



Using behavioural sciences to improve government debt collection

Governments have a significant opportunity to substantially improve outcomes, increase revenue collected and reduce non-compliance by employing behavioural science techniques and predictive modeling to help citizens make better decisions.

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INTRODUCTION

Every day, governments send tens of thousands of notices, reminders and legal warnings to citizens and businesses concerning unpaid taxes and other debts. Yet much of this correspondence is having no discernable impact. Even when agencies follow up with strongly worded messages, debts remain unpaid and debtors do not reply to explain why they have not paid, nor do they respond to seek help.

Why are so many people ignoring these important messages that, logically, are in their own best interest to address? The emerging use of behavioural sciences is starting to reveal answers to this age-old question.

Standard economic theory suggests that people make logical decisions based on available information. Unfortunately, this is not always the case since people are influenced by many “unconscious” factors that do not drive rational behaviour. While people do not always make rational choices, however, their choices can be predicted by studying human behaviour. This field of study is called behavioural science.

Understanding how people are likely to react to different messages and incentives can help governments develop more effective communications for debt collection (e.g. letters, notices, SMS texts, e-mails and phone scripts). Often, very small changes to how choices are presented can have a profound impact on how people respond. Such improvements can create better outcomes for both government and citizens, at little to no additional cost. This paper reviews the kinds of insights that can be leveraged from behavioural science to improve collection results.

WHAT IS BEHAVIOURAL SCIENCES?

Behavioural science¹, the scientific study of human behaviour, suggests that the way we behave is driven by two systems:

1. A **conscious** system that is reflective and rational.
2. An **unconscious**, or automatic, system driven by the environment. This unconscious system helps people make instant decisions based upon context, but without being aware of the reasons.

Traditional approaches to debt collection have assumed that the more information debtors receive, the more likely they are to pay (if they are able), and that clear explanations should be sufficient to prompt debtors to behave rationally. In fact, however, the unconscious system has been found to be much more influential than previously thought. As a result, when it comes to something as highly emotional as parting with one’s own money, it can no longer be assumed that supplying facts and rational arguments alone will persuade people to resolve their liabilities. Instead, collection strategies must be designed much more carefully to reflect how people respond based on real-life rather than theory.

¹ For more information on Behavioural Sciences, please see the numerous references provided at the end of this paper.

IS IT LEGITIMATE TO INFLUENCE CITIZENS USING BEHAVIOURAL SCIENCE?

Some may ask whether using science to influence behaviours could lead to a form of “nanny state” where government assumes it knows how to make better choices for citizens than the citizens themselves. Economists Richard Thaler and Carl Sunstein argue that rather than leaving people free to make harmful choices, it is better to try to frame the choices in ways that will “nudge” them into decisions that will be good for, and not harmful to, them.²

Example: UK organ donor registration

Here is how the “nudge” concept was used by the United Kingdom government to improve organ donor registration. While 9 out of 10 UK citizens support organ donation after death, only 1 in 3 have registered to be donors. In a 2013 experiment, the UK government tested a number of organ donor registration pleas on a highly visited webpage for driver’s license applications. The best-performing message asked this question:

“If you needed an organ transplant, would you have one? If so please help others.”

The results were striking. If the above message had been used to reach the entire population for the experiment, it would have generated approximately 96,000 additional donor registrations each year. That would have generated a 10% increase from including just two new sentences on the page. Not surprisingly, this message will now appear alongside every vehicle and driver’s license application, and it is estimated it will save hundreds of lives each year.

APPLYING BEHAVIOURAL INSIGHTS TO GOVERNMENT COLLECTIONS

The organ donation example is a good illustration of a message that was helpful to society without harming the individuals whose behaviour was influenced. But does the same apply to persuading people to pay their taxes and other obligations?

The answer is an emphatic “Yes”! Nudging more people to pay government debts on time helps citizens and government alike. Citizens are spared additional financial costs in the form of interest and penalties. Government costs are reduced when more citizens are steered toward making the right choices.

Alternatives that force compliance through penalties or intrusive legal action (e.g. distraint and other forms of seizure, and mandatory deductions from wages) are inherently undesirable and more costly. As a result, a strong case can be made for the smart and ethical use of behavioural science techniques in government collections. In fact, such techniques are strongly preferable to compulsion and enforcement by legal means. Ultimately, however, individual governments must decide when, where and how to use behavioural insights.

