



# Case Study

Effecting Service  
Improvements Without  
Increased Resources

▶ London-Based Housing Association

# Summary

## ➤ Challenge

London Based Housing Association needed to reduce bad debt.

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## ➤ Root Cause

3 reasons identified why residents didn't pay their rent:

*"Can't pay"*

*"Won't pay"*

*"Help me pay"*

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## ➤ Output

Respond to customer needs by increasing front-end resources.

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## ➤ Results

Recovery of £900K and avoidance of the need to hire two new employees.



Case Study

## Lean six sigma



## Effecting Service Improvements Without Increased Resources

### Overview

Leanósigma can instigate profound improvements in organisational efficiency, even when with apparent obstacles such as the need to create more services without any parallel increase in allocated budgets. This was the challenge facing our client, a not-for-profit resident-led London-based Housing Association – and as this case study shows, leanósigma’s effects were profound, hugely beneficial, and greatly welcomed by the client.

### Define

- Facing financial constraints the Housing Association wanted to improve their services, despite lack of budgetary increases.
- The Housing Association selected rental arrears as their improvement project.
- The baseline data indicated there were 2829 tenants in arrears, with a debt value of £1.8M.

The Housing Association began by recognising that it needed to offer more services to residents; however, budgets were not being increased, so improvements had to be made within existing limited resources. Selecting a project that was at very heart of their core business, our Housing Association client focused on debt collection. Specifically, they wanted to understand why tenants fell into arrears and how the Association could improve tenant rental collections.

With 6,300 tenants on its books, the Housing Association generated £24M of income per year - though not all residents paid their rent on time – in fact 2,829 tenants were in arrears, which represented a debt value of £1.8m (7.5% of revenue). To bring about effective change and increase the level of rental collection, the leanósigma project team needed to understand why residents didn’t pay their rent.

### Measure

Having established the project charter through a Kaizen event, the project team completed a Process Flow Diagram. In addition, a workshop was attended by key stakeholders from the Housing Association, to ensure that the process was fully understood by all relevant parties. By organising this event on behalf of our client, we were able to remain objective, plus we



## Measure

- Through Kaizen Workshops and completion of a Process Flow Diagram, the team identified three distinct categories of residents who hadn't paid their rent – those who *"can't pay"*, those who *"won't pay"* and those who asked: *"help me pay"*.
- These groups were further clarified into five project opportunities: 1) Rent not a priority 2) Service issues 3) Money management 4) Vulnerable residents 5) Welfare reform
- Each project opportunity had a discreet or separate solution strategy.

could offer constructive criticism - a factor that the organisation, working alone, might have struggled to achieve.

Working through the Process Flow Diagram, the lean6sigma project team assessed a number of factors that influenced why residents didn't pay their rent; these were captured on an Ishikawa (or 'fishbone') diagram. In addition, using Affinity Diagrams, the team was able to sub-group all the variables captured on the fishbone diagram, and then place them into three distinct categories; (1) Can't pay, (2) Won't pay, (3) Help me pay. These groups were further broken down into five work-streams (or five project opportunities);

1. 'Can't Pay' - rent not a priority; "The tenant is complacent; they believe they can push rent down the priority list".
2. 'Won't Pay' - service issues; "The tenant delays paying the rent, due to dissatisfaction with the service provided. Tenant may be in dispute over repairs to their property etc."
3. 'Help Me Pay' - poor money management; - "The tenant struggles to budget and manage their money; they'd benefit from some basic advice and support."
4. 'Help Me Pay' - vulnerable residents; "The tenant has challenges that make coping with paying the rent difficult. e.g. a recent death of someone who used to deal with the rent. They have no payment issues - they just need to be supported and guided."
5. 'Help Me Pay' - welfare reform; "From 2013, some tenants may have gone into arrears due to the planned changes in payment methods, since such proposed welfare reforms represent a risk".

## Analyse

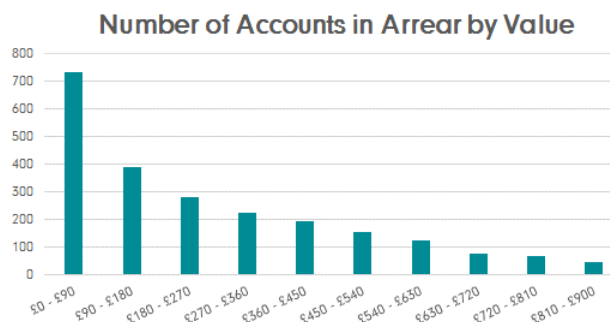
- 86% of the accounts in arrears were less than three months old – and most residents fell behind with their rent by one week.
- Activity-based analysis showed that the debt collection team spent most of their time keying information into a database and filling in forms.
- This, in itself, revealed several opportunities to remove duplicated effort, over-processing and other wasteful factors.

