

The ContactEngine Complete Guide to Better Debt Collection



ContactEngine
A NICE company

Debt is a growing problem for citizens and businesses. As household budgets continue to tighten and credit becomes easier to access through services such as Buy Now Pay Later, more and more people are sinking into debt.

The responsible role of businesses who set out to retrieve debt payments in today's market is not to push their clients to a breaking point. However, debt can't just be written off altogether. Brands need to find a way to present debtors with flexible payment plans, communicated using a channel that they are comfortable using.

We believe brands can only do this through the most intelligent applications of their customer data – deployed through AI. Call centers simply do not have the capacity to offer a personalized service to the thousands or millions of customers their businesses serve.

In this e-book, we will look at how societal attitudes and the meaning of debt is changing. We will analyze what recent legislation changes mean for your business. We will then break down the traditional debt collection user journey and reveal how friction can be removed from each step using ethical, proactive conversational AI.

So, grab a coffee and settle in as we present
The ContactEngine Complete Guide to Better Debt Collection.

- [1. How debtors are changing](#)
- [2. Navigating legislation](#)
- [3. Why the traditional debt customer journey is broken](#)
- [4. Creating a better experience with AI](#)
- [5. Ensuring ethical debt collection with AI](#)
- [6. Conclusion: Create your action plan](#)



1 How debtors are changing

It may not always feel like it, but we are living in a more open, kind, and holistic society since the pandemic. The spirit of pulling together and looking out for each other has manifested in a shift in how we expect our society to work. Take the phrases 'debt forgiveness' and 'loan forgiveness'. These terms barely registered in US Google searches before the pandemic, but have become much more common since 2020¹.

Support for those in need is still far from perfect, but attitudes towards debt are changing. A great example of this is President Joe Biden's plans to forgive up to \$20,000 of student loan debt for those who qualify². Though there are still some legal challenges to resolve, the idea of the US Government spending \$400bn on writing off debt would be unthinkable before 2020.



1. <https://trends.google.com/trends/explore?date=all&geo=US&q=debt%20forgiveness,loan%20forgiveness&hl=en-GB>

2. <https://www.newsweek.com/biden-sent-out-refunds-student-loans-americans-shouldnt-spend-it-1787036>



Part of the reason why we have become more forgiving towards debt, is unfortunately because financial difficulty is a more common problem today. More than a fifth of adults report borrowing more money compared to a year ago³. One in four people started 2023 in debt due to the cost-of-living crisis⁴.

A report by charity StepChange, released in January, discovered 24% of people in debt cite a 'cost of living increase' as the main reason, compared to 9% in January 2022 - a 167% uplift⁵.

As the factors that lead to debt are changing, so too are the demographics of those who find themselves owing money. For collection agencies and departments, understanding these movements are crucial for ensuring operations remain effective.

Here, we reveal the trends in consumer debt and explain how you can ensure your business stays ahead of them.

3. <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/howarefinancialpressuresaffectingpeopleingreatbritain/2023-02-22>
 4. <https://www.credit-connect.co.uk/news/more-than-a-quarter-of-people-expect-to-start-2023-in-debt/>
 5. <https://www.stepchange.org/Portals/0/assets/new/policy/StepChange-client-data-report-January-2023.pdf>

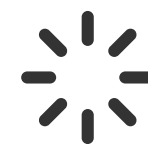
In 2022, 24% of people in debt cite 'cost of living' as the main reason.



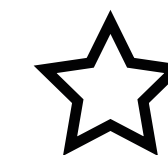
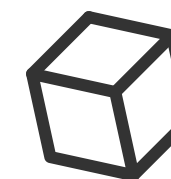
More women in debt

There are two major demographic shifts in debt that firms should be aware of. The first is a rise in the number of women who are seeking help. According to StepChange: “The proportion of women among our new client population has increased substantially, up from 62% in December 2022 to 65% in January 2023.” This figure is also higher than 12 months ago.

The rising cost of living – predominantly affecting food, fuel, and consumables – has a disproportionate impact on families, especially single-parent households. With 90% of single parents being women, it’s little surprise to see more facing financial difficulty⁶.




90% of single parents being women, the rise in cost of living has disproportionate impact.



