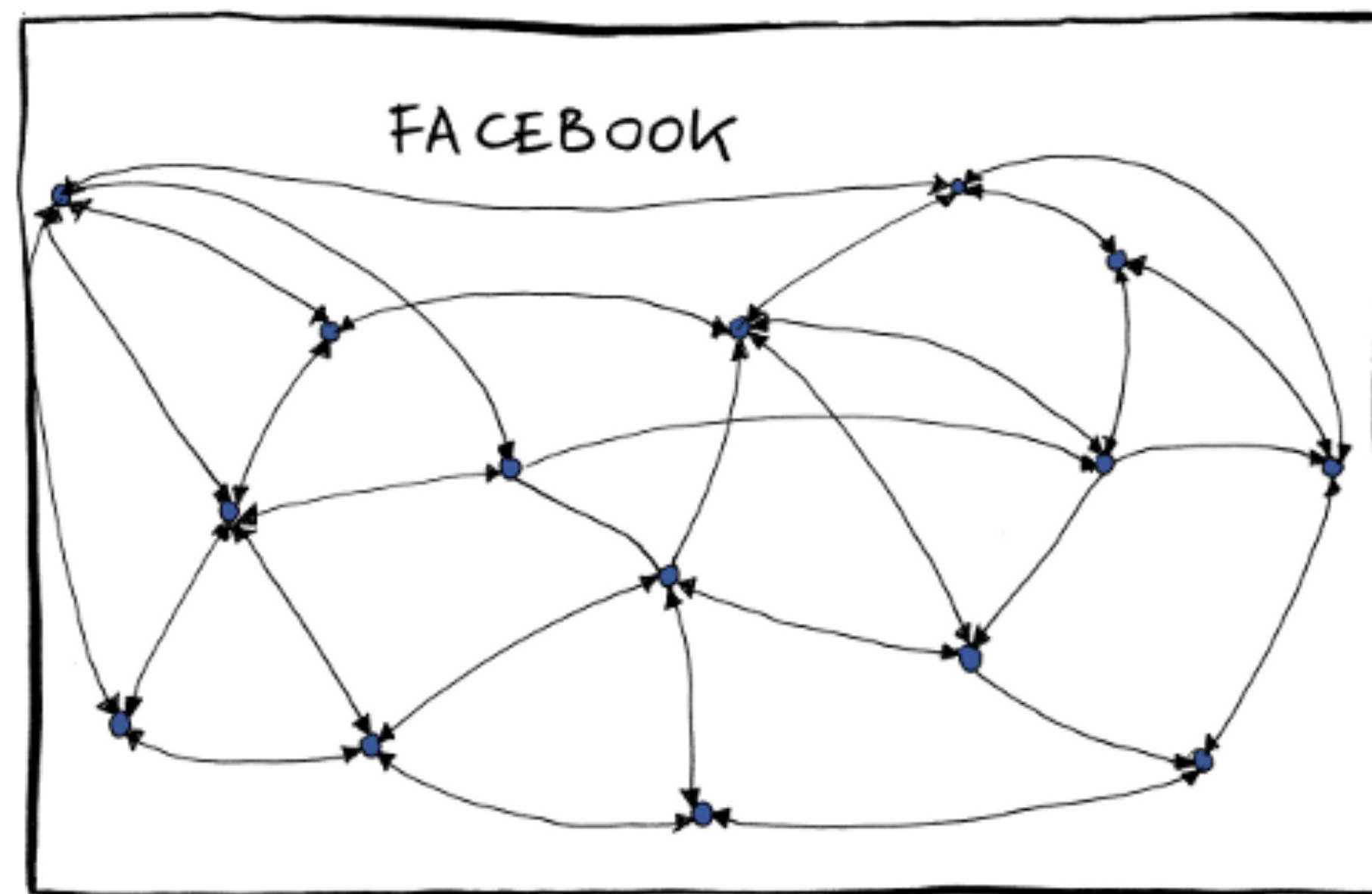
Setting up the team says more about architecture than
the architecture itself.

