

**CODE
MASTERY** presented by
Magenic

APPLYING MVVM IN WPF AND SILVERLIGHT

ROCKFORD LHOTKA

Principal Technology Evangelist

About



- One of the most widely used development frameworks in .NET
- Used by



Business

- Retail
- Manufacturing
- Telecom
- Finance
- Shipping
- Medical
- HR and Payroll
- Sports
- Security
- Media
- Web sales



Government

- Federal
- State
- Local
- City
- Police
- Fire



Other

- Military
- International
- NGO
- Education

N-Layer

Interface

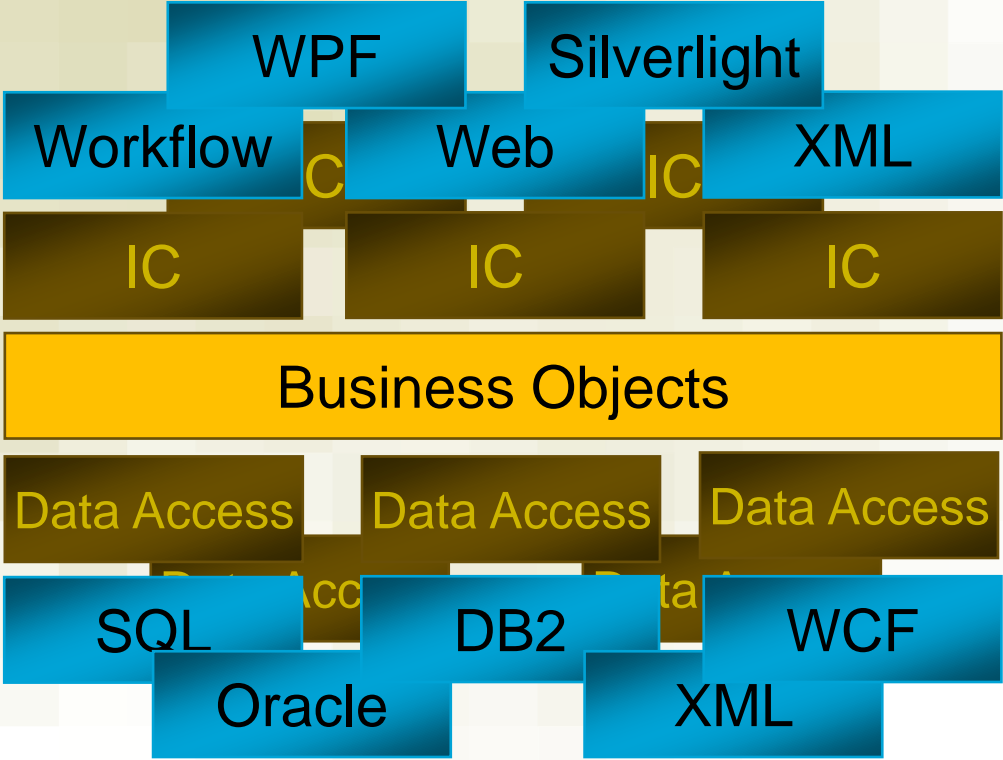
Interface Control

Business Objects

Data Access

Data Storage and Management

Layered Flexibility



How to Get UI Separation?

Data binding

- Interface/event driven
- Chatty interaction
- Loose coupling through reflection/metadata
- RAD support

