

Forget bad code,
Focus on the system
how architectural complexity rules your work



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Server actions 🔥

```
function Bookmark({ slug }) {
  return (
    <button
      formAction={async () => {
        "use server";
        await sql`INSERT INTO Bookmarks (slug) VALUES (${slug})`;
      }}
    >
      <BookmarkIcon />
    </button>
  );
}
```

6:22 PM · Oct 26, 2023



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that's how JSX felt
10 years ago

separation
of
concerns



separation
of
concerns

**BY BUSINESS
DOMAIN**



1990's



<https://www.ebay.com/itm/175866982346>

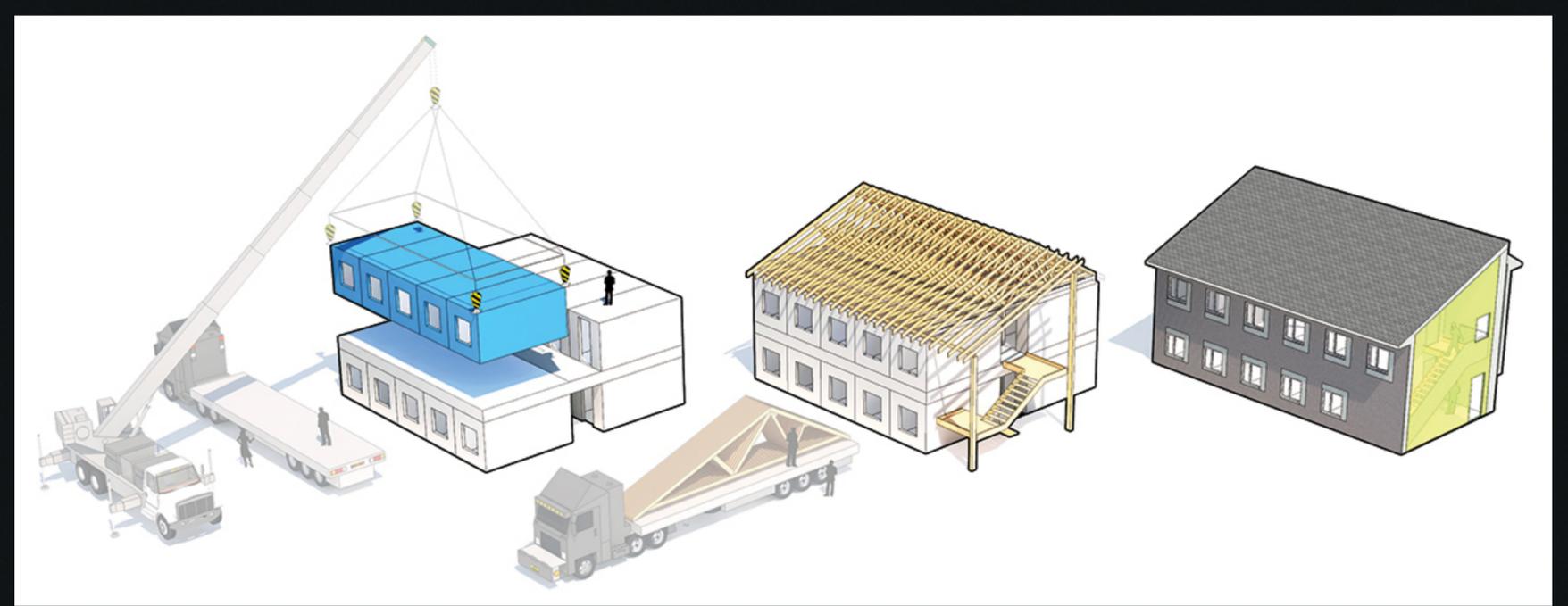
2010's



<https://10minuteastronomy.wordpress.com/2017/08/02/the-lego-ideas-saturn-v/>



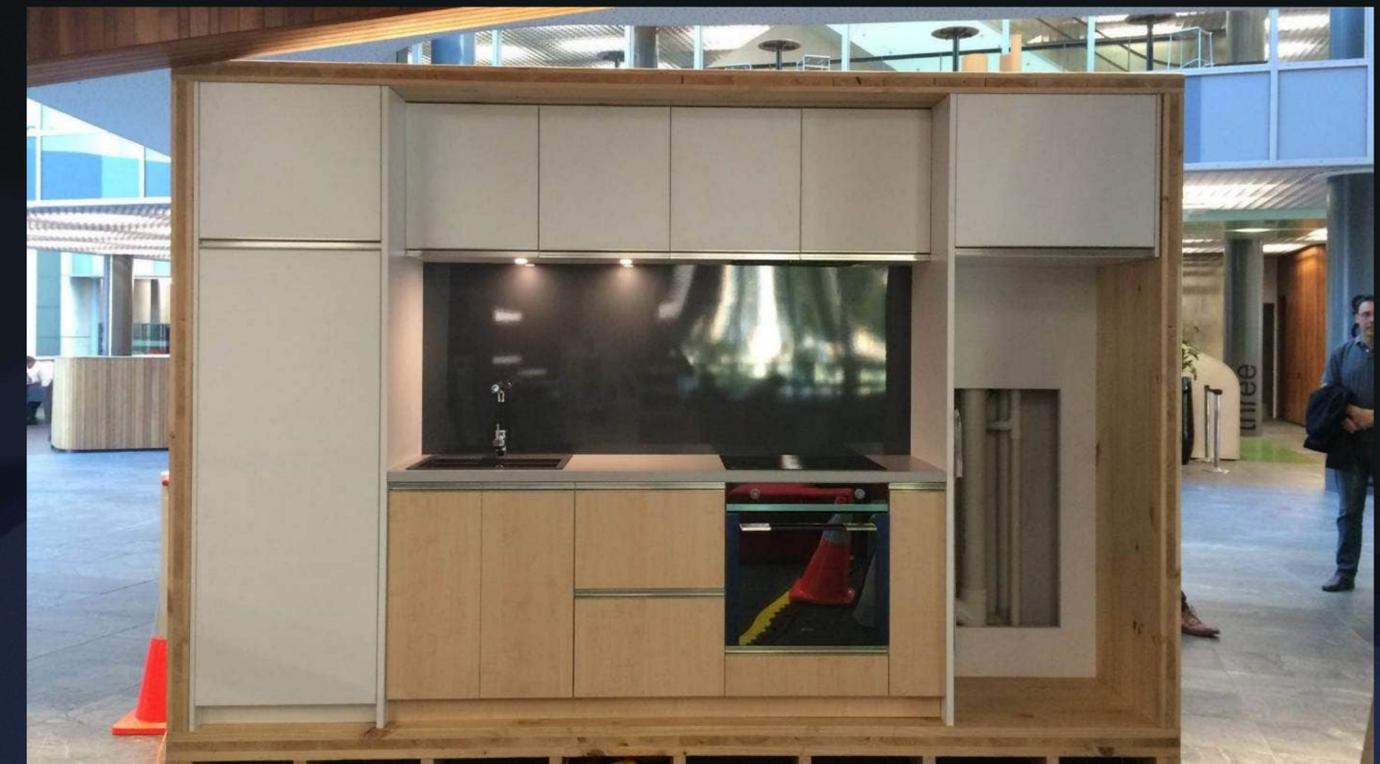
<https://www.realprojectives.com/the-advantages-and-challenges-of-modular-construction/>



<https://holstarc.com/news/modular-construction-in-affordable-housing>



<https://www.surepods.com>



<https://www.stuff.co.nz/life-style/home-property/91008805/prefab-pods-and-inexpensive-modular-housing-on-show-at-inex-design-expo>