Me

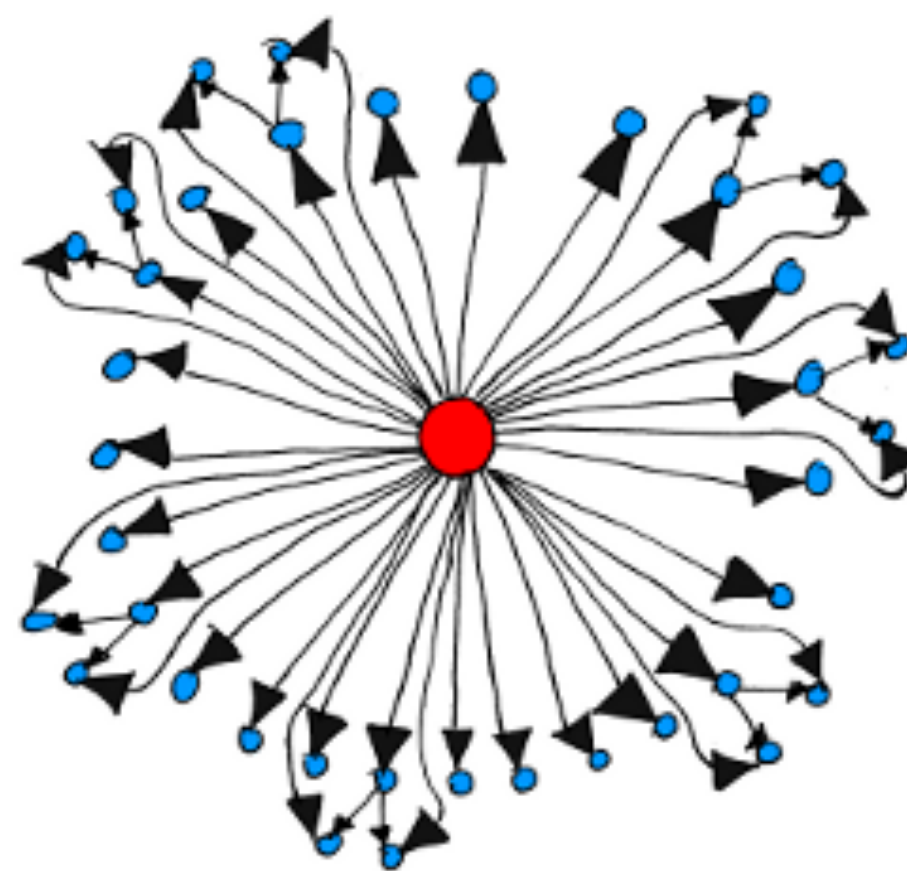
AMAZON

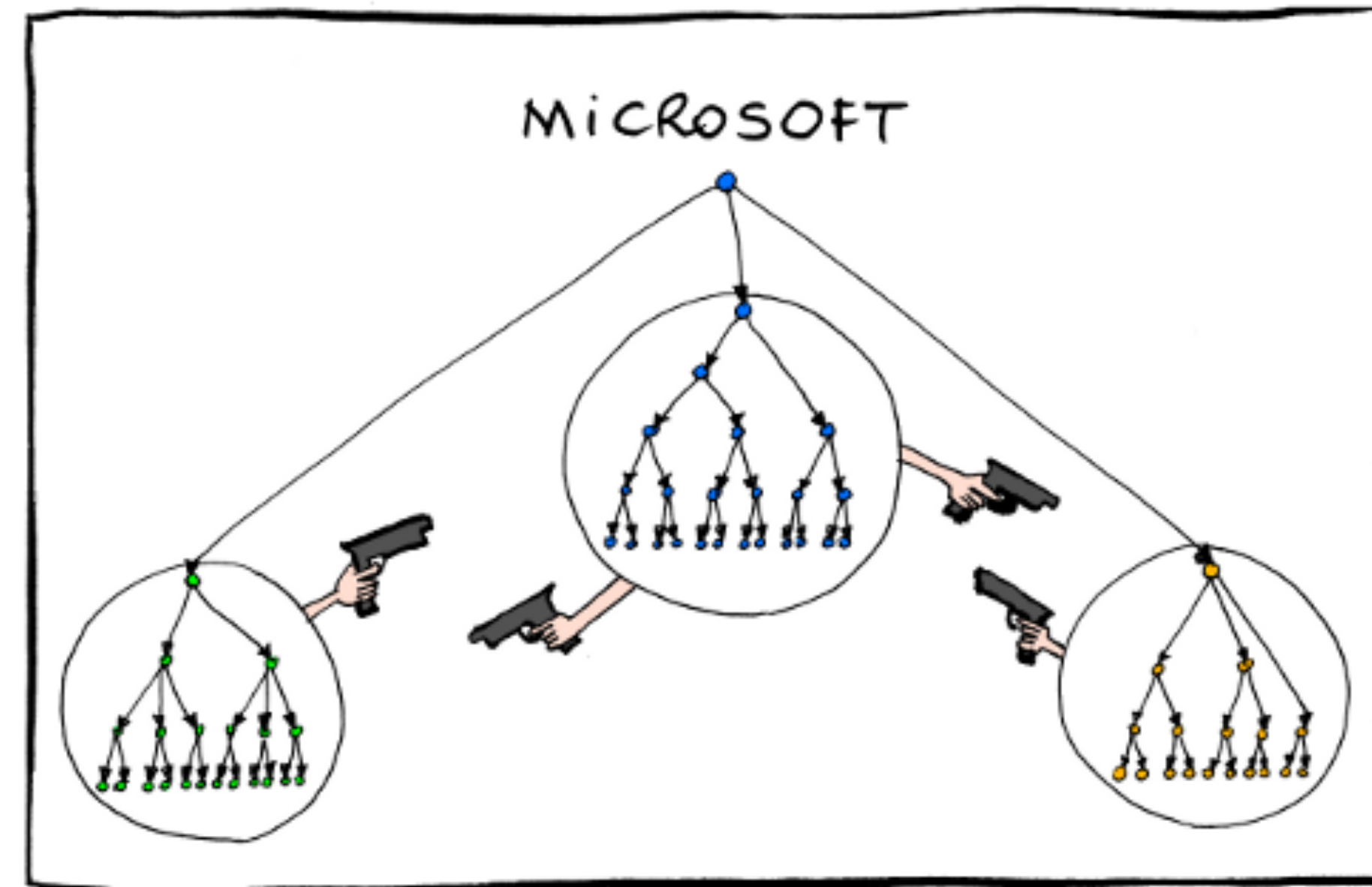


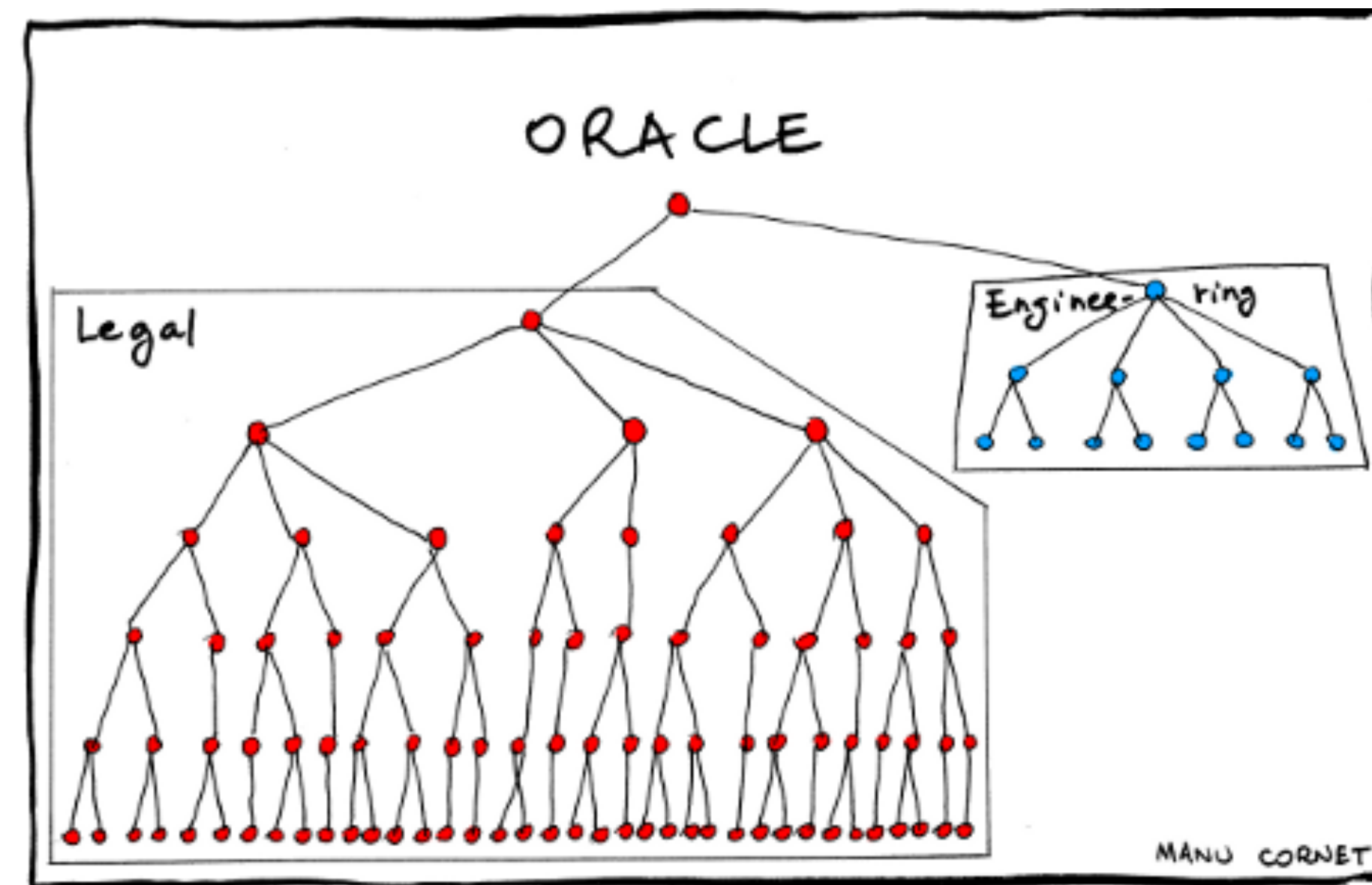




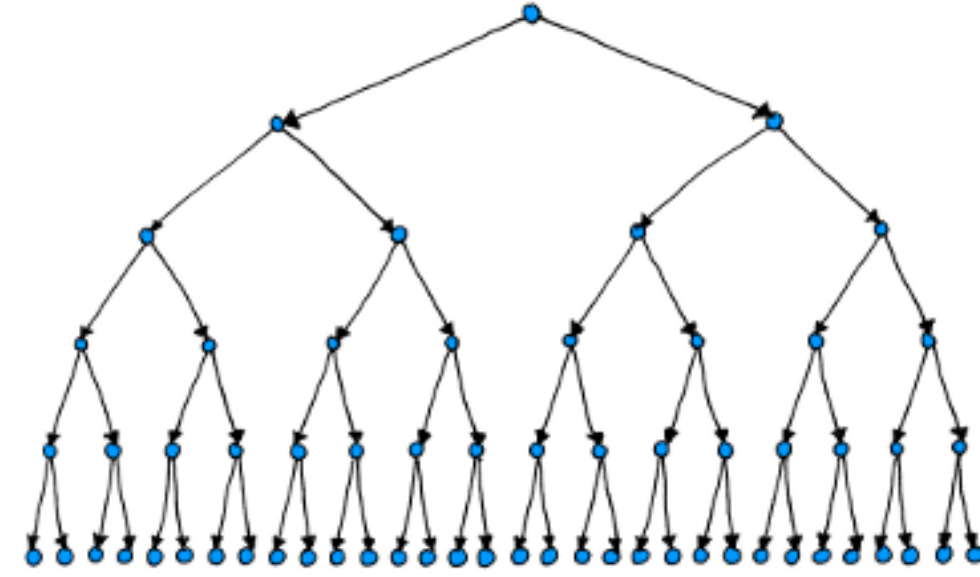
