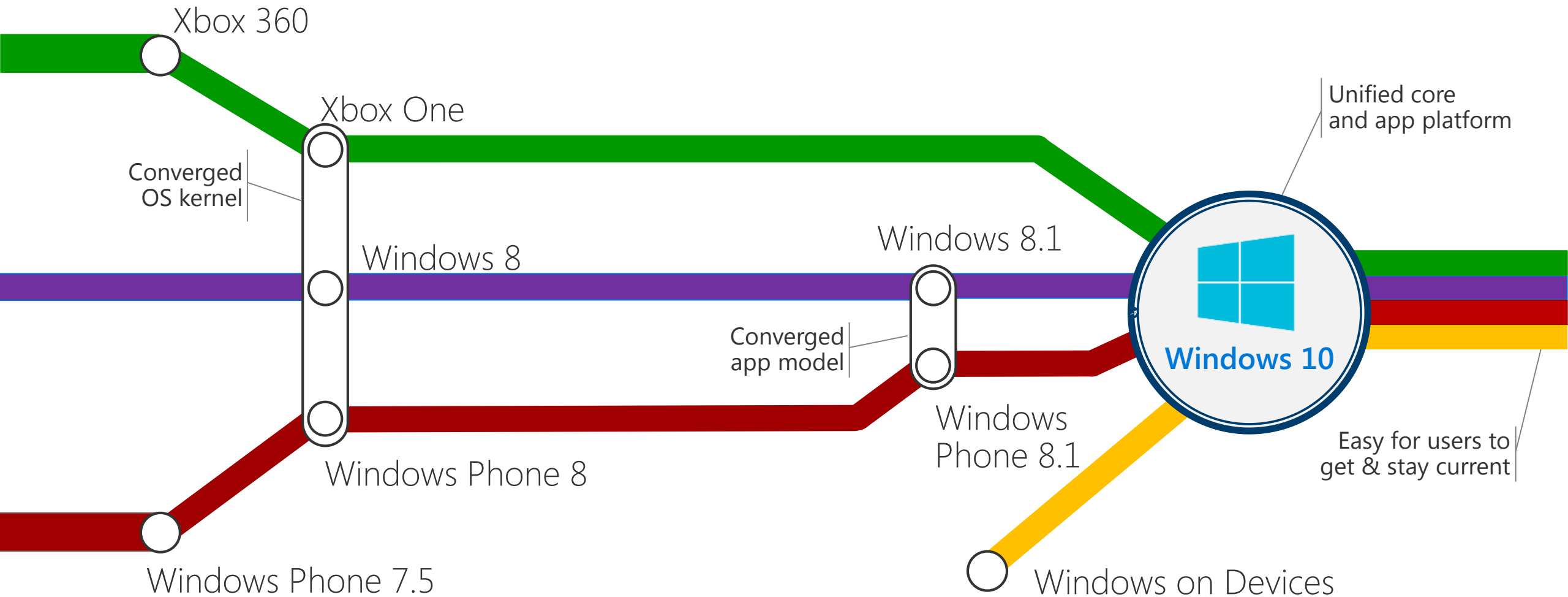


# UWP Guideline

Microsoft MVP  
Windows Development  
Darby Shin



# The convergence journey



Phone



Phablet



Small Tablet



Large Tablet



2-in-1s  
(Tablet or Laptop)