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managing

Architectural Complexity

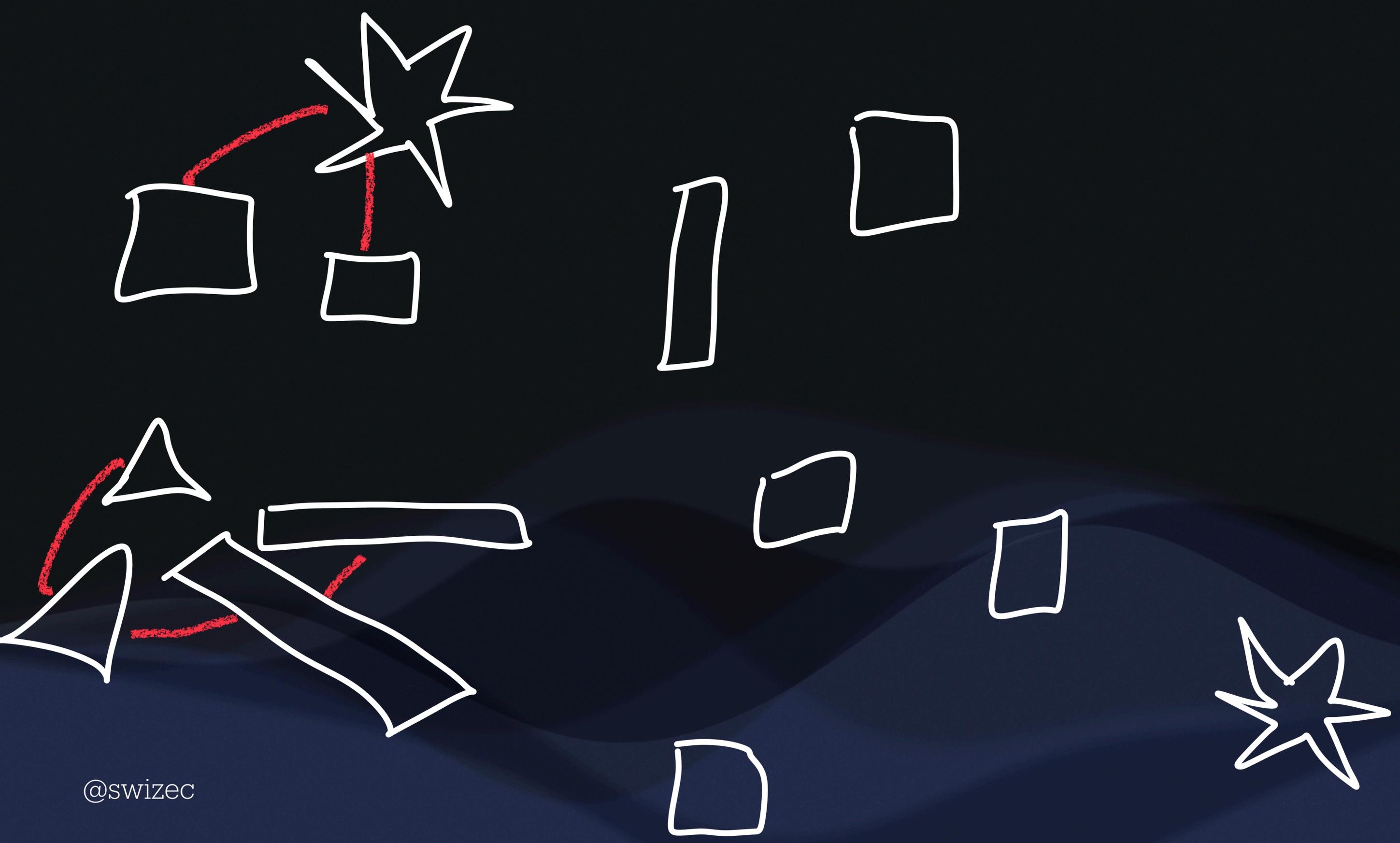
Architectural complexity accounts for

- 50% drops in productivity,
- 3x increases in defect density,
- 10x increases in staff turnover

