

FEDAY 2019

第5届 FEDAY
2019.09.21 / 成都

主办方



赞助商



支持社区





Balanced development in large teams

Vladimir Grinenko

FEDAY, 21st September 2019, Chéngdū

大型团队中开发的平衡性

9: 30 Vladimir Grinenko

当产品足够大时，开发者们容易走向极端：

- code is beautiful → releases are rare
- 代码优美 → 发布缓慢
- 流程上花费的精力太多 → 开发上花费的精力太少
- 发布频繁 → 代码质量堪忧
- 高的测试覆盖率 → 产品变得笨重，难以改变

除了这些之外：

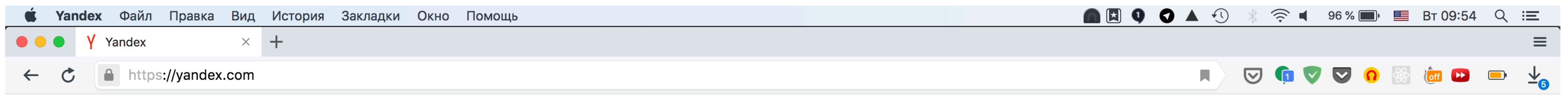
- 关注UI速度 → 不追求增加更多特性
- 想提升 UI → 没有时间思考代码架构


在Yandex，我们遇到了所有这些问题并找到了我们的解决方案，我们会把这些好的解决方案——分享给大家。



Vladimir Grinenko

- › Head of common components development at Yandex
- › More than 40 developers in 5 teams in 3 cities
- › Open source contributor



Switch to Yandex.ru EN  Log in



Images



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AppMetrica



Translate

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|




SEARCH


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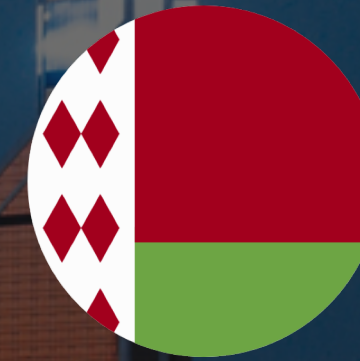
 Russia

 Ukraine Belarus Kazakhstan Uzbekistan

 Turkey

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Our Locations & International Operations Today



27 offices
9 countries



Over **10 000**
employees

About **50%**
software developers



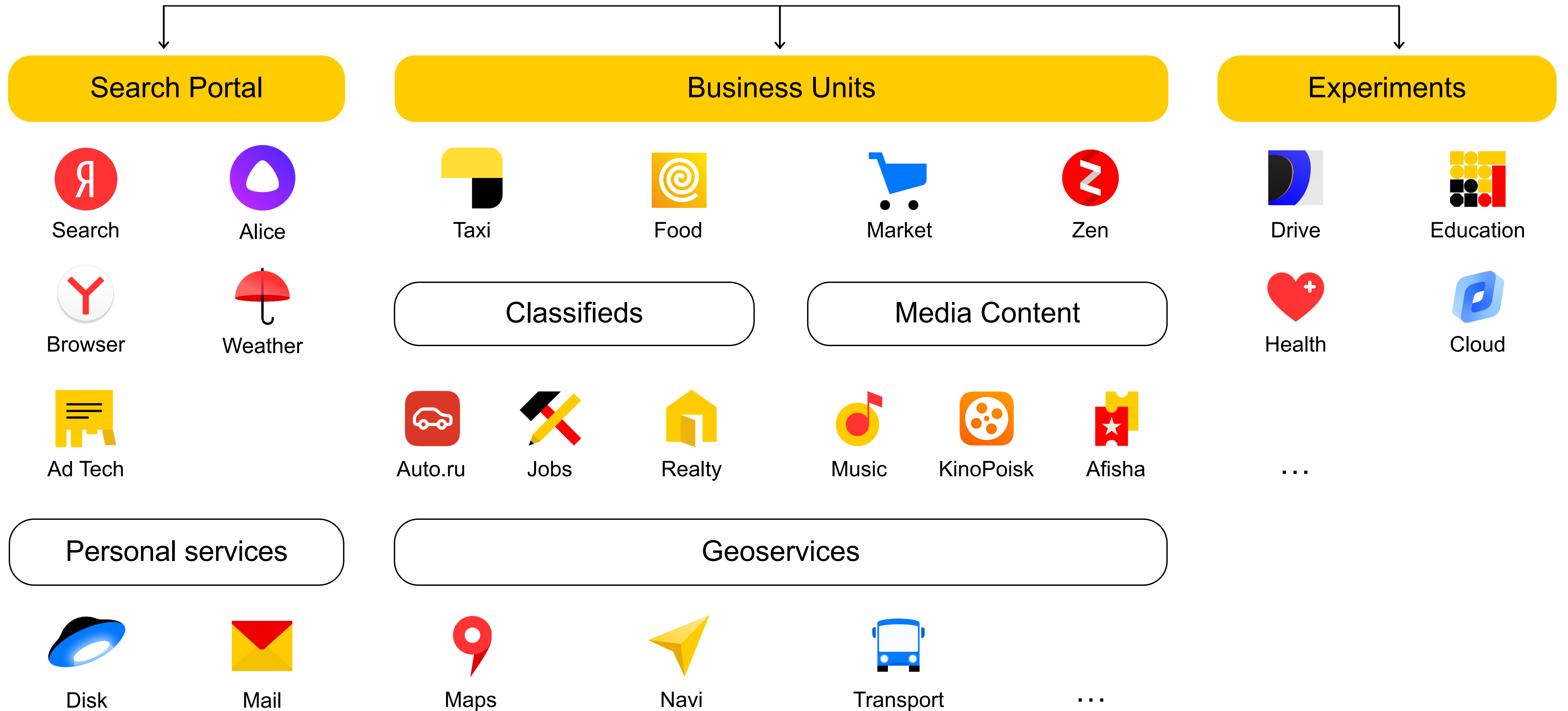
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- › Google
- › Uber
- › Spotify
- › Amazon
- › Baidu

Yandex services

- › Web: search, browser, music, social...
- › E-commerce: Market, Beru...
- › Taxi and carsharing
- › Food delivery
- › Hardware: Station, Phone, Auto
- › AI: Alice, self-driving cars...

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- Авиабилеты
- Автобусы
- Авто.ру
- Аудитории
- Афиша
- Банковская карта Яндекс.Денег
- Беру
- Брингли
- Вебмастер
- Взгляд
- Видео
- Время
- Голосовой помощник Алиса
- Денежные переводы
- Деньги
- Дзен
- Директ
- Диск
- Дисплей
- Доставка
- Драйв
- ЕГЭ

- Маркет
- Метрика
- Музыка
- Народная карта
- Недвижимость
- Новости
- Облако
- Партия еды
- Патенты
- Переводчик
- Планы
- Погода
- Поиск
- Поиск для сайта
- Поиск людей
- Поиск по блогам
- Почта
- Почта для домена
- Практикум
- Пробки
- Путешествия
- Работа

- Справочник
- Статистика
- Сувениры
- Такси
- Такси для бизнеса
- Телепрограмма
- Телефония
- Технологии
- Толока
- Трекинг
- Услуги
- Формы
- Фотки
- Штрафы
- Яндекс.DNS
- Яндекс.Авто
- Яндекс.Браузер
- Яндекс.ОФД
- Яндекс.Учебник
- AppMetrica
- XML
- Yandex Data Factory

- Едадил
- Ж/д билеты
- Здоровье
- Знатоки
- Интернетометр
- Календарь
- Картинки
- Радар
- Радио
- Рейтинг
- Расписания
- Реклама
- Рекламная сеть
- Репетитор