<https://www.theguardian.com/business/2022/jul/04/half-of-all-children-in-lone-parent-families-are-in-relative-poverty>

Collectors need to adapt their responses for those with dependents. No matter the size of the debt, you are unlikely to be the priority. Payment plans need to ensure children come first. They also need to be communicated with in a way that can be understood around busy family schedules.

Additionally, StepChange has recorded an uplift in those that are in some form of employment – 58% in January 2023. This indicates that for the majority of those in debt, some will at least have income to create payment plans. These people must be given the time and space to take stock.



Collectors need to adapt their responses for those with dependents.



A new generation

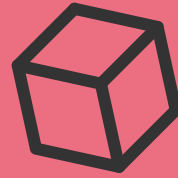
The second demographic shift is the rise in younger adults reporting that they are taking on debt – some for the first time. According to Experian, Generation Z (those born 1997-2013) experienced a 25% jump year on year in average debt balance⁷.

As this generation takes on their first-ever car payments, student loans or even mortgages, these young adults are getting a crash course in credit. However, many feel unequipped to deal with it. Santander recently launched a new campaign for its financial education program – The Numbers Game. The bank references research that two thirds of young people in financial difficulty cite ‘lack of education’⁸ as a reason . Businesses must be able to explain debt and the collections process in simple, clear, and concise language.

Firms that use conversational AI to complement the style and tone of customers will engage best and maximise their chances of recovering money owed quickly.

7. <https://www.experian.com/blogs/ask-experian/research/consumer-debt-study/>

8. <https://www.thesun.co.uk/money/18667050/young-people-debt-financial-education-survey/>



Types of debt

It's not just the demographics of debtors that are changing – the types of debt that they are facing is changing too. In previous decades the main reasons for borrowing were for mortgages or for payments on tangible assets, which could be reclaimed if necessary. Now the proportion of people

with unsecured debts – not based on assets – is increasing. StepChange has recorded rises in the proportion of clients with personal loans, catalogue, and store card debts.

The rise in unsecured debt has been recorded both in the UK, where it has risen steadily since October 2021 as the economy reopened⁹ and in the US where the largest rises were for personal loans (+18%) and credit card balances (+16%)¹⁰.

Those that are stuck in the cycle of using unsecured debts to pay off other unsecured debts need support – not just in paying loans back, but in making sure they do not end up stuck again. Collectors should communicate at the first sign that someone is falling behind on their payments because this will lead to more on-time transfers and a more positive user experience.

9. <https://researchbriefings.files.parliament.uk/documents/CBP-7584/CBP-7584.pdf>

10. <https://www.experian.com/blogs/ask-experian/research/consumer-debt-study/>





How to respond

As the nature of debt changes, so too must the way businesses respond.

We're seeing a shift towards a younger debtor, more likely with unsecured debt and little understanding about financial matters. We're seeing more people who owe money because of external factors, rather than reckless spending. There are also more people struggling financially who are already in work.

For those in charge of collecting debt, this suggests that they need to begin the conversations with people early, to help them understand what will happen if money cannot be repaid. They need to use a range of channels, particularly those favored by Generation Z and Millennials, to engage.

Finally, they need to provide flexibility and communicate with empathy to deliver the best results.



2 Navigating legislation

It's not just the types of debt and the people who are in debt that are changing. Debt legislation has slowly evolved over time, changing the methods and judicial backing that collectors have.

While the extent to which the laws have been in favor of debtors or collectors has flowed depending on occupancy of the White House, The Debt Collection Rule, introduced in 2021, has seen the tide flow the way of consumers more than ever before.

Debt collectors in 2023 have never been more restrained. Before the Debt Collection Rule was introduced, complying with legislation was mostly common sense. Obviously, debt collectors shouldn't threaten people, obviously they shouldn't harass them, and obviously companies should explain how debtors can pay the money back in straightforward terms.

While the Debt Collection Rule added clarity as to what terms like ‘harassment’ means in terms of non-face-to-face communication, it has also set firm red lines that humans could cross by accident or if they have inaccurate records. Breaches of the Debt Collection Rule can result in both the debt collection company and the specific staff member being sued. For collections agency each debt comes with a risk – is a debt worth chasing if it could result in a lawsuit?

