WNS

Extending Your Enterprise


How a Predictive Analytics-based
Framework Helps Reduce
Bad Debts in Utilities

Bad Debt Write-offs — Business Trade-off or Survival Tactic?

For the past few years, utilities have relinquished hundreds of thousands of dollars in consumer bad debts. Customer defaults continue to rise in an environment speckled with rising levels of unemployment, economic uncertainty and dipping consumer spends. A spate of stringent government regulations — to protect customer rights, reduce environmental impact and improve safety compliance — do not make it any easier for the utilities business to thrive. To make matters worse, unscrupulous consumers continue to exploit loopholes in the utility's business processes to default on their payments.

Bad debts force utilities to trade off profits for survival. When towing the line between bad debts, failed collections efforts and a stringent regulatory environment, utilities are forced to take the 'write-off' route even if it means giving up on the revenue they rightly owed.

Fig.1: The typical maze of challenges that utilities have to grapple with.
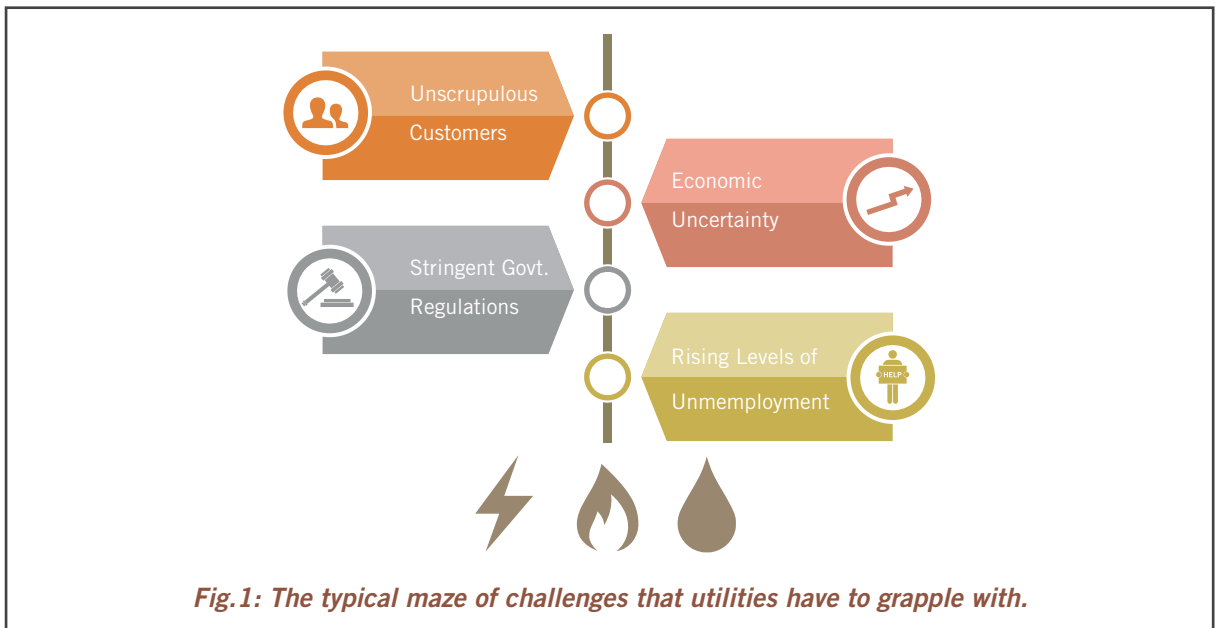
Little wonder then, that, write-offs have risen from approximately USD 400 Million in 2008 to about USD 2.8 Billion in 2014, as reported by a leading strategy consultancy firm, PA Consulting, in its recent customer service benchmarking data.

In such an environment laden with constraints, how can your utility company effectively minimize bad debt write-offs?

