

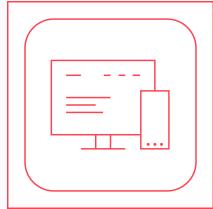


Xamarin vs. Reality

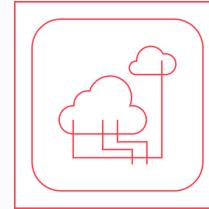


CODUCT

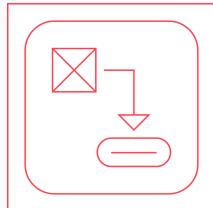
KEY-COMPETENCIES



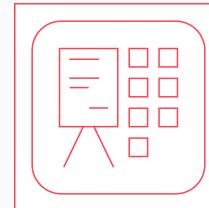
Cross
Platform
Apps



Cloud
Computing &
IoT



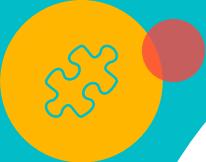
User
Experience
Design



Consulting &
Workshops

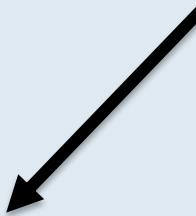


The right setup





UI



Body





Native

Portable Body

Native Veneer

Web App



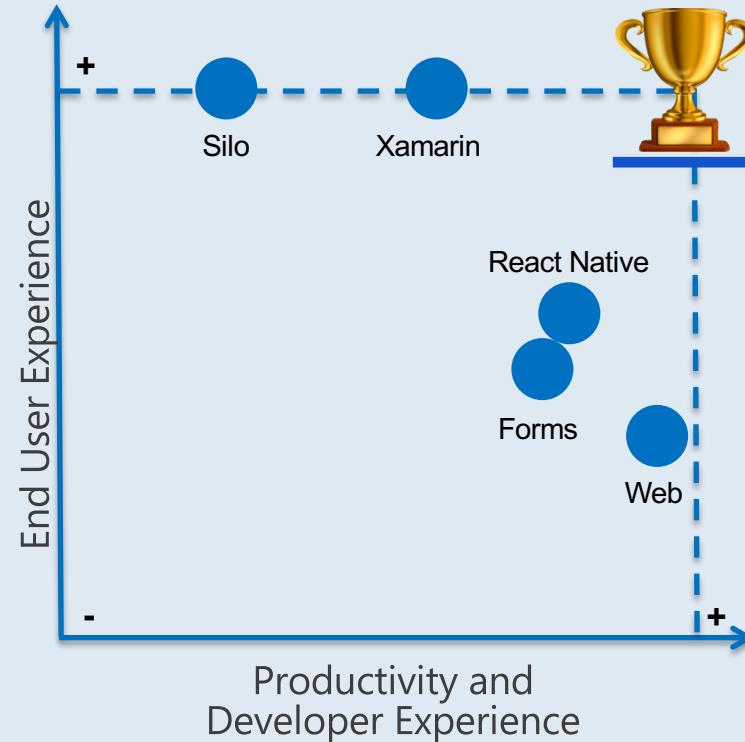


CLIENT BRIEF



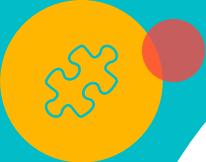
CLIENT BUDGET

The „Holy Grail“





The right setup





Mac-Mini
Mac in Cloud

Macbook
+
VS Mac

Windows
+
Visual Studio

iOS UI Developer

Forms or
Cross Plattform
Developer



Windows
+
Visual Studio

Android, Windows
or Backend
Developer



The Codesharing King



Portable Class Library



