



Data beats software hands down!

David Prince


Lead Architect – Business Intelligence



Mergers present us with many difficult technology decisions including duplication and variation of software and confusing data.

We've navigated these challenges by utilising our Business Intelligence team to buy time, save money and provide valuable insight whilst these challenges have been addressed.

With projects ranging from merging data held in multiple HR, Finance and Housing Management Systems to replacing software with reports and insight we've enriched our business and customer views



This isn't another story about a merger though, this is about the often "overlooked" data model and how it can be the hero of the hour and give you clarity where different parties are trying to influence your view

Who are Pobl?

Pobl is a group of companies offering great homes, care and support that makes a difference to people's lives

We formed in April 2016 by the merger of Seren Group and Grŵp Gwalia and consist of several companies and over 2500 people making a difference through housing, care and support. Pobl manages nearly 17,000 homes and provides care or support to around 2,500 people across Wales and south west England at any one time.

Our Group operates as three distinct divisions:

Homes and Communities

We provide high quality housing that's affordable in communities that are safe, attractive and supported to thrive. We manage over 13,000 homes and we're creating thousands more.

Care and Support

We work alongside people to help them feel safer, empowered and more included in their communities. We provide great care and support to over 2,500 people, each an individual.

Commercial

We work in partnership to build and manage great homes and 4000 student rooms across Wales.



About me

Working with data and Business Intelligence for around 12 ½ years

Prior to the Social Housing sector I worked for Vodafone UK, 7 of those years were in on-shore and off-shore Business Intelligence teams, managing BI relationships with Customer Services, Finance and Wholesale

Joined Gwalia as a Data and MI Manager and built their Business Intelligence function from the ground up

Not the typical degree route into technology...I studied Fine Art at University

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Simple can be harder than complex:
You have to work hard to get your thinking clean
to make it simple. But it's worth it in the end because
once you get there, you can move mountains.

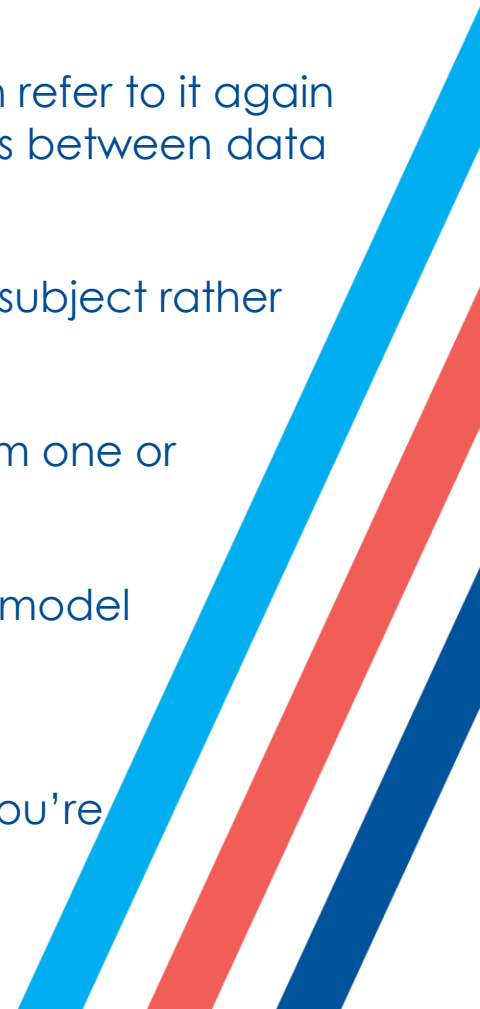
Steve Jobs



What is a data model, why do I need one?

