

# Responding to the Voice of the Customer

*Driving a Better Utility Customer Experience with Analytics as a Service*

*An Intelligent Utility Reality Webcast*

August 18, 2014

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# The Panel



**Chirag Shah**

Director, Applied Analytics & Consulting  
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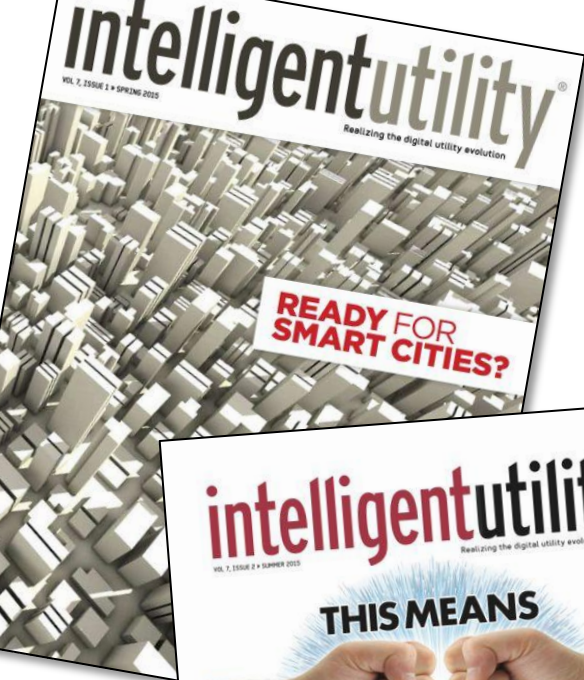


**Richard McWhorter**

Business Principal  
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**KATHLEEN WOLF DAVIS**

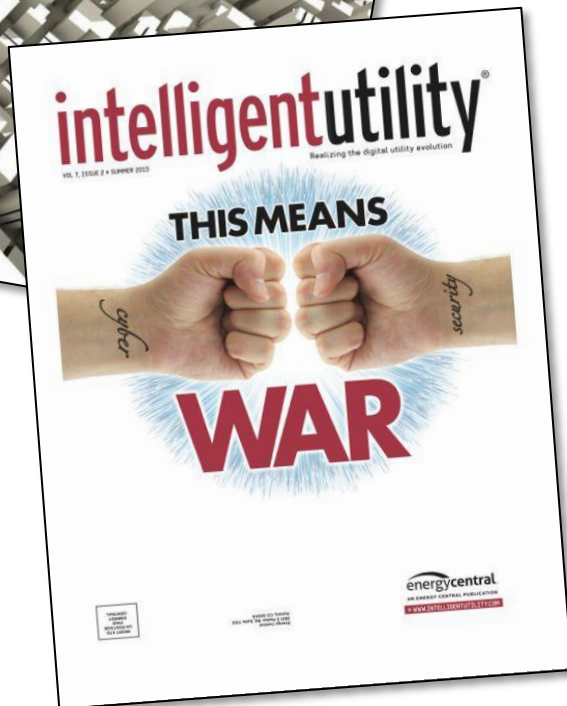
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*Daily insights  
that go way  
beyond the  
everyday.*

**TODAY'S WEBCAST TOPIC:**  
**Driving a better utility customer  
experience with analytics as a service**



# Today's Discussion

- ▶ WHAT IS SPEECH ANALYTICS?
- ▶ VERTEXONE SPEECH ANALYTICS FOR UTILITIES
- ▶ HOW OTHER INDUSTRIES ARE USING SPEECH ANALYTICS
- ▶ UTILITY SPECIFIC USE CASES
- ▶ REVIEW OF KEY TAKE-AWAYS



