

# MagentoLive

UK | 2014

# Magento 2 Overview



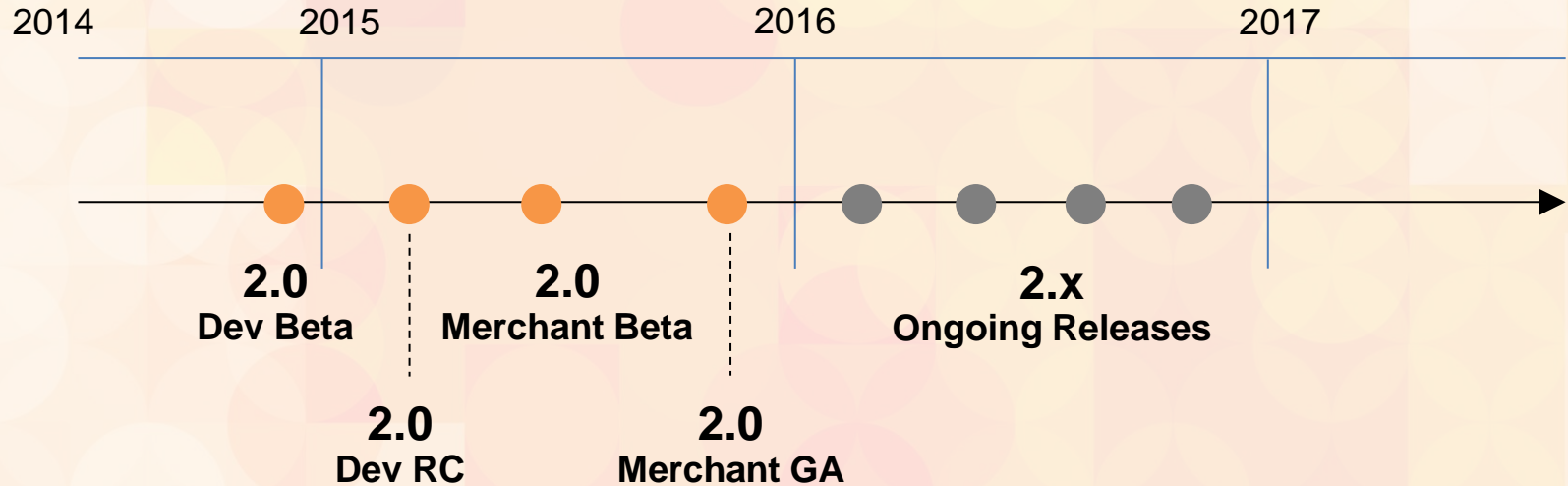
# Paul Boisvert

Director Product Management,  
Magento

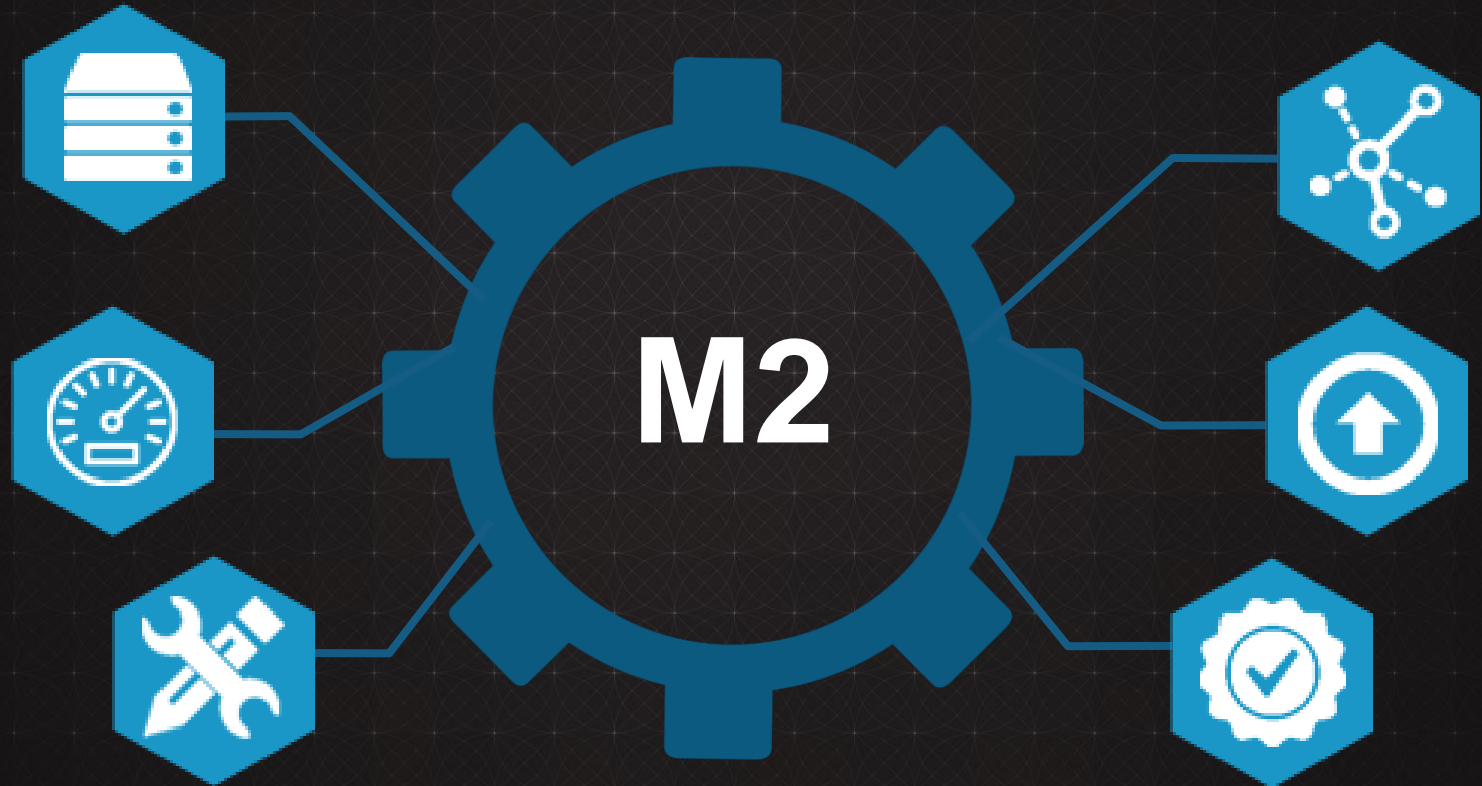


# Platform Goals

# Release Approach



# MAGENTO 2: PLATFORM GOALS





**Modern tech stack**



**Improved performance & scalability**



**Streamline customizations**



**Simplify external integrations**





**Easier installation & upgrades**



**High code quality & testing**



# Max Yekaterynenko

Sr. Development Manager, Magento  
Magento 2 Engineering Lead



[maksek\\_ua](#)

# Magento 2 Overview



`magento/magento2`



**Modern tech stack**

# PHP



# jQuery



# HTML5 CSS3 Preprocessor





# RequireJS



# Coding Standards

- **PSR-0** (Autoloading standard)
- **PSR-1** (Basic Coding standard)
- **PSR-2** (Coding Style Guide)

[www.php-fig.org](http://www.php-fig.org)

PHP Framework Interop Group

# Tech Stack





**Improved performance & scalability**

# Page Caching

- Full Page Caching out of box in CE
- Cache Applications:
  - Built-in Application:      Filesystem/Redis
  - Varnish
- Private/public content
- Invalidation logic



# Indexing

- Refactored: Catalog, Price, EAV, Stock, URL Rewrite, Target Rule Indexers
- Partial indexing
- Work in background (do not block processes)
- No manual re-index required
- Materialized View (Mview)





**Streamline customizations**

# DI

- Object Manager (Dependency Injection Container)
- Configurable di.xml
- Compiler





# Mage Class

God Class “Mage::” is eliminated












```
Mage::getModel('Magento_Customer_Model_Address')
```