The fact consumers are also becoming better protected financially in other areas, suggests that this trend is to continue – and this is certainly a good thing. Overseas, the UK Government is planning to bring the Buy Now Pay Later sector under the eye of its financial watchdog – The Financial Conduct Authority (FCA).

These new measures, which will be debated in parliament by the end of the year, could mean the FCA will penalize companies that fail to conduct adequate credit checks. These penalties could range from fines to outright bans on further lending. In the US, market analysts are similarly predicting increased regulation ¹¹.





The guidance is to move away from ambiguous terms such as “zero cost”.

The Federal Trade Commission has released guidance for BNPL providers, urging them to use clear language and move away from ambiguous terms, such as describing a payment plan as “zero cost”. The advice to “consider the consumer’s understanding, not just the sales conversion” suggests that BNPL brands are encouraged to develop a deeper knowledge of individual customers to ensure they can give them the right information.

This increased regulation is undoubtedly in response to BNPL’s impact on consumer debt. The percentage of users who said they have had to take out a loan to stay on top of their BNPL instalments increased by 900% between 2018 and 2020 ¹². Governments are now planning to introduce layers of protection to ensure consumers are safeguarded.

Debt collectors therefore need to make sure they are protecting themselves by using tools that guarantee compliance. Using proactive AI to communicate ensures all areas of the law is adhered to. For example, The Debt Collection Rule stipulates exactly what information voicemails left by collectors should include. Where human agents may forget these details, AI can be programmed to include all the details every time.

12. <https://themoneycog.com/articles/is-buy-now-pay-later-a-ticking-time-bomb>

A brief timeline of US debt and consumer legislation

1968

The Truth in Lending Act introduced the Annual Percentage Rate calculation mandated for all consumer lenders.

1970

The Fair Credit Reporting Act requires negative items to be removed from credit reports seven years from the date of the first missed payment

1978

The Fair Debt Collection Practices Act becomes effective, outlawing 'deceptive and unfair' practices, including calling at unusual times, threatening violence, harassing debtors, and using obscene language.

2005

The Bankruptcy Abuse Prevention and Consumer Protection Act introduces 'means testing' that makes it more difficult for debtors to file a Chapter 7 Bankruptcy (forgiving most debts), instead requiring them to file a Chapter 13 Bankruptcy, which requires some repayment. It amends the Bankruptcy Reform Act of 1978.

2009

The Credit Card Act gives consumers at least 21 days to pay their bill from the time it is mailed. It also instructs card companies to show how long it will take a consumer to pay off their existing balance if the consumer makes only minimum payments. Retroactive rate increases are banned.

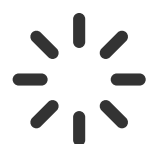
2010

Dodd-Frank creates the Consumer Financial Protection Bureau, tasked with protecting consumers against abuse from credit cards, mortgages and other financial products. By 2017 it had returned almost \$12 billion to 29 million consumers¹³.

2021

The Consumer Financial Protection Bureau's 'Debt Collection Rule' clarifies how debt collectors can communicate. It limits the number of calls to seven times a week, although texts and emails can be sent more frequently. Debtors can also request collectors stop calling their home phones. Social media messages now must be kept private and voicemails must include specific information.

13. <https://www.consumerfinance.gov/about-us/newsroom/prepared-opening-statement-cfpb-director-richard-cordray-house-committee-financial-services/>



3 Why the traditional debt customer journey is broken

Currently the debt collection conversation typically begins with a letter – striking letterhead, serious typeface, firm language. That letter prompts the debtor to get in touch – usually by phone or through your website.

The conversation is already starting negatively. Unless they are a lawyer or member of parliament, it is unlikely that a formal letter is their preferred method of communication. Thirty-seven per cent of people haven't sent a letter in more than five years ¹⁴.

They will likely feel threatened and cornered and forced to do something. What if they can't call during your contact center hours and try your site instead? They will now be greeted by an overly cheery chatbot, ill-equipped to resolve their specific case.

14. <https://www.independent.co.uk/news/world/americas/americans-personal-letter-cbs-survey-b1936752.html>

The use of automated communication tools, such as chatbots, to speak to customers has grown since the pandemic.