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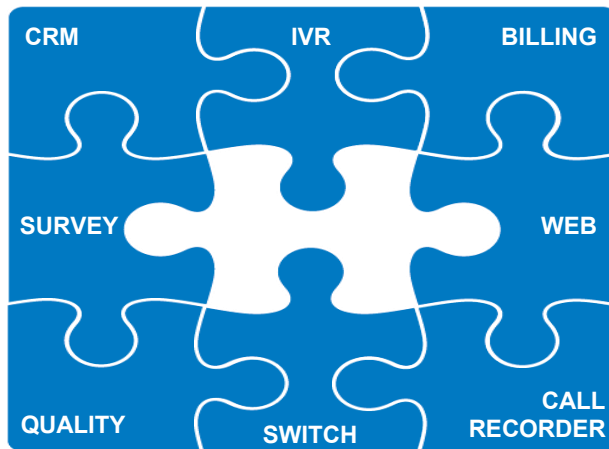
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# What is Speech Analytics?

## Unlocking Insight From Within Call Recordings

The analysis of agent/customer call recordings - structuring unstructured speech data to provide quantitative intelligence to help drive improved business performance

### TRADITIONAL CUSTOMER EXPERIENCE DATA



### VOICE INTERACTIONS

### DATA FROM WITHIN VOICE INTERACTIONS

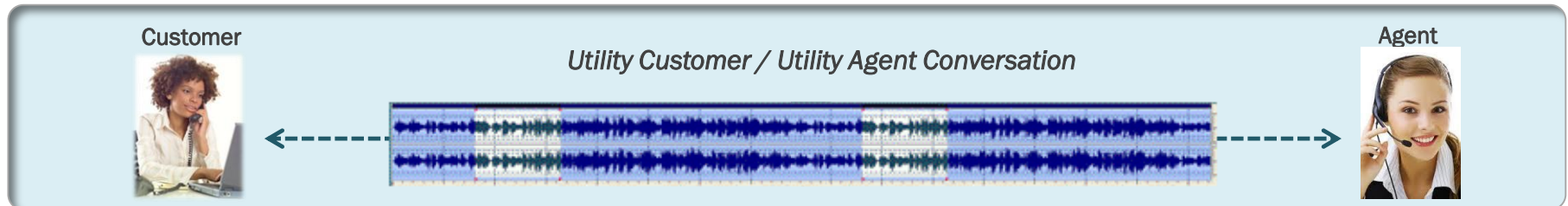
- Sentiment
- Call Drivers
- Self-Service Opportunities
- Process Improvement Opportunities
- Agent Behaviors
- Enrollment and Up-sell Opportunities
- Customer feedback
- FCR Opportunities

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# What is Speech Analytics?

## Compared to Traditional Call Dispositioning



### Traditional Utility Call Dispositioning

Call Classified as.....

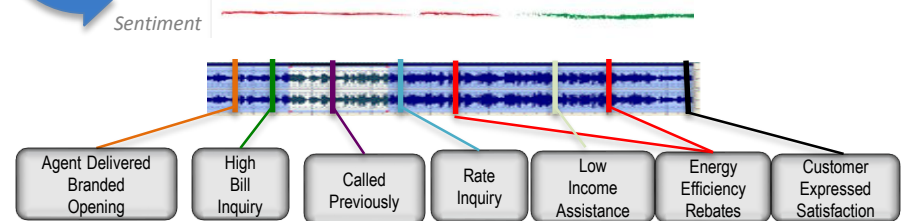
“Billing Inquiry”

A screenshot of a software interface titled 'Select Actions during Call...'. It contains a list of checkboxes under three categories: 'Customer Service' (with options like 'New Account Assigned', 'Change of Address', 'Payment Taken', 'Statement Disputed', 'Up-Sell Successful', 'Closed Account'), 'Collections' (with options like 'Payment Taken', 'Promised to Pay', 'Enrolled in Payment Program'), and 'Other' (with options like 'Cross-Sell Successful', 'Retention Failed'). At the bottom are 'Cancel', 'Go Available', and 'Go Unavailable...' buttons.

- Agent force classifies call
- Typically selects first option (limited/no incentive to classify correctly). Highest call driver typically = first option on the list

### VertexOne Speech Analytics (Powered by Nexidia)

Call Classified as.....