Yandex is HUGE

Huge is difficult to manage

Long time ago

specialization first

developer is the king

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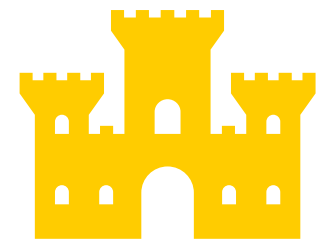
Managers



Designers



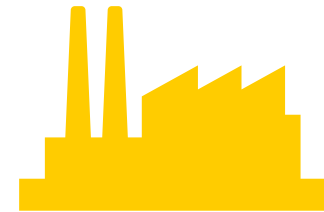
Developers



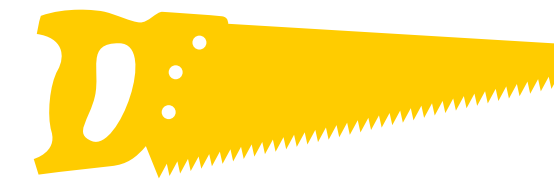
Products



PMs



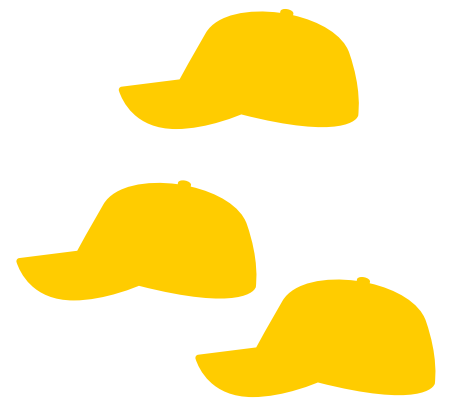
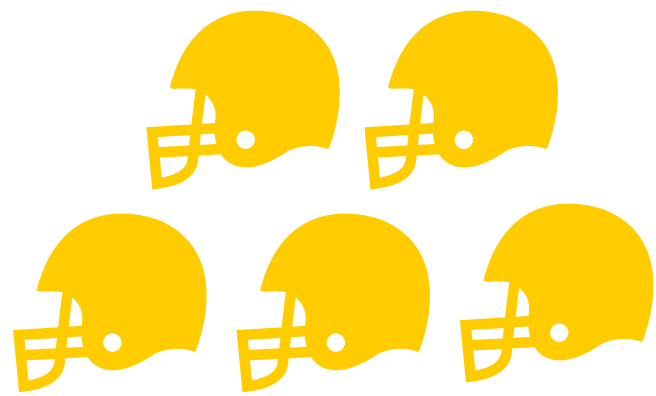
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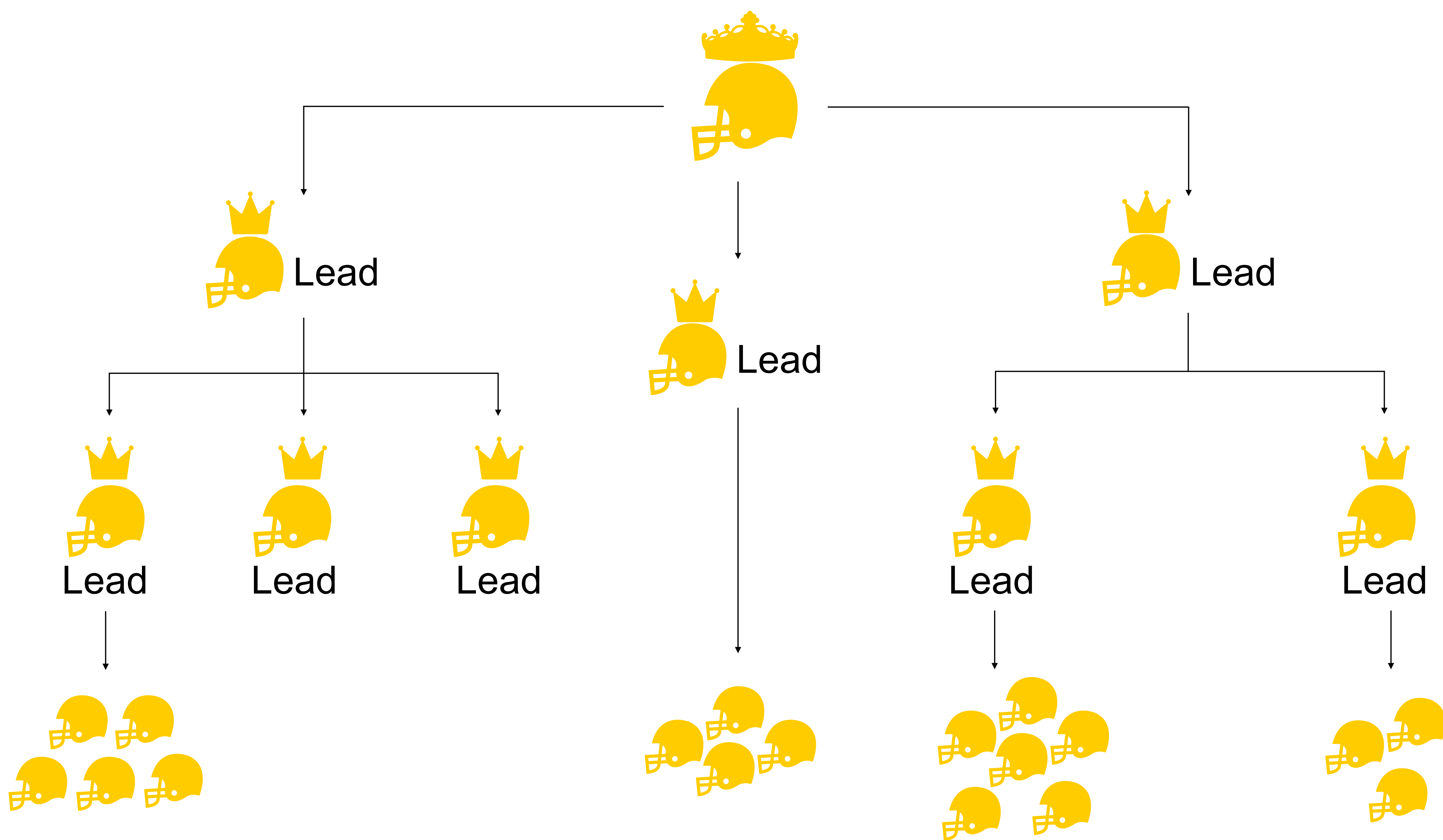