APPLE



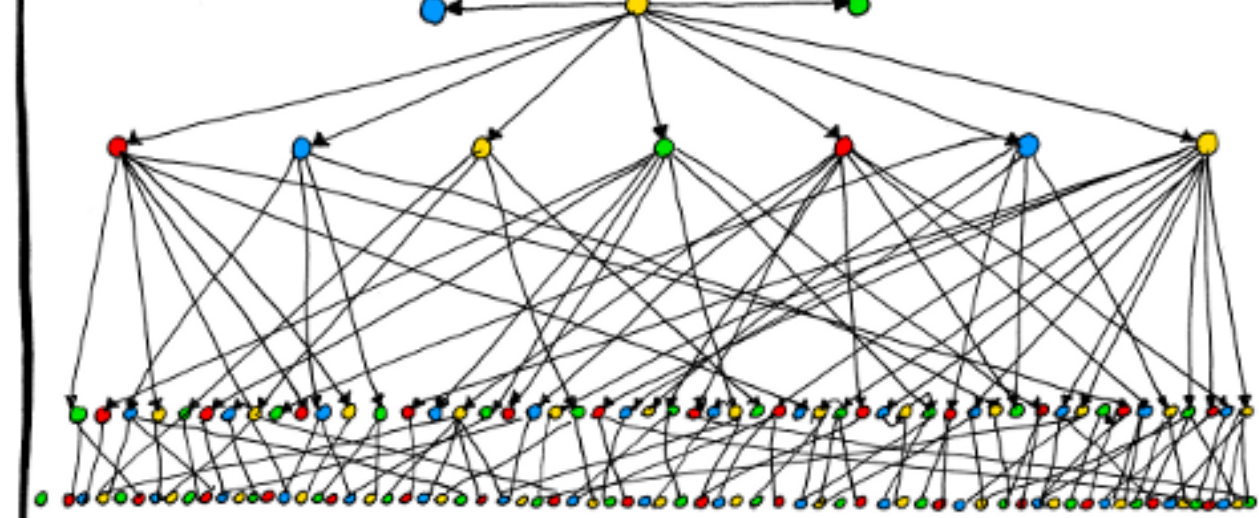




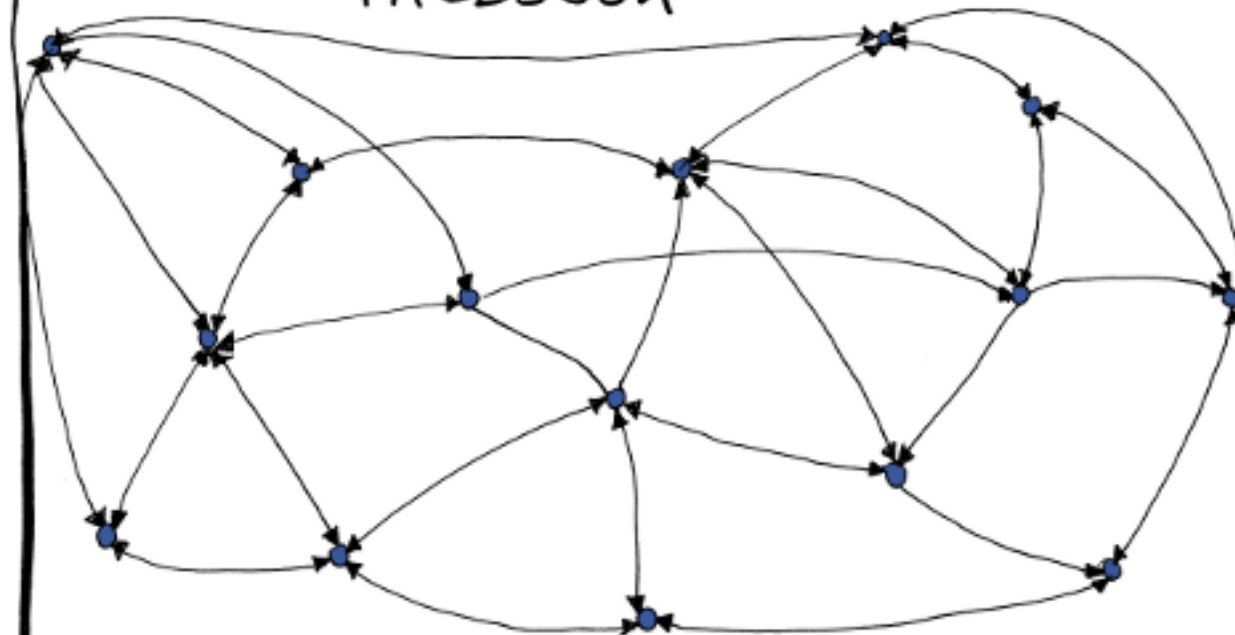
AMAZON



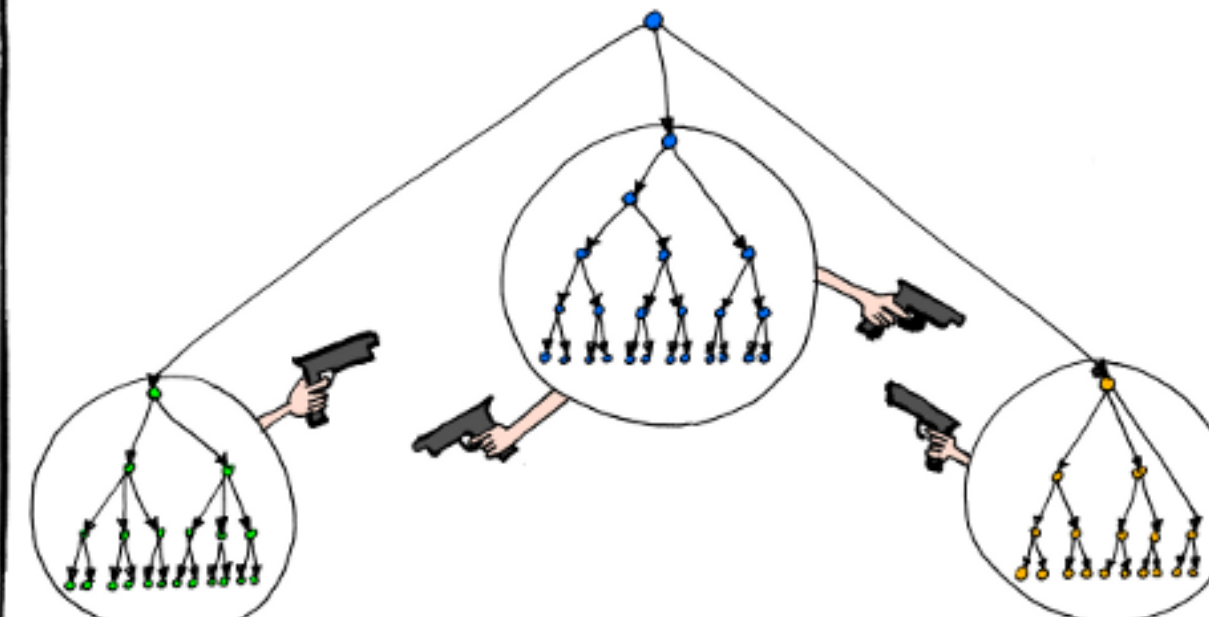
GOOGLE