- **7 “remarkable” topics identified within the conversation**
- Overall net negative customer sentiment (although ended positive after energy efficiency rebates were discussed)
- Topics associated with either agent or customer

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# What is Speech Analytics?

## An Evolution of Insight

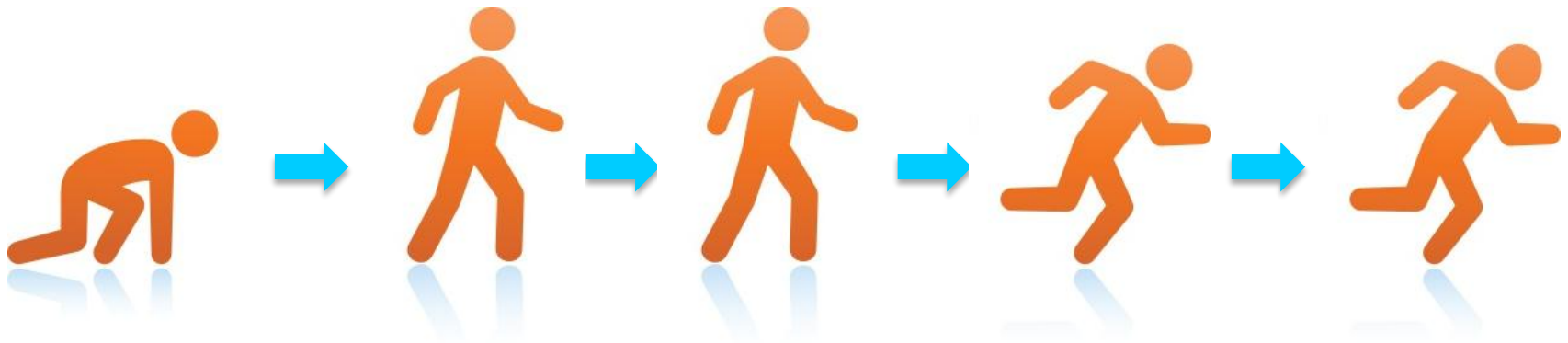
Picking Up Phones

Recording Calls

Call Sampling

Speech Analytics

Real Time Speech Analytics



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Powered by Nexidia

- We take advantage an extensive library of utility specific queries and analysis
- As the conversations change, the focus need to change
- Ensures continuous improvement

- 1) **Migration:** Operational Within 3 Months
- 2) **Insight Services:**

[illegible]

The collage features several elements: a close-up of a blue gas burner, a power line tower, a handheld device, a line graph showing energy production from 2011 to 2017, a bar chart of energy production by source, and the Verity One logo.

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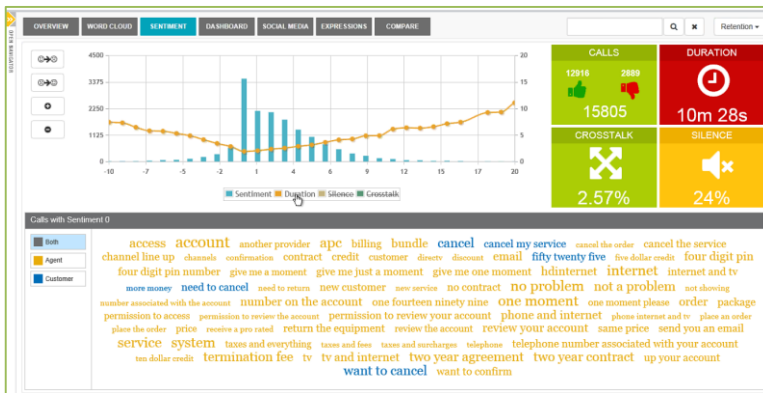
# VertexOne Speech Analytics for Utilities