Classic  
Laptop



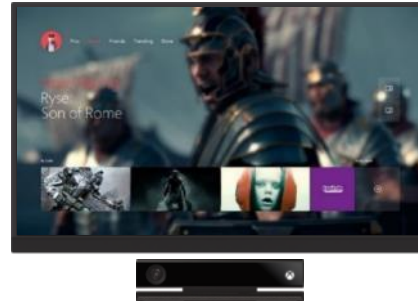
Desktops  
& All-in-Ones



Surface Hub



Xbox



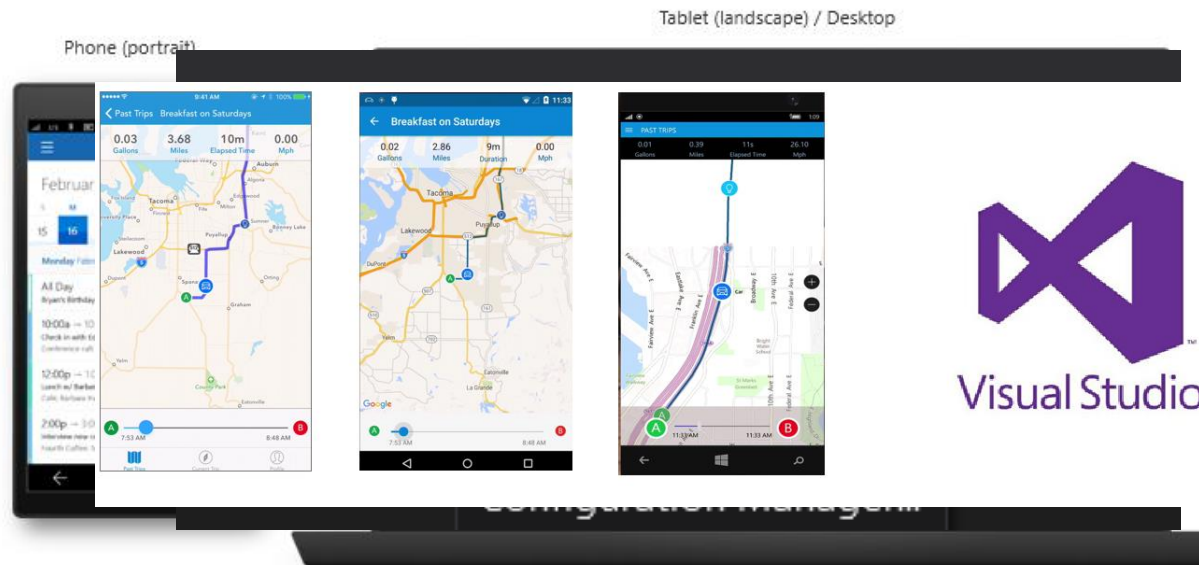
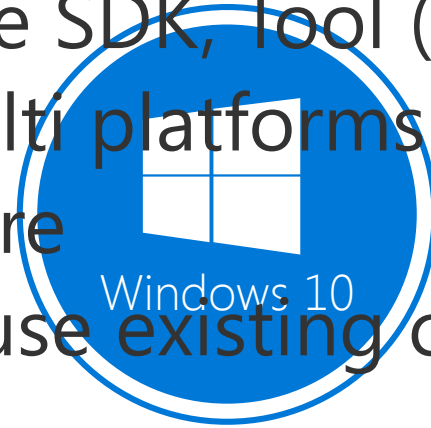
Holographic