# Interceptors & Plugins

- Before method
- After method
- Around method
- Sorting

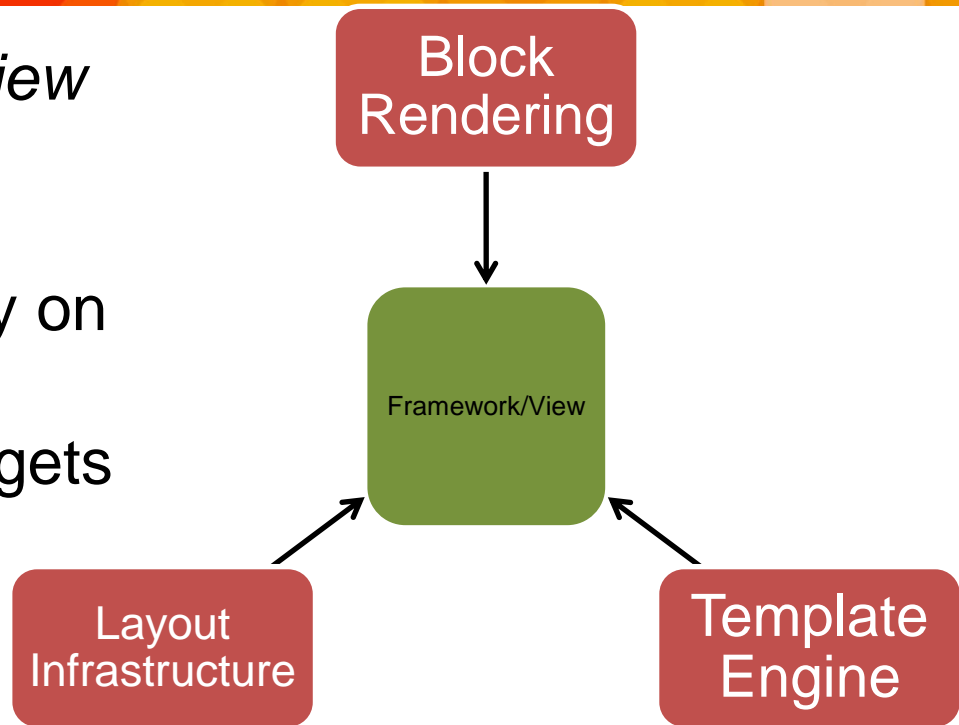


# Magento Framework

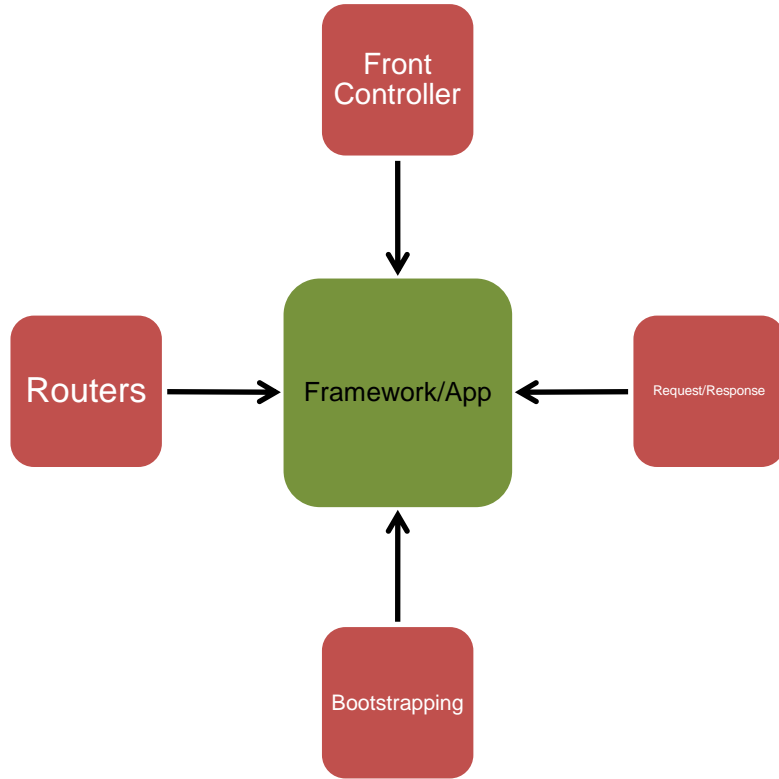
- ▼  Magento
  - ▼  Framework
    - ▶  Acl
    - ▶  App
    - ▶  Archive
    - ▶  Authorization
    - ▶  Autoload
    - ▶  Backup
    - ▶  Cache
    - ▶  Code
    - ▶  Config