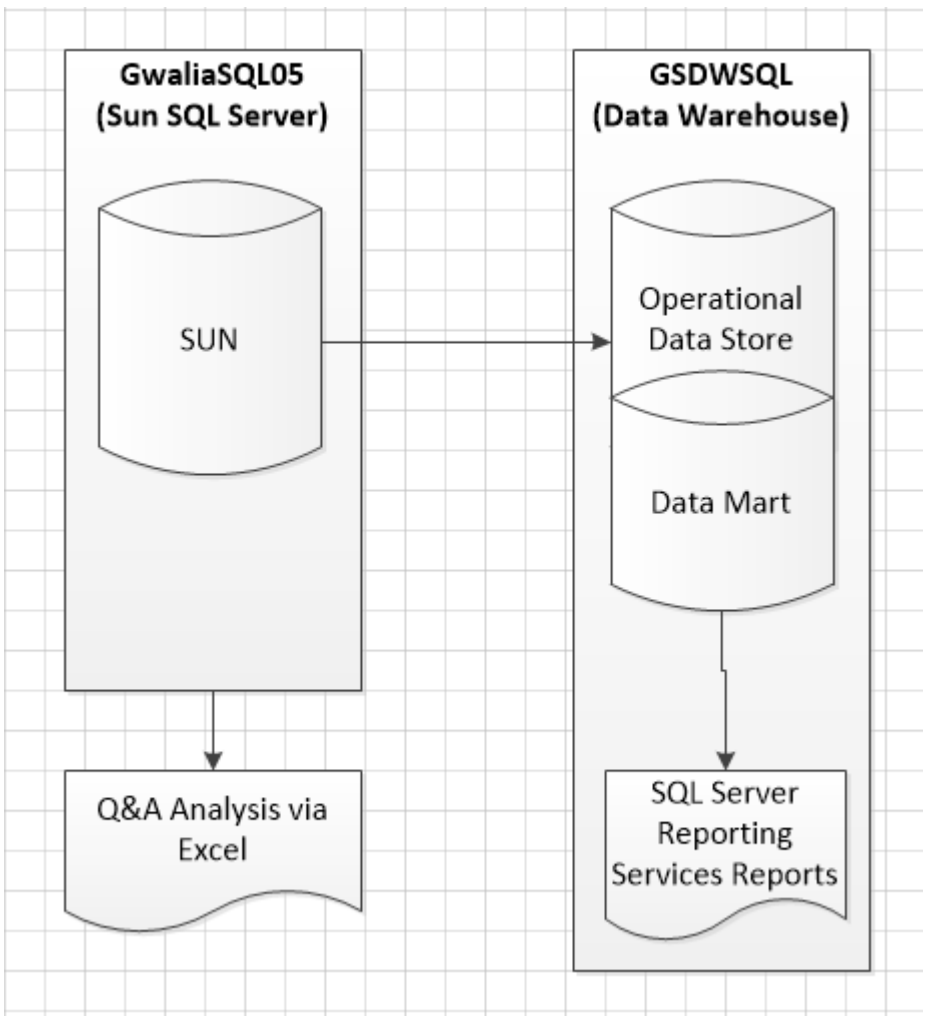
From a software standpoint, data models define how data is connects to each other and how a system works

A Business Intelligence focussed data model is less focussed on system functionality but puts the data subject in context