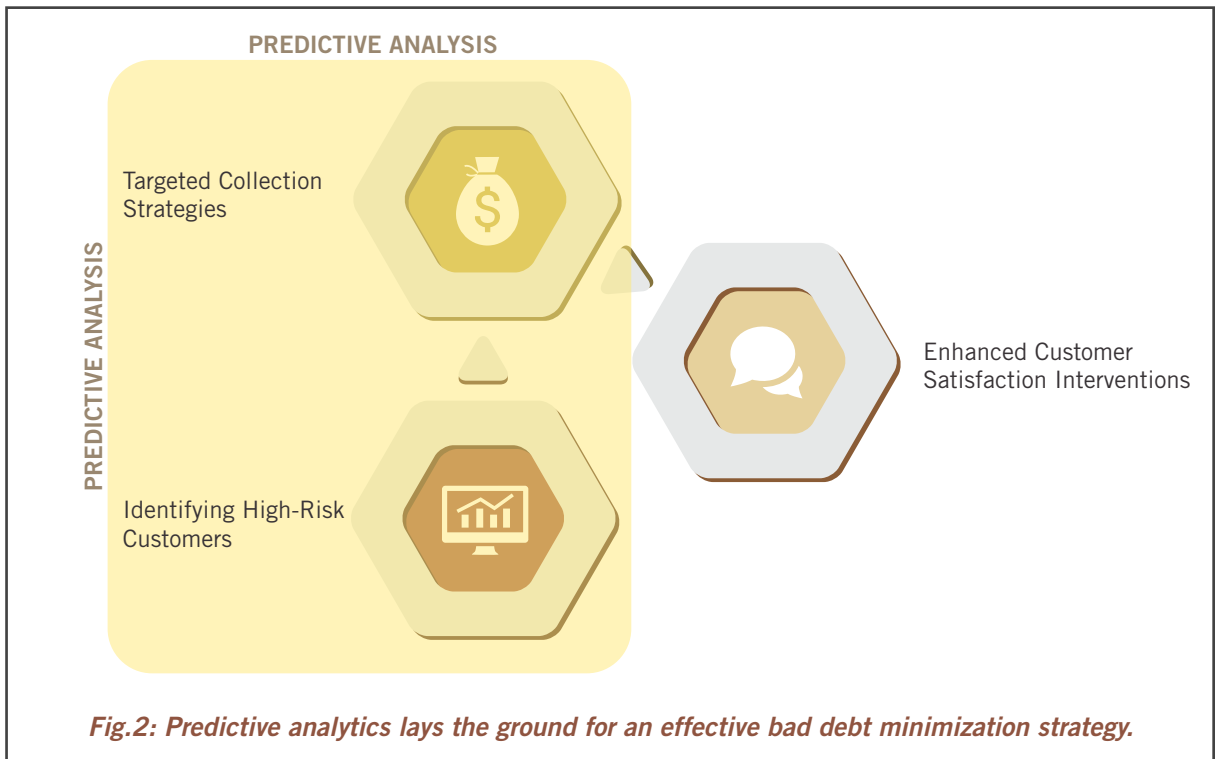This whitepaper puts forth the answers to this critical question.

Utilities can reduce their bad debts significantly by adopting the 'integrated three-pronged revenue protection strategy' that focuses on:

- Identifying high-risk customers;
- Revising collections tactics targeted towards the high-risk customer segment; and
- Improving customer interactions and experience interventions.

The customer occupies a central position in this strategy — analyzing, understanding and predicting customer behavior becomes central to its success. The level of customer understanding, required for this three-pronged framework, is enabled only by predictive analytics. Predictive analytics is an advanced form of data analytics that utilizes a large number of variables based on both internal and external data sources and leverages advanced statistical tools as well as specialized analytical techniques to predict likely future outcomes.

Predictive analytics lays the foundation to this strategy by helping identify high-risk customer behavior and in enabling the implementation of collections strategies targeted towards high-risk customer segments.

PREDICTIVE ANALYSIS

PREDICTIVE ANALYSIS

Targeted Collection Strategies

Enhanced Customer Satisfaction Interventions

Identifying High-Risk Customers

Fig.2: Predictive analytics lays the ground for an effective bad debt minimization strategy.

Predictive Analytics for Identifying High-risk Customer Behavior

With the risk of bad debts looming large, utility companies cannot afford to follow a one-scheme-fits-all policy for managing customer defaults. Most utilities charge their customers on a 'credit' basis, that is, after the use of the service. Reliance on credit payment is not ideal for all customer categories, as customers tend to misuse this option. Utilities should first make efforts to identify and classify customers (both existing and new) into high- and low-risk segments and then develop targeted strategies to securitize revenue from high-risk customer segments.

