QUALCO

E-Guide

Analytics & Automation: Implementing Best Practice in Debt Recovery

BEST PRACTICES

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INTRODUCTION

"CREDIT APPROVAL AND DEBT COLLECTION ARE INTERLINKED. CLOSE COLLABORATION BETWEEN THE TWO IS NEEDED FOR LENDING TO GROW IN A RESPONSIBLE AND SUSTAINABLE MANNER."

A decade on from the onset of the financial crisis, the lending landscape has fundamentally altered. While non-performing loan (NPL) ratios remain high in countries such as Greece, Portugal, Italy and Ireland, efforts have been made to reduce their levels across the board. Lenders have been forced to change their ways - undergoing strict assessment and regulation around capital requirements and the treatment of customers in debt.

Having experienced the consequences of irresponsible lending and inadequate pre-emptive debt management, the industry has reacted by being much more restrictive around loan origination. Banks and other lenders have limiting lending by elevating their thresholds for acceptance and demanding more collateral.

At the other end of the cycle, the market has opened up, with originating lenders making it easier to carve out debt to buyers, and leveraging the services offered by intermediaries such as master servicers and panel managers. According to PwC, in the first half of 2018 €40bn of portfolio transactions were completed in Europe, with a further €50bn in the pipeline.

While these front and back-end reactions to financial upheaval have been necessary, qualitative changes to the way credit is approved or managed in its early stages are also needed and must continue if the market is to grow again.

In some locations doing so will require a re-think of the connection between collections and lending. Traditionally, the credit approval and debt collection sides of lending businesses have been separate silos within the organisation. The financial crisis and its fall-out has dramatically demonstrated that the two are closely interlinked. In countries that have not yet connected credit and collections, close collaboration will be necessary for lending to grow in a responsible, sustainable manner.

Fortunately, time has not stood still when it comes to innovation in analytics and the last decade has brought resounding change. It is now possible to use data in ways that were previously only dreamed of. The time is right for lenders to deploy new techniques that enhance effectiveness and ensure fair and optimum outcomes for those in debt.

DATA: CLEANER,

BETTER & MORE USABLE

Data sophistication is increasing, with ever-larger quantities of data being amassed by organisations and legacy systems increasingly brought into line with the latest technology.

The data produced by modern systems are in cleaner, more usable form than in the past. Stricter regulatory requirements have also forced data to be encoded in a more formal, unambiguous manner. Modern technology has kept pace and can use this information for multiple purposes. It is no longer necessary to split data for analytics, regulatory reporting and day-to-day operational reporting into separate streams – they can all be based on a single version of the truth regarding the portfolio's behaviour.

Having the right data on hand means collections teams have the best chance of identifying customers who are most likely to make repayments. Isolating cases that need special treatment such as those affected by bankruptcy, deceased parties or litigation is far easier with accurate, up-to-date data.

Historical information is used to give a more complete picture of customer circumstances. Layering this information into one database puts lenders at an advantage, giving confidence that the information is consistent and evolving in line with the debt lifecycle.

Managing all data through a single interface can cut down on time and effort. It is also likely to lead to improved internal communications, with better sharing of information that should ultimately boost collection rates.

ANALYTICS – FROM PREDICTIVE TO PRESCRIPTIVE MODELS

It has long been known that applying the latest analytical techniques to your database can give you a more focused collection strategy, with the ability to target resources towards those customers that have the highest probability of making repayments.

Likewise, segmenting your data can enable you to make instant efficiency gains, as you should be able to get more out of the same level of resources, or in many cases, even a lower level of investment.

However, technology can now do cleverer things with the data amassed. Collections is evolving from a largely manual process supplemented by data, to one that is governed by data and analytics and can be increasingly automated.

In both descriptive analytics and predictive modelling, technology can now offer more sophisticated techniques that need less manual effort to yield interpretable results. Analysts no longer need to focus on herding the data through the systems; they can concentrate on identifying the causal processes behind the findings pinpointed by automated analytics. This is demonstrated by the more sophisticated credit portfolio valuation processes now on offer, detailed in our guide to **Credit Portfolio Valuation**.

That means technology now has the capability to "productise" analytics: to package, automate and apply common best practices to all aspects of the analytics workflow. This allows organisations to use analytics for a much wider range of problems – from day-to-day operational ones all the way to large-scale, long-term strategic decision-making.

In the decade since the financial crisis forced lenders to rethink their approach, analytics have become far more widely available. This is helping to drive a push to operationalise them by moving from descriptive and predictive analytics to prescriptive analytics.

Essentially, prescriptive analytics means automated decision-making (with appropriate human controls in place). This technology in its infancy, but we expect significant developments over the next couple of years.

THE MODELS CHANGING THE FACE OF COLLECTIONS

A uniform, automated approach to analytics means that they can be applied to any business problem as long as: suitable data is being collected – both to build the analytics (models, reports etc.) and to quantify the impact of their adoption; the process being optimised is clearly defined and changes to it are linked to the results of the analysis; and a path exists to feed analytics results back into production processes for use.