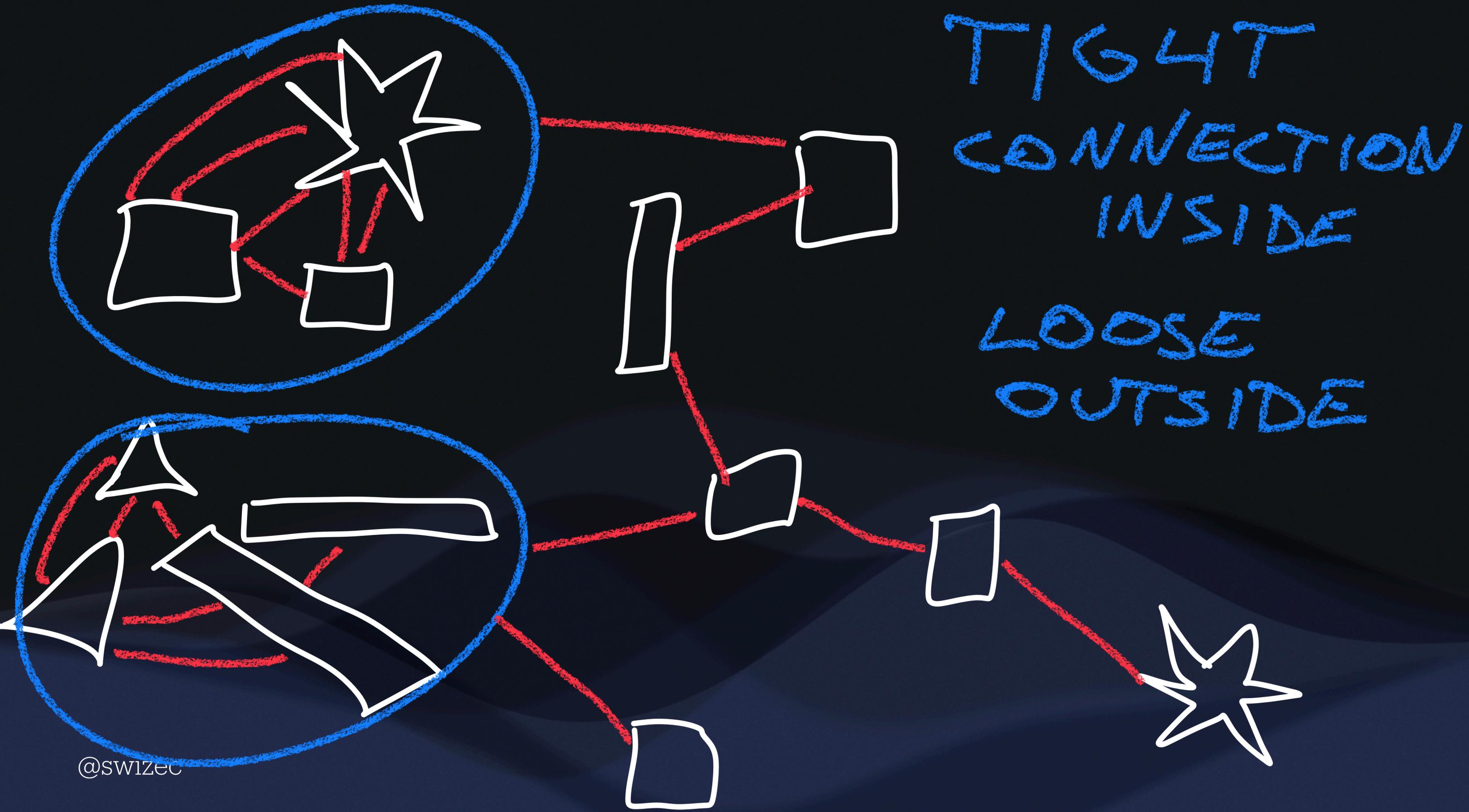
Daniel Sturtevant



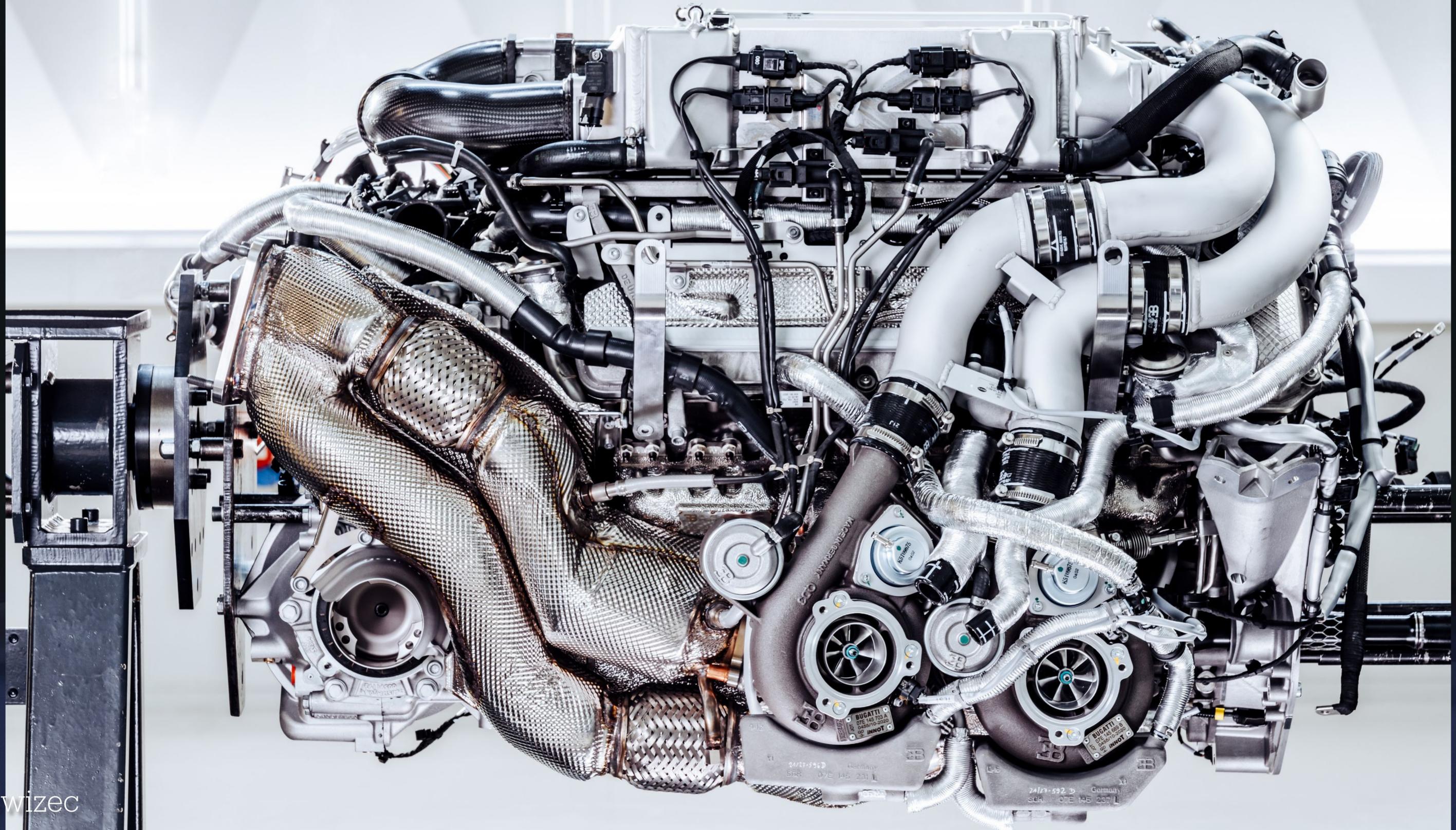




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Chiron FUEL

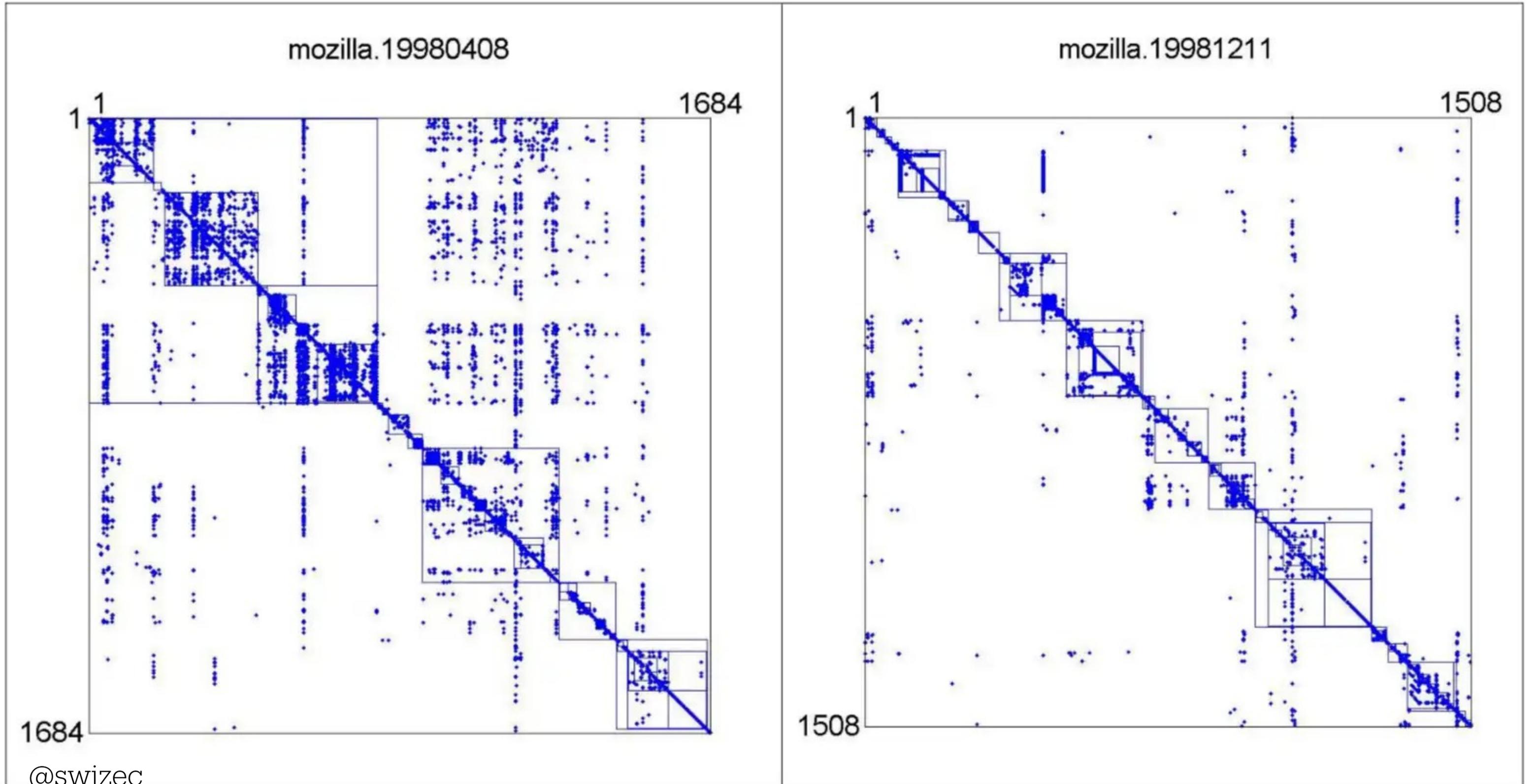
AIR

EXHAUST

TORQUE

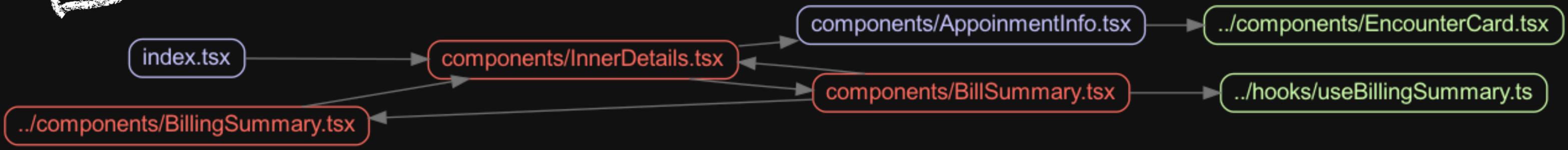
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Exhibit 