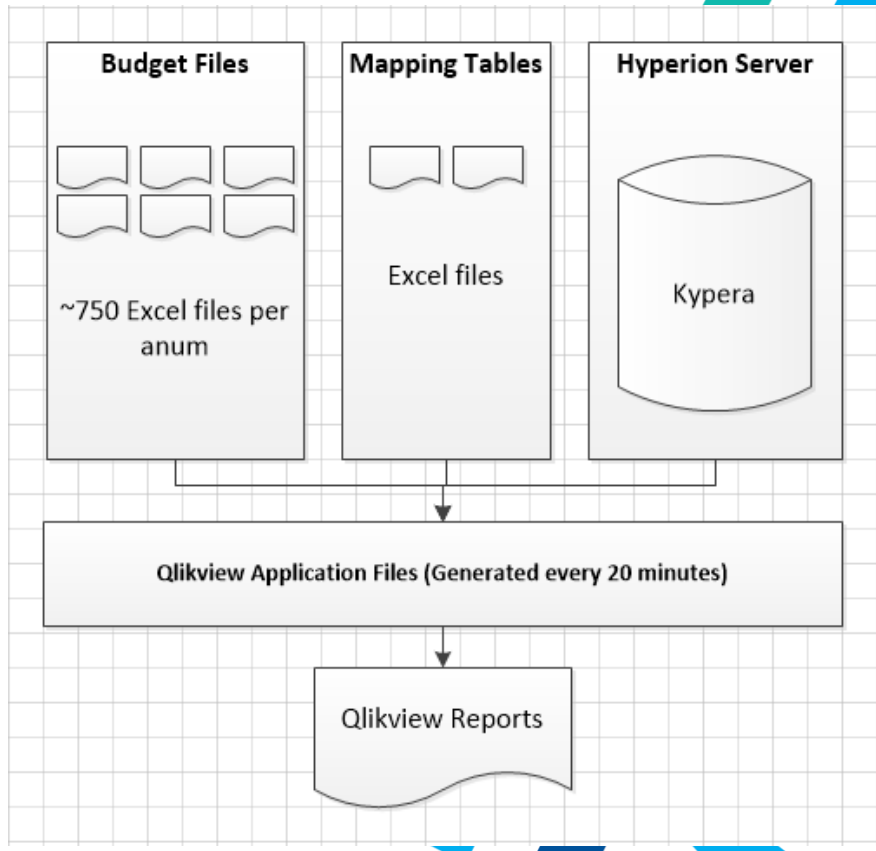
- It's the key to nimble BI as once you have a solid model you can refer to it again and again. You can bolt more to it and understand relationships between data entities
 - A clear BI model is system agnostic and is focussed on the data subject rather than the software
 - It doesn't matter where your data comes from. It can come from one or multiple systems. The systems can even be changed
 - Data models can range in complexity from a basic conceptual model right the way through to a very detailed physical data model
 - If you can picture even a basic conceptual data model when purchasing software you can have a greater clarity over what you're buying
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The Pre-Merger Finance Systems Landscape