Predictive analytical models that assess risks during the onboarding of new customers use profile parameters such as income levels, demographics, and credit history. Most utilities have stringent SOPs for evaluating new customer applications; however, they often overlook risks lurking within existing customer accounts. Risks in existing customer accounts can be identified by analyzing additional information, such as, customer meter settings, usage patterns, payment history, and complaints and communication.
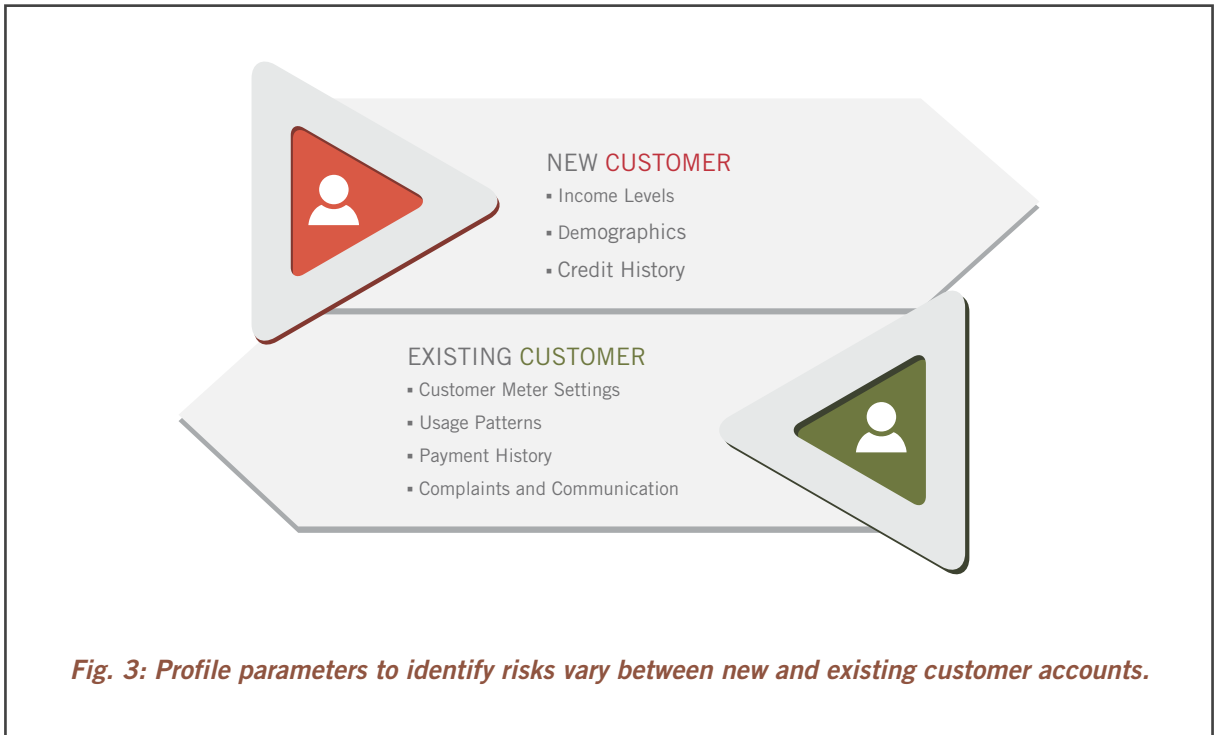
NEW CUSTOMER
- Income Levels
- Demographics
- Credit History

EXISTING CUSTOMER
- Customer Meter Settings
- Usage Patterns
- Payment History
- Complaints and Communication

Fig. 3: Profile parameters to identify risks vary between new and existing customer accounts.

Customers, who find it difficult to pay their utility dues, usually request for negotiation of payment terms and credit extensions from their utility providers. However, there are instances where customers default even after such options are provided and may opt for unscrupulous practices to escape payment. Some may pose as 'new' customers and apply to the utility company for a new account, while some may move to new addresses frequently, without informing their utility suppliers. Although most utility companies ask for information on the account holder's name, the Social Security number, and / or tax ID, individuals resorting to the 'name game' conceal these bits of information that can prove their links to other accounts. Utility companies that fail to identify customers with prior trailing dues, run into the cycle of customer defaults, bad debts and the resultant losses.