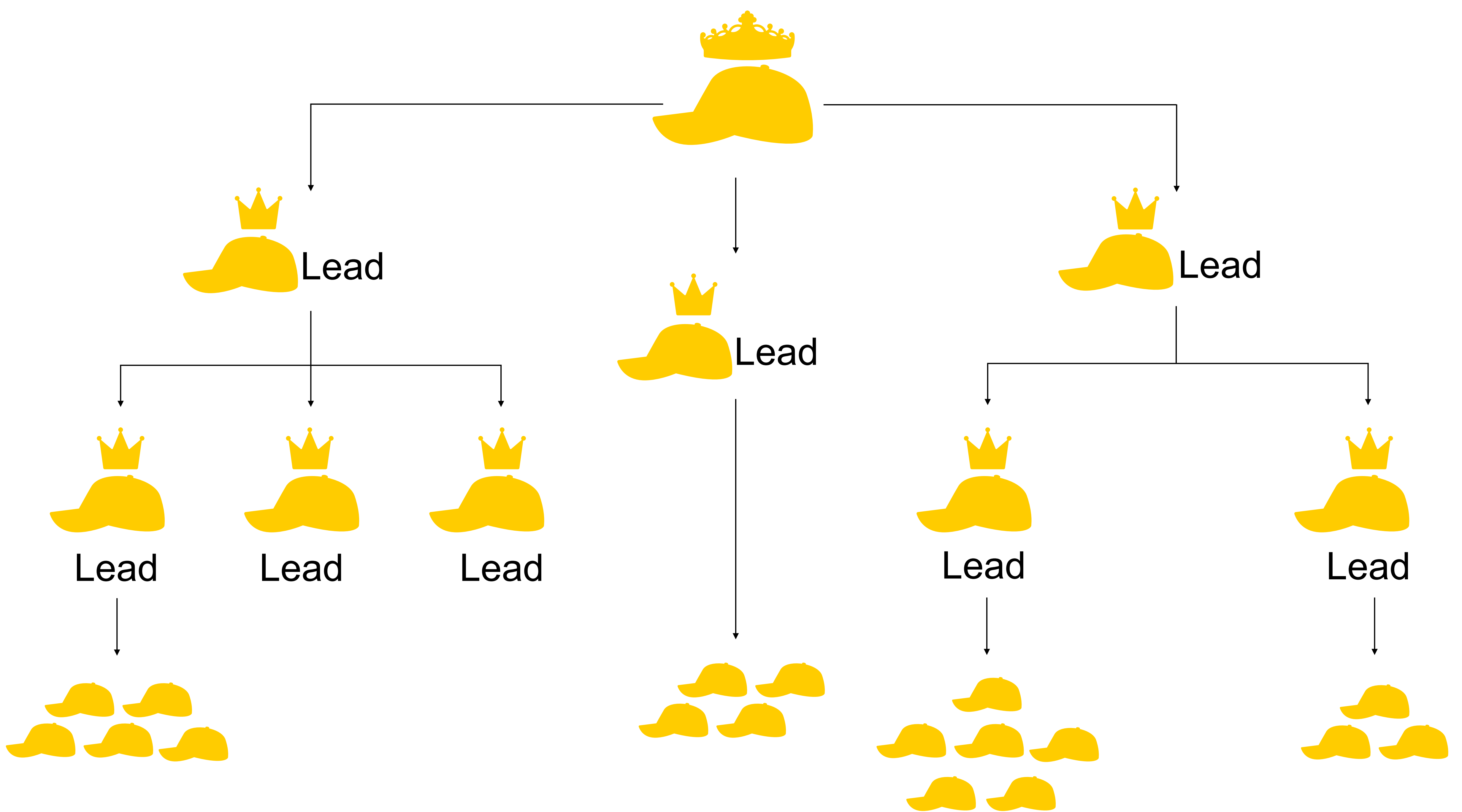
Backend



Frontend







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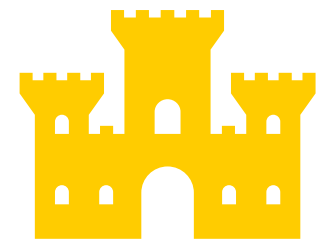
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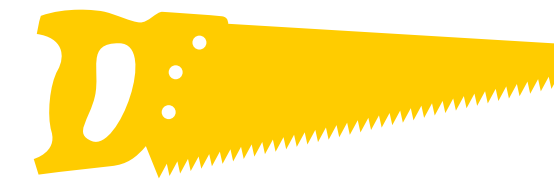
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PMs



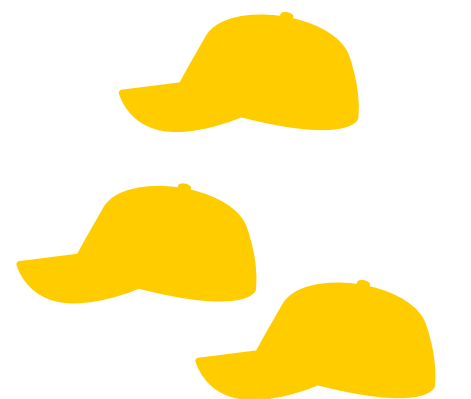
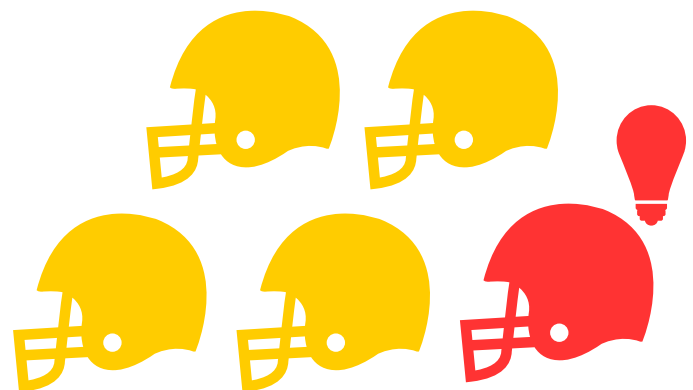
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Frontend