# Modularity: View

- Library Component *View*
- Independent from Modules
- Resolved dependency on Store
- Abstract blocks & widgets in Library



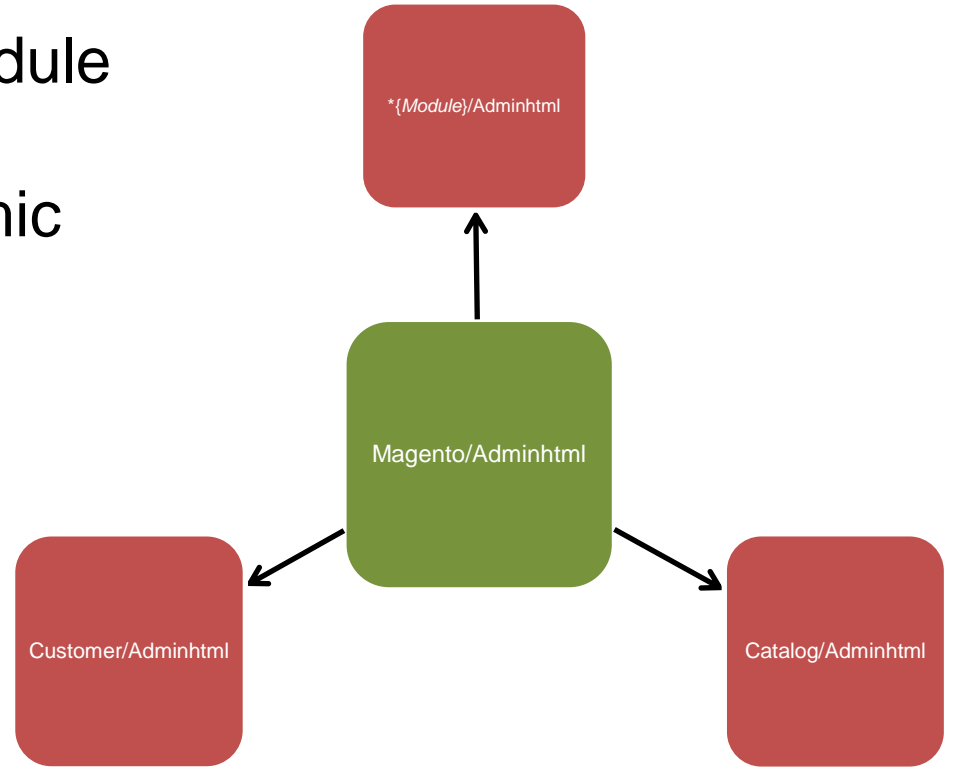
# Modularity: App



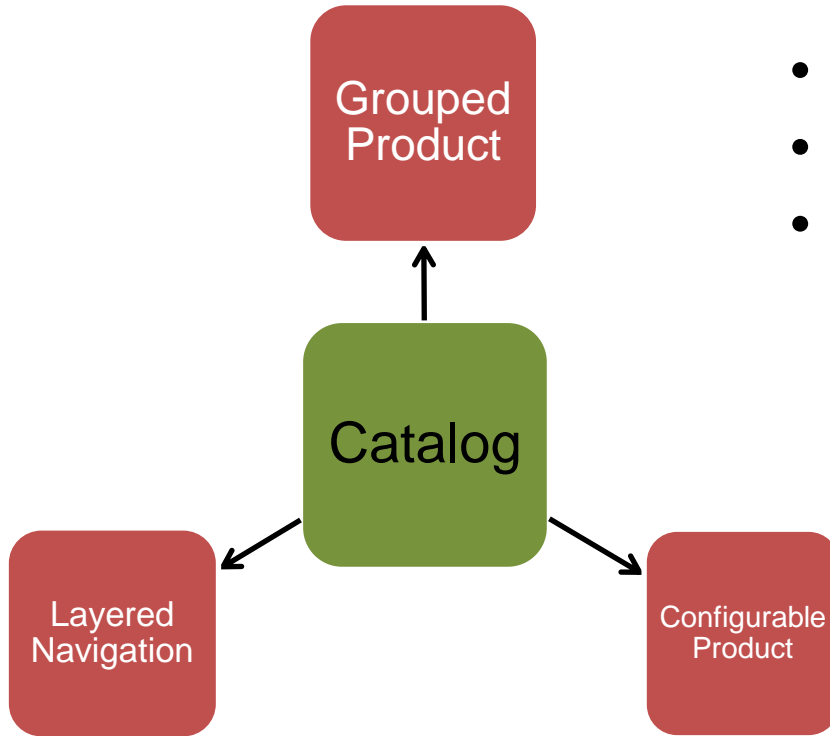
- Library Component *App*
- Resolved global dependency from Core modules