Predictive data analytics helps identify fraudulent customers that have 'trailing' debts and may resort to 'name game' tactics to get away without paying their dues. The segment of potential defaulters can be further expanded by including more parameters such as customer profile and credit rating data from credit bureaus namely Equifax, Experian, and TransUnion. Identifying a larger number of customers under the ambit of potential defaulters further minimizes the risk of delinquencies.

Vendors with expertise in data management (data collection, cleaning, preparation and analysis) can effectively assist utility companies prevent revenue leakage by spotting aliases and customers with high attrition risk.

A proven predictive analytics model is one that allows utilities to segment customers based on two parameters — the debt value the customer owes, and the propensity to pay back the debt. By plotting the outstanding dues on the x-axis and the propensity to pay back the debt on the y-axis, utilities can create a collections prioritization matrix (as shown in fig. 4) to decide on the next steps in the collections strategy.

Outstanding Dues		
Low	Medium	High
Do Nothing	Do Nothing	Steady Follow-up
Minimal Collections Efforts	Steady Follow-up	Strict Follow-up
Minimal Collections Efforts	Strict Follow-up	Accelerated Collection Efforts

Propensity to Pay Back (y-axis): Low, Medium, High

Fig.4: Sample collections prioritization matrix prescribing 'collections' steps to be taken.

This novel approach in segmentation on the basis of the customer's propensity to pay back the debt provides new insight for the debt collection strategy. As shown in fig. 4, customer accounts with high outstanding and propensity to pay are prioritized for accelerated in-house collections. On the other hand, a lower outstanding amount and propensity to pay accounts are written-off immediately as the effort and cost-to-collect the debt, exceeds the debt due on the customer amount.

Proactive action upon identification of high-risk customers can help reduce bad debt write-offs by as much as 40 percent and securitize revenues for utility providers.

Predictive Analytics-driven Technology for Revamping Collections Tactics

An efficient collections strategy aims to improve the collections rate and minimize the cost- and effort-to-collect. The collections process follows a 'dunning path' during which the utility company follows up the customer to pay up the outstanding amount. If such efforts fail or end in no recovery after a certain period of time, the customer account is placed under a Debt Collection Agency (DCA). The average recovery rates for DCAs vary within 10-15 percent across primary, secondary and tertiary placements, depending on the region. The average commissions are in the range of 25-50 percent, based on the age of the debt. In scenarios where all debt accounts are transferred to DCAs, collection costs tend to become exorbitant. Thus, most utility companies have an internal debt management and collections team focused on early-stage delinquent accounts.
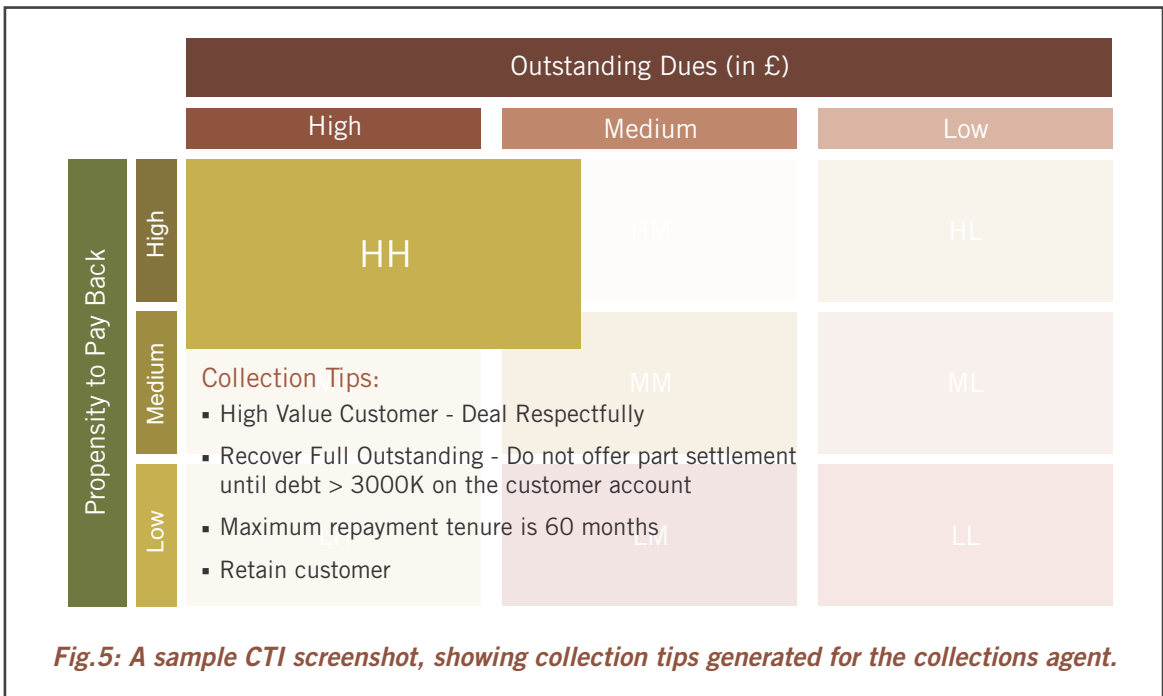
Most collections focused contact centers deploy state-of-the-art information technology and telephony infrastructure that help them improve outbound contact center performance.