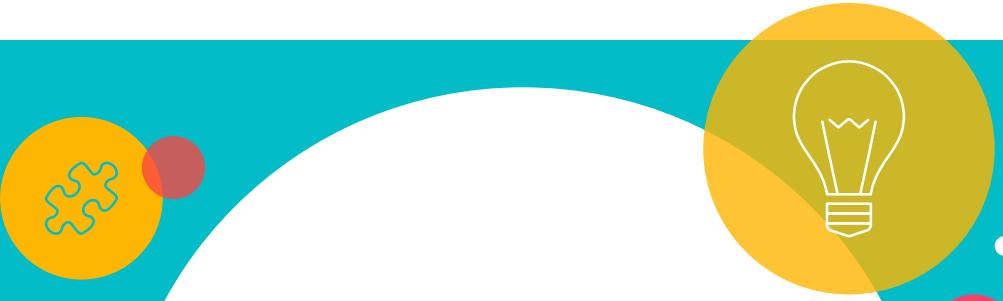
Shared Project

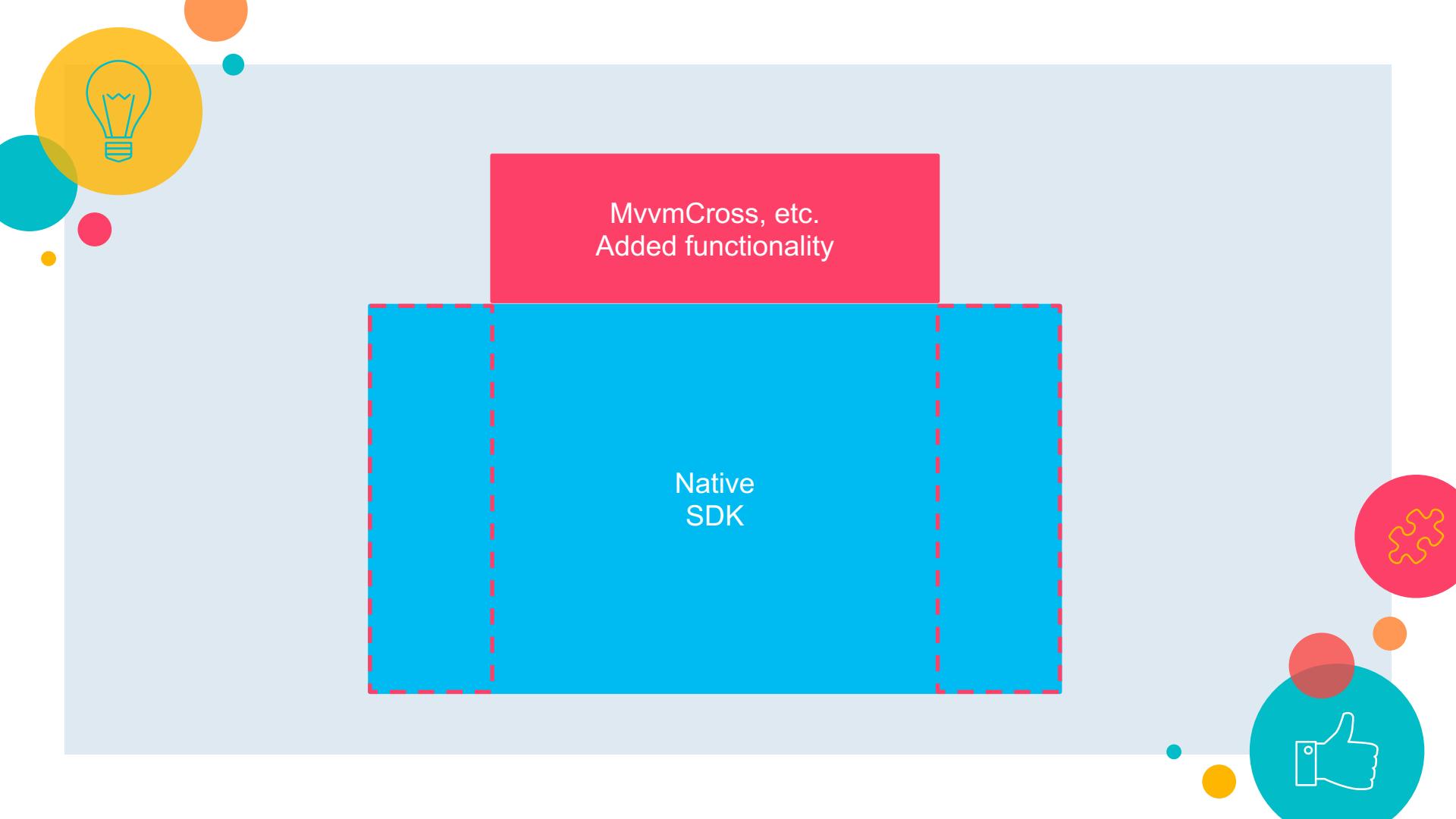


Net Standard

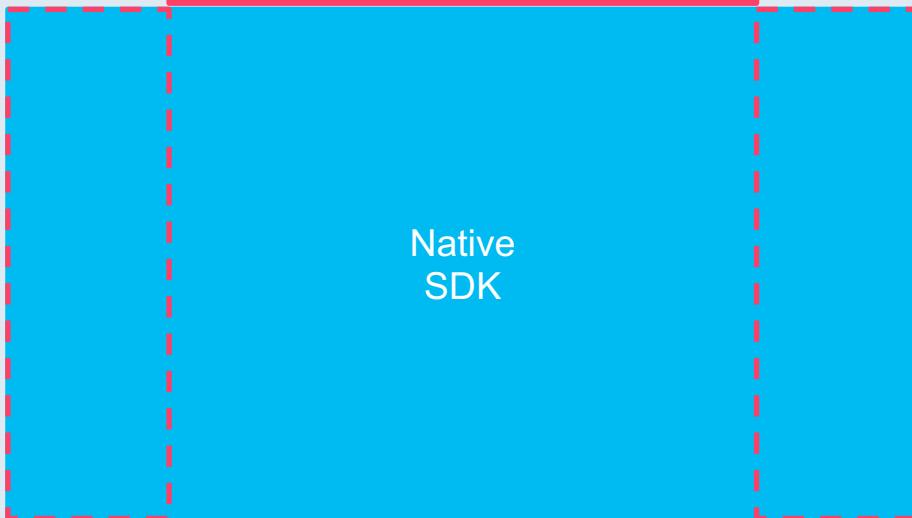


Frameworks





MvvmCross, etc.
Added functionality



Native
SDK

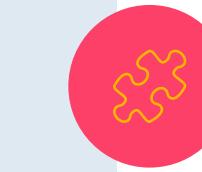
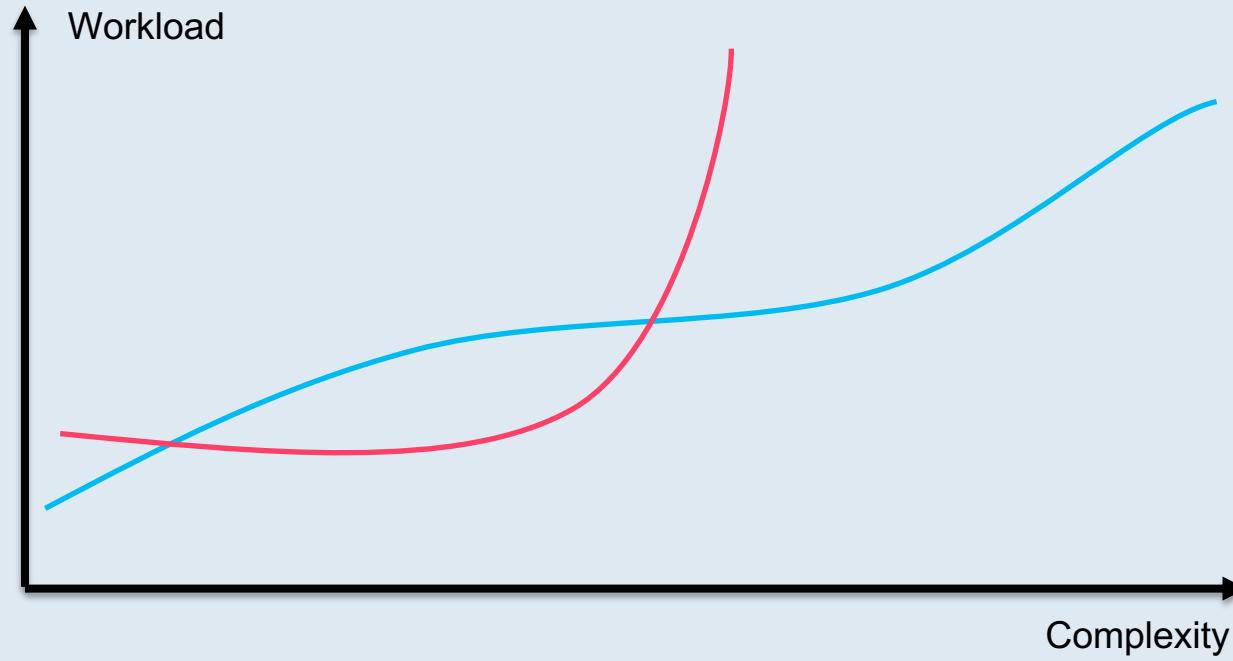
To Framework or not to Framework

Pro

- Specifications for structure, less discussion
- Additional functionality (framework)
- Solutions for standard problems

