

# A developer always pays their tech debts

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#sugcon



**SUGCON**  
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Who put all this  
Technical Debt  
here?!





# Should you pay your debts?



# Can I throw everything away and start over?

Not all hope is lost!

Take the IA with you?

Webforms? More like Lameforms.  
Kill the presentation only

Breaking point between trying to  
recover and starting again

# Well why should I make work for myself?

Raise the quality limit

Code decay

Short term pains for long term gains

Preempt serious rework

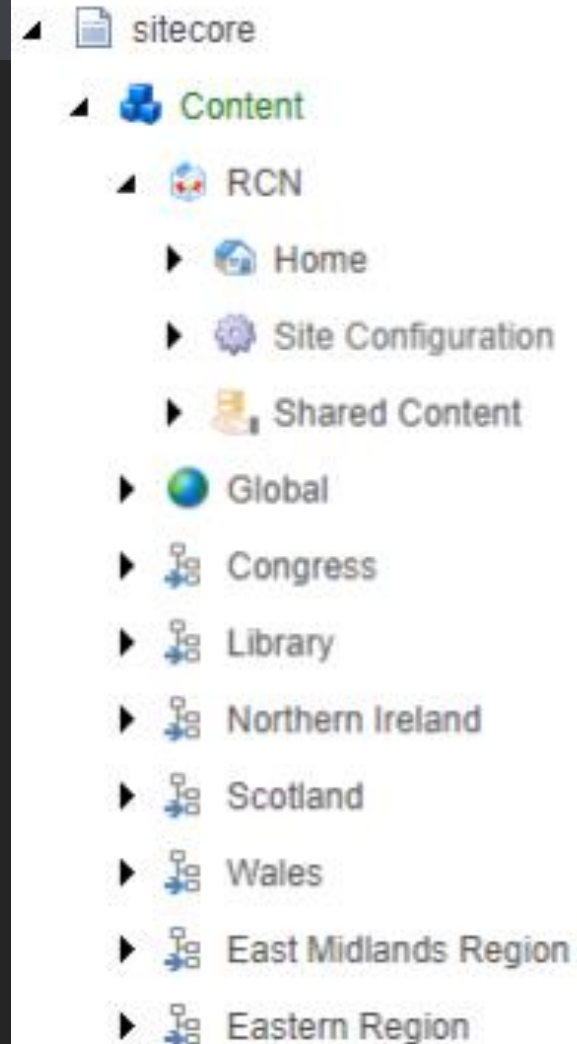
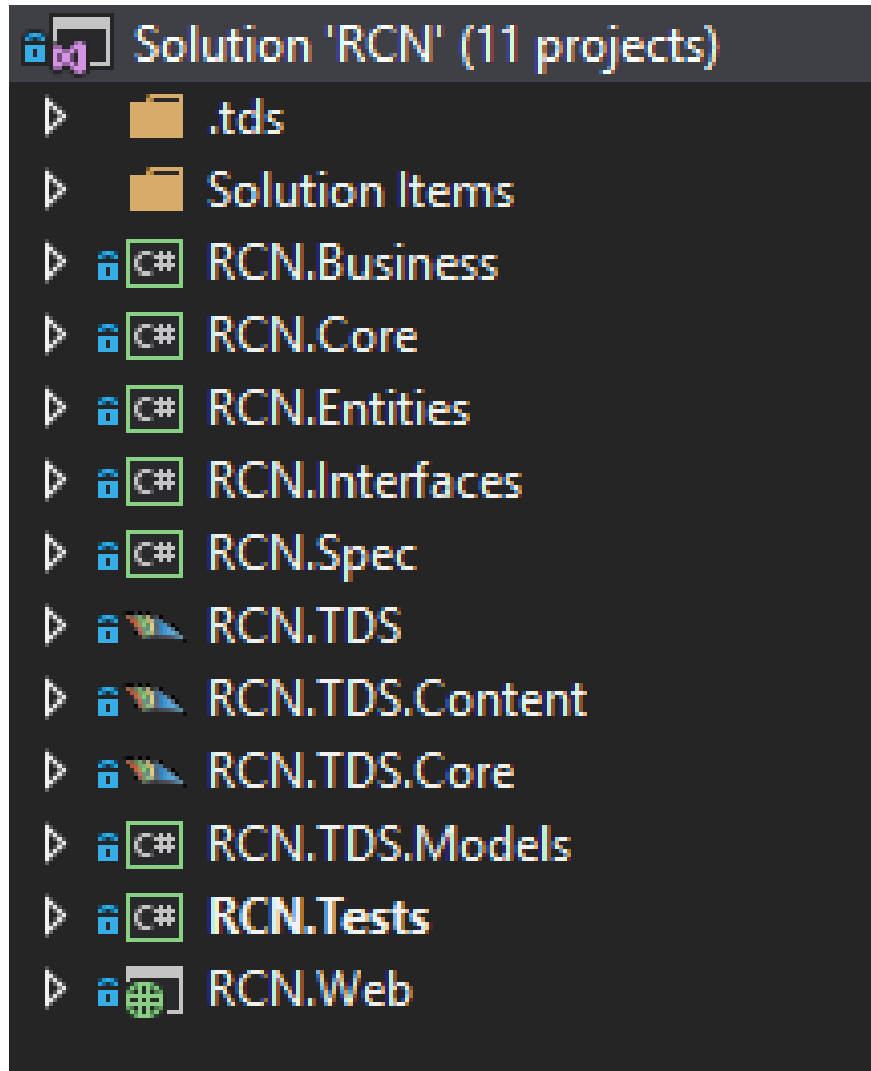
Align with the direction of the Industry