The two most commonly deployed forms of automation in a collections contact center are the 'Predictive Dialer' and 'Computer Telephony Integration' (CTI).

Predictive dialers that operate on the principles of predictive analytics, measure the number of available agents, available lines, and average call handling time to improve resource utilization. The predictive dialer has the capability to automatically call a list of telephone numbers in sequence, screening out no-answers, busy signals, answering machines and disconnected numbers while predicting possible points at which a human caller will be able to handle the next call.

CTI in turn, links the dialer with the customer information system to disseminate customer account information to collection agents. It essentially displays the propensity rank (based on analytical modeling) of the customer along with the collections strategy, helping agents, tailor their conversation, offer advice and re-structure payment methods, as shown in fig. 5.

	Outstanding Dues (in £)		
	High	Medium	Low
Propensity to Pay Back — High	HH	HM	HL
Medium	MM	MM	ML
Low	LM	LM	LL

Collection Tips:
- High Value Customer - Deal Respectfully
- Recover Full Outstanding - Do not offer part settlement until debt > 3000K on the customer account
- Maximum repayment tenure is 60 months
- Retain customer

Fig.5: A sample CTI screenshot, showing collection tips generated for the collections agent.

One very effective way to check payment delinquencies is to employ a cut-off credit score for onboarding new customers.

Many utility companies set this threshold limit at low levels to ensure that marginal consumers continue to receive their services without needing to pay a deposit. By simply raising this limit, utilities can increase the number of customers that are required to pay a deposit. Though consumer protection regulations vary between states in the UK, nearly all states allow utility companies to ask for a security deposit from high-risk customers.

The deposit amount can be customized to suit customized specific customer demographics without harming the revenue-generating potential of the utility company. For instance, utility companies can determine the deposit amount based on the tariff structure, payment track records, and the disconnection history of a customer. Pre-payment meters offer an effective option to check debt pile-up on a delinquent customer account.

Traditionally, utilities follow the route of converting customer accounts in debt to pre-payment meters only after the account exceeds a certain debt threshold value or if it remains in debt for long. A smarter strategy would be to proactively promote pre-paid meters to the identified segment of high risk customers before the first instance of default occurs. This strategy helps protect revenue and reduces the resources and efforts spent on debt collections.

A combination of these tweaks and changes leads to improved collections performance and reduced bad debt on customer accounts.

The first two steps of this revenue protection framework focus on predictive analytics tools, technology and models. The third step concentrates on improving customer interactions and experience and works in tandem with the first two steps.

Improving Customer Interactions and Experience

For most consumers, paying off utility bills, figures as the last of their 'payment priorities', in comparison with insurance, video-DTH rentals, and telephone bills. Since, electricity, gas and water are considered essential life services, utility companies cannot disconnect services to customers who have not paid their bills, for recovery of debts.

Despite the pressing need to recover revenue from defaulting customers, utility providers need to be mindful of customer satisfaction and experience. After all, customer satisfaction lays the foundation to retain market share amidst increasing competition.

Maneuvering between a rigorous collections strategy and ensuring a high customer satisfaction index at the same time can be tricky. However, it is not impossible.

A blend of appropriate advisor knowledge, utility collections experience, empathy towards customers in financial distress and compliance to consumer protection regulations can increase collections success and at the same time create a base of satisfied customers.