Following are examples of behavioural insights that can be used to improve government collections:

- **People are heavily influenced by who is communicating with them.** Many public service messages have greater impact when delivered by a neutral authority figure. Similarly, collection correspondence can be more effective when signed by a person of authority.
- **People put undue weight on recency.** People mentally “discount” the value (or cost) of money in the future. For example, most people would prefer to get €10 now to getting €15 a year from now, even though a 50 percent rate of return logically is the better deal. In the same vein, a small penalty that is charged immediately after a payment default is far more likely to influence a debtor than the threat of a much larger penalty in 12 months.

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² Nudge—Improving Decisions about Health, Wealth and Happiness

- **Most people will do what others do.** People often convince themselves to do things they feel others are likely to approve. That means if they perceive there is a high percentage of debt compliance, telling them they are among a small minority is a potent message. The smaller that percentage, the more powerful that message becomes. Conversely, sharing non-compliance statistics can risk reinforcing and encouraging such behaviour.
- **People are strongly influenced by others “like them.”** How peers and neighbours behave matters to people. Messages that can be targeted such as, “95% of people in your city (or street or profession) have already paid their taxes” can be highly effective.
- **Personal messages are more effective.** In a recent trial involving SMS text messages sent to warn people of an imminent bailiff action, using the message recipient’s name at the start of the message increased response rates, as did including the sender’s name at the end.
- **People are inclined to follow pre-set options.** Providing default options that people can perform on “auto-pilot” can also be very effective. For example, if the desired result is to secure an electronic payment after an online return is filed, a natural continuation of the process should be moving the filer to an electronic payment field. As another example, an automatic withdrawal payment option for the automatic renewal of an annual license can be provided upfront. Payment methods can also be pre-set for those who wish to pay debt in an installment arrangement. All of these approaches focus on letting people opt-out rather than relying on them to opt-in.
- **People are drawn to things that are novel and relevant.** Since people react to what they notice, key messages in letters must be both visible and easily understood. People may not read everything in a letter, and they may not read anything in a letter that looks like a previous letter. Small, low-cost adjustments to words and images used can generate significant differences in response rates. For example, using emoticons (e.g. smiley faces) has proven to support positive actions. Different channels also should be tested to determine what works best and for whom. In a recent experiment, SMS text messages were found, for a particular group, to be 5 times more effective in generating contacts than were letters.
- **People tend to behave consistently with their public promises.** When asked in advance to make an explicit or oral commitment, people are much more likely to comply with their promises. For example, confirming the truthfulness of a statement before giving it (e.g. in a courtroom) generates more correct information than when such commitments are requested after the fact. Similarly, when setting up a payment arrangement for debt arrears, asking people to confirm their promise through a signed payment agreement increases the likelihood they will make the promised payments to conclusion. Agencies that allow people to self-serve such arrangements online or by phone have achieved lower default rates due to the higher level of personal commitment required.
- **Most people want to do the right thing.** As with the organ donor example, people generally want to make decisions that make them feel better about themselves, and are consistent with their beliefs and values. Government should consider reminding tax debtors that taxes fund schools and other programmes for the public good. Various studies show that such messages become even more effective when localised to “programmes funded in your city or town.” In one study, people with large debts were much more influenced by such messages than people with small debts.

WHAT CAPABILITIES DO AGENCIES NEED TO EXPLOIT BEHAVIOURAL INSIGHTS?

Behavioural science techniques increasingly are being used by a variety of agencies to significantly improve response rates at very little additional cost. As more is learned about what works, and what does not, the value of these insights will continue to increase. Yet, this is not a “one size fits all” science. Regional differences will necessitate different approaches for different jurisdictions and populations.

Key success factors fall into two broad categories:

- 1. Gaining insights:** Agencies need to test the effectiveness of current strategies and experiment with new approaches, using statistically valid trials to determine what works best and for whom.
- 2. Deploying insights:** Insights alone are not enough. Agencies need to use their new knowledge to design and build predictive models based upon what are likely to be the optimum strategies, deploy those strategies in an automated and systematic approach, continually evaluate them, and modify them quickly and flexibly where necessary.

The essence of good debt management practice is determining the likelihood a debtor will pay voluntarily within a given amount of time, and then using that knowledge to determine the treatment that will produce the best result at the lowest cost. This discipline is called predictive modeling. It is predictive because it identifies the particular interventions that are statistically most likely to produce the desired outcome. Such models should be continuously reviewed for improvement.