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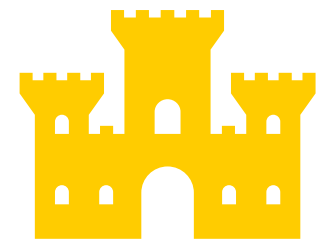
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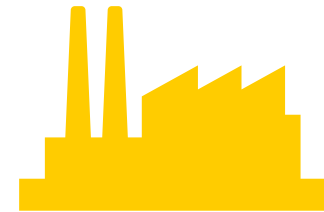
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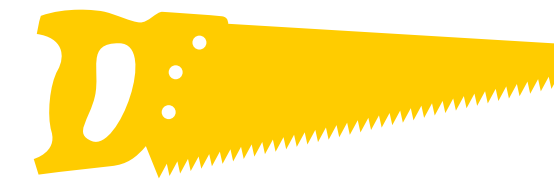
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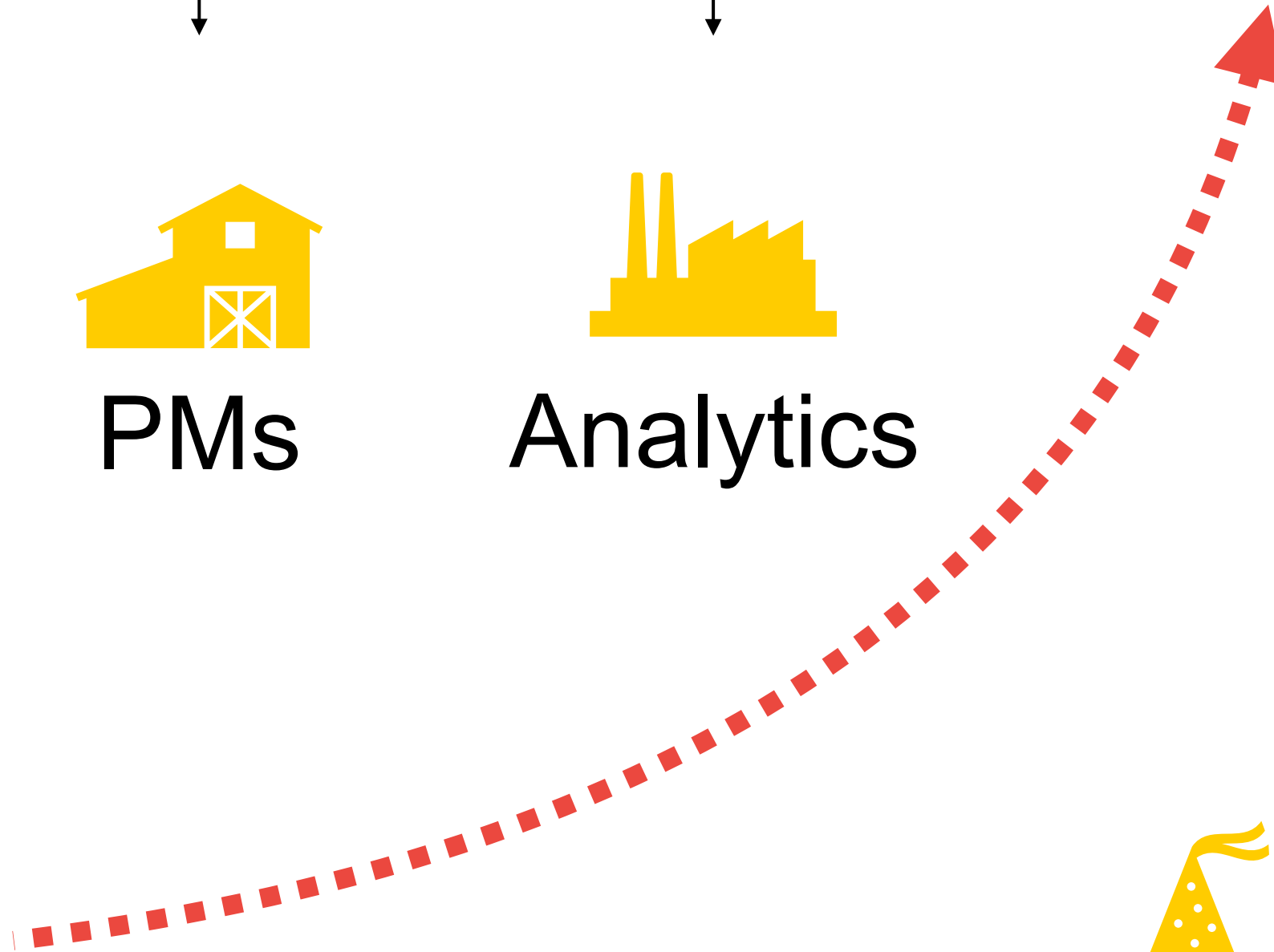
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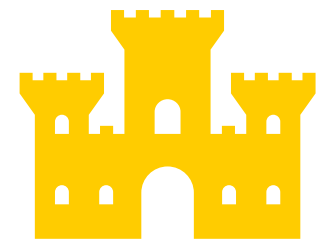
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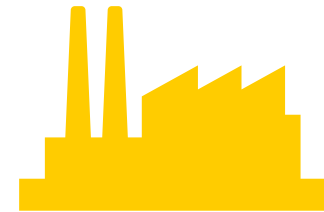
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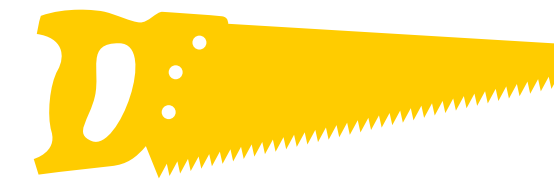