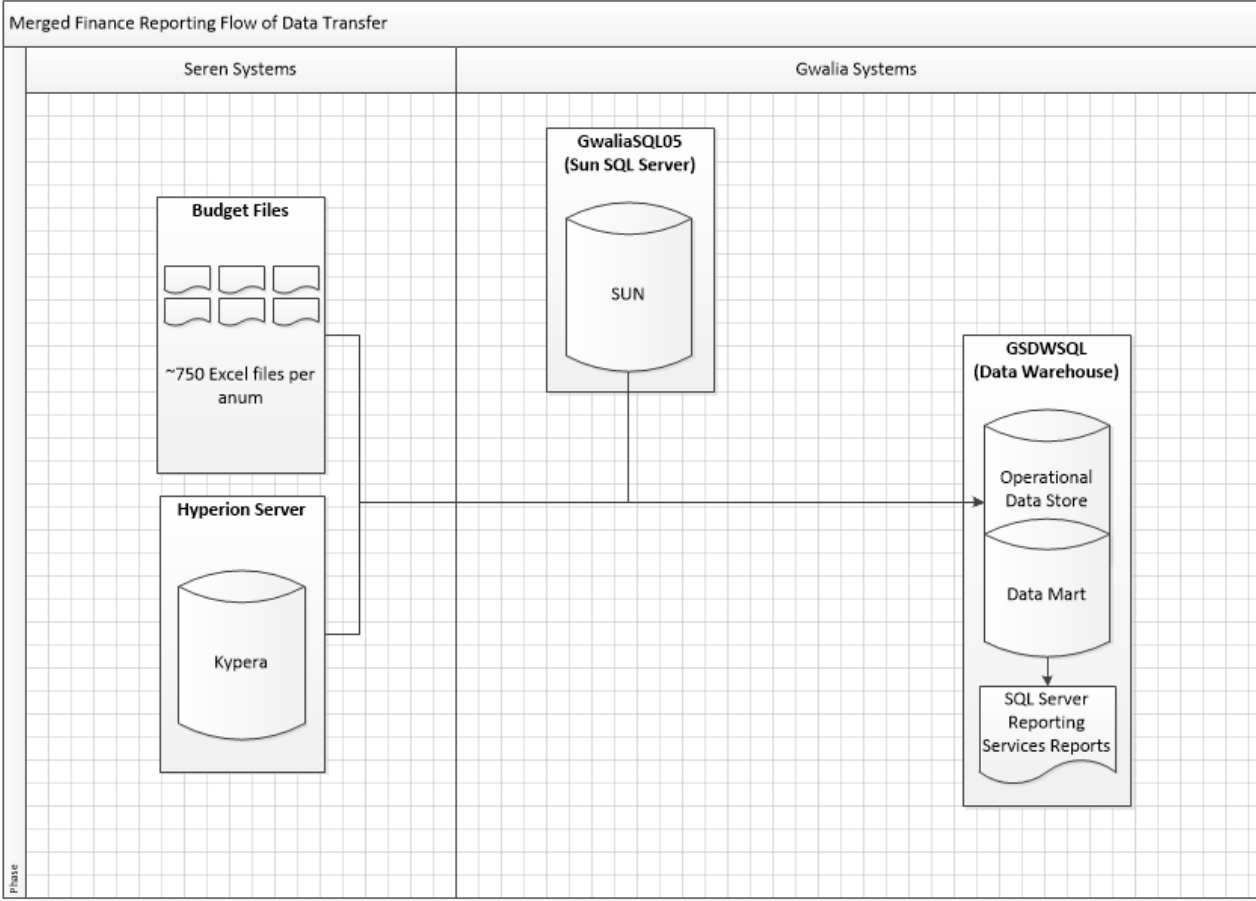
Gwalia



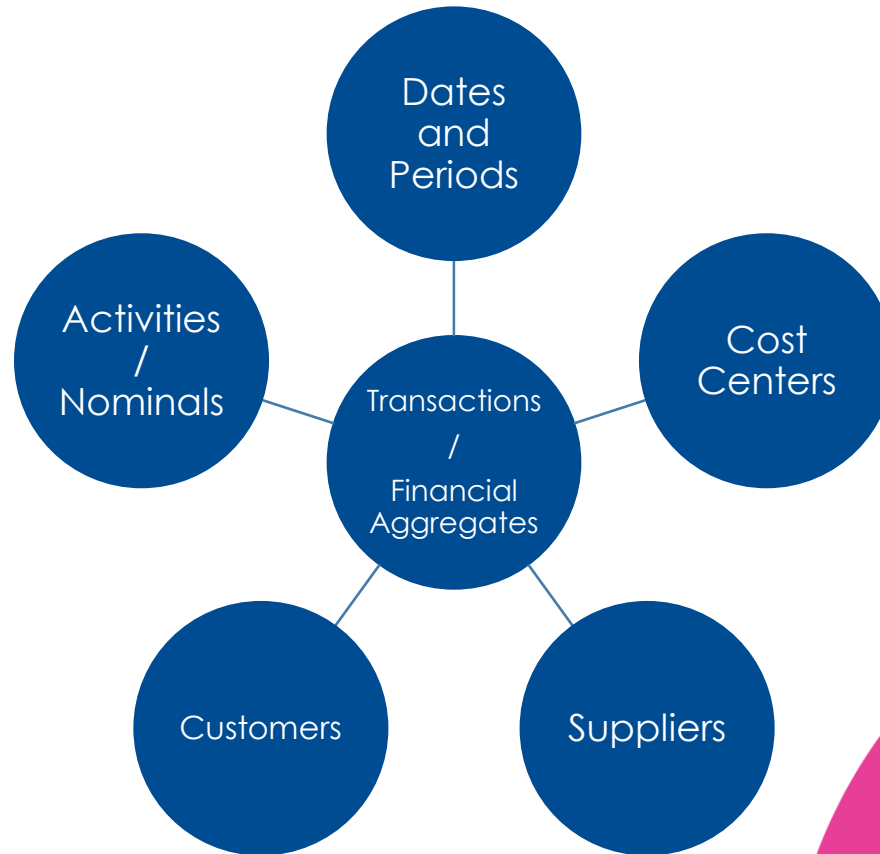
Seren