A knowledgeable customer service advisor has the right orientation needed to understand the customer and industry dynamics. This orientation comes from rigorous trainings on evaluation of the customer's situation and the ability to show empathy by offering financial advice or flexible repayment modes to suit the customer's profile.

With such interventions customers usually open up to the prospect of discussing different payment options before entering into a promise to pay back the debt. This improves customer commitment to honor agreed payment schedules and reduces effort in the collections process.

Further, as utilities operate in a regulated environment, they need to comply with consumer protection guidelines of the state. These regulations pertain to customer interaction, mode of collecting debt, identification of inability to pay, treatment of customers on social tariffs, and protection of vulnerable customers. Non-compliance invites harsh penalties. Utilities are responsible for the actions of DCAs who collect the debt from customers on their behalf. In recent times, there has an increase in the number of complaints to the Office of Gas and Electricity Markets (OFGEM) about aggressive debt collection practices. This puts additional pressure on utilities to re-evaluate their current debt collection mechanism and put in place a system to govern DCA performance.

It is advisable to strike a balance between proactive collection steps to address customer delinquency and adherence to consumer protection regulations.

Optimizing the debt collection process shows significant positive results within a short period of implementing a pilot process based on the above discussed three-point framework. Consumer delinquency management methods have the potential to reduce losses incurred by utility companies by as much 50 percent. What's more, the payoff is much higher than investment and sustainable in the long run.

How One of the Leading **Utility Companies Increased its Debt Collections** by 50 Percent in 3 Months **with Predictive Analytics**

The Client

A Leading Energy and Utilities Company

The Challenge

The client wanted to better manage its energy final debt portfolio. Its debt recovery rate was at 4 percent, compared to the 14 percent achieved by its competitors. On the other hand, the commissions charged by the client's debt collection agencies were as high as 50 percent of the collected amount that kept the operational cost-to-collect very high. This made dents in the profit margins of the client. The client wanted to optimize its final debt collection processes to improve recovery of receivables. The client also wanted to formulate focused debt management strategies for different customer segments to manage customer write-offs more effectively and in the process decrease operational costs.

The WNS Solution

WNS concentrated on transforming the client's collections process by embedding predictive analytics and making changes to the customer interaction strategy. Key aspects of the WNS solution were:

- **Propensity-to-Pay predictive data model** exclusively for residential customers. This model predicted the likelihood of customers being able to pay their dues after their accounts were finalized. The model assigned a propensity-to-pay score to every customer.

- **Customer classification into high, medium, and low propensity-to-pay** segments based on their scores.