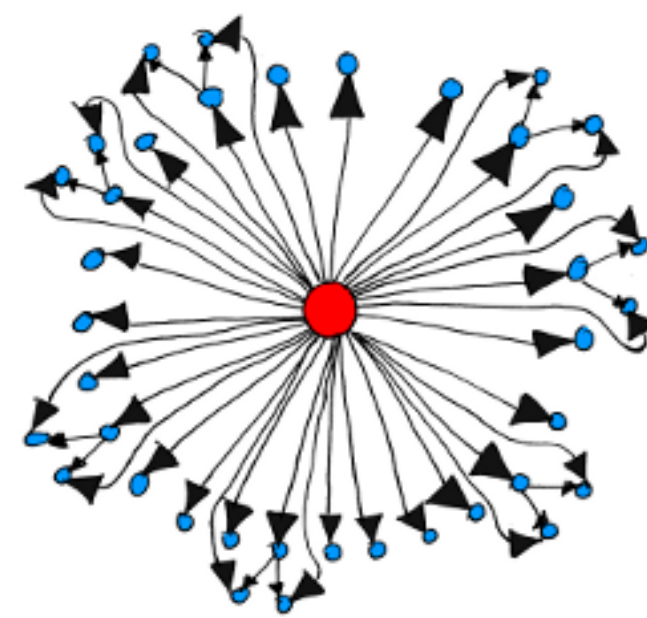
FACEBOOK



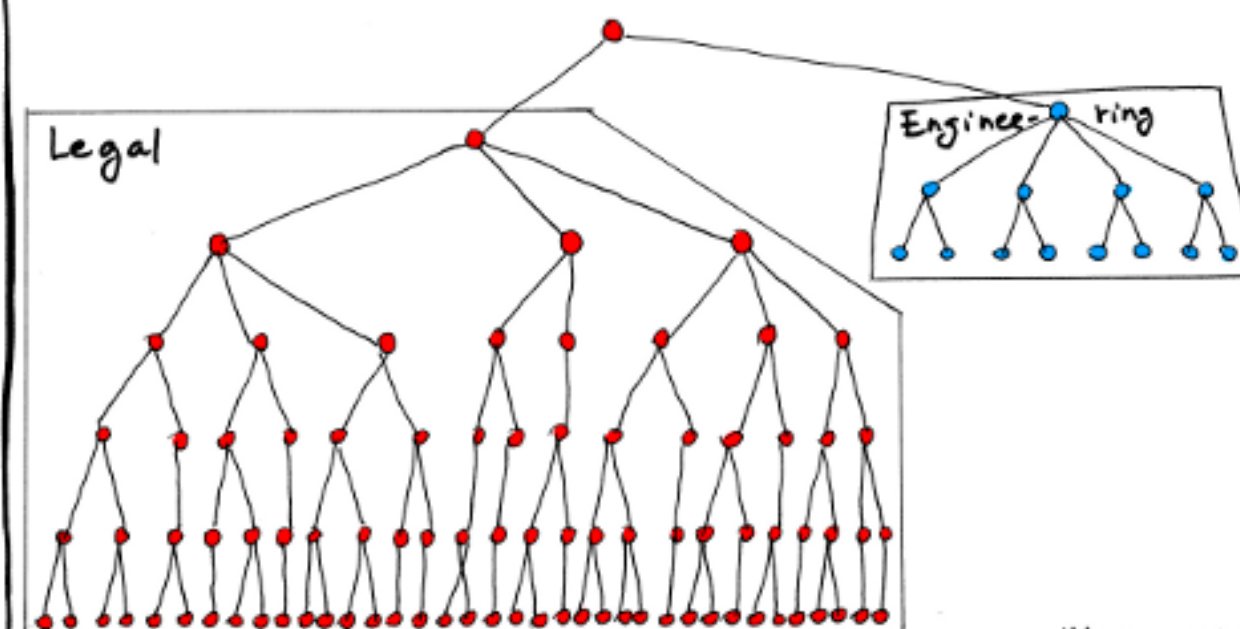
MICROSOFT



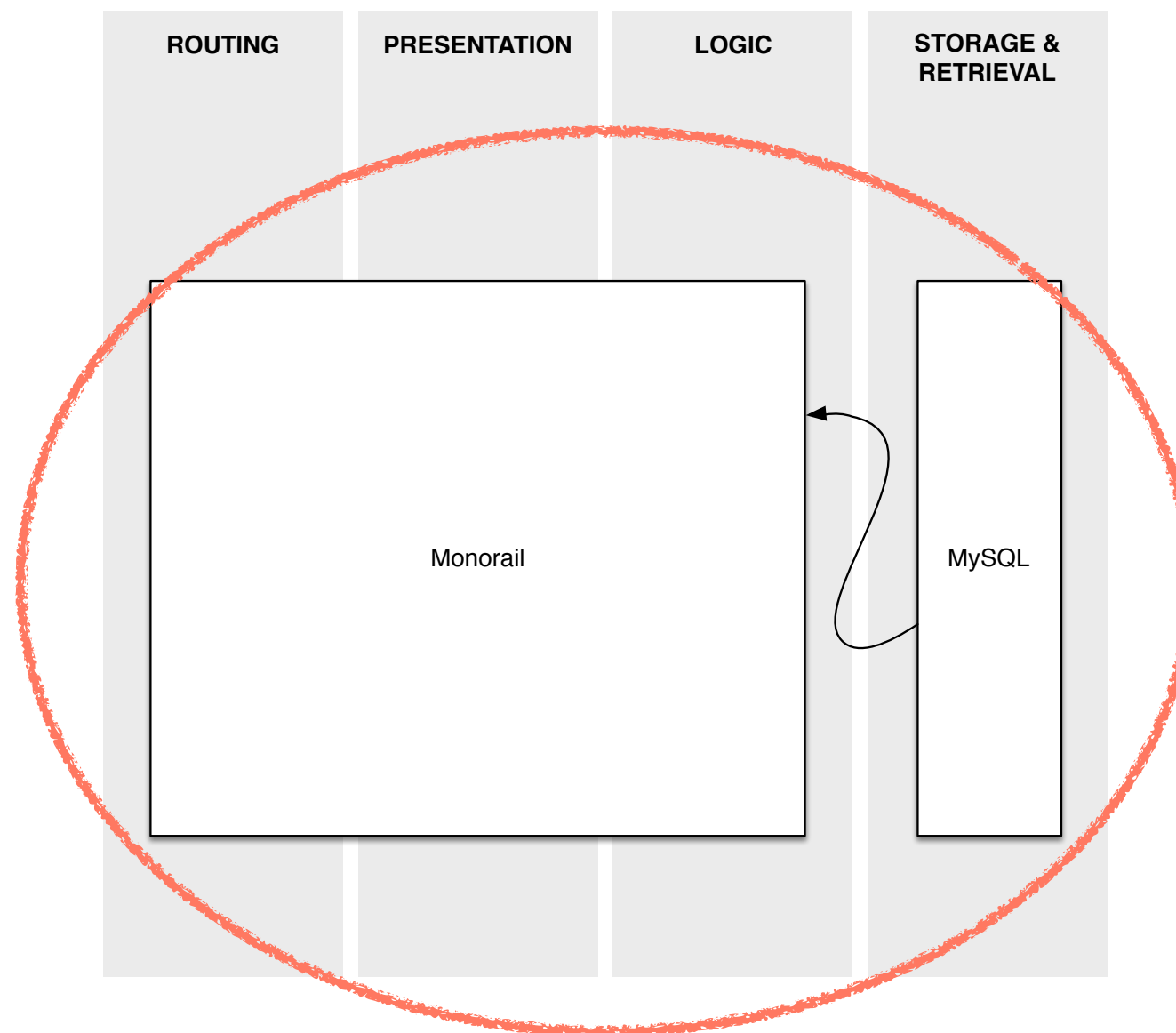
APPLE



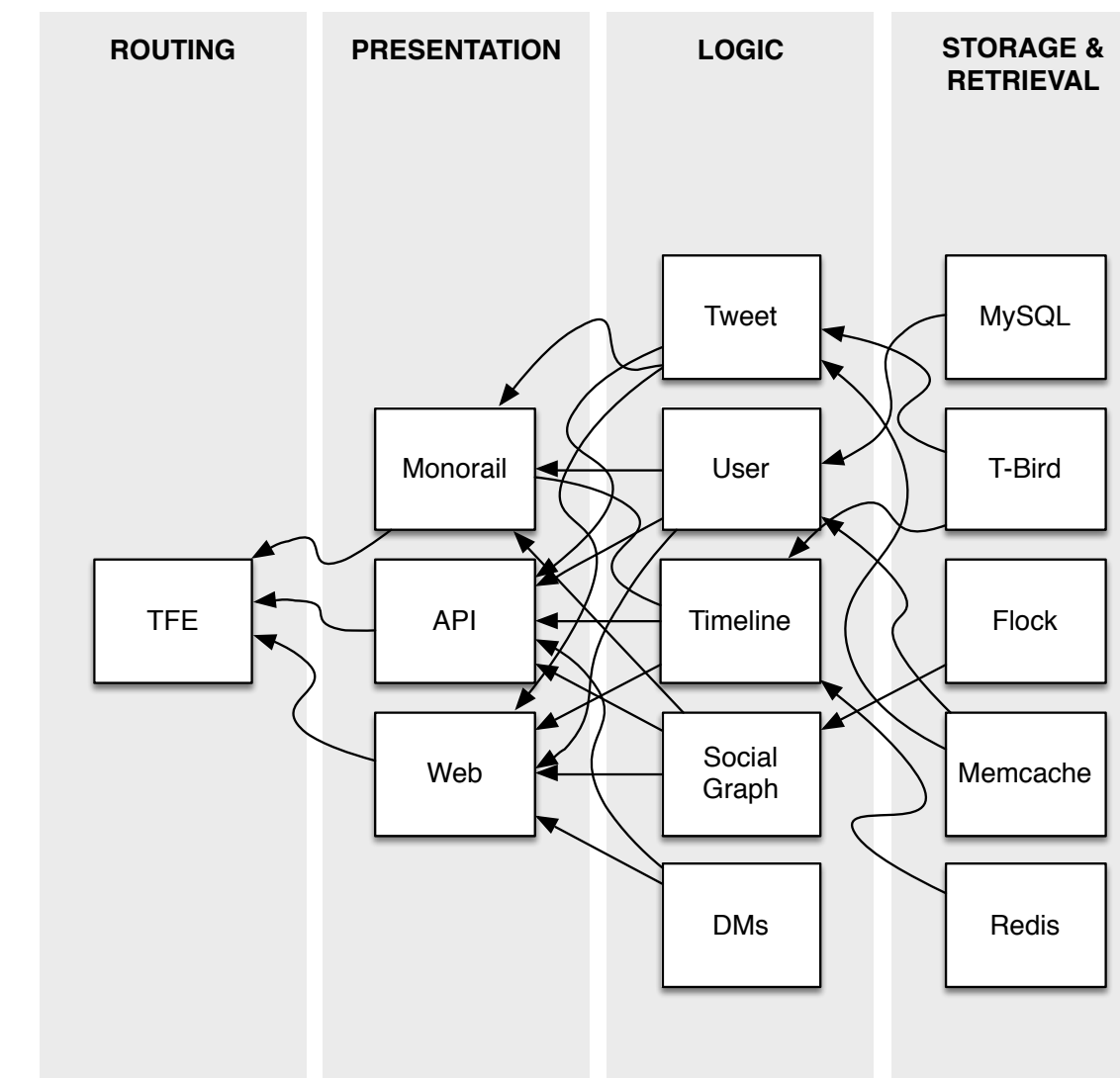