One in 4 customer service companies are using AI, with 31% planning to introduce these tools in the next 18 months ¹⁵. The global chatbot market is estimated to grow by 23.9% each year until 2030, reaching a value of \$3.6 billion.

It's easy to see why these tools have been adopted. Simple programs that can respond to frequently asked questions can reduce pressure on contact centers and give customers general answers. Indeed, the top three benefits consumers expect to get from chatbots are a 24-hour service (64%), the ability to get an instant response (55%) and answers to simple questions (55%) ¹⁶.

However, only a third expect chatbots to be able to answer complex questions, or offer 'friendliness and approachability'. This creates a big problem – especially when it comes to debt collection.



15. <https://bloggingwizard.com/chatbot-statistics/>

16. <https://research.aimultiple.com/chatbot-benefits/>

While some debtors will want to rectify a case where they owe money as soon as possible, many will avoid communicating for as long as they can. If you are insisting that they use your chatbots to get in touch, you are relying on them to make the first move and you are adding reasons for them to avoid you. You also run the risk of making them angry.



A study from the American Marketing Association revealed that while ‘non-angry customers’ show a slight preference for anthropomorphized chatbots – popping up with an on-brand greeting – angry customers are much less satisfied with that approach¹⁷.



The damage can be done instantly. According to chatbot firm EBM, one of the biggest contributors to a negative net promoter score can be “the very first moment the customer interacts with the chatbot”¹⁸.

There are few places in your customer contact function where engagement is more important than in debt recovery. If you’re relying on reactive communications from debtors phoning in or coming through your chatbot, then you are likely only adding friction to the process. This causes more stress and reduces your chances of recovering money owed. Instead, proactive AI, deployed on a user’s channel of choice, can increase response rates.


17. <https://www.ama.org/blame-the-bot-anthropomorphism-and-anger-in-customer-chatbot-interactions/>


18. <https://ebm.ai/in-depth-guide-to-improving-your-chatbot-net-promoter-score/>


The traditional debt customer journey


The traditional debt customer journey has plenty of opportunities to fail.


Customer misses a payment.
This may be down to three reasons – they don't know they have to pay; they can't pay, or they don't want to pay.



Customer receives a letter.
Regardless of the reason, the customer receives a letter containing the same blanket response all people who miss payments receive. The letter instructs the debtor to phone the company to set up a payment plan.



Customer receives a phone call from the agent
Manual phone calls are the second most popular way debt collectors reach out, despite them relying on the recipient being free to answer.



Customer ignores letter
If the customer can't pay, doesn't want to pay – or has moved house – the letter could be ignored.



Customer unable to call during business hours
Your customer might be one of the 5-10% of American workers who work nights – or there may be plenty of other reasons why they can't fit a phone call into their busy routines ¹⁹.



Customer doesn't answer
Debtors now have six chances left that week to get in touch with them by phone.


Financial situation can be discussed with a call centre agent and payment plan agreed.


Customer gets in touch with your chatbot
Is your chatbot equipped to help them set up a payment plan that responds to their specific financial situation? If not, angry users will only become angrier.


Customer gets in touch by phone call


Customer answers the call


Miss payment? start again

19. <https://www.bls.gov/careeroutlook/2015/article/night-owls-and-early-birds.htm>

4 Creating a better experience with AI

It's time to give your debt collection journey an update. By using proactive, automated communication, you can speak to customers at the first missed payment and explain their options. You likely know the methods that your customers prefer to use to hear from you, so you can communicate to them in a more seamless way. The day after a missed payment, you can send a message inviting them to fix the issue. If the case goes on longer, you can provide them with different options to pay it back.

Even if later down the line they need a phone call, AI can do most of the legwork and give your contact center all the relevant background information they need. When the call takes place, you can save customers time and avoid them having to repeat themselves.

We believe most businesses already have the data they need to offer a more effective service to customers who miss payments. It's a case of using that to its full potential. ContactEngine can unlock this data and carry out intelligent conversations that ensure users feel understood and supported.

The AI customer debt journey

ContactEngine reduces the friction and drives response rates – even from customers who are in late delinquency (30+ days)



Customer misses a payment

This may be down to three reasons – they don't know they have to pay; they can't pay or they don't want to pay.