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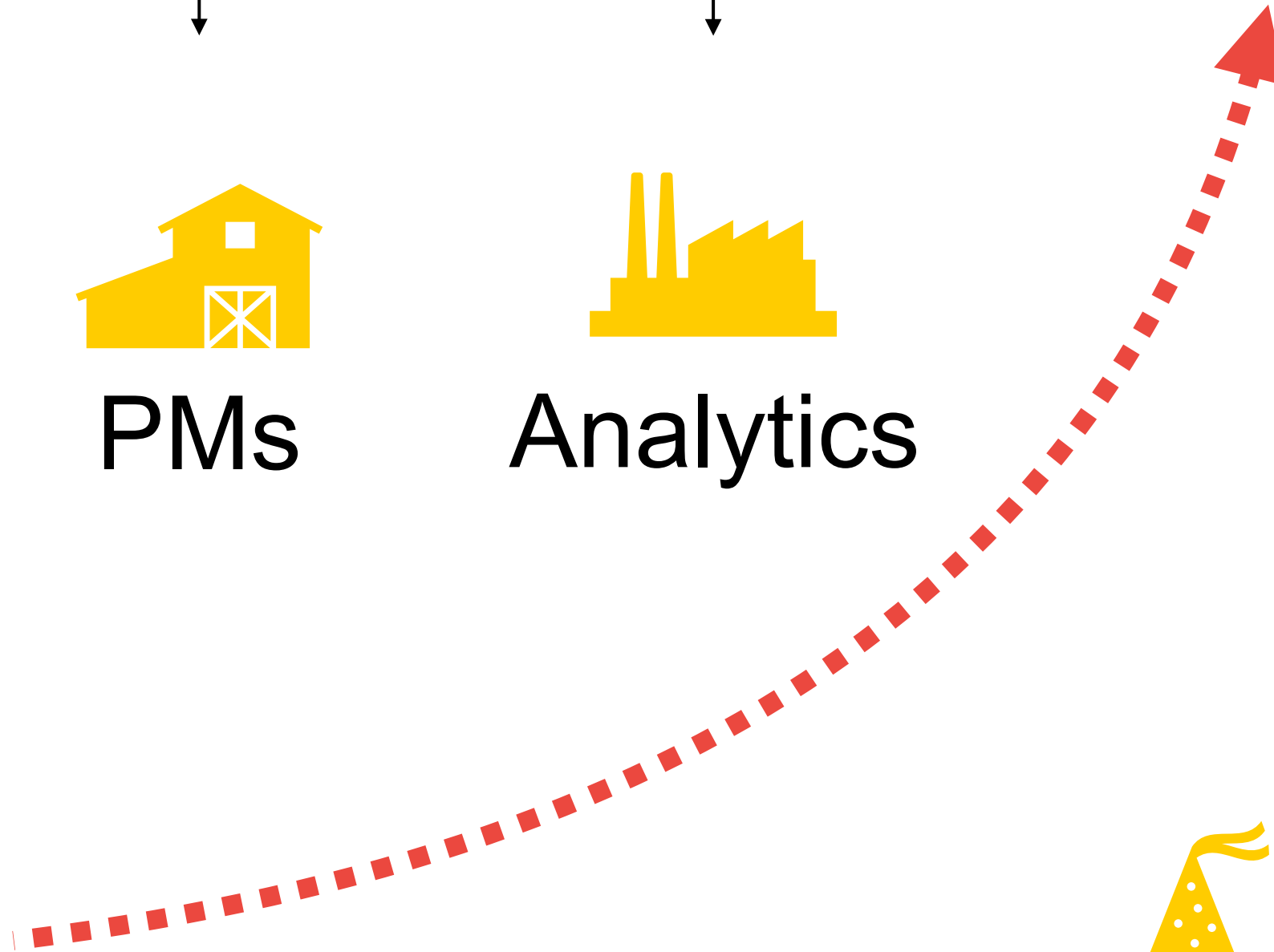
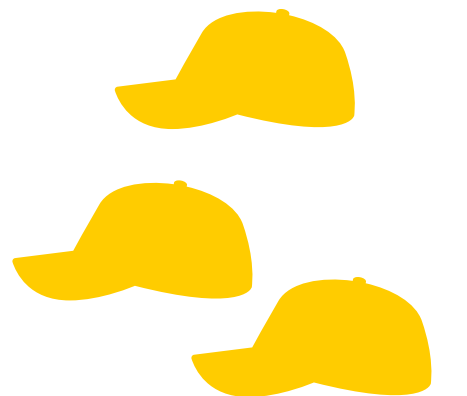
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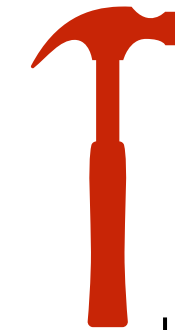
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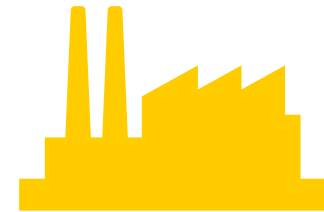
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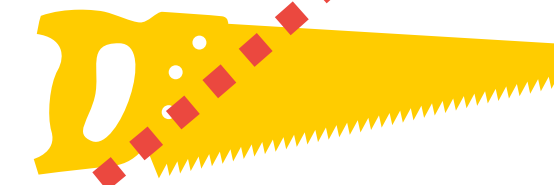
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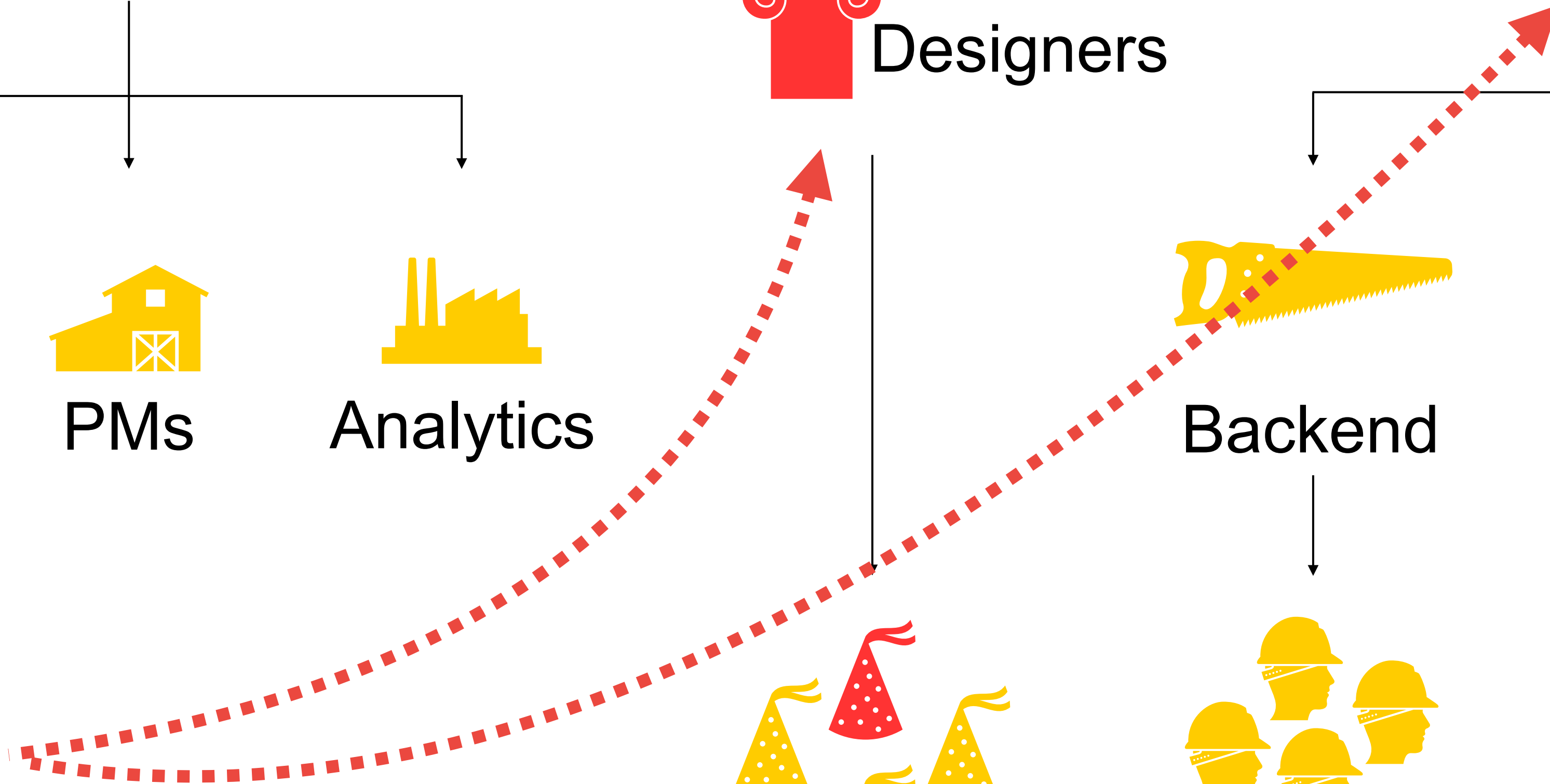
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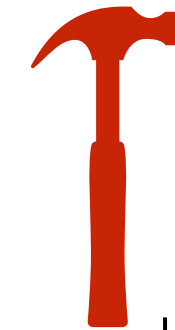
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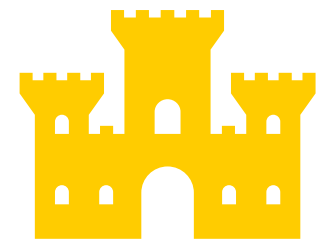