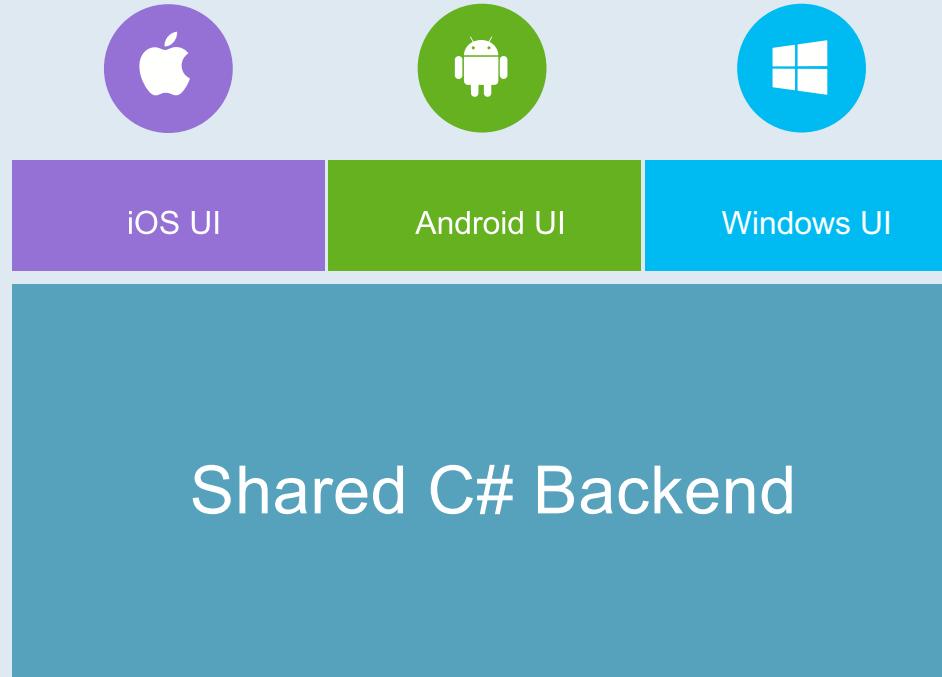
Con

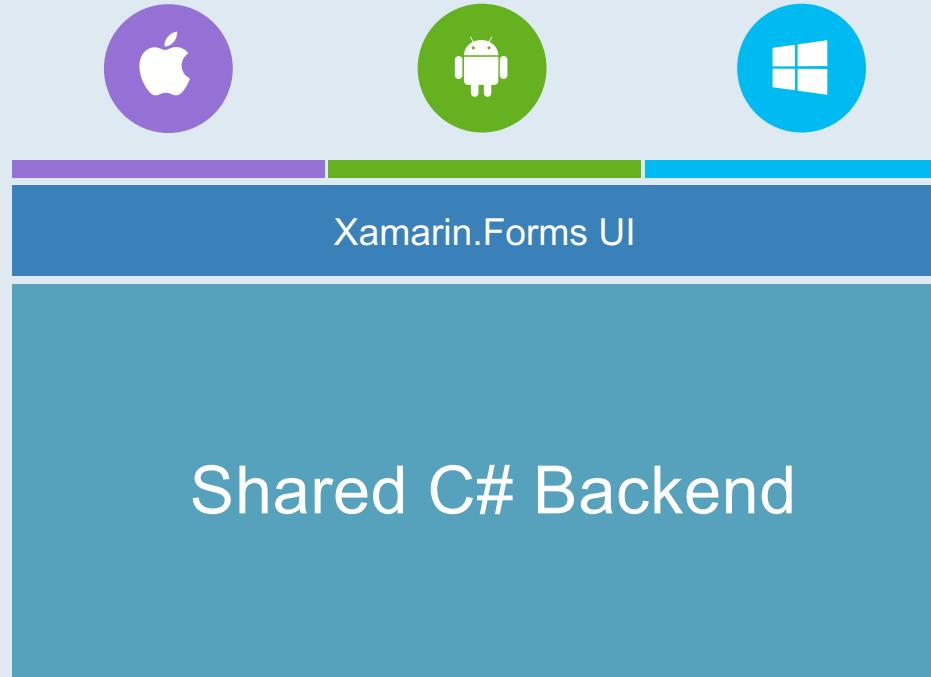
- Additional learning effort for framework
- Functional restrictions (native)