Customer is communicated with using their preferred digital channel

This can be text, email, social media, or with any other digital method. There are no legal limits to how frequently customers can be contacted. We can use previous customer data to send messages at times when they are more likely to be active



Customer responds

Seventy-three per cent of customers in late delinquency respond when contacted through digital channels. Conversational AI can find out why they have missed the payment and find a solution. Highly trained natural language processing can identify vulnerability or detect lying. Messages are then tailored to the language and style the customer uses, further increasing engagement.

3 outcomes



Customer pays in full

Customers can be taken to a payment link using the same channel they are already speaking to you on. If they have their card details on the phone, they can pay in a few taps.



Customer sets up payment plan

Those who are unable to pay in full can set up a payment plan by text, responding with details at a time that is convenient to them.



Customer is rude/uncooperative

This is flagged to a human agent who can prepare in advance and respond appropriately.

20. <https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/the-customer-mandate-to-digitize-collections-strategies>

Case study

The method works. The case study below shows how ContactEngine increased engagement and reduce time to collect for one financial service provider. By using proactive, conversational AI we were able to improve collections rates from both new and old debt.

Front Book (newer) Debt

- 80% increase in debtor engagement rate (Email, SMS, Web).
- 48% of debt recovery is digital (fully automated - no agent required).
- Recovery rates fully maintained, 0% loss.

Back Book (aged) Debt

- 64% increase in debtor engagement rate (Email, SMS, Web).
- 350% improvement in recovery rate (compared to bailiff collections).
- 42% reduction in time to collect.
- 55% of debt recovery is digital (fully automated - no agent required).

Overall

Average time to collect across all debt was reduced from 41 to 34 days.

51% of all debt is now recovered using digital payments.

Five staff benefits from proactive AI

It's not just users and your bottom line that will benefit from utilizing proactive AI communication in your debt collection, there are benefits for your staff too.

1

More meaningful work. Rather than relentlessly ringing to voicemail all day, conversational AI can do the legwork while your staff are free to spend more time working on complex cases that feel more meaningful.

2

More chances to shine. While AI is great at collecting information and driving engagement, humans are still a much better fit for having emotional conversations or negotiating with difficult customers. Let your brightest and best shine by leaving AI to do their admin.

3

Reliable information. Humans are prone to human error. Information collected over the phone always runs the risk of being misunderstood and recorded incorrectly. AI can ensure accurate data is collected, giving your human agents access to key details they can be confident using.

4

More training opportunities. As your AI communications become increasingly effective at getting the desired result, staff have access to the greatest tool they could learn from.

5

Better protection. Rather than being blindsided by rude and abusive customers, our conversational AI can pick up warning signs that customers may be difficult, enabling your staff to prepare before the call.

AI and preventing debt

As well as having the potential to recoup debts faster by using less resources, AI can also help prevent your customers from owing you money in the first place.

AI could be trained to monitor and recognize signs that a customer's general spending might be leading them into debt. Customers would of course have to give a company permission to monitor their finances in this way, but the benefits might outweigh the negatives for them if they start to receive personalized and relevant tips on how to spend less.

Lenders have a responsibility to ensure that they are treating their customers fairly. Any firm that takes proactive, forward-thinking steps to ensuring their customers are financially more stable is likely to win hearts and minds.

5 Ensuring ethical debt collection with AI

Working in the fast-moving world of artificial intelligence (AI), we are well-versed in tackling ethical debates head on. Long ago, we outlined our five core principles of AI. We pledged that our application will always be Beneficial, Ethical, Explainable, Relevant and Secure. Our BEERS strategy has defined how we have developed our natural language processing because we believe ethical AI has the greatest benefits for businesses, customers, and society.

We're helping millions of consumers have automated, intelligent conversations with organisations across numerous industries. Whether its renewing telco contracts or insurance policies, rescheduling deliveries or making changes to banking services, the principles are the same.

We use proactive conversational AI to reach out before customers identify there is a problem. Next, we present solutions to make them feel in control. Finally, we keep conversations going using the channels that they are most comfortable with, and language tailored to their preferences.

Underpinning all of this is a commitment to ethical AI, with a focus on explainability and data protection.