Powered by Nexidia

## Automatic Topic/Trends Discovery



## Call Sentiment Analysis



## Interaction Drill Down

### Power Is Out and Dispatch a Technician

Type	CallId	Duration	CallDateTime	Agent	AgentId	AgentSupervisor	SiteName	CallDirection	SentimentScore
📞	33420	15.13	06/07/2014 21:06:59	Charles E. Hayes	284674	Michael Watson	Cambridge	Inbound	6.21
📞	33427	13.60	06/08/2014 19:32:31	Charles E. Hayes	284674	Michael Watson	Cambridge	Inbound	4.37
📞	33483	1.13	06/09/2014 12:47:04	Charles E. Hayes	284674	Michael Watson	Cambridge	Inbound	4.93
📞	33486	14.60	06/09/2014 10:35:44	Charles E. Hayes	284674	Michael Watson	Cambridge	Inbound	6.31
📞	33502	7.68	06/09/2014 11:50:33	Charles E. Hayes	284674	Michael Watson	Cambridge	Inbound	0.14
📞	33518	2.57	06/10/2014 13:39:34	Charles E. Hayes	284674	Michael Watson	Cambridge	Inbound	0.64
📞	33737	29.92	06/10/2014 23:41:45	Charles E. Hayes	284674	Michael Watson	Cambridge	Inbound	5.59

🔍 Overlays 🗨️ 📄 ⚙️ 🔍 +

**Agent:** (00:00:01:00:5)   
**Customer:** (00:00:06:00:20)

Thank you for calling Northern Energy, this is Charles, how may I assist... today?

Hi Charles, this is Dennis Jean Weir at 1201 Park Avenue in Cambridge and I need... someone to my house because **my power is out again.**

Yes ma'am, I apologize for the inconvenience.... happy to look into... for you.

Thanks. Yeah, I need you to send someone to my house, because **my power is out** and I cannot go without power tonight.

Let me see if... fix that for you. I'm going to check for power outage.... area.

Ok

I'm not showing any outages reported in... area, so I will go ahead and **dispatch a technician** out to your property.

Your going to send a technician?

Yes ma'am.

Ok... would be great! When will the technician be here to turn... lights back on?

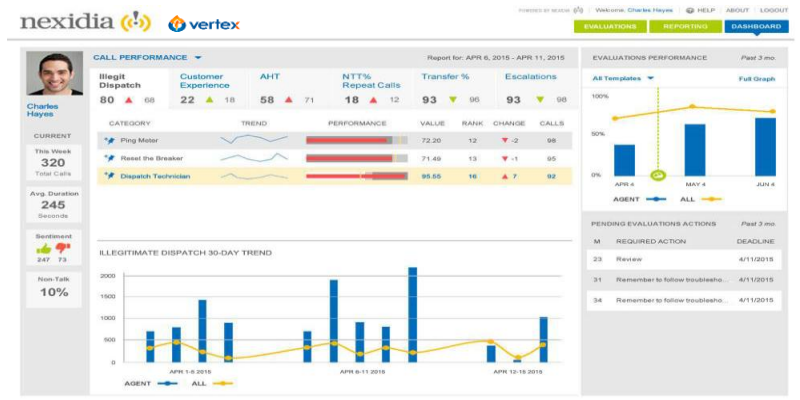
It normally takes... technician two hours.... pick up the order... your address.

Thank you, Im so glad you can help me get my lights on.

Its... pleasure, missus Weir. Thank you for calling and have a wonderful day.

00:00:01 / 00:01:53
⏮️ ⏪️ ⏩️ ⏭️

## Agent Evaluations Portal



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# VertexOne Speech Analytics for Utilities

Art required to make the science work

**Weak Query:** not enough context: `a=OR("reconnect", "reconnected", "reconnection", "reconnect order", "a reconnect order")`

**Strong Query:** phrases lengthened to provide more context:

`a=OR("we received the reconnect order", "reconnection", "did you want to call back for the reconnect order", "a reconnect order", "we have a reconnect order for you today", "we just received a reconnect order", "i do see the reconnect order for", "calling about a reconnection", "reconnect order processed", "calling about the reconnect order", "have received the reconnect request", "reconnection order has been submitted")`

