

Identifying the Optimum Collections Strategy through the use of Champion Challenger Analytical Tools

A Decision Analytics briefing paper from Experian



December 2008

Introduction

The economic downturn has highlighted that, after 15 years of a static and a fairly forgiving collections environment, there are now significantly increased pressures on consumers and their ability to meet repayments on credit commitments. This has sparked greater fears among lenders about their exposure levels to bad debts and, as a result, there is increased focus on the efficiency of their collections function.

While it is recognised that the best customer acquisition risk management strategies need to be constantly reviewed and amended to ensure that they are performing optimally, the same process is not being applied to collections strategies.

This paper demonstrates the use of champion/challenger analysis as a means to continuously improve collections performance in this rapidly changing and challenging environment.

Mark Keyworth
Principal Consultant, Global Consulting

The need for change

The speed at which the credit crisis is developing into a global recession has taken everyone unawares. Now, set against a backdrop of collapsing house prices and rapidly growing unemployment levels, increased charge offs and mortgage defaults are widespread as greater numbers of consumers struggle to service debt commitments.

But many collections operations are struggling to cope with such a dramatic change in economic and borrower dynamics. Historically, the design of debt management systems and procedures, set up to support business through the good times, has typically been aimed at achieving collection operational stability and predictability rather than allowing for flexibility and speed of implementing change. This is now becoming a major issue as organisations try to address rapidly deteriorating portfolios.

This has been compounded by the fact that many collections managers are, understandably, unwilling to take the risk of making widespread changes to previously successful collections strategies for fear of further losses. Instead, many focus on trying to increase throughput by making operational changes only; ramping up staffing resource, deploying new dialer technology or resorting to earlier debt sale and higher write-offs.

But now, more than ever, collections success depends on the ability of organisations to ensure that at any given time, the most optimum strategy for each

debtor is being applied. The challenge in such turbulent times is determining that strategy.

The key is to develop test and learn methodologies that enable new strategies or treatment paths to be tested in real time with no impact to ongoing collections activity. This allows any downside risk of change to be minimised whilst allowing for the upside benefits to be determined using factual evidence.

Champion - challenger is an evolutionary process aimed at continually trying to improve upon the current procedures and proactively addressing an ever-changing collections world. In essence, it formalises the process of answering the 'what if' questions collections professionals ask themselves on a regular basis.

What is Champion - Challenger testing?

Champion - challenger is terminology used to describe the way in which the existing collections strategy, known as the champion, is routinely tested against an alternative approach known as the challenger. To ensure accuracy, the challenger should be tested in a live environment but controlled to avoid financial loss. Thus the challenger is developed and designed using recent customer information and implemented on a small, statistically robust sample with the results closely monitored.

If the challenger strategy is shown to outperform the existing or champion strategy, the challenger strategy can then be rolled out to a much larger proportion of the portfolio for further validation, or may even become the next 'champion' strategy on the majority of the portfolio.

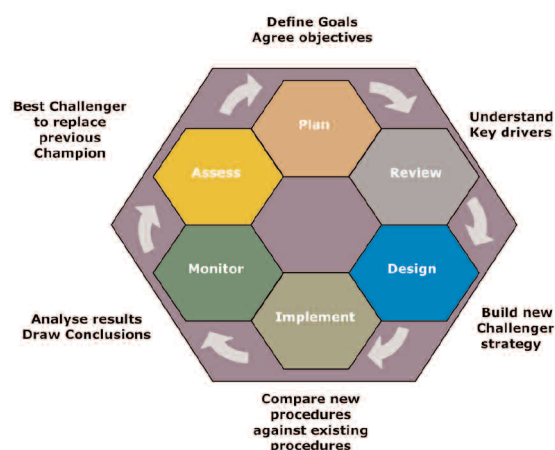
It is equally important that the successful new strategy be deployed quickly so as to maximise benefits, whilst allowing for the design and implementation of the next challenger in line.

This constant search for improvement in process is critical in the current deteriorating environment, where a borrower's circumstance may change significantly, causing them to react and behave differently to varying contact strategies. Adapting strategies regularly also prevents debtors from "learning" the standard collection process and avoiding timely settlement.