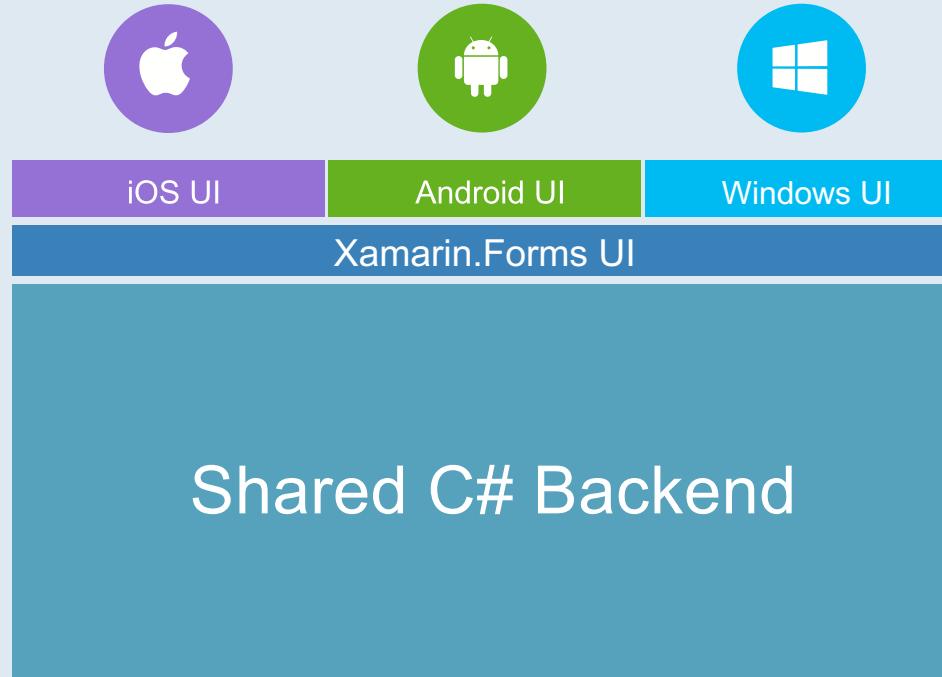


Xamarin.Forms embedding in Xamarin.Native

The best of the best of the
best, Sir!







Xamarin.Forms embedding

- Before: either Forms (Custom Renderers) or Native
- Extremely useful for projects with some design intensive areas
- Working: DependencyService, MessagingCenter, Binding
- Not working: NavigationService