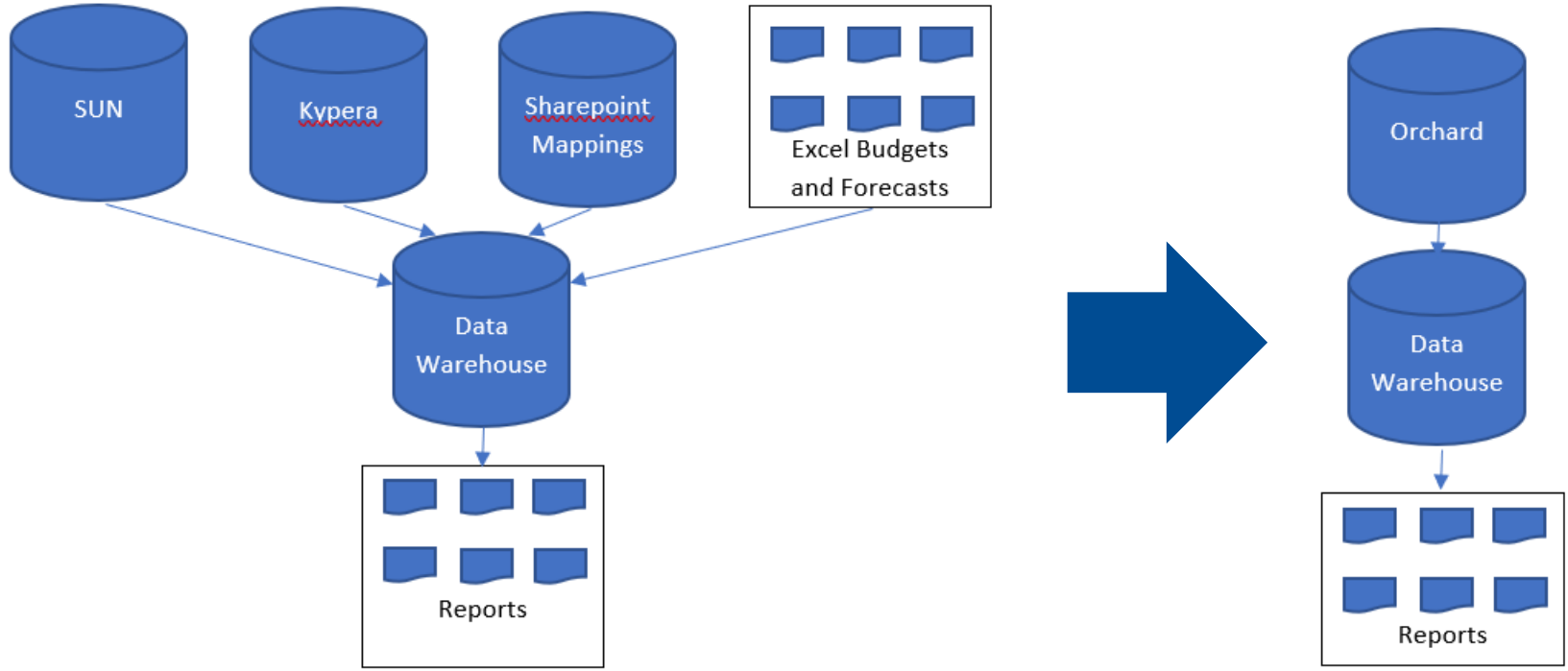
The first step...getting all the data in one place!