Improve as a developer

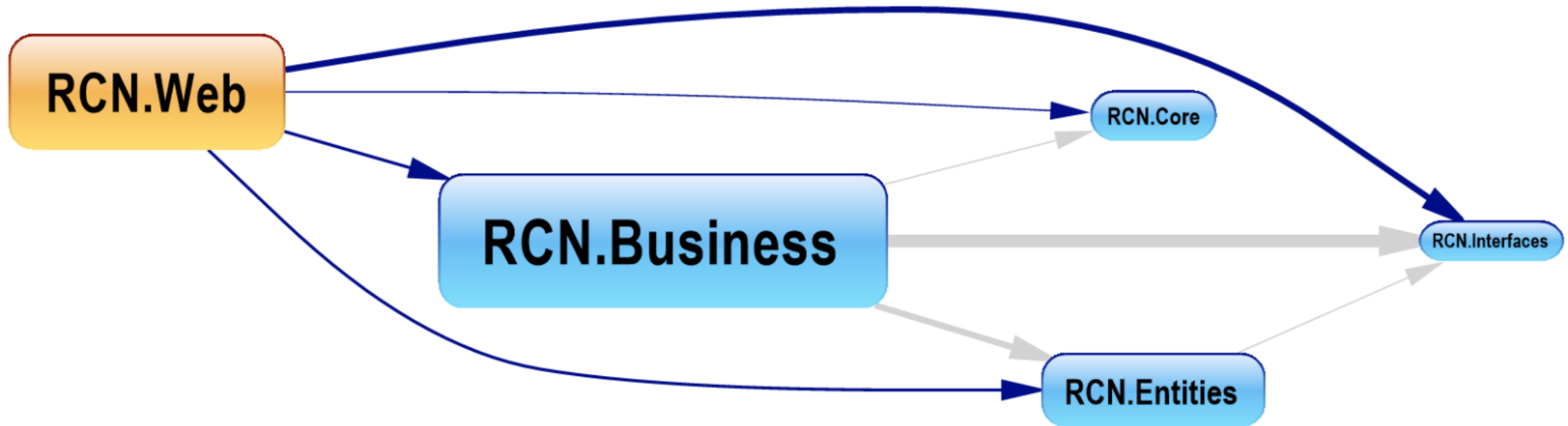
Clients probably don't want to pay

Undeveloping is fun!