# Modularity: Admin

- Global *Adminhtml* module is eliminated
- Modules are monatomic



# Modularity: Catalog



- New Modules
- Enable/Disable
- Delete from code

# Modularity

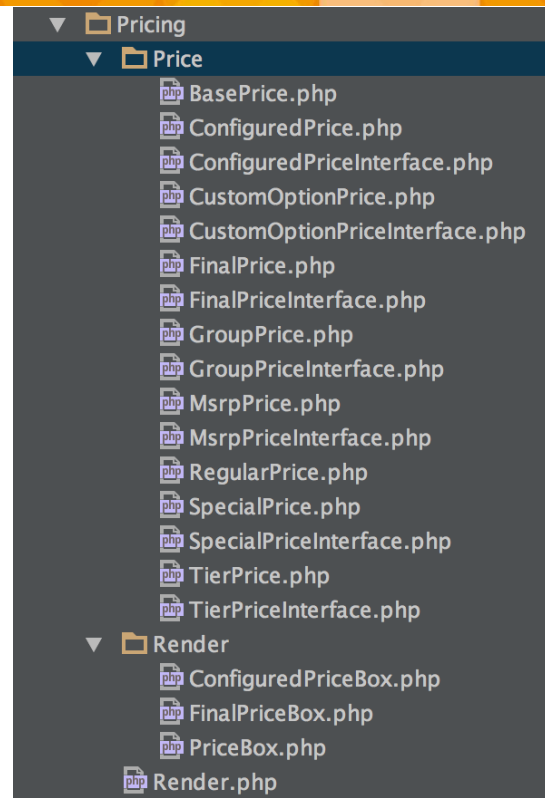
- Sales: extracted Recurring Payment
- Shipping: Carrier, decoupled shipping methods
- Checkout – extracted Term&Conditions and Multishipping
- Payments – OfflinePayment, decoupling payment methods





# Price Logic

- Price logic decomposition per price type
- Price Interfaces
- Price decoupled from Tax and Weee
- Price “adjustment”



# i18n

- Global function `__()`
- Phrase
- RendererInterface
- Composite, Inline, Placeholder, Translate
- [Module]/i18n



# Layouts

- Layouts, templates (view) in Modules
- Layout file responsible only for single page/block
- Validation Layout XML (XML Schema)
- Extend Layout
- Merging Layouts
- Override Layout
- Page Types



# Magento UI Library

The screenshot displays a collection of UI components from the Magento UI Library. At the top left, there is a dropdown menu with three options: 'This is link', 'This is hovered link', and 'Yet another'. Next to it is an 'Input Label' component with a red asterisk, showing an 'input.placeholder' and an 'input.value'. To the right, a breadcrumb trail reads 'Home > Hover Element > Current Element'. Below this is a tooltip containing the text 'Tooltip text'. A set of three tabs is shown: 'Details', 'Additional Information', and 'Customer Reviews (133)'. The main area features a grid of 'Add to Cart' buttons in various styles: blue, grey, and white, some with dropdown arrows. On the right side, there is a 'Subnav Header' with a list of links: 'Account Dashboard', 'Account Information', 'Address Book', 'My Orders', and 'My Product Reviews'. Below the subnav is an 'Expanded' accordion with a close icon and placeholder text: 'Accordeon Content. Mauris pulvinar erat non massa. Suspendisse tortor turpis, porta nec, tempus vitae, iaculis semper, pede. Cras vel libero id lectus rhoncus porta.' At the bottom right, there is a 'Collapsed' accordion with a close icon. A tooltip is also visible over one of the 'Add to Cart' buttons with dropdown arrows, showing the same three options as the top-left dropdown.