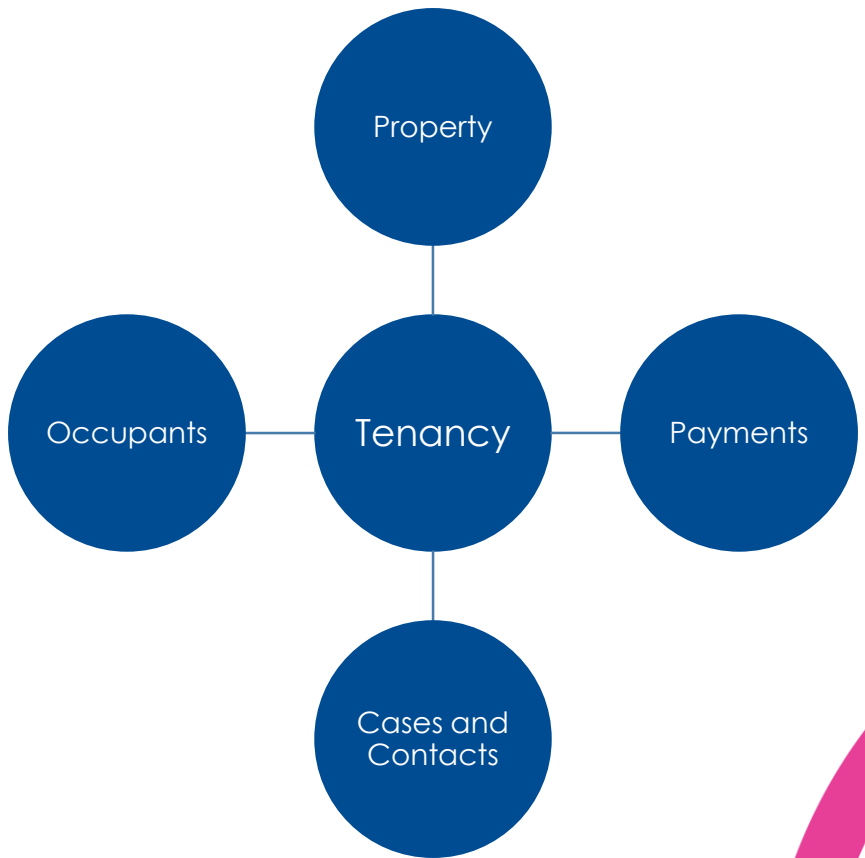
The next step...what do we need to know?



The final step...moving from many systems to 1



What does our tenancy model look like?



What can we understand from our tenancy model?

Tenancy Type and Category	Young Adult Occupants	Recent Arrears Decline	Max Occupants	Planned Outstanding
Direct Debit	Adult Occupants	Variance To Average Arrears	Arrears Officer	Responsive Outstanding
Tenure Length	Older Adult Occupants	Eight Week Arrears Trend	Lettings Officer	Property Lets In Last 12 Months
Tenancy Status	Retirement Adult Occupants	Locality	Responsive Officer	Neighbourhood Crime Banding
In Notice Period	Total Occupants	Town	Cost Center	ASB Cases
Termination Reason	Household Makeup	County	Weekly Rent	Average Property Value
HB In Last 60 Days	Contact Details Flags	Post Code	Weekly Service Charge	Experian Segment
Tenant Age	Current Arrears Stage	Building Type	Responsive Jobs	Bankruptcy
Tenant Gender	Current Balance	Property Age	Void Jobs	CCJs
Child Occupants	Arrears At Last Posting	Bedrooms	Abandoned Jobs	Low Credit File Footprint

Mixture of information from our housing management systems, Experian and open-source sets such as police.org and the land registry

We've done some of our own segmentation based on household makeup



Source System:

Arrears Office:

1 of 2? 100% Find | Next

Tenancy Ref	Expected End Date	Title	Surname	Address	Benefit Status	Net Balance	Arrears Trend	Current Action	Arrears Percentile	Experian Segment
		Ms			HB claimant	£859.57	Arrears increase over long period	Eviction Warning Letter	Balance in top 20%	Financial stress
		Miss			UC claimant	£1,312.89	Arrears increase over short period	Re serve NSP	Balance in top 20%	Financial stress
		Miss			Not known to be a claimant	£959.63	Arrears increase over long period	Re serve NSP	Balance in top 20%	Stretched money managers
		Ms			UC claimant	£676.32	Arrears increase over long period	Notice Seek Possess	Balance in top 20%	Stretched money managers
		Mrs			HB claimant	£586.60	Arrears increase over long period	Court Warning Letter	Balance between 20 - 40%	Vulnerable to financial stress
		Ms			HB claimant	£385.66	Arrears increase over long period	Court Warning Letter	Balance between 20 - 40%	Financial stress
		Mr			UC claimant	£3,263.59	Arrears increase over long period	Home Visit - Contact Made	Balance in top 20%	Financial stress
		Mrs			Not known to be a claimant	£2,158.48	Arrears increase over long period	Apply to Court	Balance in top 20%	Stretched money managers
		Ms			Not known to be a claimant	£1,915.27	Arrears increase over long period	Home Visit - Contact Made	Balance in top 20%	Vulnerable to financial stress
		Ms			UC claimant	£1,779.88	Arrears increase over long period	Email Sent	Balance in top 20%	Vulnerable to financial stress
		Miss			UC claimant	£1,737.88	Arrears increase over short period	Eviction Warning Letter	Balance in top 20%	Stretched money managers