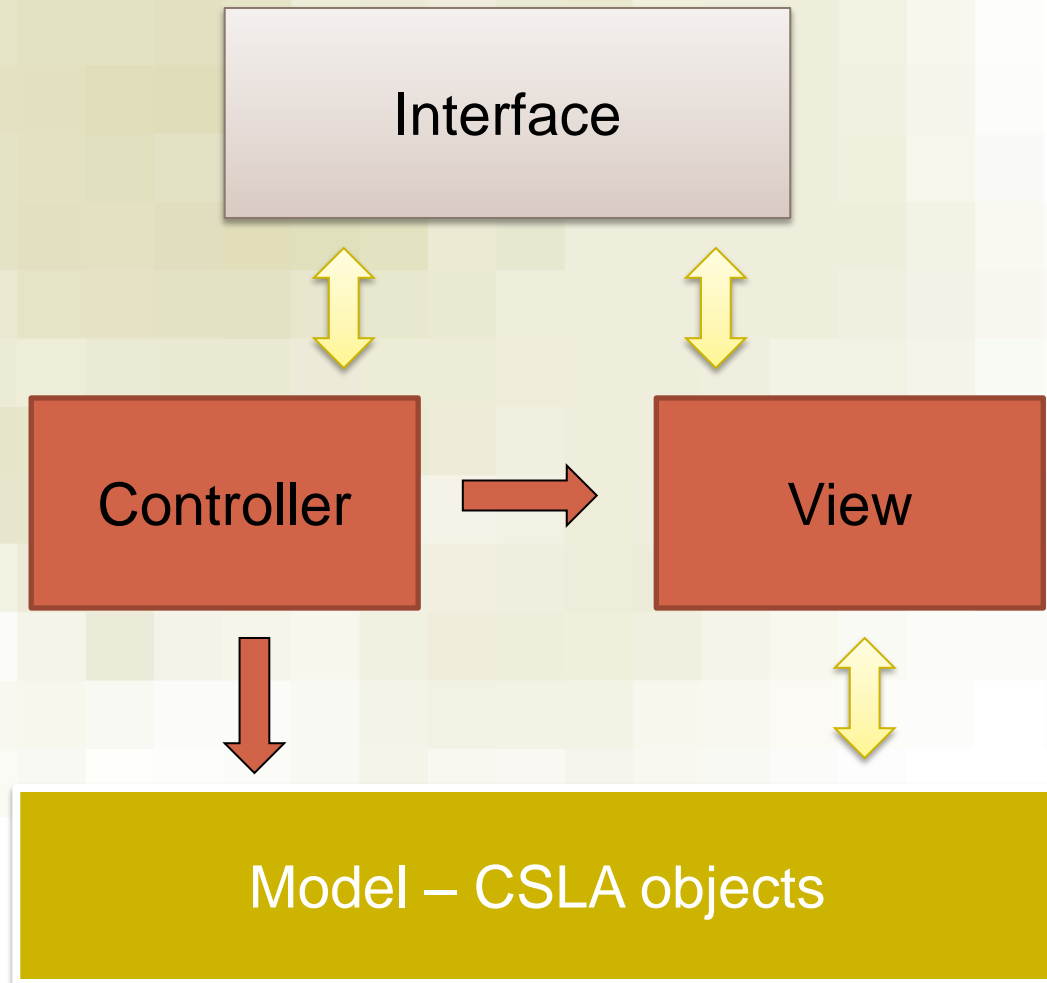
MVC/MVP/etc

- Custom code implementation
- Various types of interaction
- Loose coupling through indirection/interfaces
- No RAD support