ORACLE



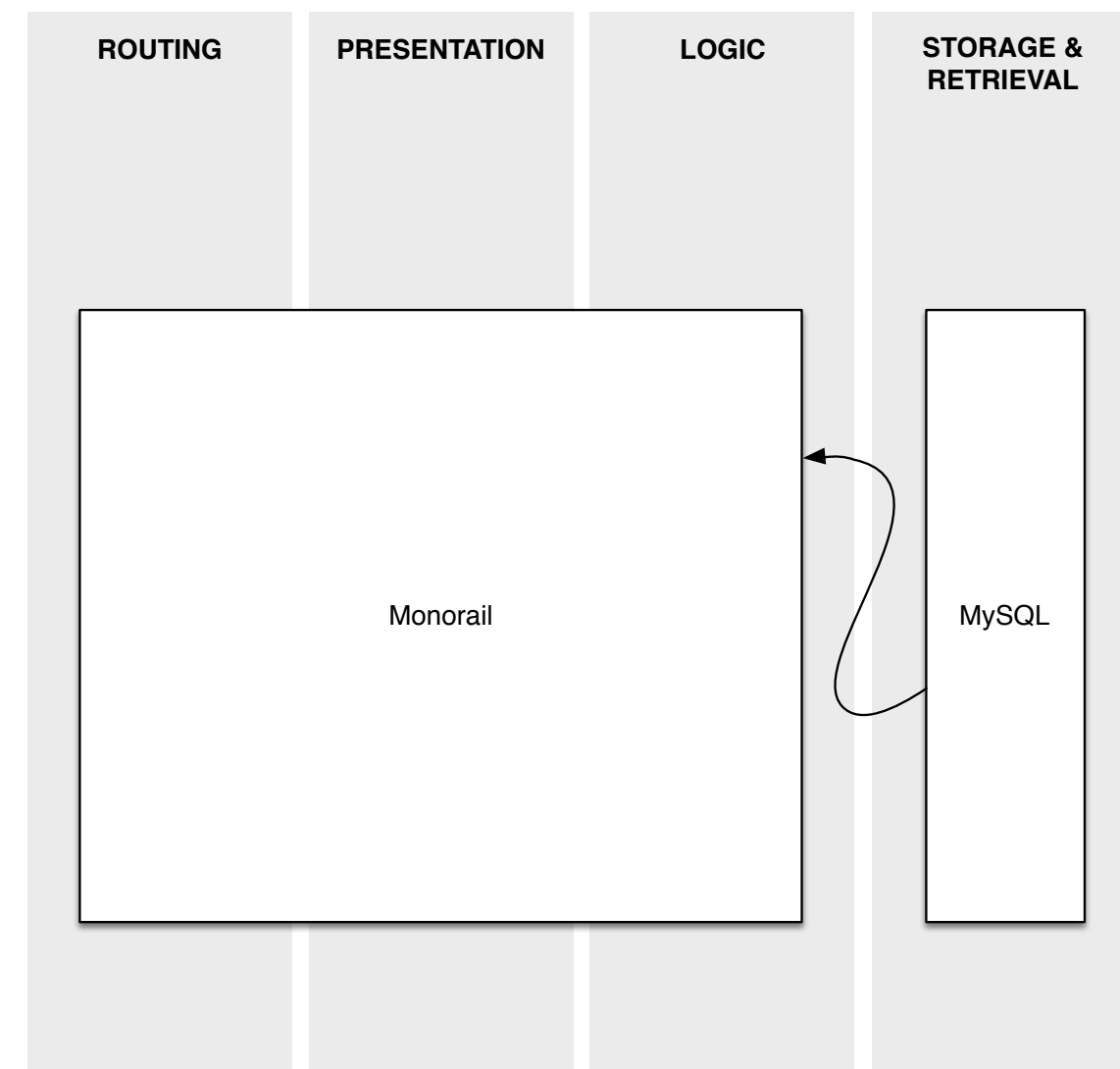
Team



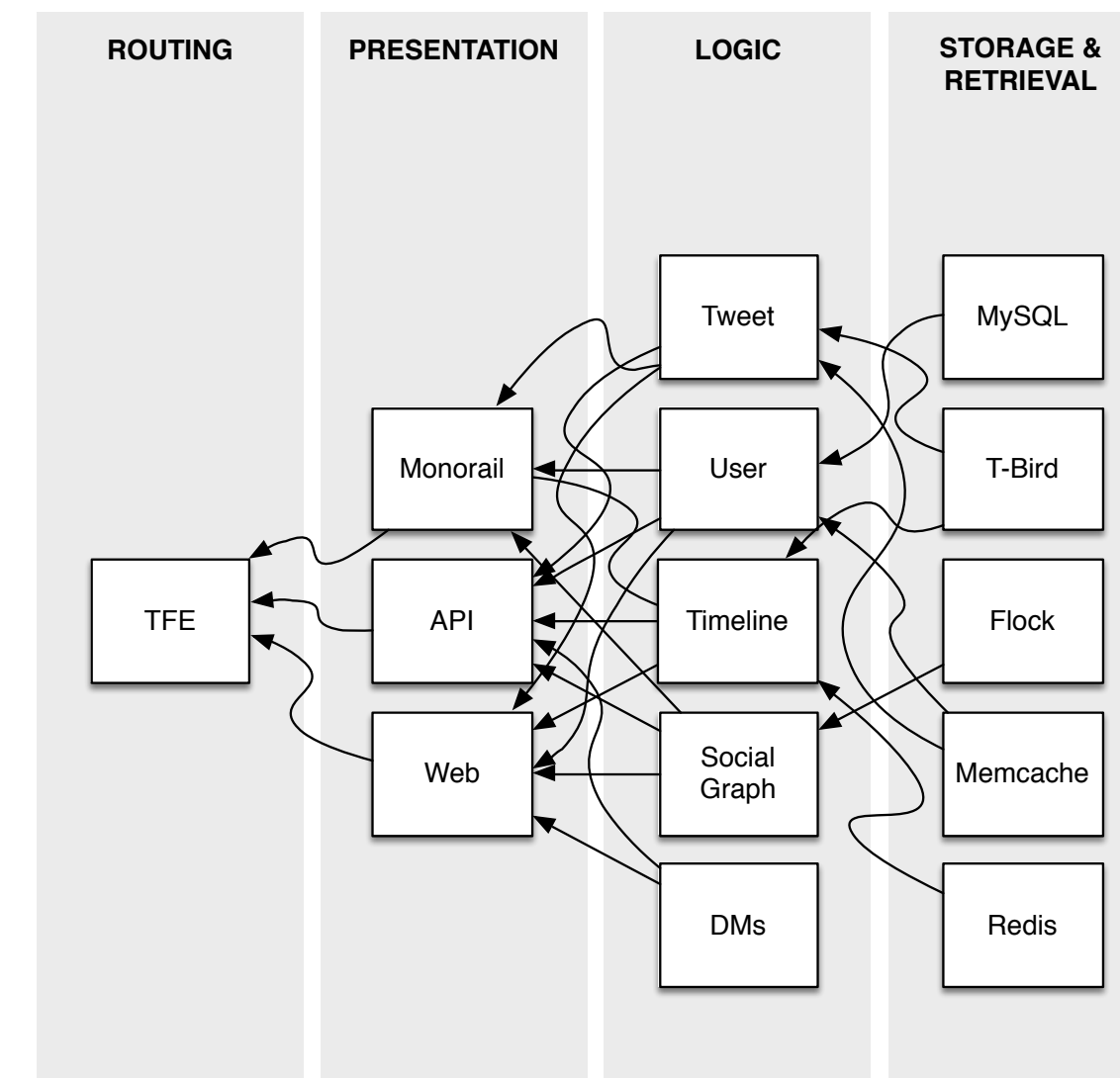
Single codebase
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