Tenancy Ref:

No End Expected

Financial Stress

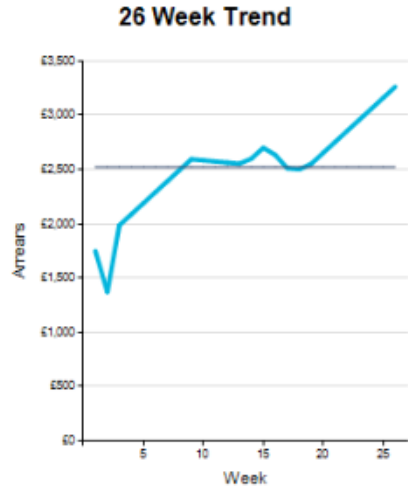
£3,263.59

Balance in top 20%

Early Arrears Action

Arrears increase over long period

	Trend	Balance
4 Week	Negative	£2,289.49
8 Week	Negative	£2,584.09
12 Week	Negative	£2,598.69
16 Week	Negative	£2,500.29
20 Week	Negative	£2,856.99
24 Week	Negative	£3,263.59
Last 4 Wks	Negative	



Tenancy Ref	Expected End Date	Title	Surname	Address	Net Balance	Arrears Trend	Current Action	Arrears Percentile	Experian Segment	Benefit Status
<input type="text"/>		Mr	<input type="text"/>	<input type="text"/>	£3,263.59	Arrears increase over long period	Home Visit - Contact Made	Balance in top 20%	Financial stress	UC claimant

Officer: Show Actioned:



IMC001 - AccountAble

Report Location: /Homes and Communities/Income Management/Charter
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Last Refresh: 05/03/2019



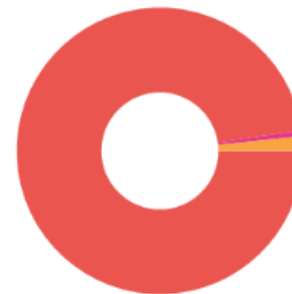
No. of Tenancies



AccountAble

Priority	# Tenancies	£ Value
1	104	£84,392.01
2	1	£539.02
3	3	£1,436.40
Total	108	£86,367.43

Value of Priority



Officer	Section	UC Flag	Priority	Rule	Tenancy Reference	Name	Address 1	Current Balance	Net Balance	
[Officer]	Court Services	Non UC Accounts	1	In Arrears and balance is increasing	0 Actioned of 12		£0.00 Actioned	£13,817.65	£13,563.44	
				Regular Payer with Missing Payment	0 Actioned of 1		£0.00 Actioned	£594.76	£594.76	
				Total	0 Actioned of 13	£0.00 Actioned	£14,412.41	£14,158.20		
			2	HB has reduced	1 Actioned of 1	£451.80 Actioned	£539.02	£54.45		
				Total	1 Actioned of 1	£451.80 Actioned	£539.02	£54.45		
			3	In Arrears and balance is static	1 Actioned of 1	£1078.98 Actioned	£1,251.25	£1,251.25		
				Total	1 Actioned of 1	£1078.98 Actioned	£1,251.25	£1,251.25		
		UC Accounts	1	In Arrears and balance is increasing					£846.48	£846.48
									£638.53	£638.53
									£627.44	£627.44
									£513.30	£513.30
									£480.21	£480.21
									£400.27	£400.27
									£280.27	£280.27
				£215.52	£215.52					
				£154.51	£154.51					
				£3,263.59	£3,263.59					
				£2,471.30	£2,471.30					
				£2,316.08	£2,316.08					