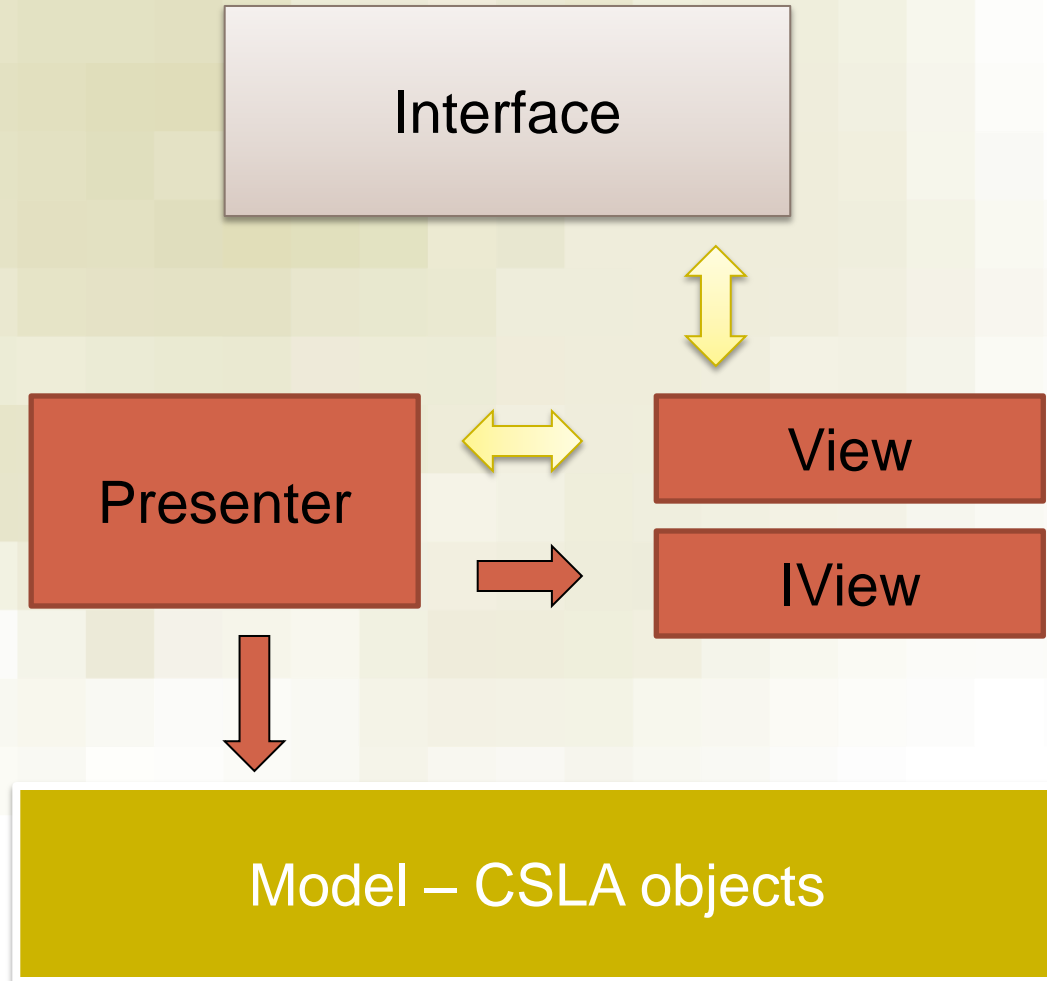
I want my R – A – D

- Patterns have consequences
 - Some good
 - Some bad
- Patterns should be used when
 - The good outweighs the bad
 - *This means overall cost is reduced, nothing else*

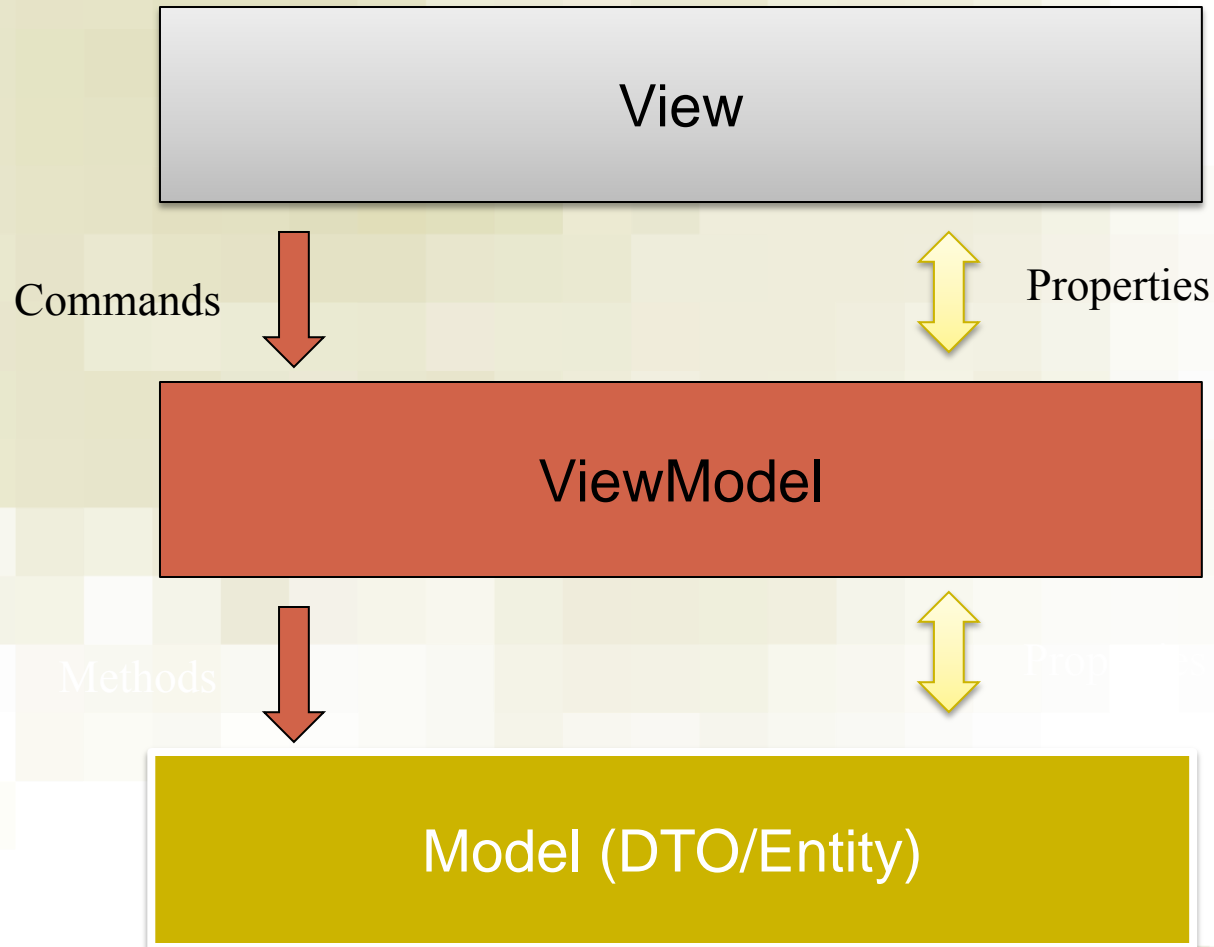
MVC (one of many variations)