These model types are already changing the face of collections. Those being used by the biggest servicers in the market include:

Predictive models estimating customer response to letters. These are used to minimise mailing costs and expedite treatment or investigate alternative communication channels.

Predictive models quantifying a customer's probability to accept, and then honour, payment arrangements with specific terms. These can be used to optimise the solution offered, maximise the cash collected and eventually maximise the number of customers rehabilitated.

Combined with descriptive analytics on effort allocation (such as call attempts), these will pinpoint portfolio segments that are under-represented in our treatment or are being offered the wrong solution, and help refocus effort on more productive segments and/or offers.

Predictive models estimating the best time to call a customer and the length of time to keep calling before switching to a different approach (such as outsourcing or skip tracing). These can drive efficiency by maximising the productive use of a call centre.

A combination of predictive and process-driven modelling can be used to price portfolios more consistently, accurately and with less manual effort. Combined with a productised approach to analytics, this process can be continued into the portfolio's treatment cycle to obtain continuous updates on is value, both as a whole and for any selected segment.

Regulatory, management and investor reporting: traditionally taking significant amounts of effort both to produce and to reconcile, report books can now be set up once and produced automatically, with reconciliation (with respect to other reports, analyses, forecasts) guaranteed by the analytics infrastructure. This ensures there is a single version of the truth for all analyses.

The use of analytical tools enables organisations to make constant improvements in performance, giving a multi-dimensional and transparent view of collections results and determining where to focus resources to drive improvement.

AUTOMATION AND ANALYTICS: THE PERFECT PARTNERSHIP

In collections, as in any other sector using analytics, automation drives more widespread use of predictive analytics. It results in greater consistency and the elimination of "data wrangling" efforts that do not add value. Instead, analysts can focus on operationalisation – adopting the results of analytics to drive better business decisions.

The push towards "prescriptive analytics" is now percolating down from strategic decision-making to day-to-day operational decisions. The holy grail of analytics is to fully automate and continuously optimise these as well: providing systems that automatically tweak everyday decisions taken on a per-customer basis.

In the collections space, this would include decisions such as optimising call times and frequencies, outsourcing, and the triggering of legal action, with clearly-defined objectives. Using automation to decide who to call and collect from should substantially increase productivity, at the same time as giving collectors all the data they require through a user-friendly interface.

Key to this progression is encoding not just the actions taken and their results, but also the actions allowed to be taken at any particular point in a customer's journey. These business rules and constraints are currently only partly encoded in operations systems.

Of course, analytics – and predictive modelling in particular – is not without its dangers: model bias and fairness is an important concern.

Our view is that preventing model bias due to past behaviour – e.g. making predictions that favour particular characteristics just because this was common practice in the past – is a technical issue and should be solved by technology, but ensuring fairness is a more general, societal issue that will need co-operation between technology, business and regulation.

SEGMENTATION:
A WORD OF CAUTION

Segmentation is both a blessing and a curse. While it helps business stakeholders make sense of their portfolios, it also often prevents the application of alternative strategies to specific segments, leading to a dearth of data for the use of analytics.

One current priority in analytics is model "understandability": making the predictive models that drive decisions easier to understand and accept, so that they can be adopted as segmentation mechanisms. This means reliance on traditional segmentation driven by experience or ad hoc descriptive analyses can be reduced.

To obtain the full benefit of analytics, this segmentation needs to be combined with business processes that allow for experimentation if we are to generate data for a wider set of approaches on wider portfolio subsets. There also needs to be quantifiable A/B (or "champion-challenger") comparative testing of new processes.

MACHINE LEARNING:
BEYOND THE HYPE

Whether it's called predictive analytics, machine learning or artificial intelligence, the hype behind this collection of techniques is slowly giving way to actionable results. It's not so much a matter of new techniques coming along – in most cases, the algorithms needed to make sense of collections portfolio behaviour have been around for a long time. It's more a matter of amassing experience and technological capabilities to productise and automate these techniques so that their capabilities can be put into practice.

As the world is coming to terms with, and increasingly adopting, machine learning, it's also becoming more aware of its limitations and dangers, and this awareness is leading to a drive to circumscribe their use: predictive model fairness, usage tracking and handing some control to the data subjects are now serious issues that need to be faced in order to meet regulatory requirements without losing the benefits machine learning offers.

Analytics systems will need to come up with transparent, automated ways to deal with such constraints. The collections industry is well-versed in dealing with regulation and treating customers fairly and these skills will be needed.