The six key considerations for Champion - Challenger testing

In order to successfully develop a robust development process there are several separate stages that need to be addressed:

1. Planning which includes selection of the target process, documenting the expected financial benefits and operational considerations of its introduction.
2. Review the strategies to be challenged and explore current weaknesses
3. Design the challenger strategy and select the sample size and risk level
4. Implement the champion/challenger test
5. Monitor metrics and compare challenger group to control group
6. Assessment of results and promotion of challenger if appropriate



1. Planning

The first step in any Champion/Challenger process is to decide on the current strategy, procedure or work practice that will be challenged.

Clear objectives for the challenger strategy then need to be developed and agreed prior to the design and implementation phases. These objectives should articulate the expected financial and operational improvements that should result from any changes. Part of the process would also aim to plan the size of the test, how long it should run for and how success will be measured. Insufficient focus on this stage can lead to a resistance to change within the organisation. Objectives should also be clearly communicated.

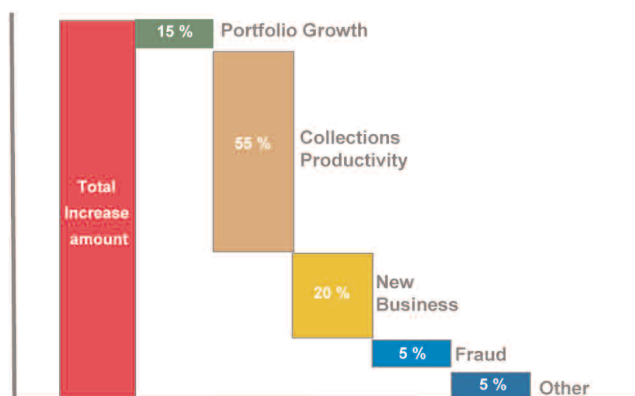
2. Review

An essential step, but one often overlooked, is the need to identify weaknesses in the existing system, process and procedures that may be addressed in the challenger strategy design.

Collections processes are normally complex with multiple variables. By focusing on some key aspects it is often easier to assess the impact of the changes rather than trying to tackle the entire collections process. For example, the challenger process under consideration might be the early contact schedule for a medium risk debtor. Reviewing all the elements in detail such as timing, tone and frequency of mail correspondence, timing and tone of first telephone call, relative experience of the agent, in conjunction with collection metrics, may highlight some unexpected flaws in the existing strategy.

This review of specific current collection working practices and metrics can also identify not only issues that contribute to an increased delinquency within the collections environment, but may extend to other parts of the credit cycle.

A recent study by Experian identified that an increase in delinquency had several causes:



The review stage therefore can identify specific issues that need to be addressed within a new collections challenger, as well as identifying contributing influences that may only be addressed further up-stream of collections.

3. Design

The design phase of the Champion/Challenger process incorporates the key learning from the review stage and balances this with the risk appetite of the business. Test accuracy, risk and chance of success can be optimised by considering the following:

- **Clearly define challenger parameters**

The parameters will depend on the specific area or process under review. The

greater the level of changes, the greater the likely risk to the existing volume of debt being collected through customer inaction or a drop in staff productivity. Examples include:

- *Refining segmentation criterion*: such as number of missed payments, balance, risk scores or triggers from external bureaux
- *Determine appropriate actions & timing*: changing type, timing, tone or frequency of communication and/or when a debt is passed to a third party or sold.

- **Identify exclusions**

Identify the special groups that will not be subject to testing but are run through administrative functions. Examples would include bankrupt, deceased, fraud etc. Other groups may include those that need a heavy manual assessment to solve administrative issues or to allocate to appropriate special treatment. Examples here include first payment defaults and over-limit accounts within first month.

- **Determine sample size**

When considering how to measure the success of a test it is common to compare the test to an existing process hold-out sample (champion). The best way to achieve an unbiased design and the most valid results is to assign a random number that is used for test purposes to an account or customer. These random numbers then allow the business to segment the account / customer base into equal and random groups. The business should then determine the size of the challenger test strategy to be deployed, noting that the test group size will depend on the issue being tested.

Since the challenger is to be compared to the established procedures the key measure is knowing how many different treatments are estimated to take place between the champion and challenger groups. The comparison between the two approaches is only valid where actions are markedly different. Typically the size of the test group can vary from 5% through to 25%.

It is important that accounts chosen for the champion challenger exercise have not been used in any other recent challenger test. Their recent exposure to variations in collections process will not make them a true representative sample of the debtor database. An ongoing record should therefore be kept of all challenger participants.