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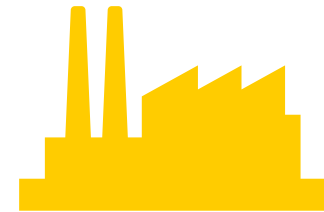
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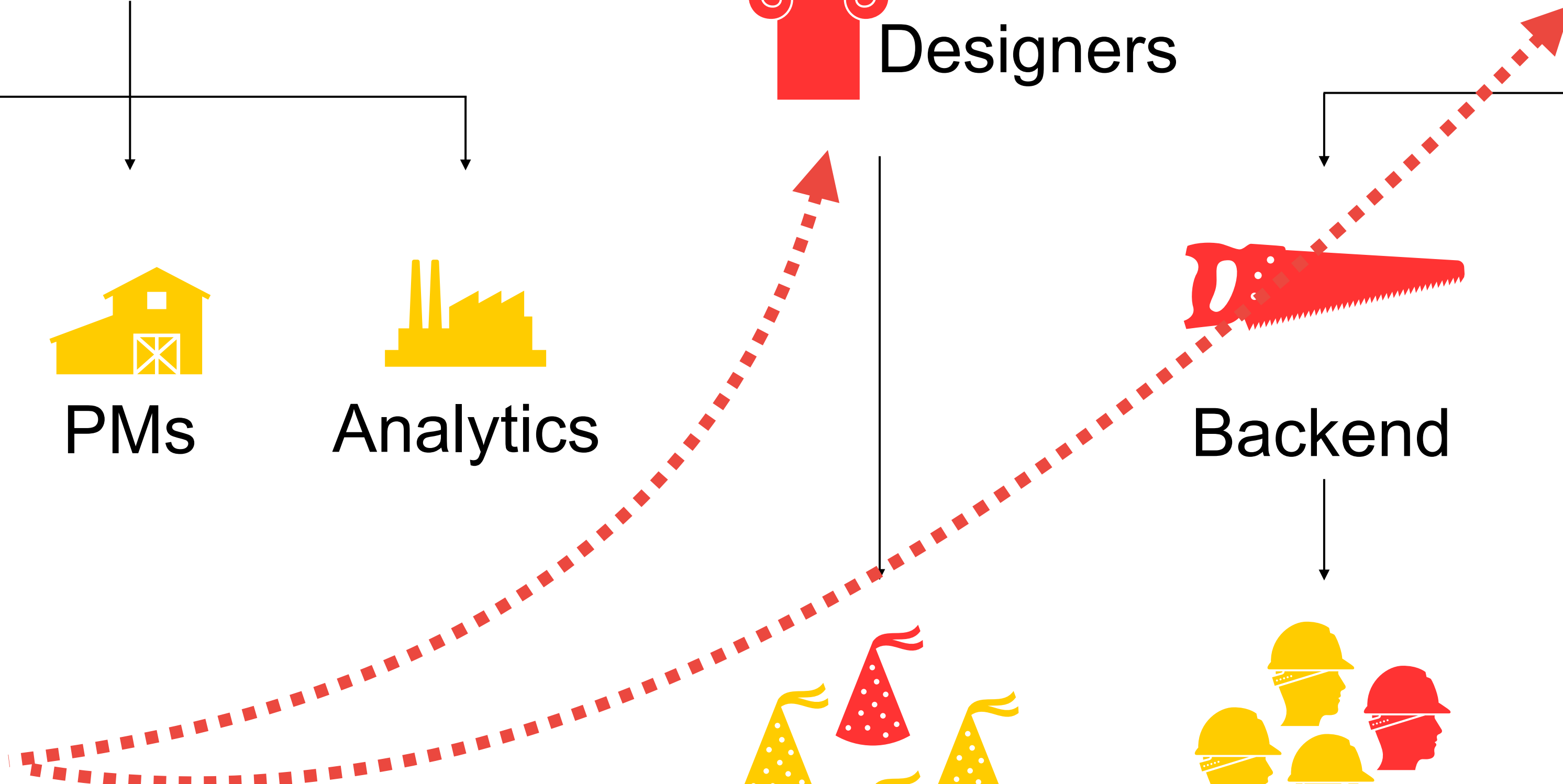
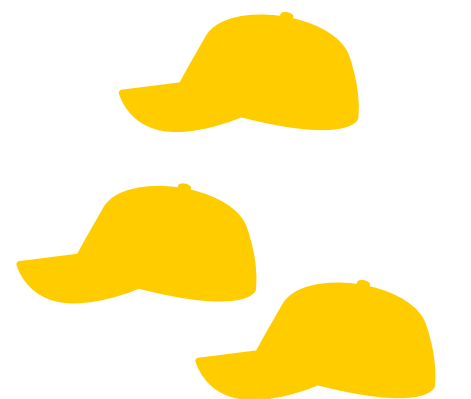
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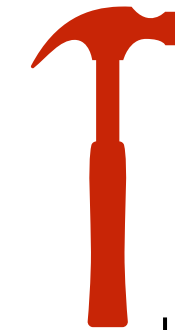
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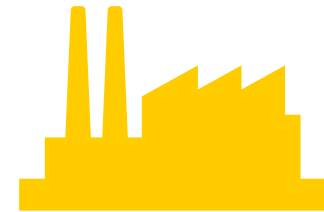
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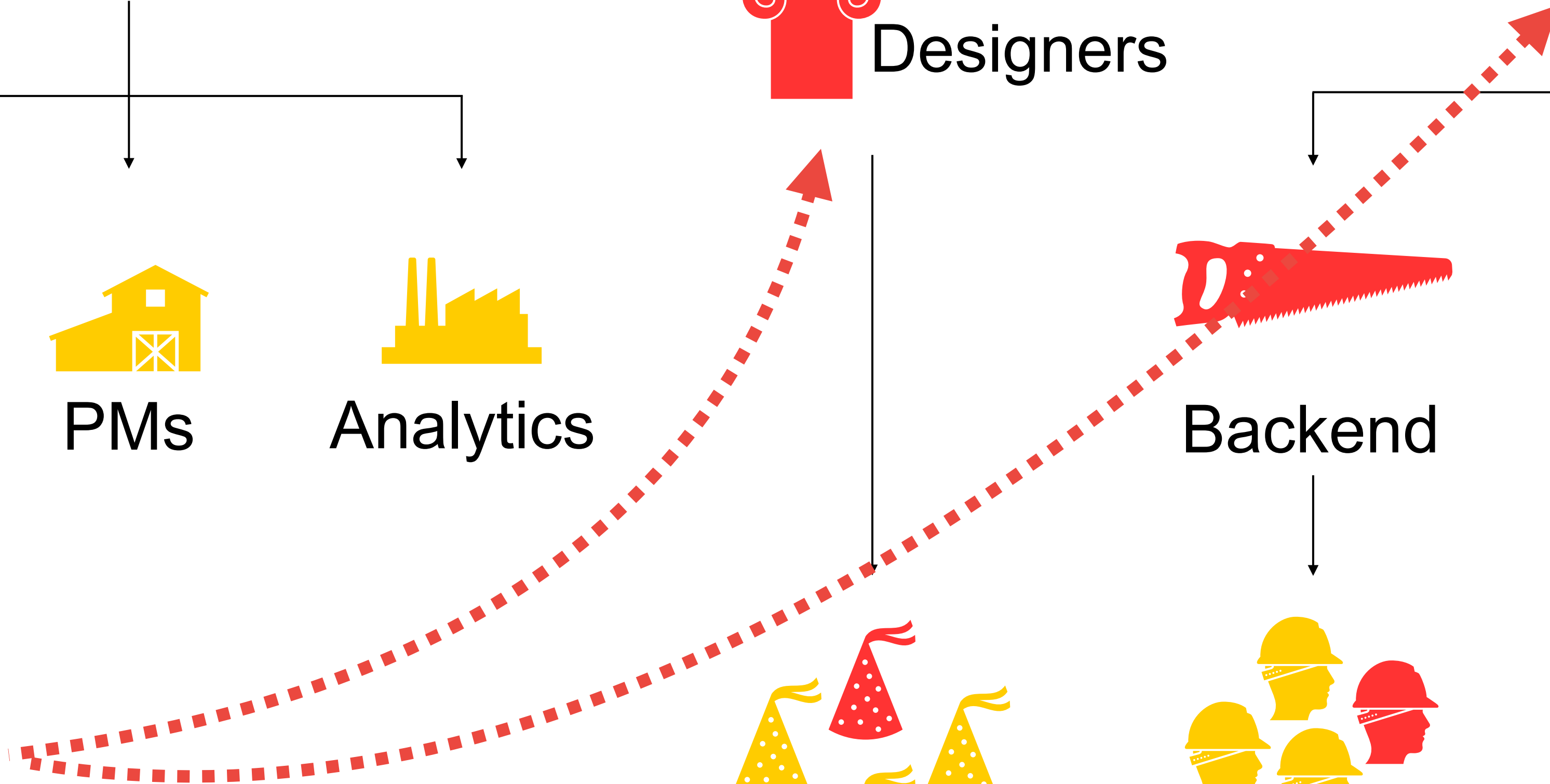
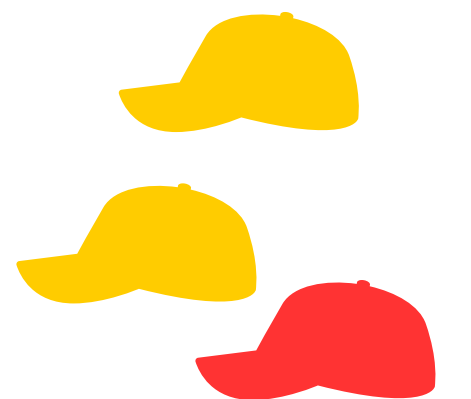
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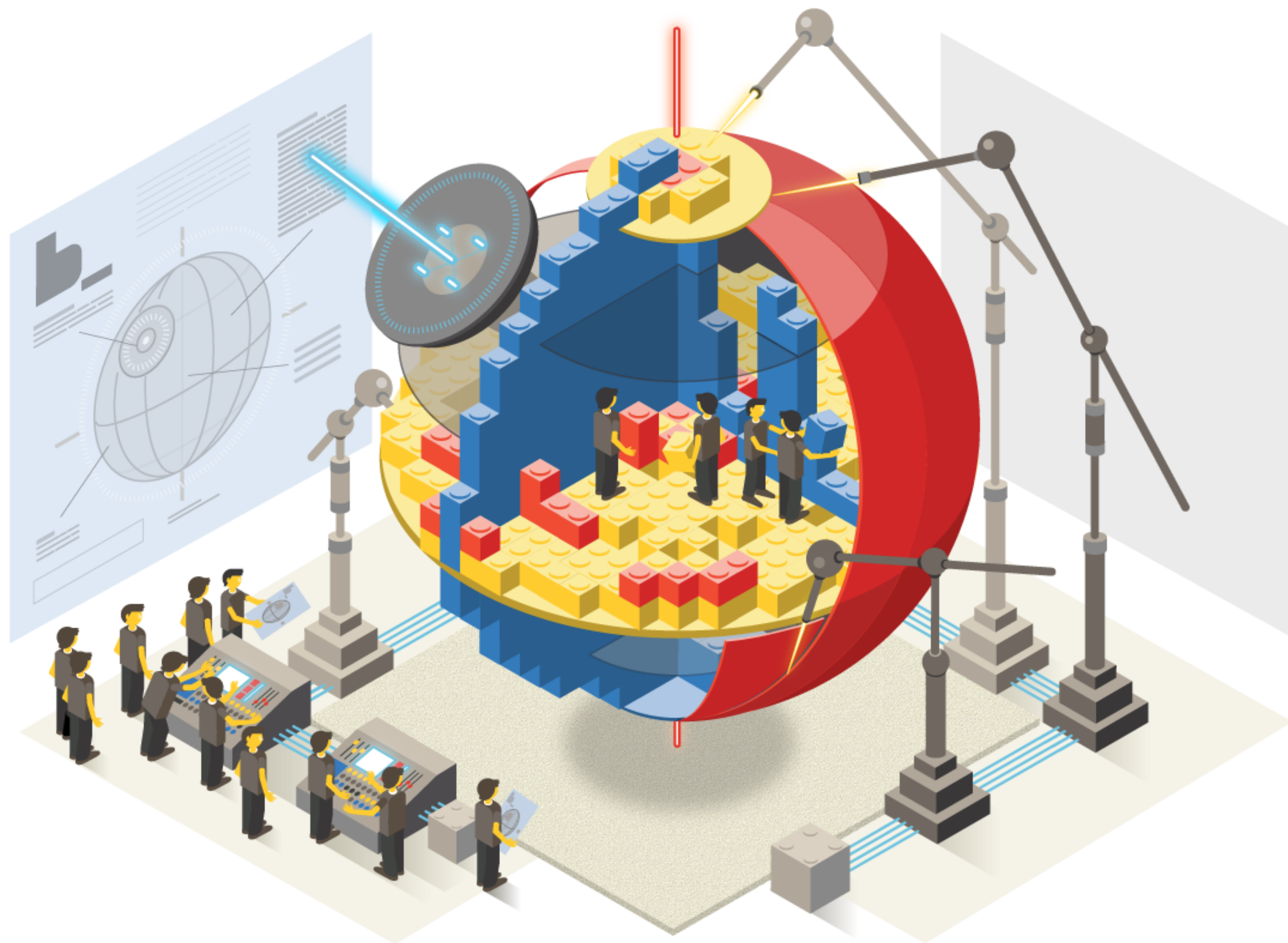
How it works from dev POV