- Upgradability
- Consistency
- Extensive list of reusable components
- Styling and design best practices
- Good documentation
- Simplifies customization



# Magento UI Documentation

## pub/lib/css/docs

### Primary button

The `.button-primary()` mixin is used to create a **primary button**. By default it uses Primary button variables from `variables.less` file.

### Primary button



```
<button class="button" type="button"><span>Button</span></button>
<button class="button :hover" type="button"><span>Hover</span></button>
<button class="button :active" type="button"><span>Active</span></button>
<button class="button disabled" type="button"><span>Disabled</span></button>
```

```
.button {
  .button-primary();
  &:active {
    box-shadow: inset 0 3px 1px rgba(0,0,0,.29);
  }
}
```

# Blank Theme



Modern Technologies



Mobile First Responsive Design



Built with Magento UI library

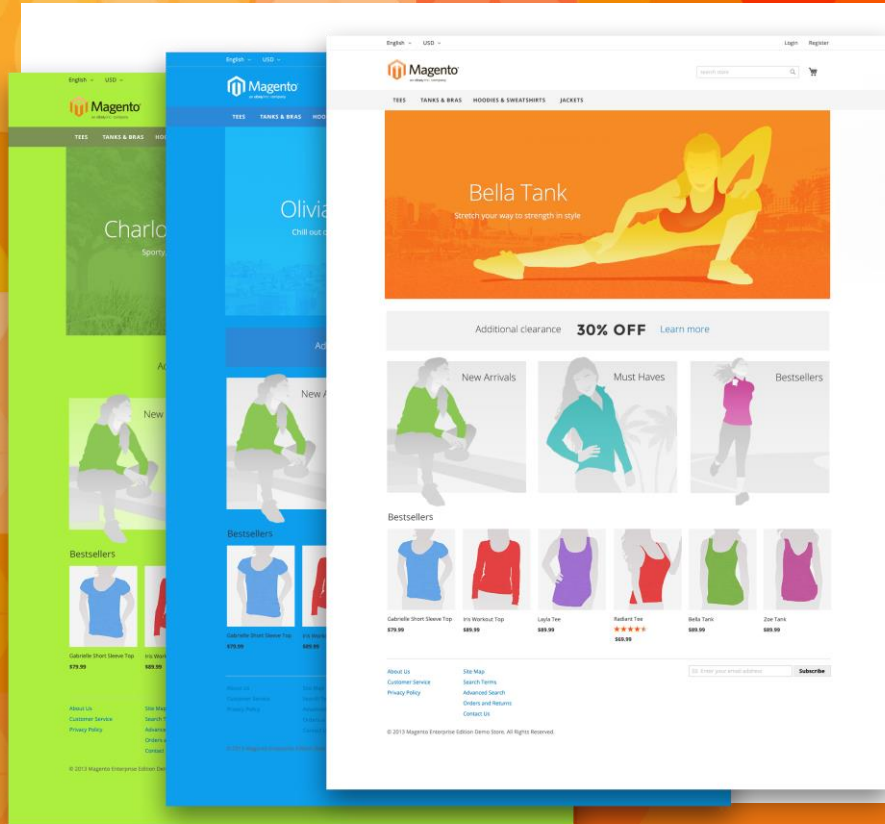


Compiled with Built-in PHP  
LESS Compiler



WCAG 2.0 AA Compliant

# Multilevel Theme Inheritance



- Simplifies customization
- Flexible store design
- Allows store to be special
- Maintainability
- Less code duplication



**Simplify external integrations**



# Service Layer and Web API

- Service Data Transfer Object
- Service Versioned Strategy
- **Service Layer'ed**
  - Customer
  - Catalog (+ CatalogInventory)
  - Tax & Price
- WebAPI Framework: Consuming Services via REST/SOAP