Xamarin.Forms

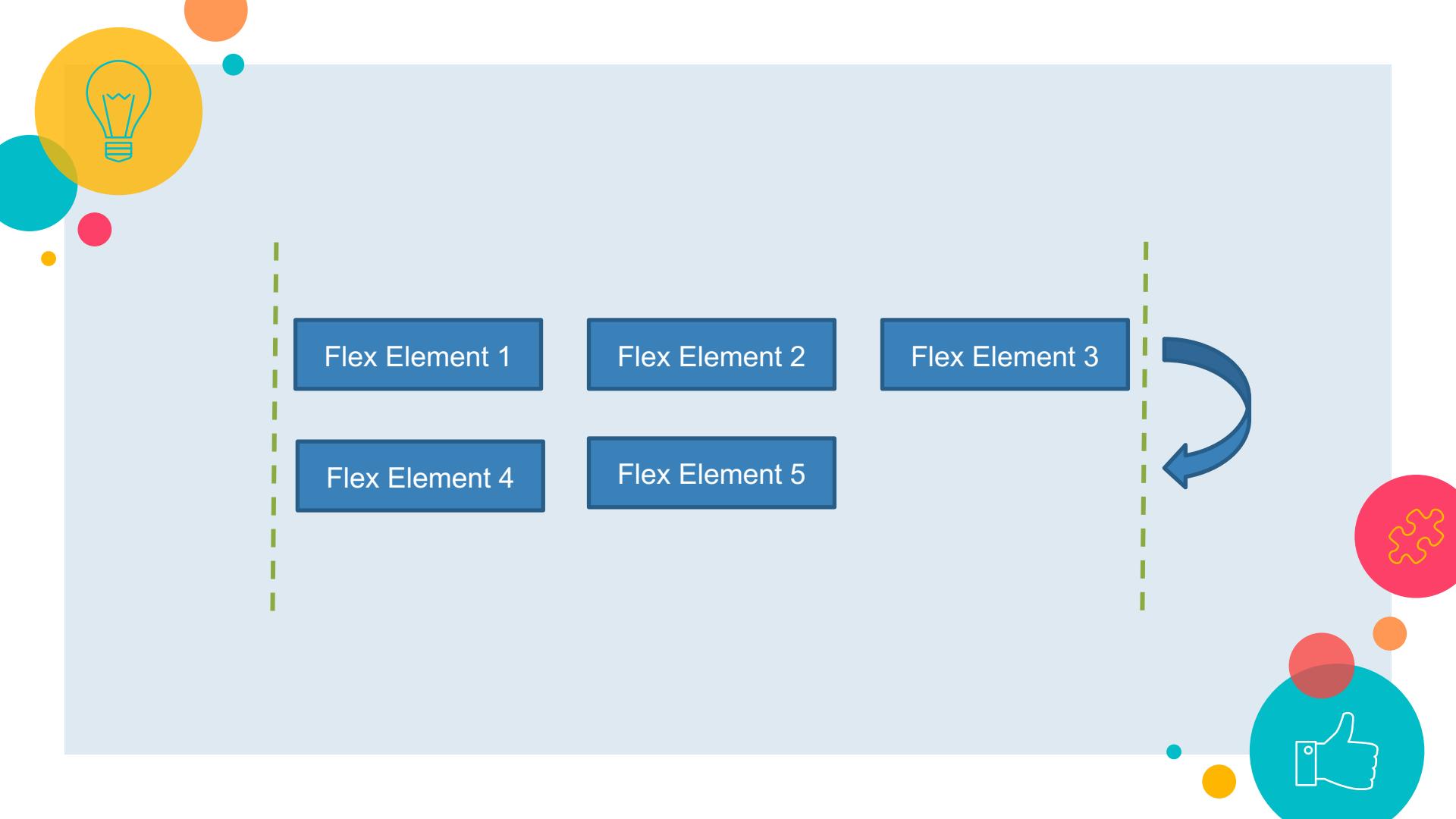
FlexLayout

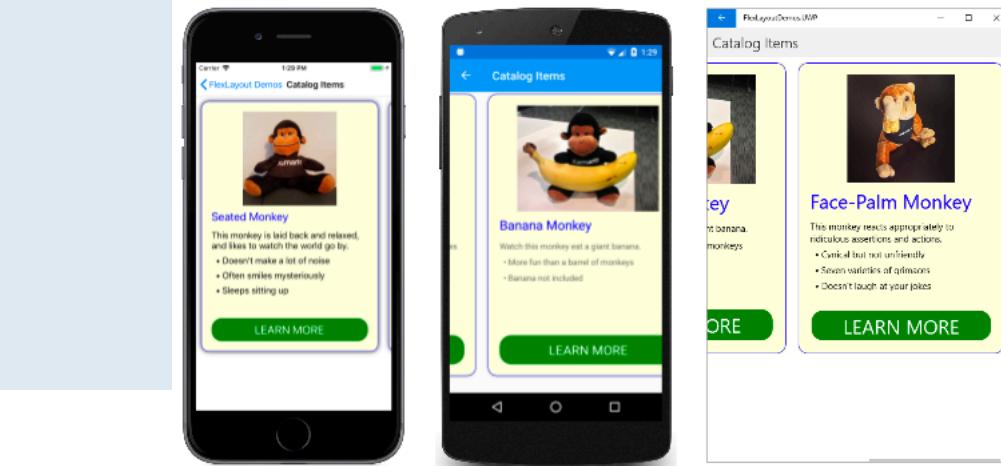