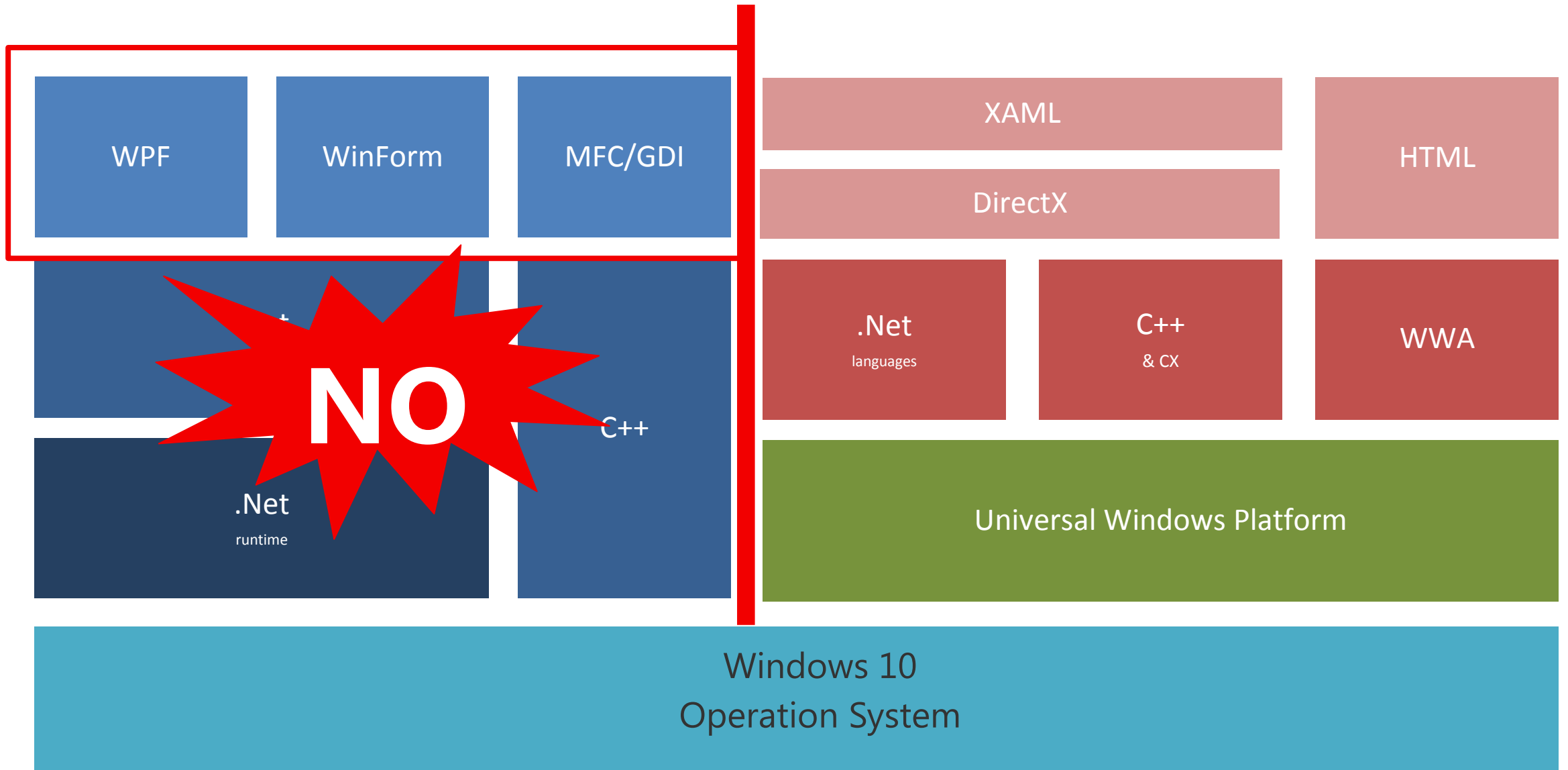


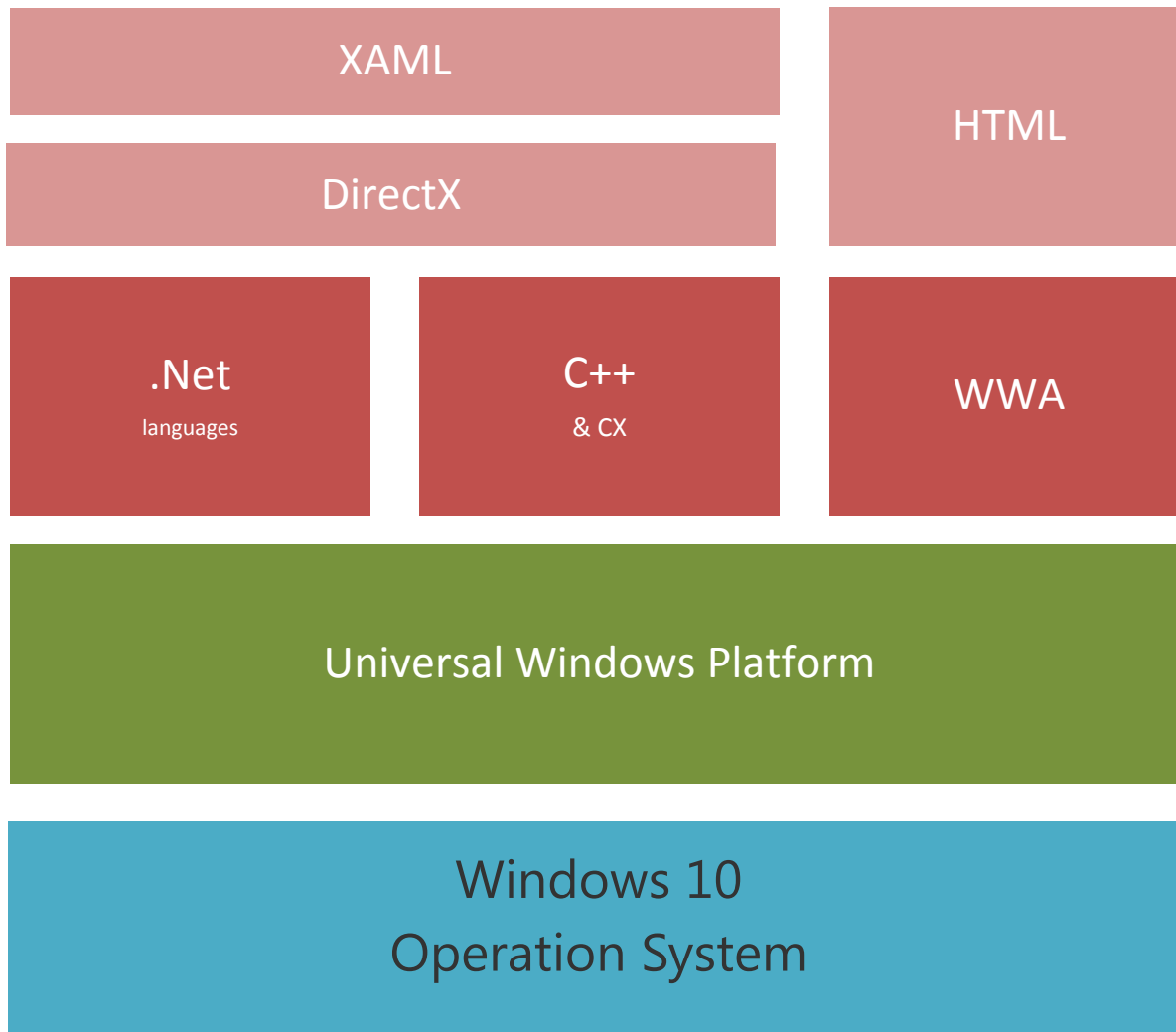
IoT



- Adaptive UI, Control, Touch, Pen
- One SDK, Tool ( Visual Studio, Xamarin )
- Multi platforms ( ARM, x86 )
- Store
- Reuse existing codes (C, C++ OneCoreUap.lib)







Enhanced  
WinRT APIs

+

Win32/COM APIs

Can we use GDI,  
MFC, WinForm,  
WPF in UWP?



Hi. I'm Ryutana

No I'm afraid...



Then, Why do we need to  
use it?

First of all, UWP is fully optimized for touch based UI, and that's really easy using UI framework.

You can distribute your apps from MS Store and the UWP can cover multiple platforms **x86/ARM**.

Lastly, if you use **Xamarin (C#)**, the same app can support multiple OS (Android, iOS too).

Can we use serial,  
Bluetooth RFComm,  
sensors... in UWP?