- › Developers are assessed by the heads of developers
- › Tech goals is priority
- › Technological expertise is growing
- › A lot of effort is invested in R&D

Issues

- › Developers are not responsible for the product
- › Products can not force developers to do tasks they don't like





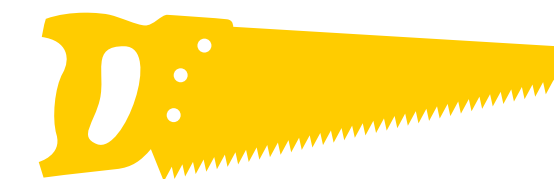
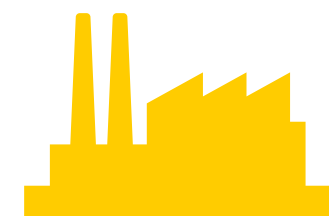
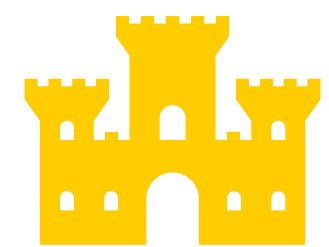
The company grows x2 YoY

Next step

product first

manager is the king

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Issues

- › No code reuse
- › No experience sharing
- › Manager can hardly understand code quality

No balance

- › code is beautiful → releases are rare
- › a lot of attention for processes → less attention to development
- › frequent releases → bad code
- › high tests coverage → hard to change the product
- › care about UI speed → not interested to add more features
- › wanted to improve UI → no time to think about code architecture



The company grows x2 YoY

Common scheme

Agile

SCRUM

- › complete teams
- › everybody is responsible for the result
- › reasonable backlog
- › regular shipping
- › and all these things

Issues

- › changes regularly
- › employee development *history* is lost

Our current solution

consistent staff structure

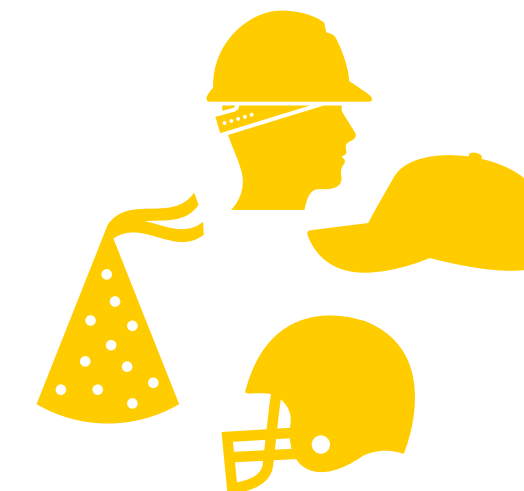
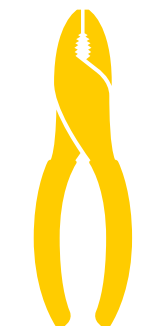
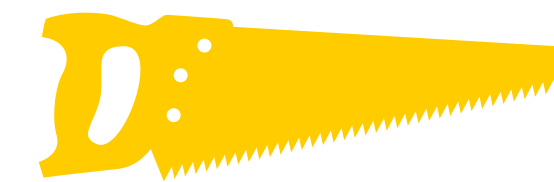
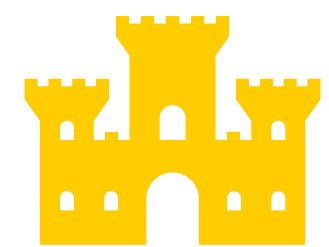
long term relations between leader and subordinates