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# How Other Industries Are Using Speech Analytics

## Churn/Retention



- Predictive modeling of customer churn
- 30% improvement in ability to spot churners
- Redesign of inbound and outbound retention program

## Sales Effectiveness



- Real-time monitoring of speech
- Rep guidance alerts to agent desktop to improve offers
- Supervisor coaching tablet to identify agents needing help

## Customer Satisfaction



- Analysis of “customer effort” and relation to C-Sat
- Direct relationship to driving customer wallet share and customer retention

## Cost Management



- Tracking, quantifying and eliminating defects in claims management process
- Goal of 20% improvement in call time
- 15% improvement in FCR

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# HOME RUNS & SINGLES AND DOUBLES

USE CASES FROM THE COMMUNICATIONS VERTICAL

# Comcast

## Proactive Customer Retention Program

### *Business Challenge*

Use customer interaction data to reduce churn

Customers actively communicate their experiences, perceptions and even intentions to their service providers

Tens of millions customers generating over 300 million interactions per year, the challenge is identifying the customers with the highest propensity to cancel service.

### *How Speech Analytics Helped*

Program analyzed 100% of customer interactions

Model ranked customers based on dissatisfaction, cost concerns, competitive mentions, unresolved problems, number of contacts.

The foundation of this program relies on the ability to analyze every customer interaction and drive action before the churn event.

# Comcast

## Proactive Customer Retention Program

### *Value Delivered*

*Goal: Minimize complexity and investment while identifying the customer most like to churn. Initiate proactive outreach program with save offers.*

Customers ranked by propensity to churn, the list provided to outbound calling team.

A 60% reduction in churn was initially realized (measured via A/B control testing).

Today, every customer interaction is scored using targeted churn algorithms.

Churn rates continue trending lower and program continues to expand.

*Annualized Return*

> \$10M

# Time Warner Cable

## Call Reduction Program

### *Business Challenge*

Company mandate to reduce costs, improve ASA, and increase customer satisfaction. CARE team had to reduce call volume by 1.7M during fiscal year.

### *How Speech Analytics Helped*

Developed call drivers to understand why customers call

Categorized call types that were deemed

- Problematic
- Optimal for Self-Serve / Automation
- Incorrectly routed

Conducted deep dive analysis into

- Repeat Callers
- Transfers
- Call backs
- IVR / Self-Help
- Service Appointments

Implemented actions based on the findings and recommendations



# Time Warner Cable

## Call Reduction Program

### *Value Delivered*

Key results included:

- Service appointment follow-up calls using automated functions
- Optimizing the IVR to improve routing and reduce transfers
- Self-service enhancements
- Changed multiple internal processes to reduce repeat calls

In addition to the call volume reduction, TWC also received secondary value impacts in the areas of :

- Reduction in manual call tracking
- Improved FCR, AHT, CSAT

*Annualized Return*

> \$13M

# Singles & Doubles of Interaction Analytics

Focus	Effort	Description	Findings	Changes	Call Volume Reduction	Annualized Saving (\$5 per call)
IVR Payments	Past Due Amounts	Understand reasons why past-due customers who tried to make IVR payments ended up calling	<p>Discovered that inconsistent business rules across regions impacted past due customers trying to make payments:</p> <p>In some markets IVR only expressed total amount due, not past due amount, and wouldn't accept partial payments.</p>	<p>Created new processes / procedures to make payment processes consistent. Changes allow payments of any size through IVR.</p> <p>Reduced calls into billing &amp; improved customer experience.</p>	<p>30%</p> <p>9,000 calls</p>	\$500K
Call Volume	Repeat Calls	Understand reasons for repeat calls which caused higher than normal call volume	<p>Customers were being disconnected frequently and needed to call back to resolve issue. The repeats were due to technical reasons rather than agent's failure to solve the customer's initial issue.</p>	<p>Changes made to telecom and IVR infrastructure to address the technical issues causing disconnection.</p>	<p>33%</p> <p>13,000 calls</p>	\$800K
EcoBill	Reasons for EcoBill calls	Evaluate EcoBill calls to understand call drivers of a self service product	<p>EcoBill auto-enroll would occur during a one-time payment.</p> <p>Customers expecting paper bill would receive bill via email instead. Accounts fell past due which prompted angry and frustrated calls.</p>	<p>Added a second EcoBill enrollment confirmation screen to ensure customers were aware of they of the new process.</p>	<p>50%</p> <p>12,500 calls</p>	\$750K