On the positive side, machine learning and related analytics techniques can help in this endeavour. They can be proactive in identifying innovative ways to deal with vulnerable customers as well as reactive – proscribing actions that treat such customers unfairly. Regulation is obviously focusing on the latter, but the benefit to society from the former is just as important. At QUALCO we have these concerns foremost when designing our technology and products.
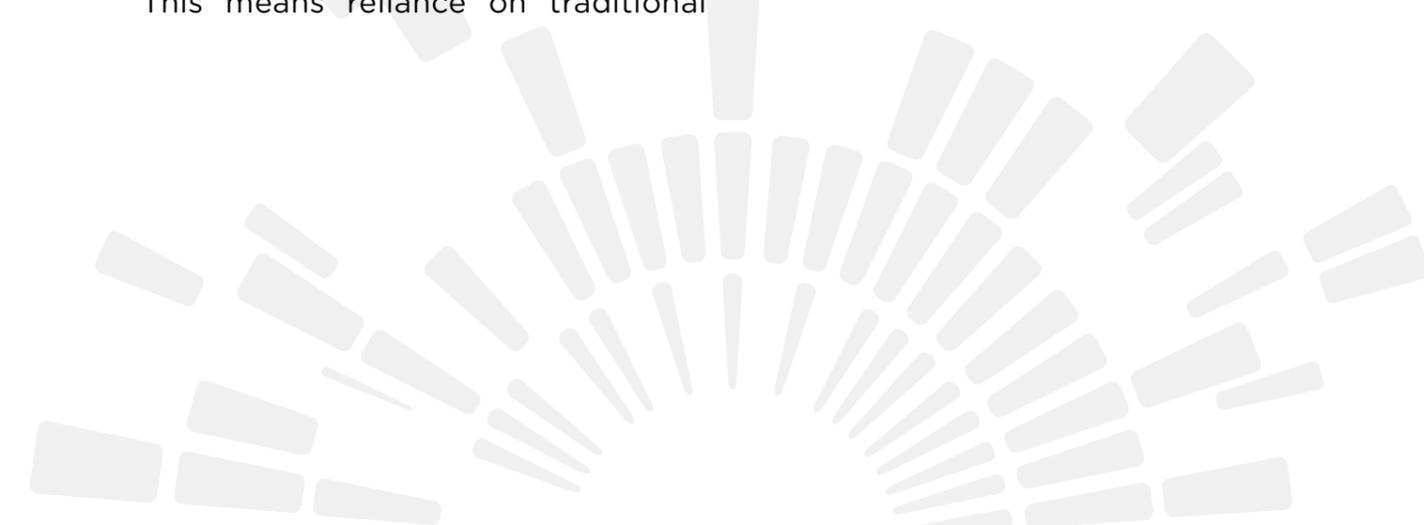
CONCLUSION: A NEW STRATEGY FOR AN AUTOMATED WORLD

Handling non-performing loans in a timely and effective manner is key to lender strategies in the post-financial crisis landscape, both from an economic and regulatory perspective.

Failure to adequately reduce NPLs will limit organisations' capacity to lend and result in increased regulatory pressure. Fortunately, today's higher standards align with developments in analytics and automation that allow teams to make the best use of their resources and identify optimum strategies for accounts and customers.

Lenders and collections teams have traditionally bolted analytical tools onto their main strategies, using them to test ideas, segment accounts and validate approaches. We believe operations and analytics should be seen as two parallel, "horizontal" streams that interact to benefit each other throughout the credit lifecycle, rather than viewing analytics as a "vertical" tool to be applied to specific problems in isolation.

Automation has clear direct benefits in operational efficiency: single agent views, guide scripts and dialler integration can significantly increase operator efficiency and lower training costs. Firms can achieve customer and accounts-based portfolio segmentation, automating customer contact via SMS, post and email. Back-office functions such as customer requests, direct debits and legal action support can all be integrated within the same architecture.

Rather than spending time on administrative tasks, collectors have more time to interact with customers. Analytical techniques mean they are more likely to be targeting accounts with a high propensity to pay.

However, as well as operational benefits, widening the scope of analytics and the capacity to operationalise them is also hugely valuable.

We must consider the impact of every new capability in terms of both operations and analytics. This is true for both technology and business operations. When adding new functionality to systems, every new operational capability should be accompanied by facilities to both collect appropriate data for analytics and receive analytics feedback to optimise the process. In business operations, changes should be driven by analytics and result in measurable benefits, closing a continuous optimisation loop.

Using analytics and automation will only help to reduce bad debt, delinquency and attrition. Taking a strategic approach to customer segmentation and collection can identify the root cause of delinquent behaviour and allow firms to take effective steps to resolve these problems earlier, whether in-house on an outsourced basis.

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POWERFUL DECISION MAKING

QUALCO Data-Driven Decisions Engine (D³E) analytics automation crunches your data daily, bringing predictive insights to daily operational processes, powering decision making.

By tidying your analytics workflow and identifying optimal predictive models, QUALCO D³E transforms raw portfolio data into powerful intelligence, insight and granular-level predictions. Adjusting to changing institution and market needs is easy.

For more information and to request a free demo, **get in touch**.

For more information visit:

QUALCO Data-Driven Decisions Engine

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QUALCO is an expert provider with more than 15 years' proven experience in enabling clients to take control of customer data across the entire credit lifecycle. Whether you are looking to modernise your internal collections platform, delve deep into the analytics of your entire debt portfolio to drive future strategy, or harness the power of external service providers, QUALCO has a solution to help you drive efficiencies and streamline your collections and recoveries operations.

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