THE 5R COLLECTION STRATEGY

Organisations using the power of predictive modeling are able to place:

- The **right** account
- With the **right** resources
- At the **right** time
- Using the **right** tools
- To achieve the **right** results.

PREDICTIVE MODELING BEST PRACTICES

- **Deploy**—simultaneously deploy and test multiple approaches
- **Test**—develop and test predictive models that enable them to “test and learn” using randomised control trials and other methodologies
- **Simulate**—assess the likely impact of new models before they go live, accelerating their testing and implementation timeframes
- **Operationalise**—move strategies into production by automating correspondence key processes and actions, allowing collectors to focus on cases that truly need human intervention
- **Change continually**—rapidly evolve their strategies.



Optimal interventions will depend upon a range of considerations, such as the debtor's previous behaviour, the size and age of the debt and the risk of default. They will also involve deploying the right behavioural messages, using insights from behavioural science to design smart communications of proven effectiveness.

CONCLUSION

Governments have an opportunity to significantly increase revenue collection by employing behavioural science techniques and predictive modeling to help citizens make better decisions. The key is to establish a strong and proactive analytics capability within a "test and learn" environment. Agencies can then develop and maintain fully optimised and highly effective treatment strategies which derive maximum value from a new understanding of how their citizens behave in real life.

HOW CGI CAN HELP

CGI can help agencies mine and analyse their own data, data from other agencies, and data from third-parties, to build high-quality predictive models. We can also help them operationalise behavioural insights by deploying our Strata[®] decision engine. When integrated with CGI's collection case management system for government, CACS[®]-G, or with an existing agency case management system, Strata triggers a collection treatment action based on predictive models. Treatment actions then progress a case along the optimal collection path. Our clients typically have seen increases in overdue collections of 10%-45% from implementing such programmes.

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Ted London is a Vice-President and leader of CGI's Tax, Revenue and Collections Center of Excellence. He manages a team of subject matter experts who focus on providing expertise to clients around the world to enhance their revenue and collection operations. Mr. London is also a recognised subject matter expert with over 18 years of experience in collections, tax administration and audit business processes for government. During this time, Mr. London has worked with more than 25 federal, state and provincial agencies including the U.S. Internal Revenue Service on the management of their collection and tax administration operations. Mr. London has also led many efforts to estimate the level of revenues that will be generated from proposed initiatives, and in turn the measurement of the actual revenue generated from those initiatives. Mr. London has made numerous presentations to major organisations including the Federation of Tax Administrators (FTA), the Organisation for Economic Co-Operation and Development (OECD), the North Eastern States Tax Officials Association (NESTOA), the Southeastern Association of Tax Administrators (SEATA), the National Association of State Comptrollers (NASC), the National Association of State Auditors, Comptrollers and Treasurers (NASACT), and the Government Revenue Collection Association (GRCA).



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Mr. Smith is an Executive Consultant and a member of CGI's Tax, Revenue and Collections Center of Excellence. He is part of a team of senior subject matter experts whose roles are to provide expertise to help clients around the world enhance their revenue and collections operations. Mr. Smith is based in the United Kingdom. Until September 2013, he held a senior leadership role in the UK's national tax agency, HM Revenue & Customs (HMRC). During his career in UK government, he worked extensively with a range of agencies and central departments on all aspects of collections and debt management. He is a recognised expert within the international tax agency community, particularly for his work in developing debt analytics capabilities and in pioneering HMRC's use of behavioural science to improve the effectiveness of its collections strategies. He has worked closely with tax administrations worldwide, as well as with the Intra-European Organisation of Tax Administrations (IOTA) and the Organisation for Economic Co-operation and Development (OECD). In 2012, Mr. Smith was awarded the CBE (Commander of the Most Excellent Order of the British Empire) by the Queen for his services to HMRC. He is a Fellow of the Institute of Credit Management (ICM), Europe's largest credit management organisation.

ABOUT CGI

At CGI, we're in the business of satisfying clients by helping them succeed. Since our founding in 1976, we've operated upon the principles of sharing in clients' challenges and delivering quality services to address them. As the world's fifth largest IT and business process services provider, CGI has a strong base of 68,000+ professionals operating in more than 400 offices worldwide. Through these offices, we offer local partnerships and a balanced blend of global delivery options to ensure clients receive the optimal combination of value and expertise required for their success. We define success by helping our clients achieve superior performance and gain competitive advantage.

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