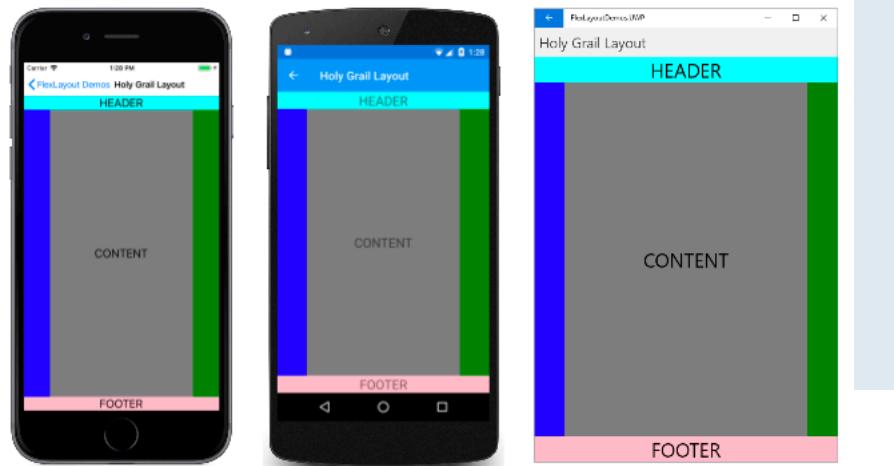
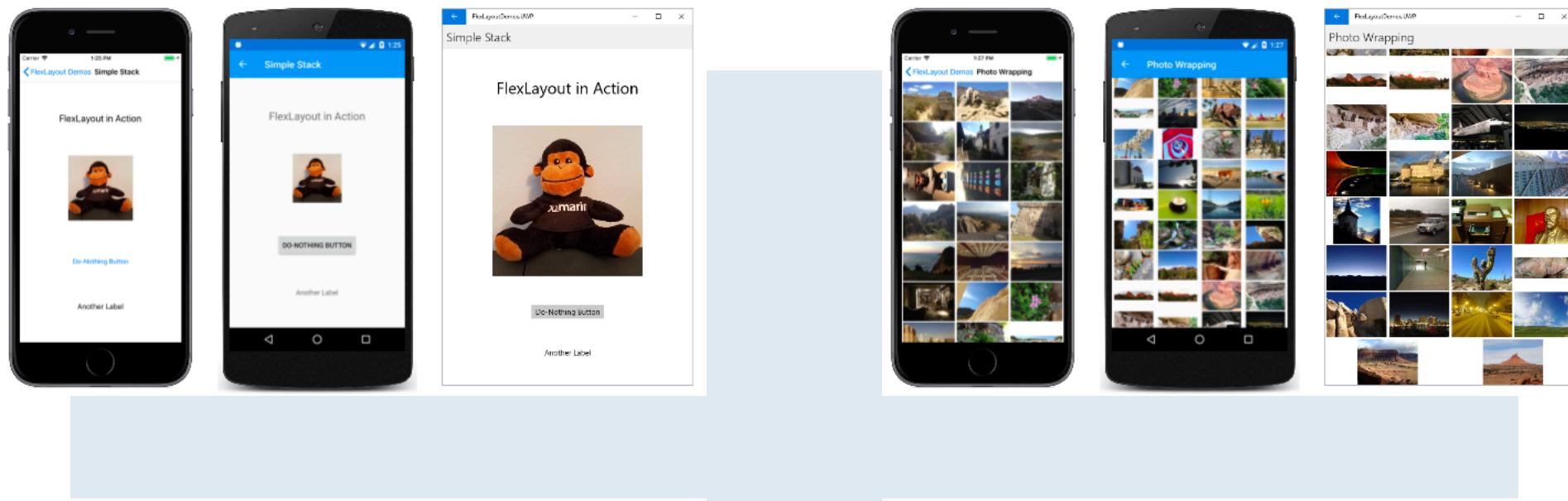
Adaptive Layouts