5: A Comparison of Mozilla before and after a purposeful re-design effort.

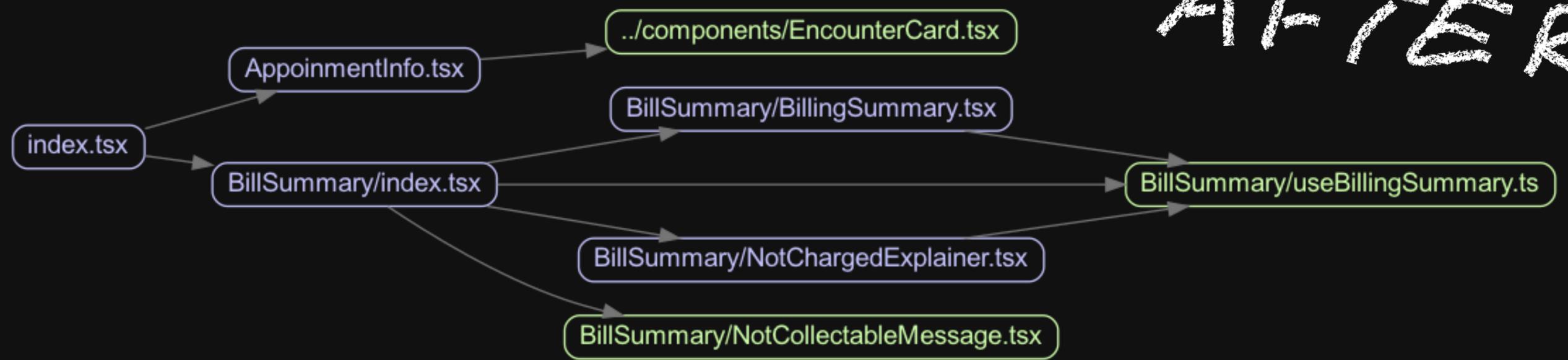


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BEFORE



AFTER



contain the load

put it in a little box

Notice architectural complexity

- jumbled dependency graphs
- ../../../../ imports
- circular dependencies
- unclear inside/outside boundaries





Fix architectural complexity

- organize by business domain
- tight internal coupling, loose external
- clean/validate inputs at boundaries, prop drill on the inside
- be explicit
- duplication beats mixed concerns



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swizec.com/react-summit