# What it all looked like



# How the solution was structured





# Figuring out what's right for us

Development Team

RCN - Membership Organisation  
and Trade Union

Varied audiences

Enterprise solution

Volumes of traffic

Delivering a progressive product



# Where we wanted to be

Harden the foundations

Remove limitations of N Tier

Enable future phases

Sort daily headaches

Use modern solutions to problems

But also...

MAKE DEVELOPMENT GREAT AGAIN



# Before we started

Buy in

Robust branching strategy

Unit Test and Regression Test plans

A few Resharper licenses

Bravery!

What is right for us

SOLID principles

Design Patterns

Modular Design

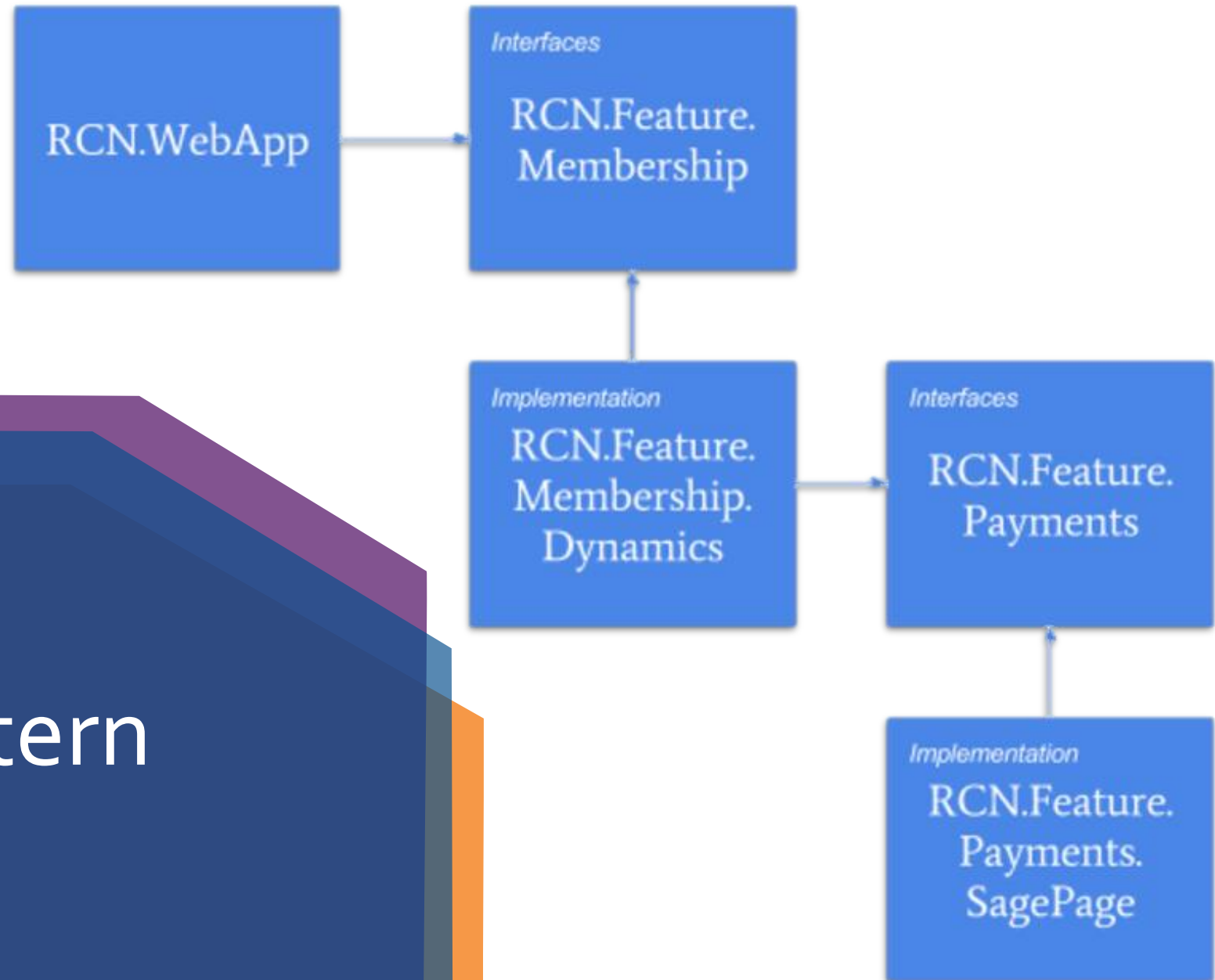
Development standards

Content strategy

Helix

# What we considered

# Stairway Pattern





# How we went about it

1. Chose technologies, principles and design patterns
2. Rewrote development guidelines
3. Completed a solution review
4. Audited the information architecture
5. Created a transformation backlog
6. Agreed an implementation approach

# How we paid our debts



Big Bang approach simply not possible

Phased approach

Features at a time

Boy Scout Rule

No Test or QA team!

CI server builds every commit to every branch

Unit Tests are run

Code Coverage reports are generated

Code coverage summary [View full report »](#)

Classes:	<div><div>39.7%</div></div>	134/337	Methods:	<div><div>27.4%</div></div>	569/2070	Statements:	<div><div>25.7%</div></div>	1480/5749
Diff:	+1.22%		Diff:	+3.2%		Diff:	+3.53%	