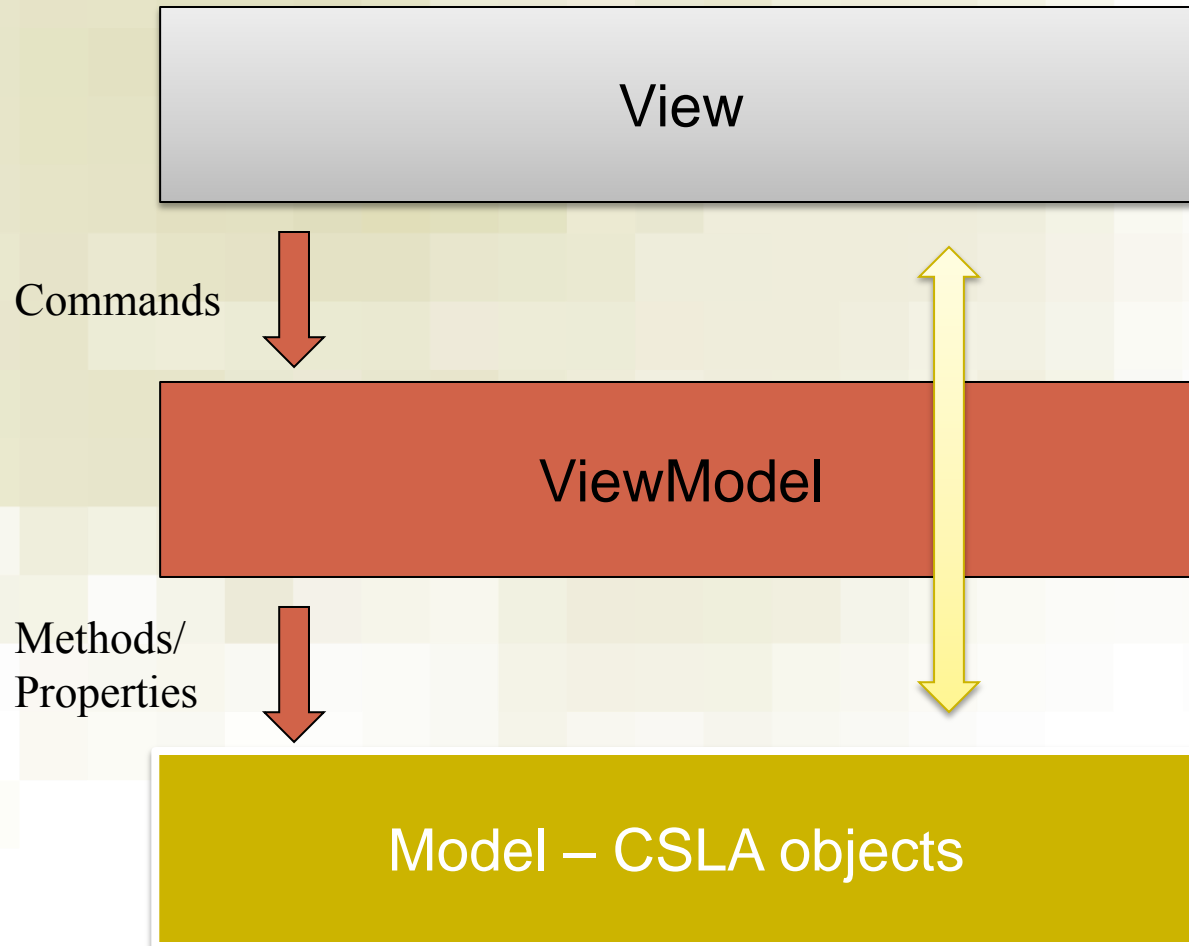
MVP (an MVC variation?)



MVVM (anemic model)



MVVM (rich model)



“M” Patterns: What’s Missing?

Message routing

- Delivers messages to controller/presenter

Rendering engine/handler

- Creates/displays View

XAML: What's Missing?

Trigger VM method from arbitrary UI event

- System.Windows.Interactivity
- MVVM UI frameworks
- CSLA .NET InvokeMethod or Execute

Binding to “unbindable” UI properties

- Such as ListBox.SelectedItems

Summary

- Patterns are great tools
- Be aware of all consequences
 - Including platform-specific consequences
- Use pattern when overall benefit > cost



Thank You!

Rockford Lhotka
rockyl@magenic.com
www.lhotka.net

**CODE
MASTERY** presented by
Magenic