# Utility Specific Use Cases



## Call Driver Hierarchy

Summary Data

Call Reasons

Call Drivers – Why the customer picked up the phone

Call Resolutions

Call Types	Outage	Service Requests	Utility Billing
 <b>Call Drivers</b>	Report a Full Outage	Reconnect Orders	High Bill
	Report Partial Outage	Temp. Disconnect Service	TDU Charges
	Status Inquiry	Move In	Tampering
	Report Outage Flickering	Claims	Utility Billing Charges
		Undergrounds	
		Tree Trimming	
		Remove Meter	
		Demolish Meter	
		Move Out	
		Request New ESI	
		Permanent Meter	
 <b>Root Cause</b>	Breakers (Troubleshooting)	Payments	Cross Meter
	Order Not Received		Switch Hold
	New Service - Choose a REP		Meter Test
	Order Cancelled		AMS Opt Out
	Order Rejected		
	Cross Meter		
	Tampering		
	Switch Hold		
	Inadvertent Gain or Switch		
	Disconnection Order Received		
<b>Resolution</b>	Power Restored	Order Not Received	Escalation - Internal
	Contact Electric Provider	City Inspection Required	Contact Elec Provider
	City Inspection Required	Contact Electric Provider	
	Escalation - Internal	Contact an Electrician	
	Contact an Electrician	Escalation - Internal	
	Out of Utility Region	Order Cancelled	
		Order Rejected	

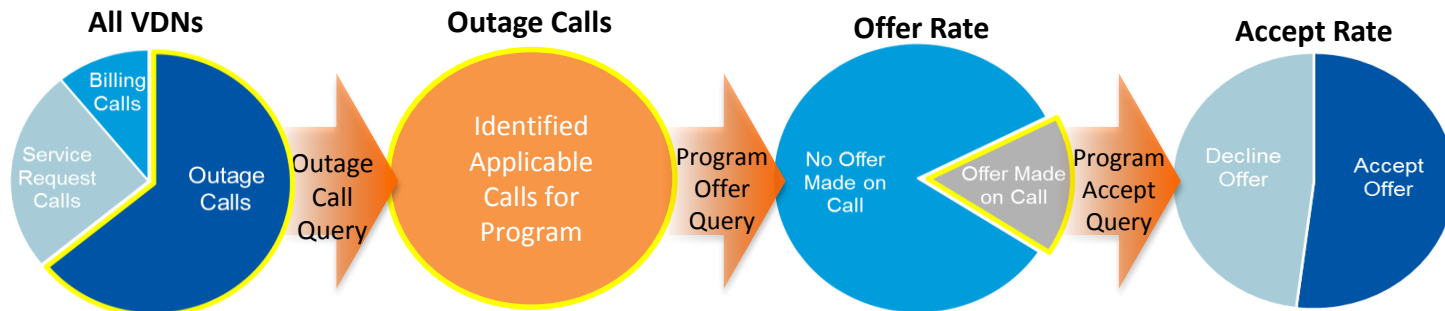
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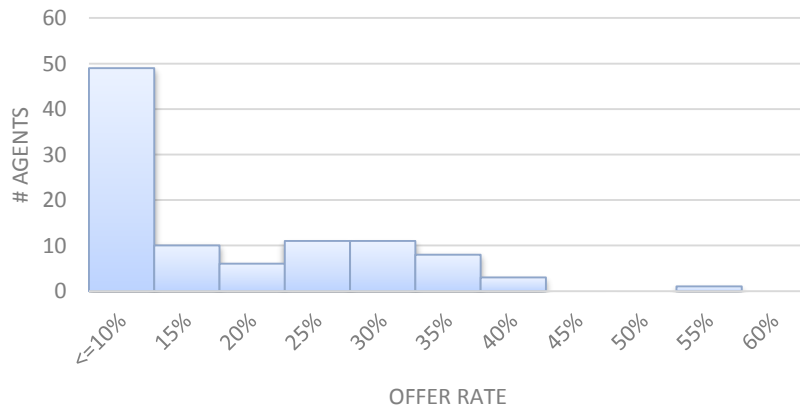
# Utility Specific Use Cases