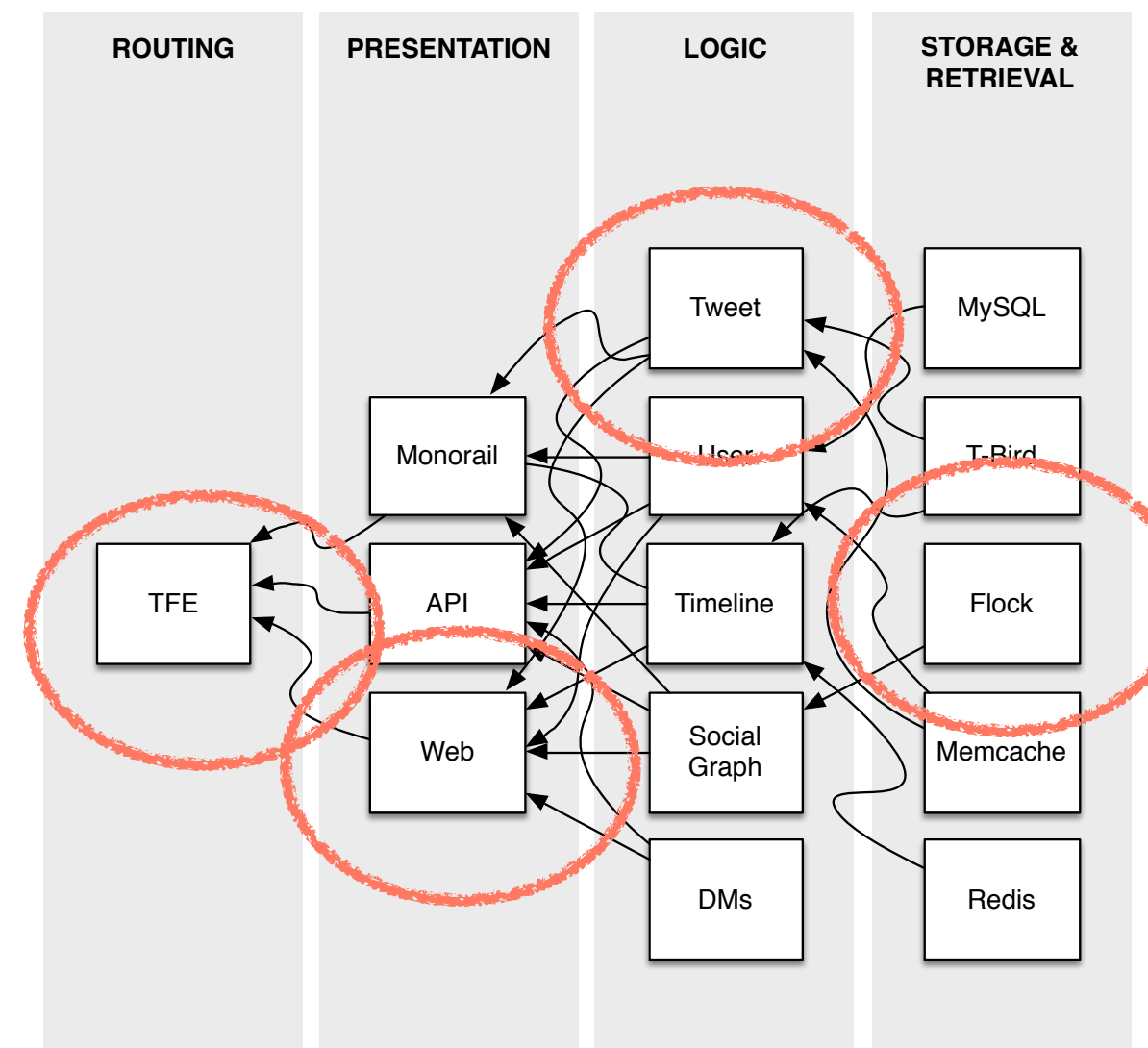
Many smaller, clearly scoped services
Single responsibility principle
Independently managed
Clear ownership for each service