Here, we've outlined our four guiding principles, which show how we apply AI in debt recovery cases.



Fairness and integrity

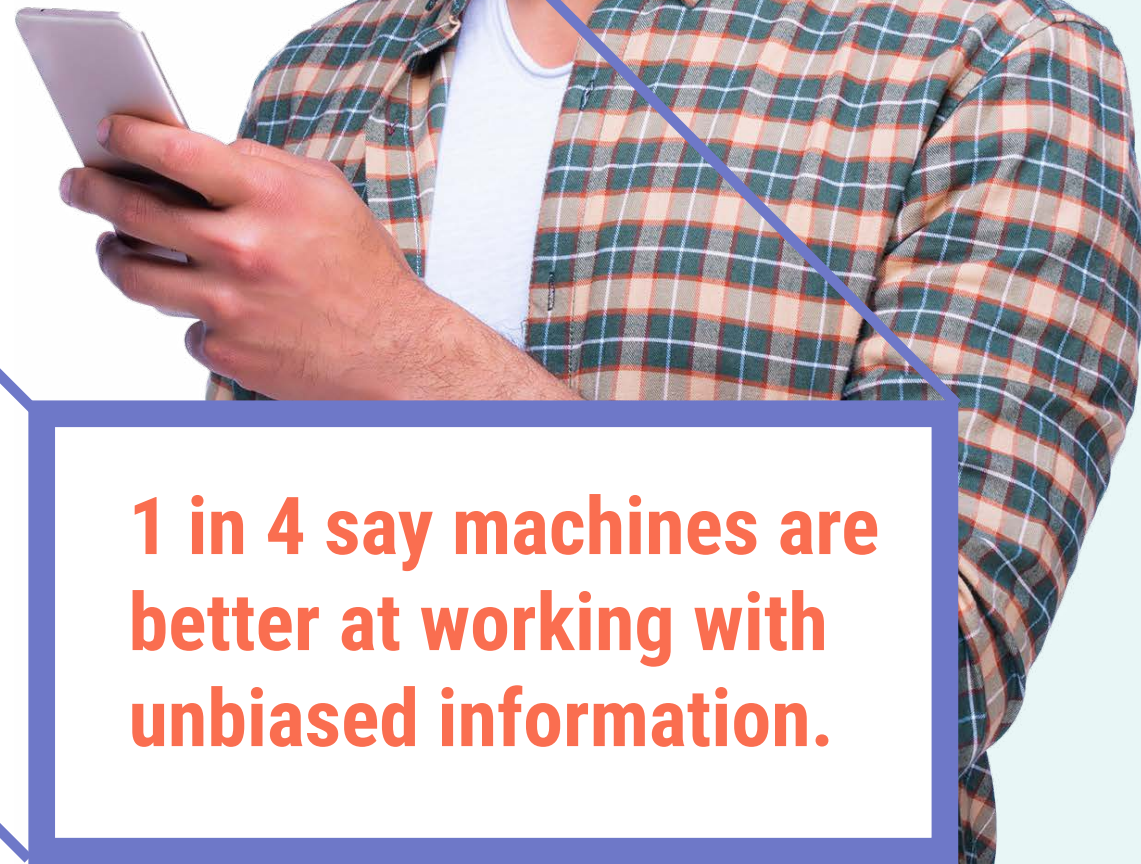
Debt collectors should follow moral principles of fairness and honesty. They should avoid treating debtors differently based on race, gender, or any other attribute. They should also act in a way that does not cause distress or fear. Sadly, this isn't always the case. Four in 10 people in problem debt say they have been left “fearing for their lives” due to the aggressive tactics of debt collectors ²¹.

But the dial is slowly shifting in how much people trust AI to make fair and calm decisions. Forty-eight per cent of Americans say the positives of greater AI adoption outweigh the negatives ²². Americans want AI to play a greater role in decision making in an array of industries, such as technology (66%), manufacturing (61%), logistics (58%), and retail (52%).



21. <https://www.independent.co.uk/news/uk/home-news/uk-loans-debt-relief-b2204956.html>

22. <https://www.stevens.edu/news/new-survey-americans-think-ai-threat-democracy-will-become-smarter-humans-and-overtake-jobs-yet>



1 in 4 say machines are better at working with unbiased information.