## Outage Program Enrollment Measurement

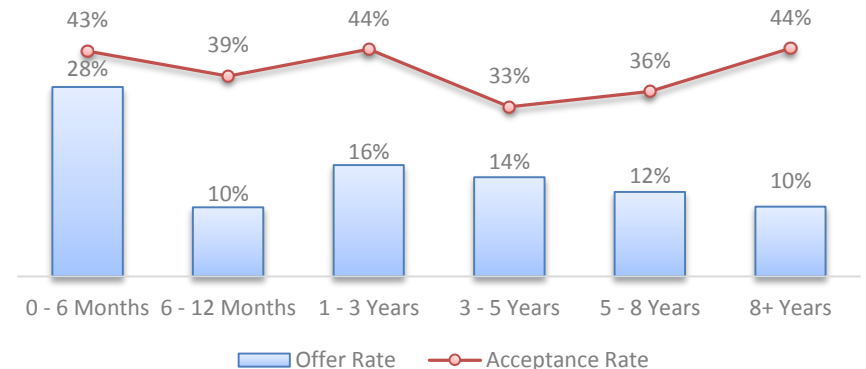
*Quantify program enrollment offers and accepts and establish reports to measure trends and improvements*



Program Offer Rate Distribution



Offer and Acceptance Rate by Agent Tenure



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# Utility Specific Use Cases

## The Measurable Value From Speech Analytics

### *The Business Case for Speech Analytics*

Business Objective	Use Case	Assumptions	Benefit
Increase First Call Resolution	<ul style="list-style-type: none"><li>Identify repeat call drivers and root cause</li><li>Implement process, policy and training to reduce repeat calls</li></ul>	Cost per call: \$4 # of calls deflected: 100k/year	\$400K/year
Increase Program Enrollment	<ul style="list-style-type: none"><li>Measure offers and accepts</li><li>Training and messaging improvements to increase enrollments</li></ul>	Reduction in paper bills: 5% Cost per paper bill: \$0.40 # of customers: 250k # of bills per year: 12	\$60K/year
Reduce Truck Rolls	Identify skipped remote checks that can prevent unnecessary field visits	Reduction in truck rolls: 5% Cost per Truck Roll: \$150 # of truck rolls per year: 10k	\$1.375M /year
CSAT Improvement	Identify behavior, process and policy issues driving customer frustration	Reduce escalations & complaints Enhance CSAT score	Improved relationship with PSC
Best of Breed Customer Service	J D Power certification for contact center Ability to use Analytics to drive improvements	Reduce customer effort	Match level of service from other industries

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# Review of Key Take-Aways

## 1. Speech Analytics Allows Utilities to Extract **Value From Call Recordings**

- ✓ Improve business process
- ✓ Enhance agent performance
- ✓ Monitor compliance
- ✓ Improve CSAT
- ✓ Increase market intelligence
- ✓ Increase program enrollment
- ✓ Reduce costs
- ✓ Increase self service

## 2. Speech Analytics is a **Core Capability of Best Run Contact Centers** Across Industries

## 3. Extracting Value from Speech Analytics Requires:

- ☐ Analytical skills
- ☐ Understanding of the industry and the business
- ☐ Understanding of the technology – its capabilities and its limitations
- ☐ Continuous refinement as the conversations between a utility and its customer evolve

# Questions?

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