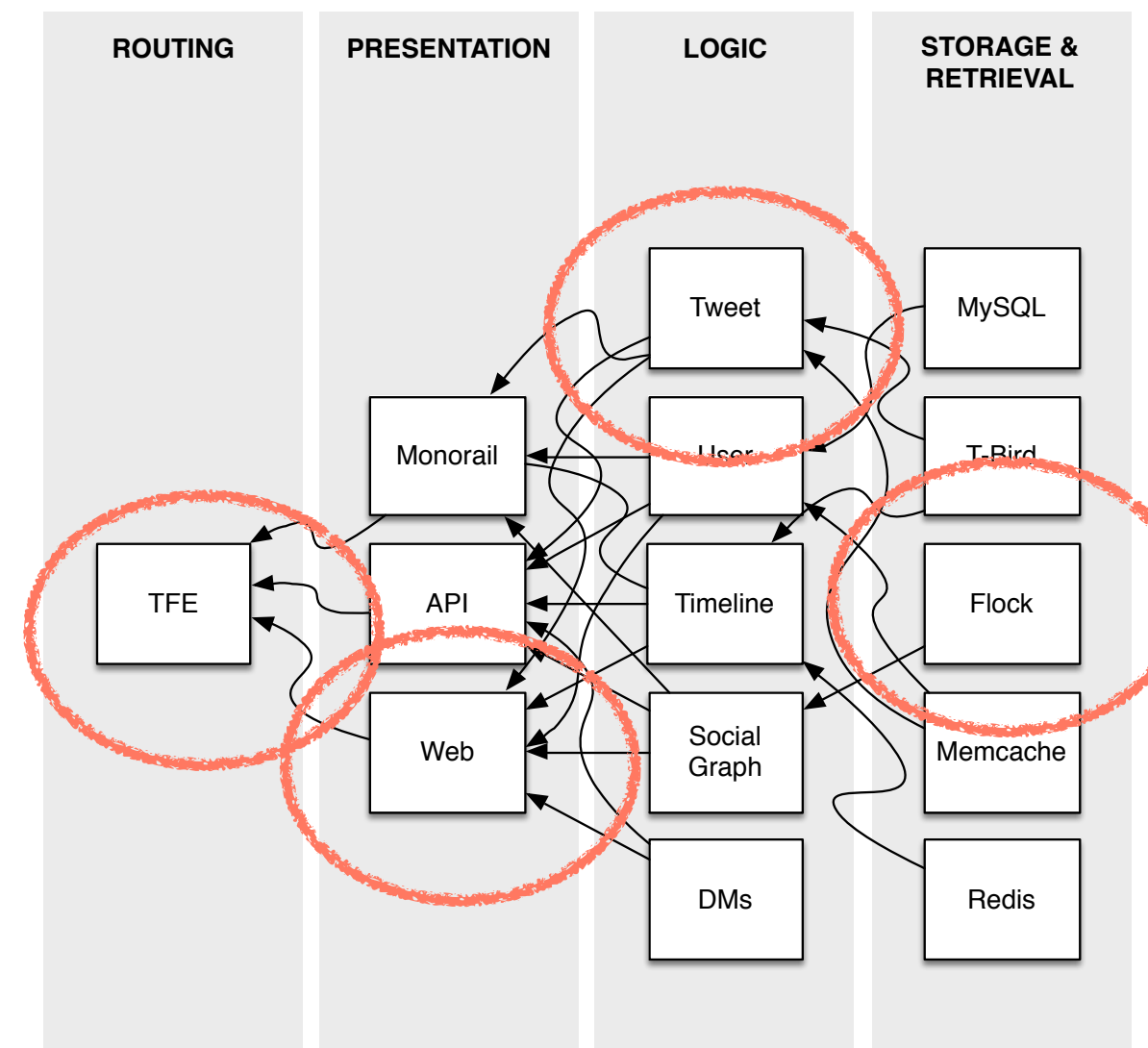
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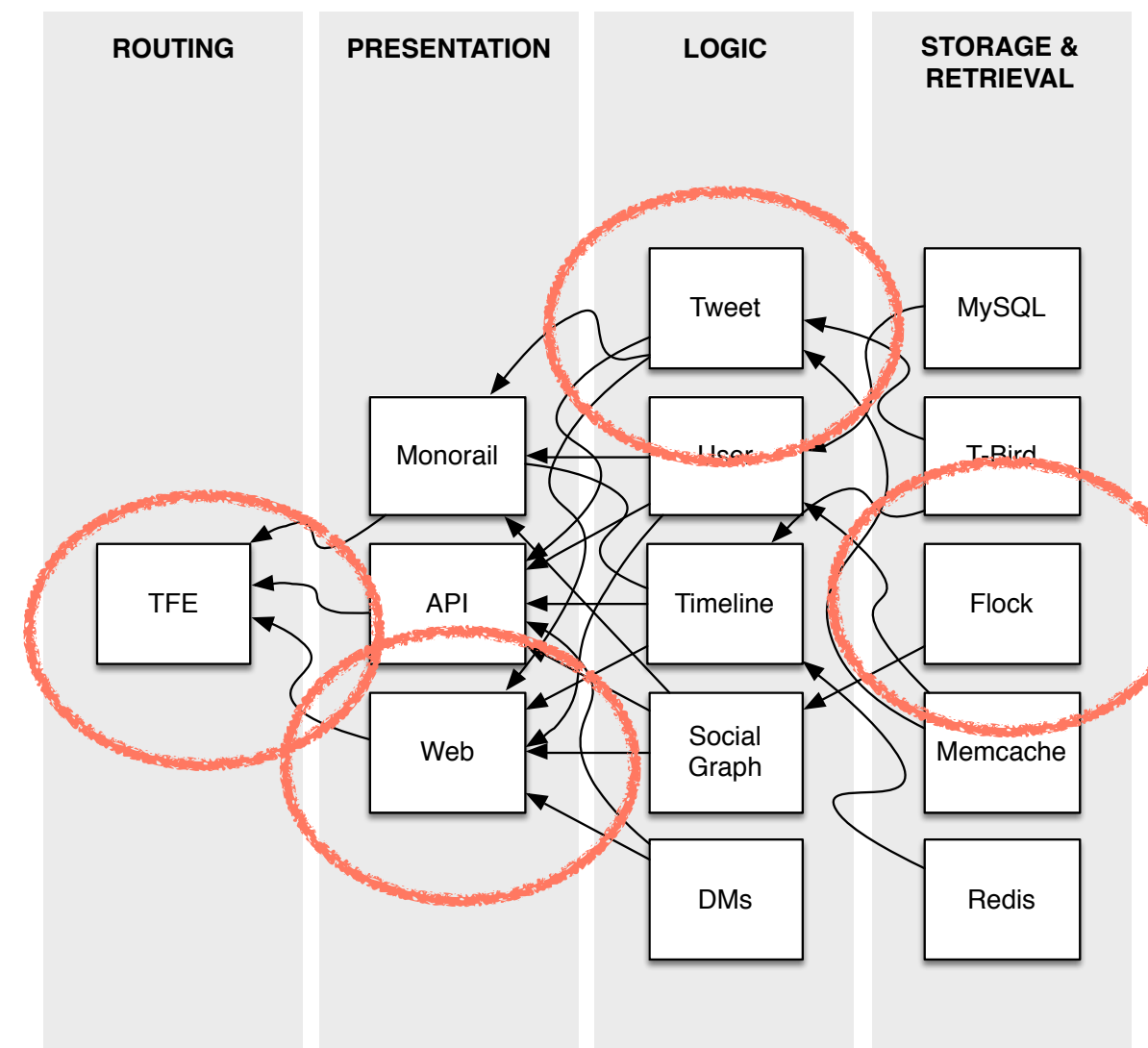
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Many smaller, clearly scoped services ~~teams~~
 Single responsibility principle
 Independently managed
 Clear ownership for each service ~~team~~

Ways must be found to reward design managers for keeping their organizations lean and flexible. There is need for a philosophy of system design management which is not based on the assumption that adding manpower simply adds to productivity.