Irrespective of the root causes of arrears, the Housing Association spent considerable time chasing various matters up and collecting money. The level of outstanding debt was £1.8m, so how old was the debt and how much was recoverable? By looking at the age profile of tenants, an assessment of the recoverable debt could be made;

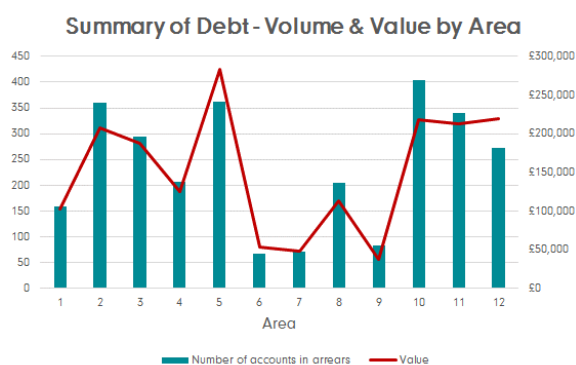
Debt age (months)	Number of accounts in debt	Value
0-3	2492	£848,414
3-6	208	£431,505
6-9	87	£288,885
9-12	21	£95,490
12-19	16	£101,764
18+	5	£44,825
	<b>2,829</b>	<b>£1,810,883</b>



Another way of viewing the debt-age profile was to determine the number of payment cycles by which the tenants were in arrears. Since the residents paid their rent weekly, the payment cycle was one week. Using a histogram and making statistical adjustments to the average weekly rent (£90) enabled the team to see the number of arrears by week, which illustrated different modes of behaviour.



Where did the debt come from? By looking at the data, an assessment of 'volume' (the number of accounts in arrears) and 'value' could be calculated, so that the total debt by area could be measured;



The highest number of tenants in arrears was living in area 10. Conversely, area 6 had the least number of residents in arrears. Cumulatively, area 5 had the highest volume and value of arrears. With the least debt coming from areas 6, 7 and 9, what was different in these areas? Could examples of best practice be taken from these areas and be applied to the areas where debt levels were higher? The Housing Association management team had received a request for two additional employees - but they hoped that, by understanding how time was spent on debt recovery and by removing wasteful activities, they could avoid recruiting additional staff.

Completing activity-based analysis over a four-week period, it was possible to make an assessment of how the team spent their time. The analysis revealed that most of their day was spent keying information into a database and filling in forms. This, in itself, revealed several opportunities to remove duplicated effort, over-processing and other wasteful factors.



## Improve

The Housing Association reduced the number of forms in circulation, from 41 to 24.

Drop-down menus within the database replaced free text fields, which improved quality of information.

Each work-stream required different solutions – plus tenants were educated and instructed through education, letters and

The activity-based analysis revealed how time was spent chasing debt; it also identified opportunities to reduce duplication, over-processing and defects. Within the current process, there were 41 different forms in use, some of which had two purposes; it was also evident that only 24 forms were actually used.

The Housing Association was able to reduce the number of forms in circulation - which, in turn, led to a higher quality of information being recorded and communicated. The review also showed how quality would be improved by (1) reducing the number of free text fields within the database software and (2) creating drop-down menus.

With each work-stream displaying problems that had different root causes, it was clear that the solution strategy would also need to vary. Within the 'Service Issues' work-stream, the solution strategies were to (1) decrease the time taken to complete repairs and (2) improve internal communication of relevant facts (where tenants had been granted rent-free periods due to service issues). Tenants who couldn't pay (as well as those for whom rent wasn't a priority) were made aware of the Housing Association's policy on evictions. Through education, plus a series of letters and training sessions, the Association took a tougher stance on these residents. By creating new processes and by improving internal communications, vulnerable residents were supported via input from their case workers. In addition, increased use of text messages helped to reduce these residents' debt levels. The Housing Association also created a drop-in clinic where residents were encouraged to call in and discuss their situation.

## Control

- By creating new processes and improving internal communications, the Housing Association recovered £900K in bad debt.
- By re-allocating staff to the front end of the process, the Housing Association could prevent tenants falling into debt and generating additional legal costs.
- The need to hire additional staff was avoided.

Our Housing Association client had been looking to reduce the costs of providing services to tenants, whilst also improving their services. Lean6-sigma was commissioned to provide an overview of the 'Lean Six Sigma' methodology, so that the Housing Association could use this framework to bring about improvements in their housing performance.

Within each work-stream, opportunities were identified; some were quick wins, others required cultural changes. In addition, policies needed updating and the organisational team structure needed revising. By creating new processes and improving internal communications, the Housing Association was able to recover £900K in bad debt. It was also able to avoid recruiting the additional staff requested by the debt team. Furthermore, by reallocating staff to the front end of the process, the Housing Association avoided the scenario of tenants falling into debt and generating additional legal costs.

This case study demonstrates how improvement can take place through operational-level projects that drive out process waste and improve current processes. Moreover, the current structure was, assessed for fitness of purpose and for whether it was aligned with the Association's core values and vision.

