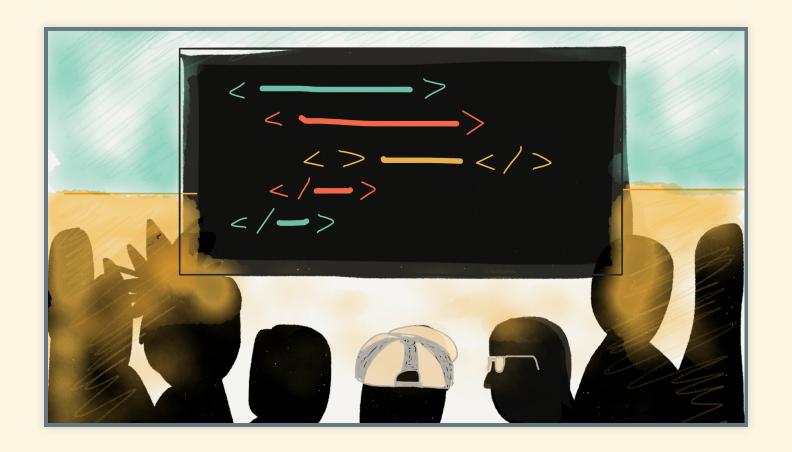
# WEBWORKER #41







Kevin Krieger

freelancer e-commerce open source contributor co-organizing WebWorker Saar



# **AGENDA**

- overall view
- technical view
- example: M1 vs M2
- overview shop systems



# ONLINE SHOP REQUIREMENTS

- not only an online shop
- Customer: "Shopping experience"
- Merchants: Shop needs to fit in organisational setting
- Merchants: Multichannel



#### SOLUTION(S):

PIM (product information system)

CMS (content management system)

DAM (digital assets management)

ERP (enterprise resource planning)

CRM (customer relationship management)

Shop

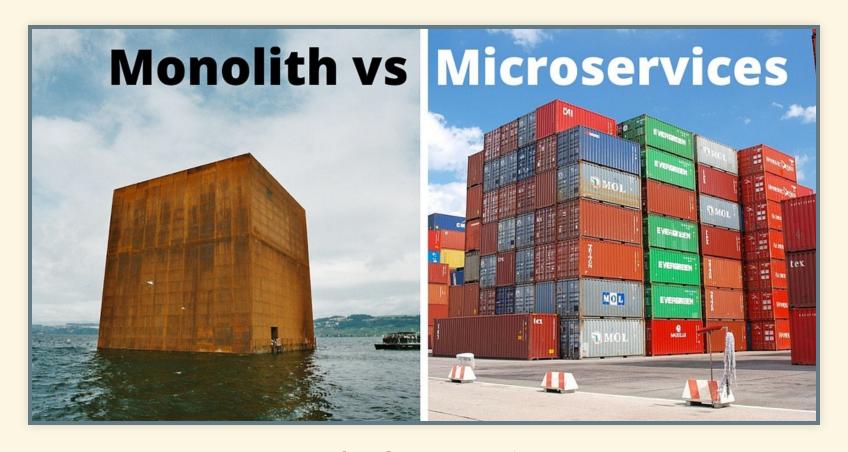
Marketplaces (like Amazon & Ebay)