**Easier installation & upgrades**

# Composer and Deployment Tool

- Deployment Tool
- **Composer**



[magento/magento-composer-installer](https://github.com/magento/magento-composer-installer)



**High code quality & testing**

- Full set of tests: Unit, Integration, Static, Legacy
- Functional Test – **Magento Testing Framework (MTF)**
- Continuous Integration & Continuous Delivery
- Performance Testing
- Regression Testing



[magento/mtf](https://github.com/magento/mtf)



# Magento 2 and Team

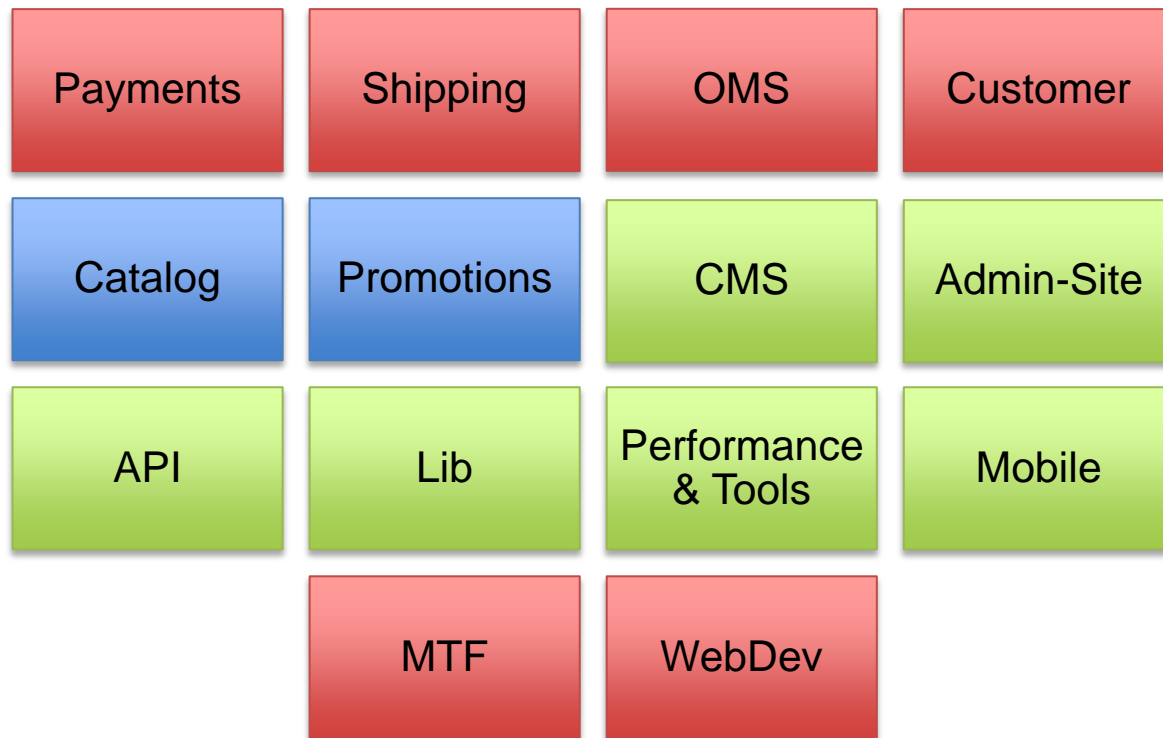
# Magento 2 Domains

Commerce  
Services

Merchant  
Experience

Platform  
Services

# Functional Areas





# Teams

WebAPI

QM

Tango

Ogres

Firedrakes

WebDev

Trolls

South

GoInc

Dragons

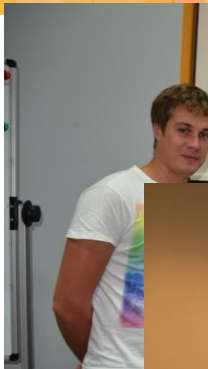
Extensibility

MPI

Fearless Kiwis

Folks

# Teams





`magento/magento2`

# Contacts



[max@magento.com](mailto:max@magento.com)



[maksek\\_ua](https://twitter.com/maksek_ua)



[pboisvert@ebay.com](mailto:pboisvert@ebay.com)

| **Thank you**

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