- **Strategy Simulation / What If Analysis**

Whilst the overall objective of Champion / Challenger testing is to test proposed strategies in a controlled environment, it is crucial that the Collections Manager ensures that a proposed challenger strategy will not adversely impact the portfolio, either operationally or financially. Ideally, an understanding of the expected results of the proposed Challenger is assessed by undertaking a simulation exercise. This strategy deployment simulation is often referred to as 'What If' analysis.

What If analysis involves running the strategy against a historical file of accounts / customers in an offline environment. Distributions of volumes and related financial and risk measures of accounts falling into each action component of the strategy can then be obtained.

Analysis of these simulation results will allow the managers to gain a detailed insight into the potential impact of the implementation of the new strategy. Examples could include:

- What volumes of automated letters and / or telephone calls will be generated as a result of the implementation of the strategy? Operational planning can then be undertaken to ensure that resources are available to deal with collection calls as required.

- If the new strategy was likely to result in an increase in debt outsourced for collection, what would be the cost impact of the commission to be paid and the operational impact of increased agency management time against the lift in monies collected?

A simulation is not a substitute for a Champion/Challenger test in a live environment, but when the number of variables is high and the risk to existing collections performance is significant, an offline analysis can improve operational response and provide a more confident prediction of challenger cost/benefits.

Consulting with collections software professionals who have done similar Champion/Challenger tests elsewhere is also pertinent at this stage. They can use their experience to assist with mapping out a challenger design, advise on the selection of control and sample groups and accurately assess risk levels for each type of action under consideration. Reconfiguration of collections software modules to support dual and simultaneous procedures will also be highly beneficial.

4. Implementation

The implementation of a test should not disrupt business as usual and should be implemented into the operational environment as seamlessly as possible. Under ideal conditions the new processes will be building onto existing methods so that additional training or testing is not necessary.

Indeed, many challenger activities may be fairly independent of direct collector involvement such as the automatic issuing of letters within a new timeframe.

However, where activities involve a manual review or phone contact with a 'harder' approach for example, there is a risk that staff bypass the challenger processes and continue to work as usual. Care must therefore be taken to communicate the new strategy and/or introduce new work practices so that all relevant staff are engaged and committed ahead of challenger introduction.

It is also important that the testing timeframe is understood across the wider organisation and expectations managed accordingly.

Typically the collections testing period will range between 4 and 6 months and will be determined by the type of strategy being implemented and the results generated. This is due to the fact that when a new collections strategy is implemented it will typically take a whole month to be applied to the whole portfolio, assuming that different payment days occur. The test then runs for three months, typically. This would allow new collection cases to work their way through to default state in early collections, or cases to run through the late collections process through to write-off & agency allocation elsewhere.

5. Monitoring of Challenger Strategies

Close monitoring of the Challenger will give an instant impact as to its performance against the Champion and ensure that no unexpected impact of the test is being felt and significantly degrading collections performance. However, new measures may receive different reactions over the time of a test and staff familiarisation or acceptance issues may skew initial data results. Knee jerk reactions should therefore be avoided.

Performance measurements should remain consistent for the lifetime of the test, relate directly to the objectives of the challenger strategy and encompass ongoing quantifiable financial results, as well as operational metrics.

Strategic

- 1st Payment Delinquency (No, value and %)
- 2nd Payment Delinquency (No, value and %)
- 3rd Payment Delinquency (No, value and %)
- 1st to 2nd to 3rd delinquency roll rates
- Provision rates
- Write-off rates

Operational

- Number of cases worked
- % of promises kept v's promises made
- Right party contact rate

The ability to carry out time series analysis of the respective performance of the Challenger strategy's performance against the Champion is also required. Time series analysis allows risk managers to better quantify the performance of strategies, so that seasonal effects that may misrepresent the strategies if a single month's performance is viewed in isolation can be overcome.

6. Assessment

Finally, on the basis of the initial agreed performance criteria alone, the collections manager must decide whether it is advantageous in promoting the Challenger test to become the main Champion strategy on the majority of cases.

If no incremental benefit or too small a benefit was established, the sample can be easily rolled back in to the existing Champion Strategy.