Xamarin.Forms FlexLayout

```
<ContentPage
    xmlns="http://xamarin.com/schemas/2014/forms"
    xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
    xmlns:local="clr-namespace:FlexExample"
    x:Class="FlexExample.MainPage">
    <FlexLayout>
        <Label Text="Flex Element 1" />
        <Label Text="Flex Element 2" />
        <Label Text="Flex Element 3" />
        <Label Text="Flex Element 4" />
        <Label Text="Flex Element 5" />
    </FlexLayout>
</ContentPage>
```

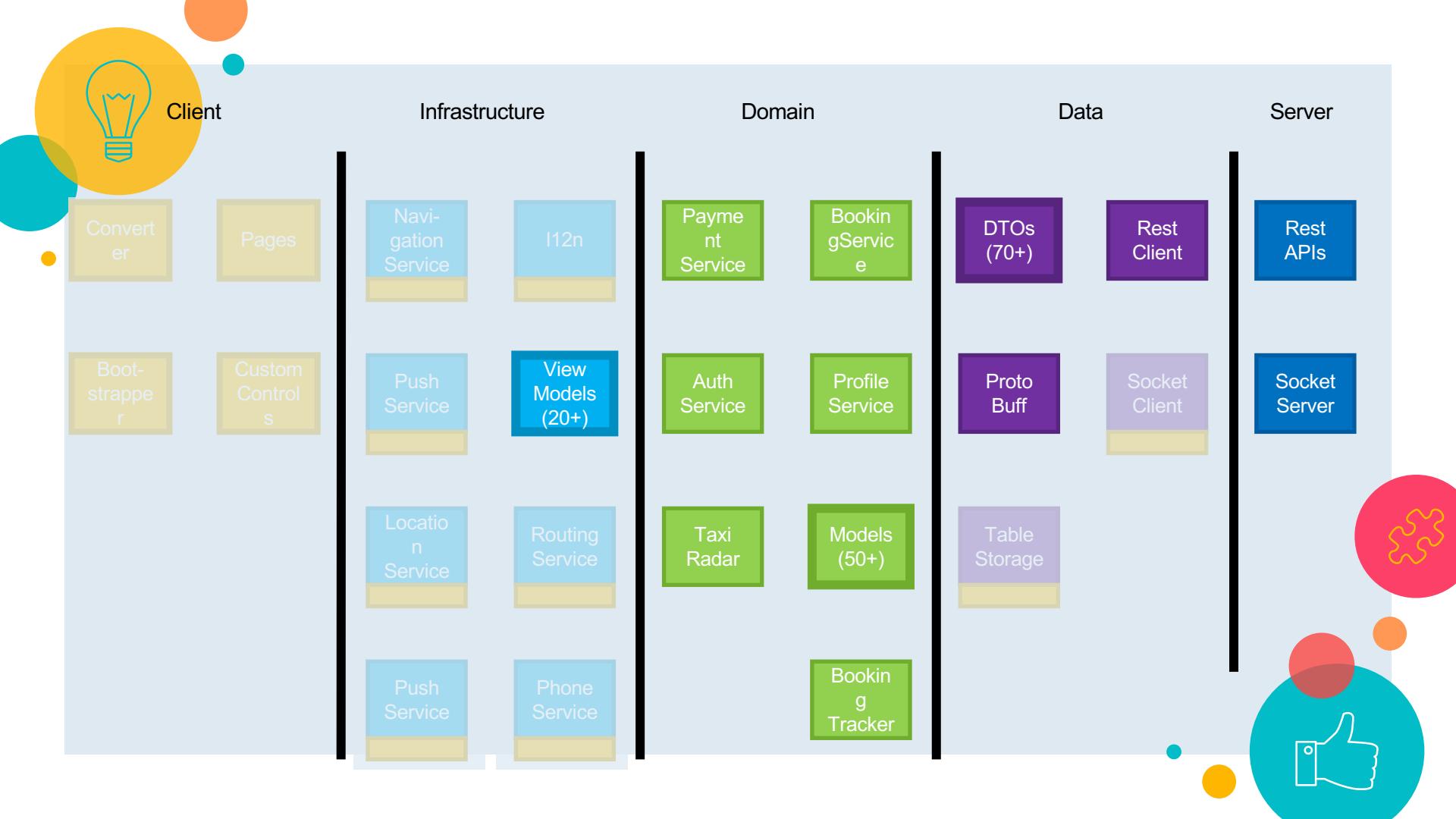




ViewModel Design Guide

Demo





Thread awareness

ALLE öffentlichen
Methoden starten
auf dem UI Thread!

Bei Bedarf auf den
Threadpool
wechseln.

```
public void ActivatePolling()
{
    if (IsPolling) return;

    // This must be called from the UI thread!
    var synchronizationContext = SynchronizationContext.Current;

    //...

private async Task UpdateDataAsync()
{
    var currentDevices = await Task.Run(
        () => _deviceRepository.GetAllDevices());

    //...
}
```



Bouncer Pattern

Always cancel
ASAP.

```
public async Task LoginAsync()
{
    if (IsDataLoading || !CanLogin) return;
    IsDataLoading = true;

    //...
}
```





No Exceptions™

ViewModels never
throw™ Exceptions!

Exceptions get
represented
through state!

```
public async Task RefreshAsync()
{
    if (IsDataLoading) return;
    IsDataLoading = true;

    var cts = new CancellationTokenSource(TimeSpan.FromSeconds(NetworkTimeout));

    try
    {
        await Task.WhenAll(new Task[] {
            _newsService.RefreshNewsAsync(cts.Token),
            _newsService.RefreshFeaturedNewsAsync(cts.Token)
        });

        await UpdateDataItemsAsync();
    }
    catch (HttpRequestException)
    {
        _notificationService.Notify(ApplicationConstants.Text_NoInternet);
    }
    catch (OperationCanceledException)
    {
        // Cancelled because of timeout
        if (cts.IsCancellationRequested)
        {
            _notificationService.Notify(ApplicationConstants.Text_Timeout);
        }
    }
    catch
    {
        System.Diagnostics.Debugger.Break();
    }

    IsDataLoading = false;
}
```

Workbook, Inspector, Profiler

Productivity Boost mit
Xamarin Tools





If the answer is
“Java” the
question was shit.





Questions?



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