=> lot of APIs and integration



# SEPARATION OF CONCERNS

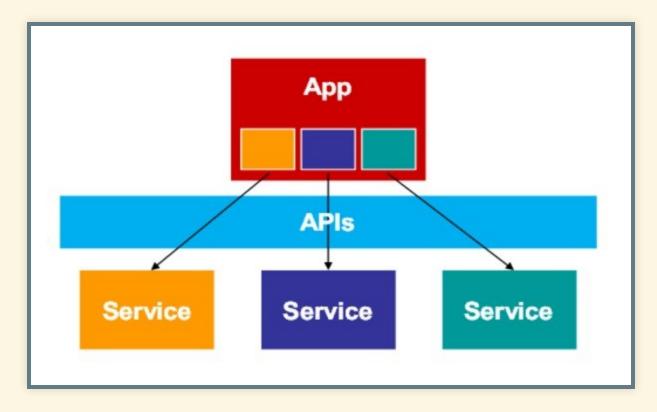
#### FROM MONOLITH TO MICROSERVICES





symbol: container

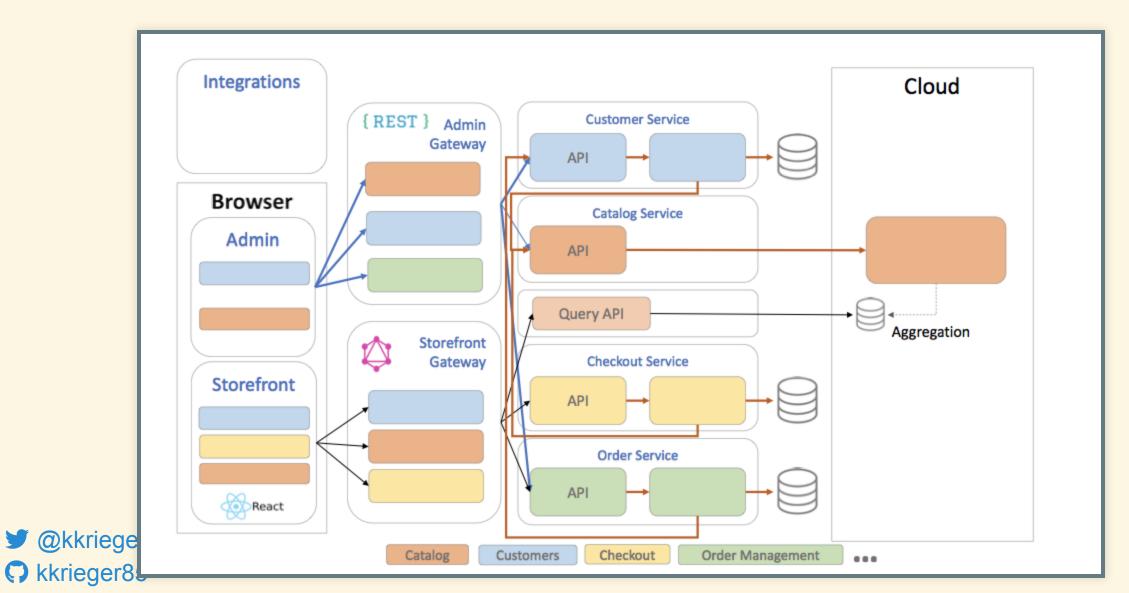
# SEPARATION OF BACKEND



API first / "headless"



# SEPARATE OF FRONTEND: (STORE-)FRONT(-END)



#### WHAT DOES IT MEAN TO DEVELOPERS?

Apache / nginx MySQL

PHP>7.2 HTML5

CSS3

- ZF 1 (parts) Modman
- Protoype JSComposer
- iQuery
- CSS
- phtml

- LESS/SASS

- ZF 1 (parts)
- **ZF 2 (parts)**
- KnockoutJS

#### **MAGENTO 2**

- Redis>5.0
- Varnish>5.2
- RabbitMQ>3.7
- Composer
- Symfony

#### RequireJS

- jQuery
- JavaScript
- LESS/SASS
- CI/CD Pipeline RabbitMQ>3.7
- Coding Standards Composer
  - (PSR-0/1/2/3/4) Symfony
    - ZF 1 (parts)
    - ZF 2 (parts)
    - KnockoutJS
    - RequireJS
    - jQuery

#### MAGENTO 2.3

- PHP>7.3
- Redis>5.0 Varnish>5.2
- Elasticsearch

- GraphQL

Redux

webpack

JavaScript

• LESS/SASS

Studio)

React (PWA)

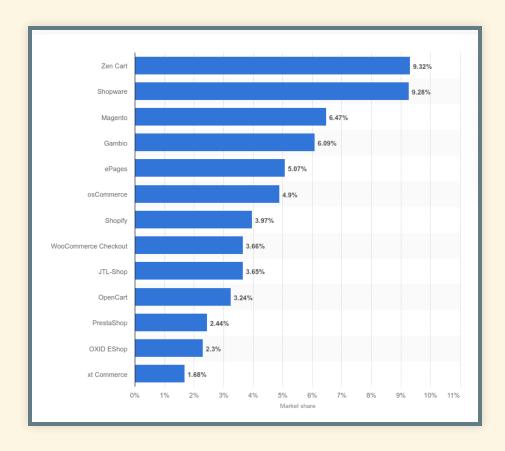
- Peregrine
- yarn
- CI/CD Pipeline
- Coding Standards (PSR-0/1/2/3/4)