Virtual teams

V-teams

- › temporary
- › agile
- › focused

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Product

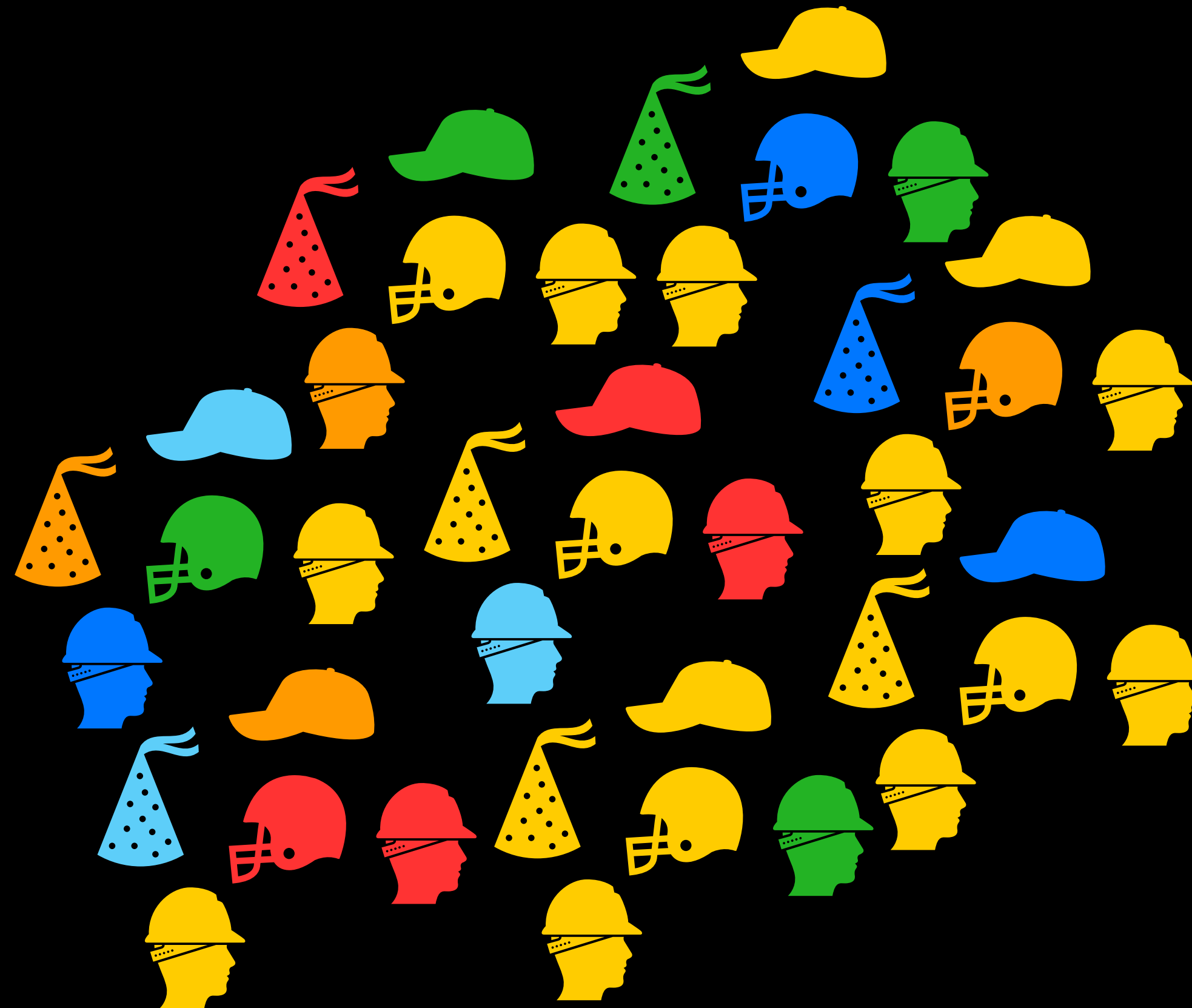


care about UI speed


Product

care about new features

responsible for test
coverage



responsible cycle time

care about code
architecture

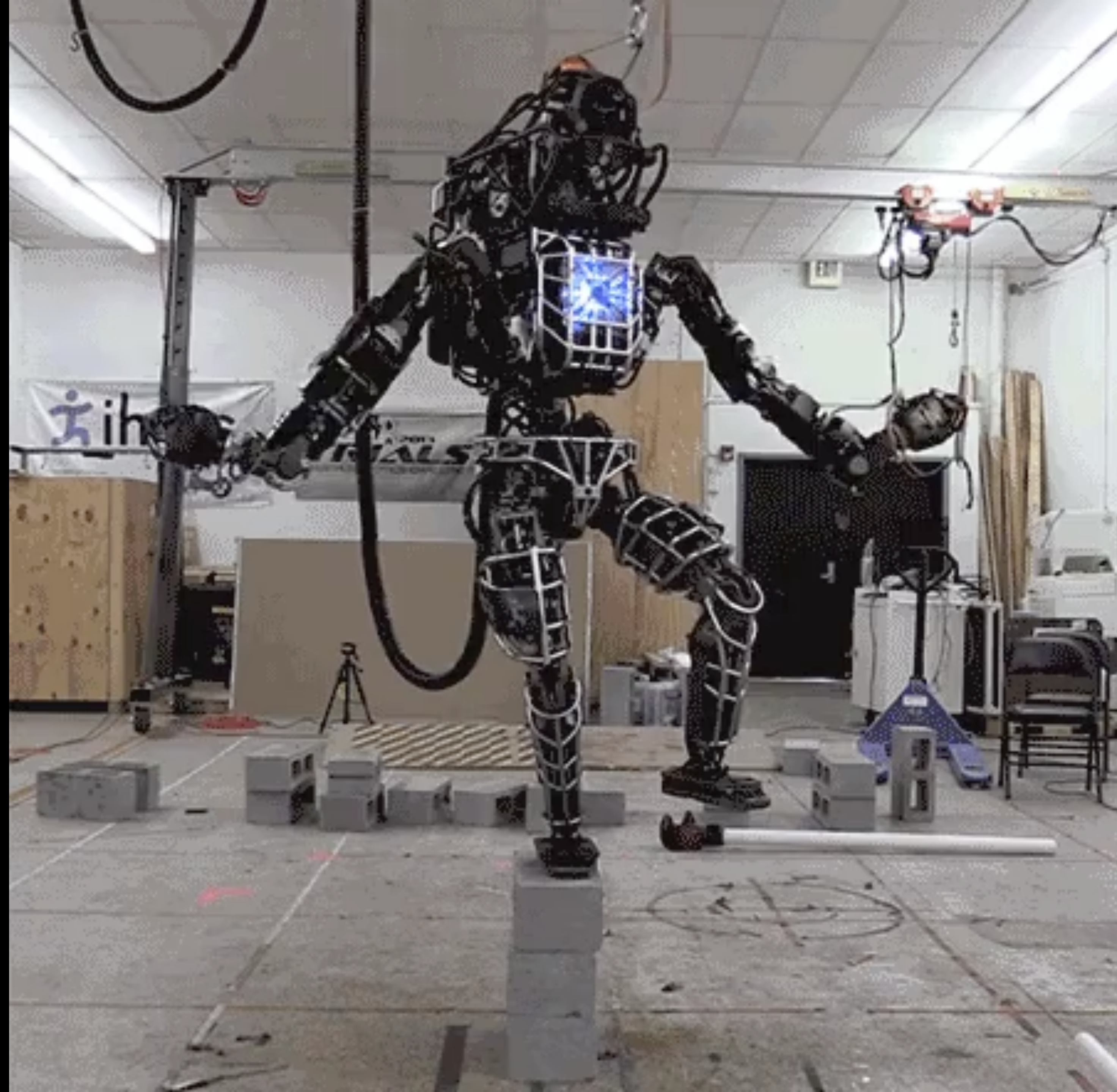
want to improve UI

Roles

- › staff leader
- › v-team leader

Assessment

- › decision in comparison
- › collectively
- › goal system



Additional profits

- › documentation
- › consistency
- › focus but with common responsibility
- › easy to switch people between projects
- › experience sharing
- › growth zones
- › not boring ;)


Some issues

- › Still no one common center for developers
- › How to reuse the code?
 - › — Committees
- › How to choose a team?
 - › — Bootcamp
- › How to interview?
 - › — Universal requirements

Summary

Summary

- › small teams are fast and flexible
- › v-teams can balance product aspects
- › each team has to collaborate with others for better results
- › each team includes all the required specialists
- › hiring process is not limited by team leader capacity
- › hiring process is not limited by team leader location
- › v-teams help employee growth



Try it yourself





Thanks

Vladimir Grinenko

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tadatuta@yandex-team.ru



tadatuta



tadatuta



tadatuta