If, however, it is determined that the Challenger strategy has achieved its objectives and has outperformed the champion strategy, the Challenger may then be 'promoted' as the new Champion. The new strategy would be then rolled out to the remainder of the portfolio so as to maximise returns to the business. The next generation of strategy design and Champion / Challenger testing can then commence. It is the iterative nature of this process that leads to the constant improvement in collections efficiency.

Case study

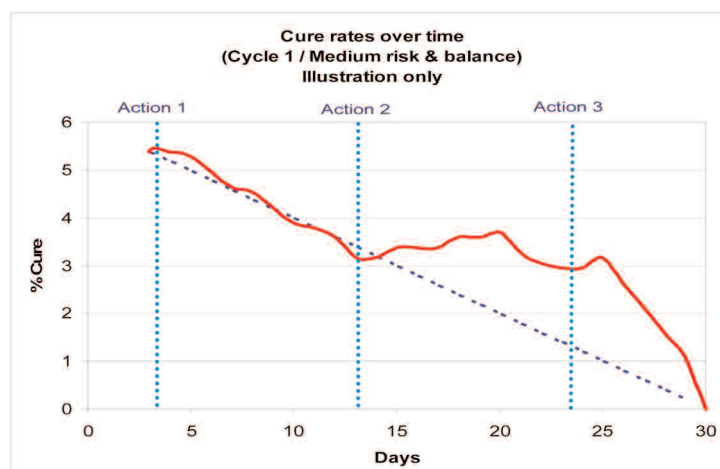
The benefits of a focussed collections business review can be significant. In this case study, a large retail bank that had been using decision engine technology for several years (Probe and Strategy Management) reviewed their collections process and identified that re-engineering their action and timings may be beneficial. A Challenger therefore was developed to segment their base on a more appropriate manner but also to refocus the actions and timings to maximise customer impact. The business review looked at each step throughout the strategy and examined whether actions being taken were effective. The initial review compared against previous experience and the amendments to actions taken with a view toward more automation as well as improvement in payments received.

The overall results led to improvements throughout the delinquency cycle.

	Roll rate comparisons		
	Champion	Challenger	Variance
Cycle 1	22	18	-18%
Cycle 2	43	37	-14%
Cycle 3	63	57	-10%

As an illustration the diagram below represents a single homogenous group of customers and their cure rates throughout the cycle, examined in line with the actions taken.

The observed fall off in cure rates between day 3 and 13 was typical for self-cure rates observed on medium risk customers. In view of this, the first action taken on day 3 had little impact on the customer's propensity to respond. The second action did have a significant and prolonged impact on the cure rate, whilst the third did show some impact but was too near the month end to sustain prolonged impact. The actions were reviewed with action 1 being removed, action 2 moved forward in the sequence to around day 8 and the third action being moved to day 20. The changes in the scenario led to advanced cash flow, fewer actions and an overall improvement in cure rate.



The collections status quo is no longer acceptable

As many countries slide into their first recession since the early 90s, growing numbers of consumers are experiencing unemployment and restricted access to credit for the first time. Payment behaviour will be unpredictable and highly likely to change as conditions get worse.

The collections status quo is no longer acceptable. For credit grantors, the need to establish a culture of continuous collections improvement has never been more necessary.

Modern collections systems are already providing many organizations with more sophisticated default management capabilities such as highly granular segmentation, individual collection strategies and better agency management.

The inclusion of a Champion – Challenger module and its powerful test and learn techniques will improve a collection team's performance and agility further still. At very little cost and risk, new strategies that more accurately reflect the changing customer landscape can be trialed in a controlled manner but with the advantage of using real data from real customers. The subsequent rapid replacement of old strategies by the new successful challengers will accelerate debtor rehabilitation and/ or mitigate losses by writing off un-collectable debt sooner.

The benefits are tangible and significant; reduced cost to collect, improved cash flow and reduced bad debt provision which all contribute to better profitability, an imperative of every business.

All companies, and lenders in particular, may feel powerless to control rising defaults in the face of a deepening recession. But by building a collections organisation that expects continuous improvement and by leveraging the technology that supports it, they can certainly lessen its impact on their bottom line.

720 Waterside Drive
Aztec West
Almondsbury
Bristol, BS32 4UD, UK
Tel: +44 (0)1454 892000
Fax: +44 (0)1454 892030

Email: tallyman.info@experian.com
Website: www.experian-da.com/tallyman