Hi. I'm Ryutana

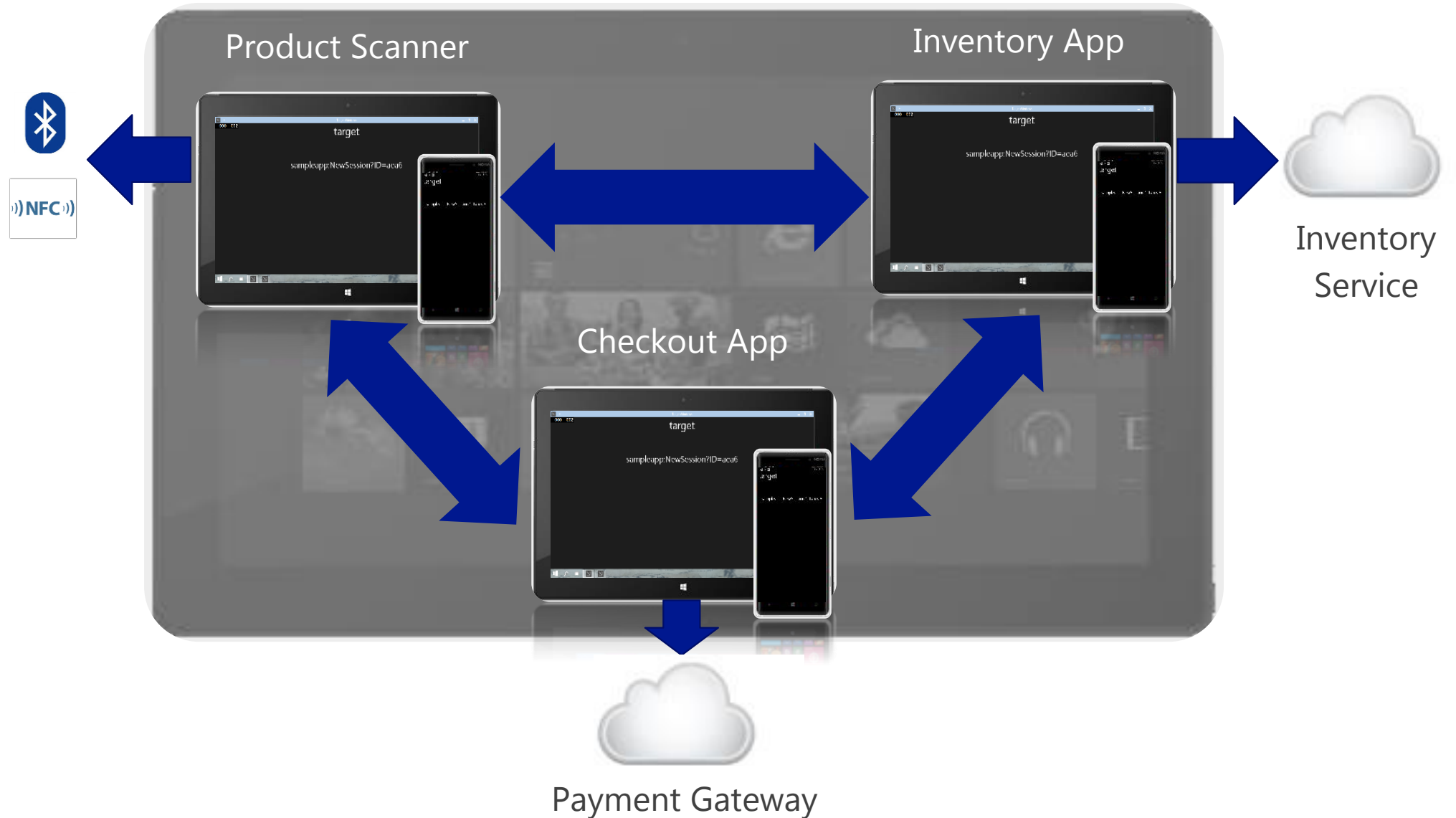
Relevant APIs are all available in  
WinRT, so we can use those.

Any legacy APIs like  
CreateFile,  
DeviceIoControl are  
available?

Yes, relevant APIs are included  
in **OneCoreUap.lib**



# App Service scenario



Does a UWP can launch  
other UWP?



Hi. I'm Ryutana

Yes, possibly it does.  
I've seen it.

Can a UWP talk to  
others?

Yes, it can!

How can we reuse existing sources?



Hi. I'm Ryutana

Except UI code, you can check if your logic APIs are available in OneCoreUap.lib.

Many of legacy APIs are available in OneCoreUap.lib.

Surprisingly, **Console app** can work with UWP without any source code change.

Above this, background Task and Services... blah, blah...

Lastly, there is a bridge project which is called **Centennial** enable you to easily migrate existing project into UWP.

More complex questions...



Hi. I'm Ryutana

UI, Store APIs issues, you can refer to WinRT APIs docs in msdn. In the reuse source codes perspective, you can refer to OneCoreUap.lib.

Or you can contact Korea SE team  
[essupport@mdstec.com](mailto:essupport@mdstec.com).





Hi. I'm Ryutana

Again, how come we need to use UWP?

I said before.  
UWP supports not only ARM/x86 based app but also same device driver model.

You can use **one app & device driver** to multiple platform.

Driver, too?  
Wow, then, I would like to use UWP!

Full compatibility and connectivity with Azure is bonus!