Melvin Conway



Many smaller, clearly scoped services — teams

Single responsibility principle

Independently managed

Clear ownership for each service — team

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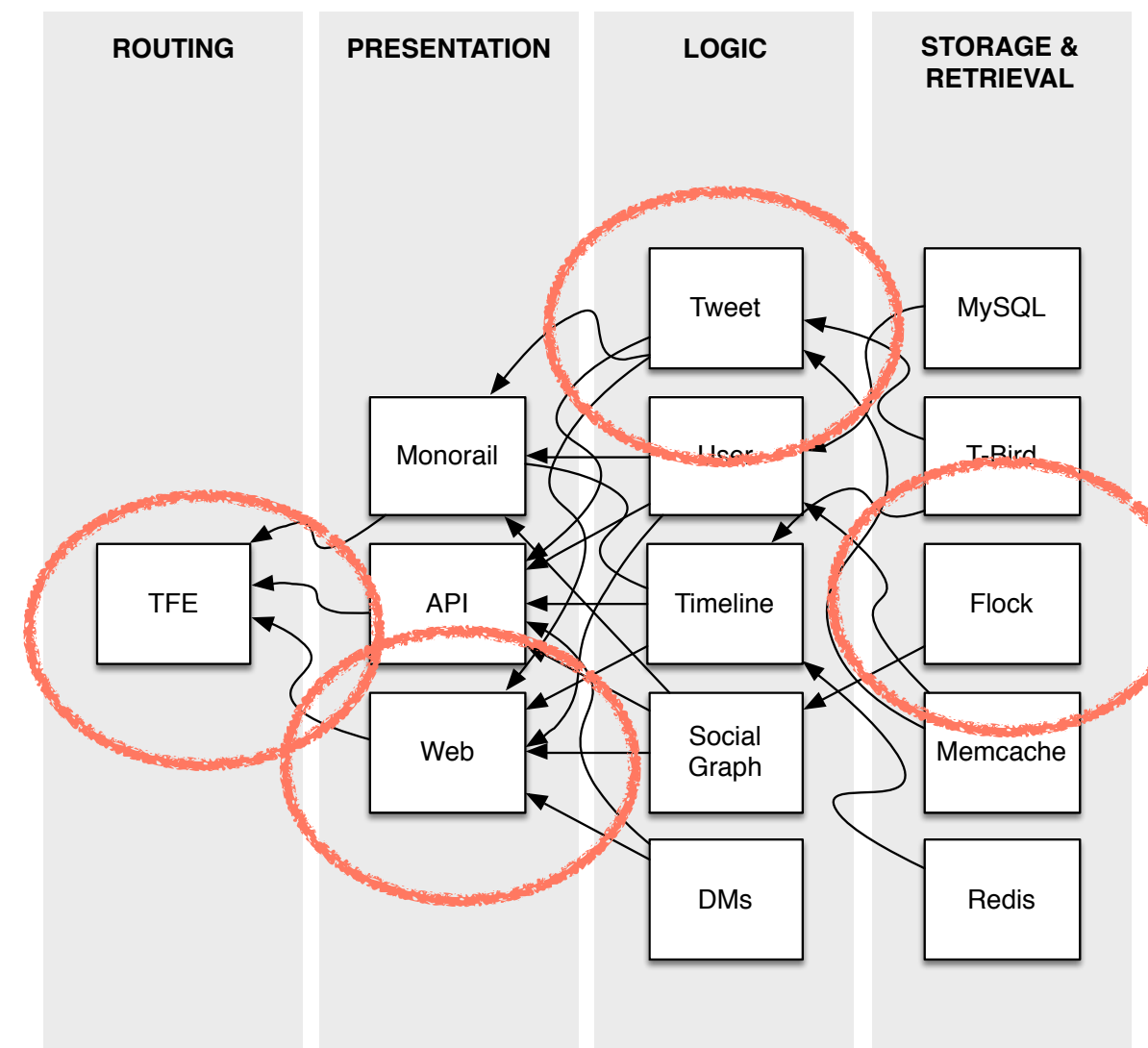
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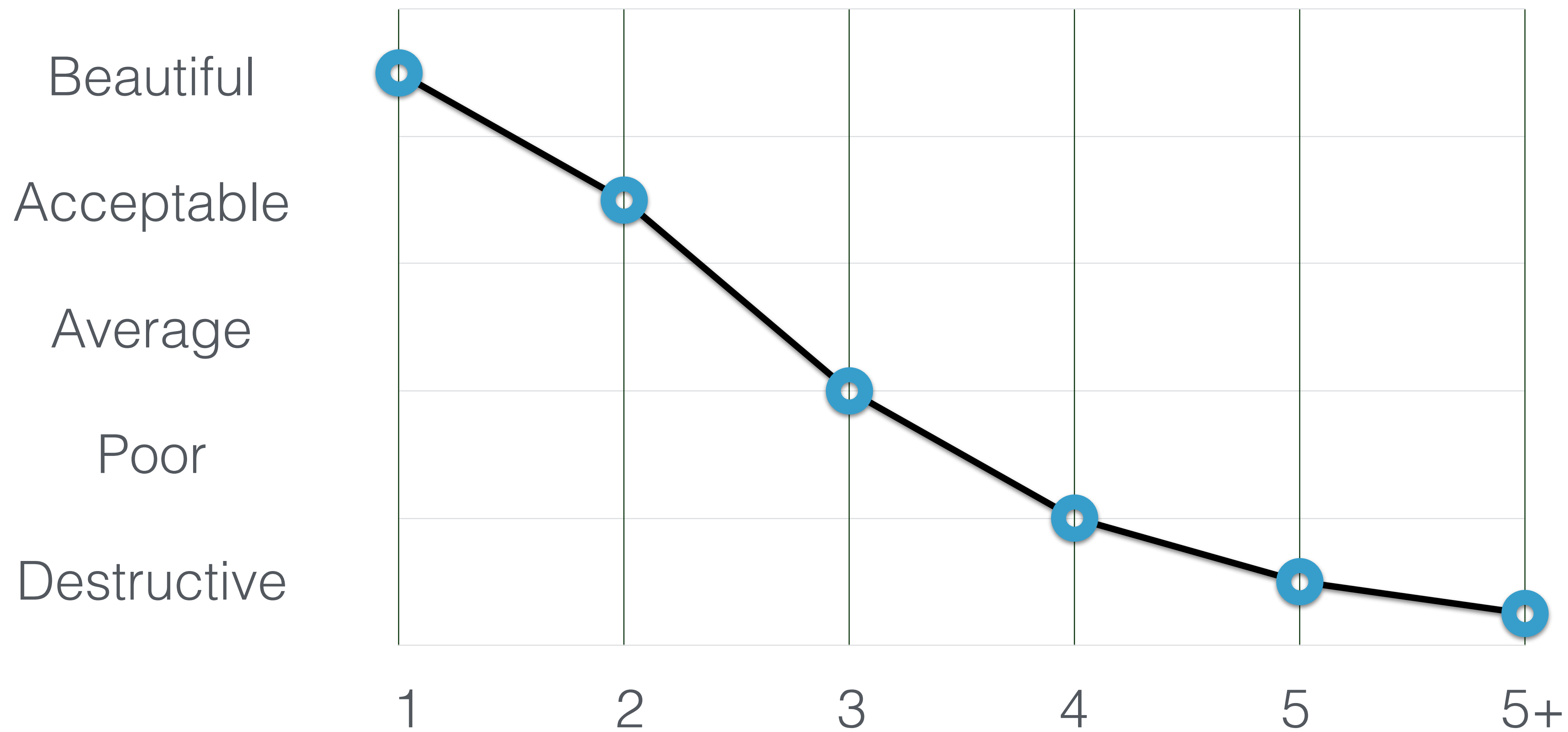
▪

Melvin Conway (sorta)



Many smaller, clearly scoped services ~~teams~~
 Single responsibility principle
 Independently managed
 Clear ownership for each service ~~team~~





You know you have reached perfection of design not
when you have nothing more to add, but when you
have nothing more to take away.

Antoine de Saint-Exupéry



64 bytes



32 bytes



64 bytes



48 bytes

32 bytes

Product should be a dictatorship.

Michael Arrington

0. It's not all about the code!

1. Small teams can do big things.

2. Full stack teams keeps your architecture flexible.

3. Make your teams mimic your architecture.

4. Make product a dictatorship.

THANKS!

Raffi Krikorian

@raffi & raffi.krikorian@gmall.com