In the workplace, 54% of people are more trusting of robots than their managers ²³. One in 4 say machines are better at working with unbiased information.

We believe the best application of AI is one where humans and computers are working to their strengths.

Within debt collection, this could be AI proactively reaching out to debtors to inform them of a missed payment. AI can then collect necessary information about someone's financial situation before suggesting options for repayment, which an agent can sense-check. By using AI that is explainable, the end user can see the methodology behind why recommendations have been made. The language used by the tool can be controlled, ensuring that no one receives unfair treatment.



23. <https://www.oracle.com/corporate/pressrelease/robots-at-work-101519.html>

Offering control

Debtors should feel in control of the conversation and be able to agree realistic payment plans. This is especially important for those who are facing many different debts or priorities in other areas of their lives.

Creditors who use digital tools to offer flexibility are more likely to see a return in what they are owed because these give the debtor control over their situation. A recent example is the UK Government's Time to Pay facility. This tool enables people to spread the cost of their tax bill into monthly payments. Since April 6th last year, 21,600 people who were unable to pay their bill in full have set up a payment plan – an increase of 3,900 on the year before.

Organisations should consider going the extra step and proactively communicating with debtors using AI. This way, creditors can reach out and help debtors create payment plans that are right for them once the first payment has been missed. This ensures that debtors feel more in control of their situation, which in turn increases response rates.



Data responsibility

Money is a daily worry for many Americans. Sixty-five per cent say money is a “significant source of stress”²⁴, while the average American worries about debt six times a day²⁵. More than half of Americans say they do not feel comfortable talking about their finances²⁶. This is a significant barrier for debt collectors who need to encourage debtors to have these conversations. Those who owe money can feel strong-armed into opening up and be left feeling judged, vulnerable, and misunderstood.

Here, AI once again presents a solution. A Penn State University study found people trust giving data to machines rather than people because they do not gossip and are not prone to human error. After all, machines are less likely to leave their work computer unlocked when they go to lunch.

24. <https://www.apa.org/news/press/releases/stress/2022/infographics-march>

25. <https://swnsdigital.com/us/2022/01/average-american-worries-about-money-six-times-a-day/>

26. <https://swnsdigital.com/us/2022/04/more-than-half-of-americans-are-convinced-talking-about-finances-with-others-is-taboo/>



Respect

Debtors should always feel respected. This is important in the tone that you take in your communications. Our conversational AI never uses inflammatory or accusatory language even when customers' messages do.

This is one of the many benefits of using AI to have these challenging conversations. Our programme's language can remain cool and professional in the face of angry or upset customers. AI can suggest objective solutions or redirect customers to a call centre if debtors do need to speak to someone.

By adhering to these four principles of fairness, control, data responsibility and respect, we are creating a better experience in debt recovery for both those who owe money and the creditors they owe. We are proving it is possible to increase debt recovery rates in a more efficient and more ethical way.



6 Conclusion: create your action plan

Proactive conversational AI is better for brands, users, and staff than traditional debt collection methods. As laws continue to better protect consumer rights and as societal attitudes to consumer debt continue to soften, AI is the most effective tool for treating debtors ethically, while avoiding legal pitfalls and damaging PR.

We have demonstrated through our case study that proactive AI can increase the amount of money recovered while reducing costs and the time it takes to collect. Below are three steps you can take today to see the same success:



Check your current 'time to collect' and 'digital payment' rates for debt. If your operation currently takes longer than our case study to retrieve debt (41 days) or your share of digital payments is lower (51%), then you should strongly consider proactive conversational AI.



Assess your current debt collection methods. Find out how reliant you are on letters and manual phone calls.



Get in touch with ContactEngine and find out how we can help you improve your debt collection journeys.



About ContactEngine

ContactEngine is a Conversational AI technology that enables agencies to proactively engage citizens in conversations that fulfil government objectives. ContactEngine automates outbound citizen engagement across all channels and generates unique insights into the changing patterns of communication by applying demographic and intent analysis, linguistics and ground-breaking artificial intelligence principles to mass volumes of raw data. For more information about ContactEngine, please visit www.contactengine.com/government