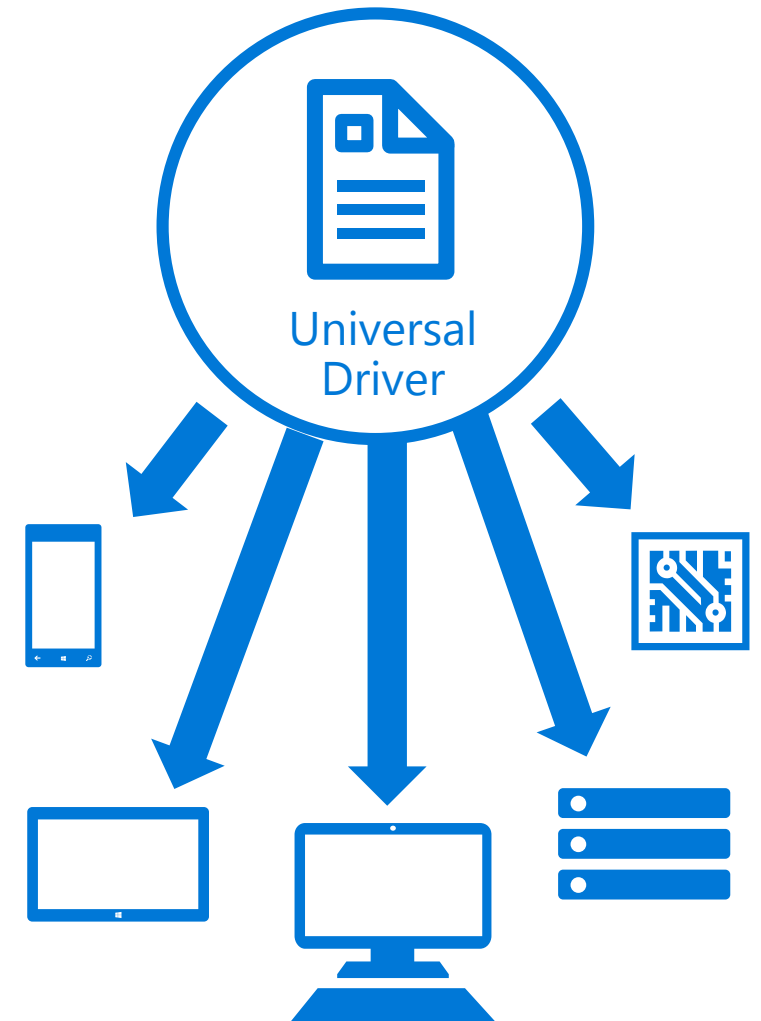
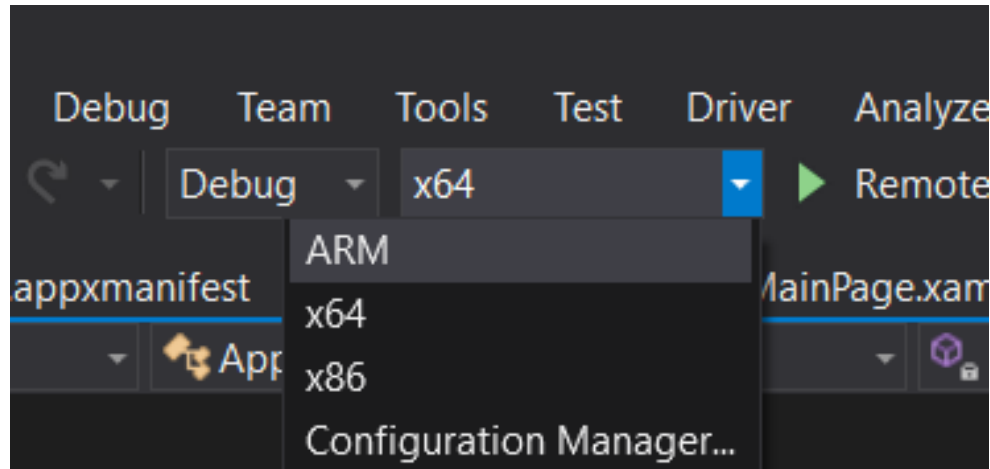
# Windows universal device platform