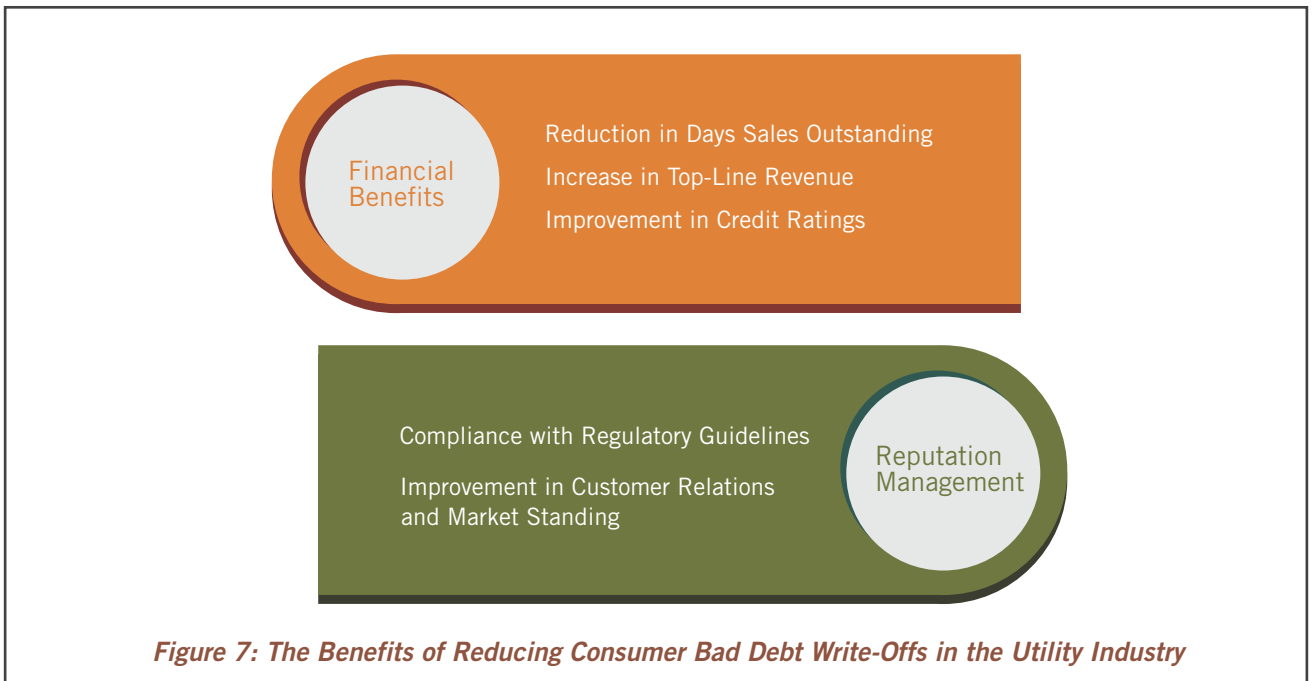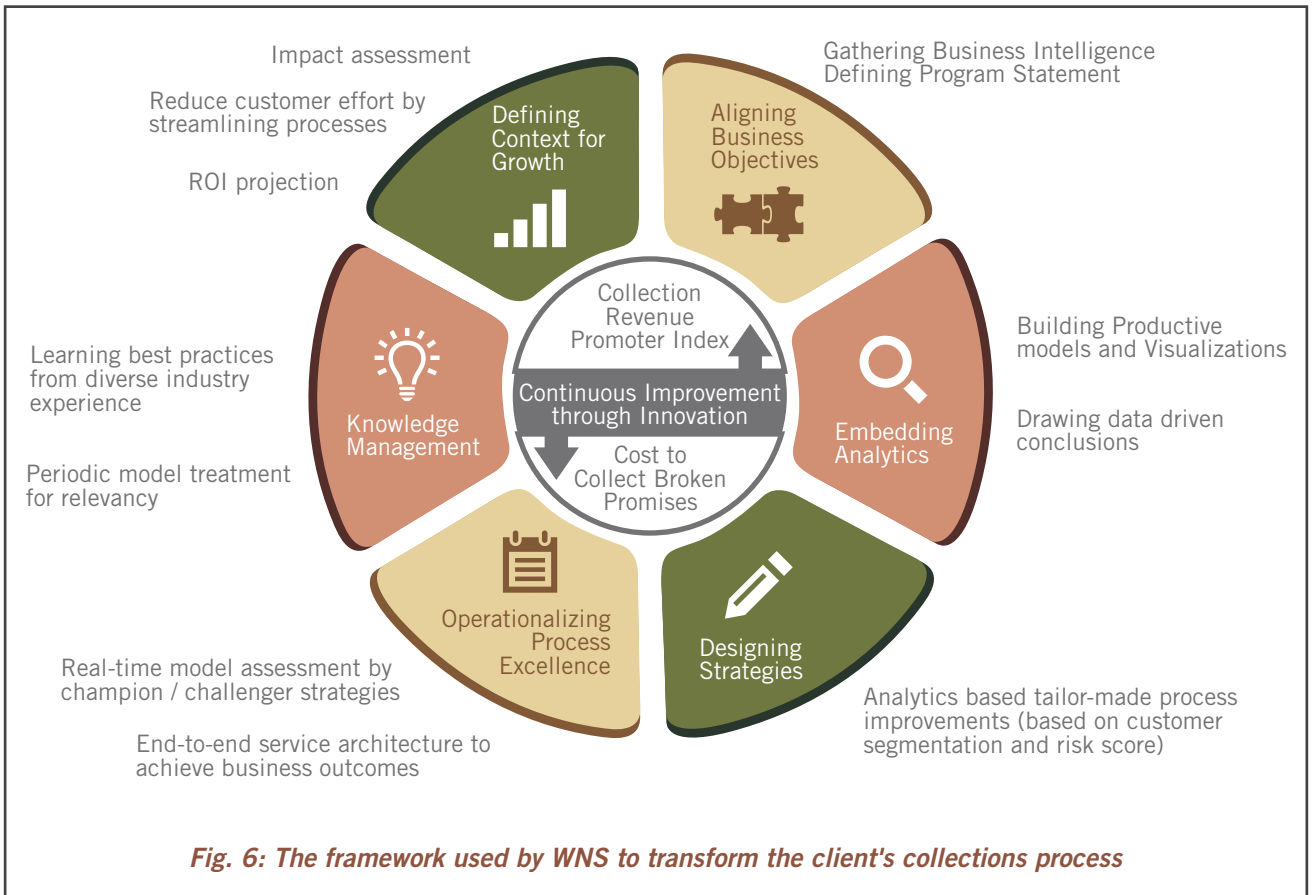- **Focused delinquency management strategies** for every segment.