✓ 427 tests passed

# 77

Days of technical debt



# 14

Days of technical debt





Technical Debt rating - D

Technical Debt ratio - 20.83%

Days of debt - 77

**Debt**  
**20.83%**

Rating **D** 3d 0h effort to reach **C**

Debt 77d

Technical Debt rating - B

Technical Debt ratio - 7.41%

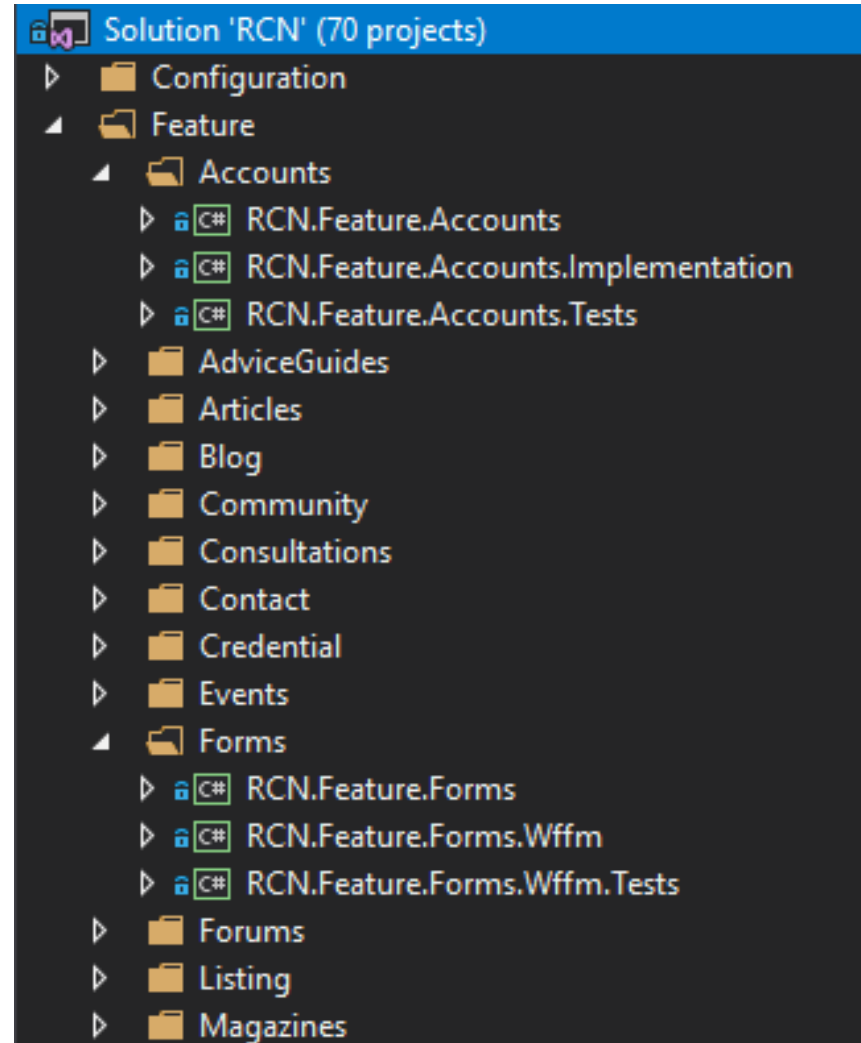
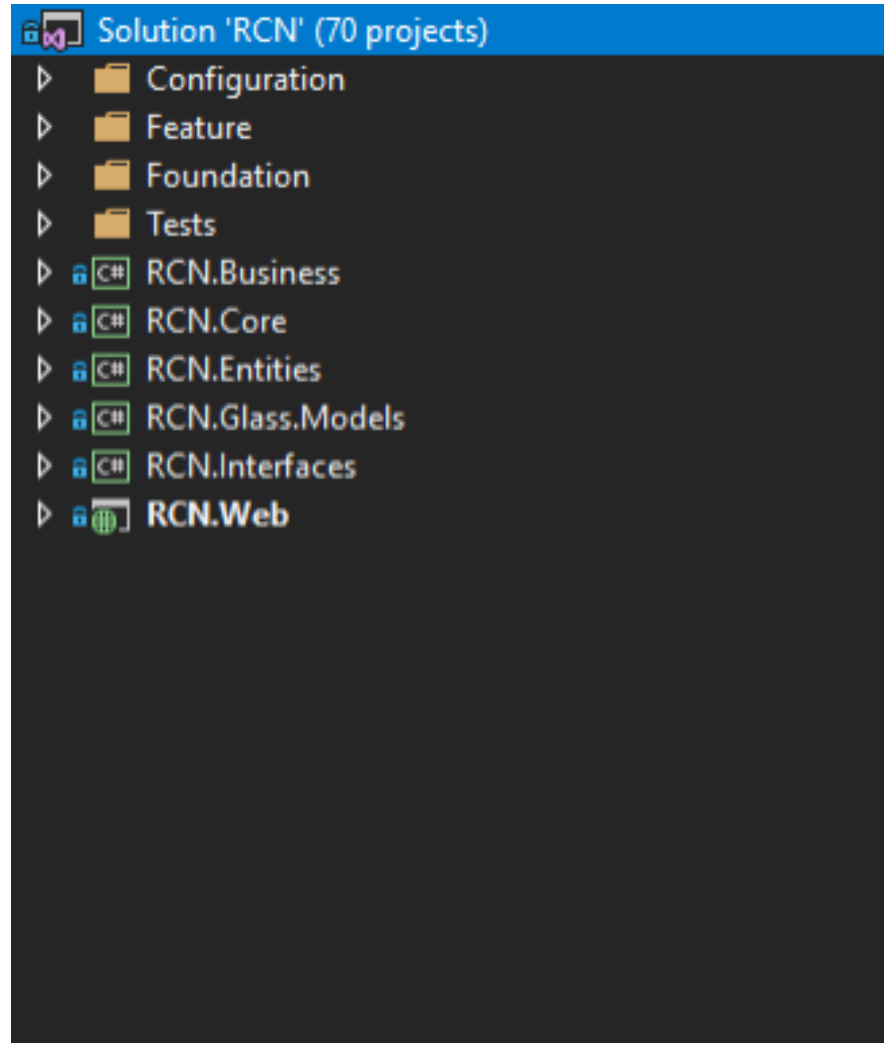
Days of debt - 14