#### **OVERVIEW (GERMANY)**

#### MARKET SHARE OF E-COMMERCE SOFTWARE PROVIDERS IN GERMANY AS OF SEPTEMBER 2019



Source: Statista



"websites using e-commerce technologies in Germany which used the .DE extension"

#### **DISCLAIMER:**

- consider community/free edition(s)
- some are hardly documented (often best doc: composer.json)
- I am Magento dev
- opinions are mine



# **ZEN CART (V1.5.6)**

- PHP > 5.6
- jQuery
- WTF! DevDocs



#### **SHOPWARE**

#### **SHOPWARE 5.6.X**

- PHP > 7.2
- Composer
- Elasticsearch
- ExtJs (Admin)
- Smarty-Templates (Storefront)

#### **SHOPWARE 6.X**

- PHP > 7.2
- Composer
- Symfony
- API-First
- Node.js
- NPM
- Vue.js (Admin)
- Bootstrap
- SASS
- Twig (Storefront)
- In progress: Vue Storefront aka Shopware PWA

See SW6 docs



See SW5 docs

#### WOOCOMMERCE

- Plugin WordPress
- PHP > 7.2
- flexible Theming
- HTML in PHP as Storefront
- Plain CSS
- REST API
- Good Docs



## JTL-SHOP 5(BETA.1)

- PHP > 7.1 jQuery
- Smarty 3 Templates Redis
- Bootstrap 3Memcached

• LESS



## OXID ESALES (6.5.0)

- composerSymfony (partly)
- PHP > 7.1 PSR-3
- Smarty 2 Templates



#### **PRESTASHOP (1.7.6.2)**

- composer
- PHP >5.6
- Smarty 3 Templates (Storefront)• webpack (assets bundler)
- Symfony (partly)
- twig (Admin)
- Bootstrap 4

- jQuery
- SASS
- npm
- node.js



# **OPENCART (V3.0.3.2)**

- composerPHP > 5.4WTF! DevDocs



## XTCOMMERCE (6.2.X)

- PHP >7.2/3/4 LESS
- Smarty 3 Templates• Ioncube Loader



# **SYLIUS (V1.6.4)**

- composer
- PHP >7.2
- good API coverageyarn
- twig (Storefront + Admin)• rollup (bundler)

• node.js

• jQuery 3.4

SASS

• gulp



## BAGISTO (VO.2.2)

- composer
- PHP >7.1
- build on laravel
- api first(?)
- node.js

- webpack
- bower
- Vue.js PWA as extension
- Bootstrap 4.0
- jQuery 3.2



#### SAAS

- Plentymarkets
- gambio
- epages
- Shopify
- Wix.com
- BigCommerce



#### **ENTERPRISE**

- Hybris
- Spryker
- commercetools



#### **IGNORED**

• osCommerce (PHP < 7)

#### MISSING?

- OroCommerce
- Odoo



#### **CUSTOM DEVELOPMENT**

How would you start developing an ecommerce software?



#### **FUTURE CHALLENGES**

- stronger separation of services
- lots of API => more SAAS
- stronger separation of concern
- Backend: API only
- Frontend: PWA, Chatbots, Digital Assistants, AR/VR
- ==> bigger teams
- higher initial costs for individual shops



# THANK YOU QUESTIONS?



#### **SOURCES**

- See docs-links
- t3n\_Marktueberblick-E-Commerce.pdf
- magento-open-source-software-maintenance-policy.pdf
- enterprise-agreement
- Magento 2.3. Tech Stack
- magento.github.io/pwa-studio/technologies/theme-vs-storefront/
- e-commerce-software-provider-market-share-in-germany

#### **IMAGES**