- **Customer segment prioritization for outbound contact.** Customer segments were prioritized on the basis of the propensity-to-pay scores and the amount of outstanding debt.

- **Rigorous cost-benefit analysis** to streamline operational, financial, and human resource activities. This exercise would go on to optimize the debt management process.

- **Inbound and outbound test strategy implementation to engage customers.** The customer service executives used the customized call scripts and pre-determined verbiage to carry out settlement negotiations with and provide debt management advice to customers.

- **Performance monitoring of pilot strategies** regularly against critical tactical and quality indicators and also against the parameters set by the champion process.

Benefits Delivered

By using predictive analytics to carry out propensity based customer segmentation and enforcing customized engagement and advisory policies for different customer segments, WNS was able to fulfill the business objectives of the client. The WNS solution achieved the following results for the client:

- Debt collection increased by 50 percent within 3 months

- The challenger process recorded an 8 percent rise in conversion rates compared to the champion process

- Operational expenses decreased by 20 percent

Thus WNS helped the client optimize its collections process by bringing in actionable insights using predictive analytics.

Impact assessment

Reduce customer effort by streamlining processes

ROI projection

Gathering Business Intelligence
Defining Program Statement

Defining Context for Growth

Aligning Business Objectives

Collection Revenue Promoter Index

Continuous Improvement through Innovation

Cost to Collect Broken Promises

Building Productive models and Visualizations

Drawing data driven conclusions

Learning best practices from diverse industry experience

Periodic model treatment for relevancy

Knowledge Management

Embedding Analytics

Operationalizing Process Excellence

Designing Strategies

Real-time model assessment by champion / challenger strategies

End-to-end service architecture to achieve business outcomes

Analytics based tailor-made process improvements (based on customer segmentation and risk score)

Fig. 6: The framework used by WNS to transform the client's collections process

Financial Benefits

Reduction in Days Sales Outstanding

Increase in Top-Line Revenue

Improvement in Credit Ratings

Reputation Management

Compliance with Regulatory Guidelines

Improvement in Customer Relations and Market Standing

Figure 7: The Benefits of Reducing Consumer Bad Debt Write-Offs in the Utility Industry

Conclusion

Reducing consumer bad debt write-offs has several benefits in the utility industry. These benefits have a positive effect on the day-to-day operations of the company and also impact its reputation in the market along with stakeholder relations.

Utility companies need to reduce instances and volumes of consumer bad debt write-offs to stay competitive in a dynamic economic environment. What's more, they need to achieve this goal in the face of continuing challenges—shrinking income levels of consumers, stringent regulatory guidelines, and pressure from shareholders to optimize performance and returns on investment.

Predictive analytics has emerged as a key enabler that helps segment customers into identical groups based on their attributes and formulate customized debt management and advisory policies targeted to a particular customer segment.

Targeted strategies assure better performance and acceptance with the customer segment and helps reduce consumer bad debt write-offs and drive several significant business benefits, by improving customer satisfaction levels.

About WNS

WNS (Holdings) Limited (NYSE: WNS), is a leading global business process management company. WNS offers business value to 200+ global clients by combining operational excellence with deep domain expertise in key industry verticals including Travel, Insurance, Banking and Financial Services, Manufacturing, Retail and Consumer Packaged Goods, Shipping and Logistics and Healthcare and Utilities. WNS delivers an entire spectrum of business process management services such as finance and accounting, customer care, technology solutions, research and analytics and industry specific back office and front office processes. WNS has its global delivery network spread across China, Costa Rica, India, Philippines, Poland, Romania, South Africa, Sri Lanka, United Kingdom and the United States.

Write to us at **marketing@wns.com** to know more

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