Same API/DDI based single driver model

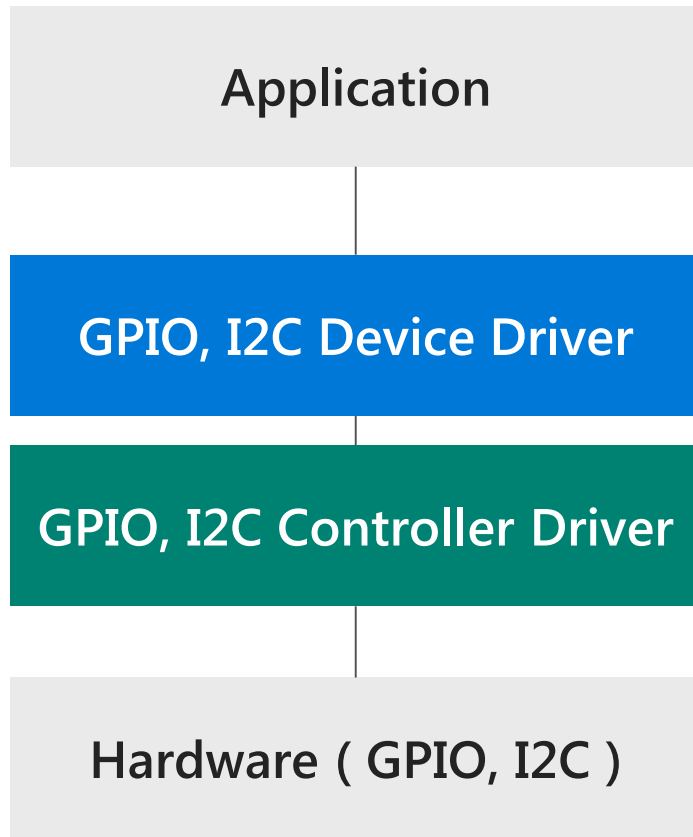
Enterprise, Mobile, IoT

Legacy Kernel mode Driver compatibility

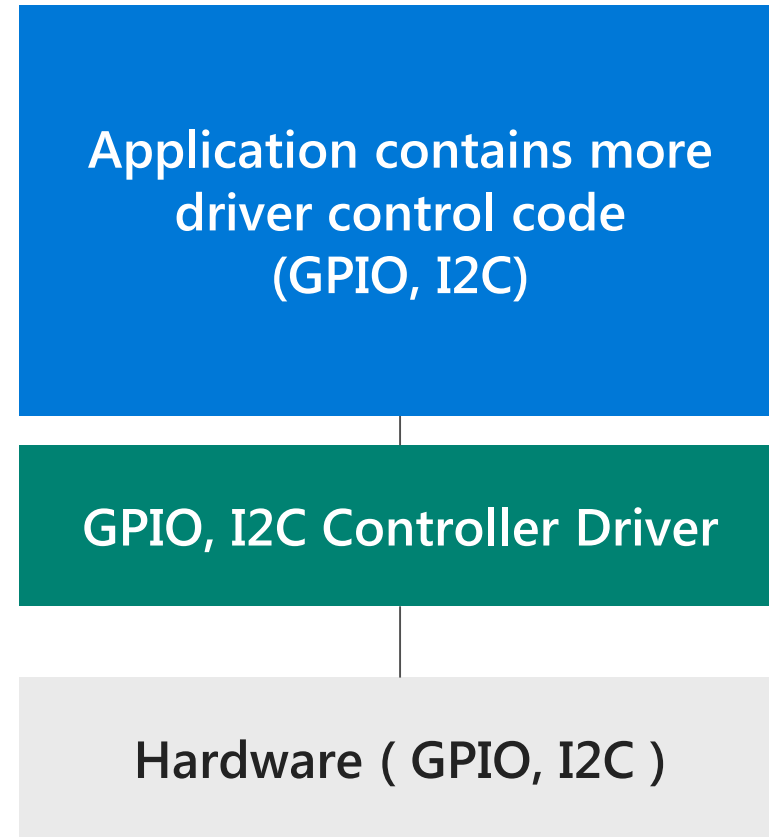
User mode driver has a low compatibility



# Driver and Sensor programming



<Windows 10>



<Windows 10 IoT Core>

# Call to Action

- UWP App means your customer starts to use Windows 10
- UWP app/driver can run on Windows 10 IoT Core
- Boots to use Windows 10 through UWP