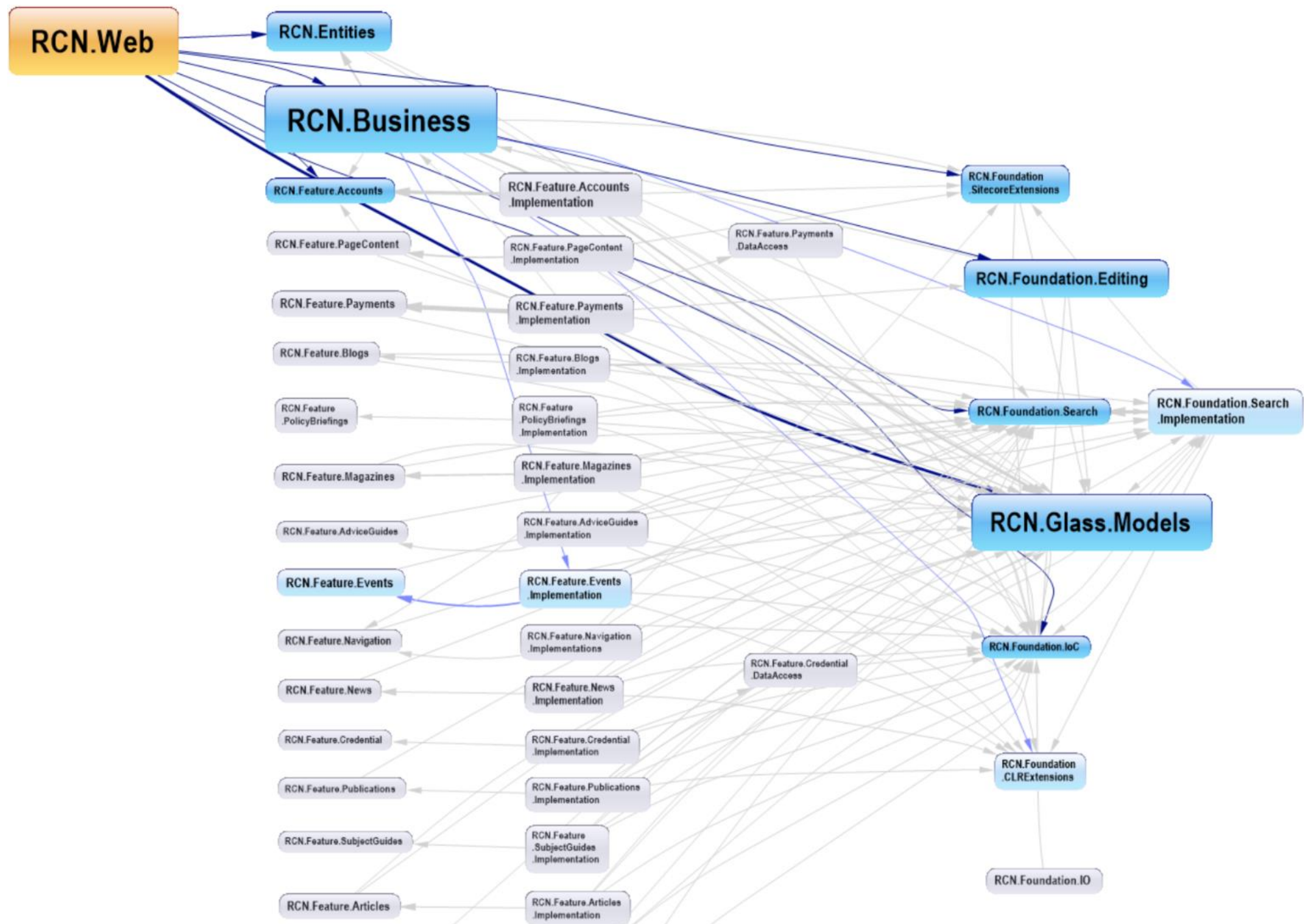
**Debt**  
**7.41%**

Rating **B** 4d 4h effort to reach **A**

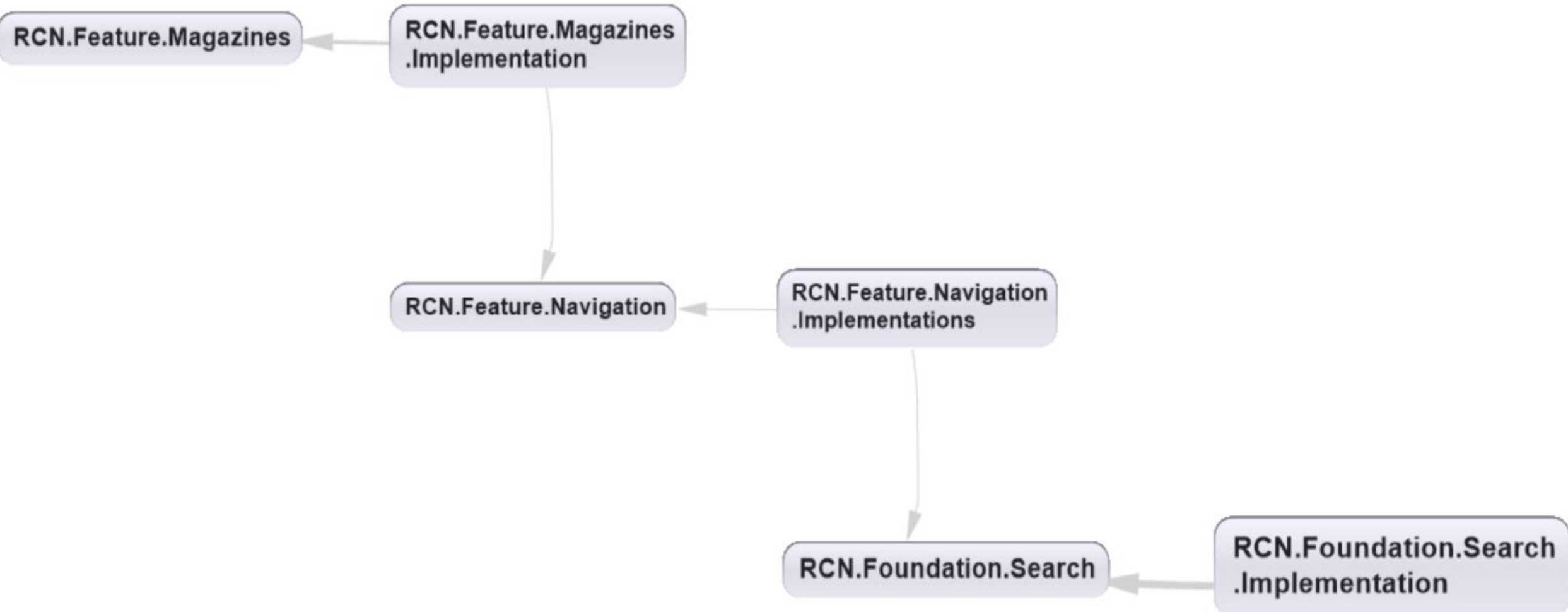
Debt 14d 0h

# So what it all looks like now





# Lets zoom in to a feature



# Our takeaways from doing this

Know where you're heading first

Don't go blindly following Helix

Be careful of pulling code weeds

Talk in words clients can understand

Sitecore Powershell Extensions saves (personal) lives

You might wanna check in those deployment packages...



# 3 months on - how has it helped us?

Handle far higher loads

Less tickets, more development

Juniors setting less fires

Faster implementation times

Easier communication with clients

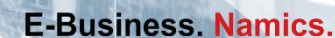
Upgrading to 9 is more simple

But we're still not done...

# TL;DL - How do I solve my tech debt and move to a modern solution?

1. Get the thumbs up
2. Figure out what is right for you
3. Decide how you want the implementation to look in 12 months
4. Find approaches and principles that can help you get there
5. Review the solution against all this to build a backlog
6. Agree how to implement the changes with minimum risk

Now go break your site!



# Thank you!

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