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AI-Enabled Contact Center Analytics

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NICE Nexidia Special Edition

Turbocharge your analytics with AI

Deliver extraordinary customer experiences

Build an agile, scalable analytics program

Andrew Moore

About NICE Nexidia

NICE Nexidia's Customer Engagement Analytics solutions include industry leading Customer Journey and Speech Analytics, the NICE ENLIGHTEN AI framework with pre-trained models for interpretive, predictive, and prescriptive use cases, IVR Optimization, Predictive Behavioral Routing, and Quality Central. NICE's contact center strategy for analytics is to provide the most powerful, scalable, and personalized omnichannel AI-enabled analytics at the journey level, interaction level, and behavioral level by leveraging historical and real-time, high-performance analytics capabilities. These capabilities empower businesses with full-spectrum insights to deliver optimal customer experiences while saving costs, driving revenue, improving customer loyalty, maintaining compliance, and more.

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Introduction

Are you an executive or manager responsible for customer care? Or a business analyst charged with ensuring the efficient operation of your organization's contact center(s)? Whether you're focused on contact center processes and efficiency, or you're seeking to create a world-class customer experience, you've come to the right place.

The contact center is the main point of contact between your organization and its valuable customers. Today's consumers demand an outstanding customer experience in exchange for their loyalty, meaning the quality of your contact center interactions with customers as well as their efficiency in solving their needs can be a competitive differentiator for your organization.

About This Book

This book is designed to explain the concept of analytics and how you can deploy them to make your contact center(s) more effective than your competitors'. This book provides you with seven chapters that explore the following:

- The technology of speech and text analytics and how this technology is important for the contact center. In Chapter 1, you discover how speech and text analytics work, what the analysis of omnichannel communications is, and why you should focus on outcomes and not just data collection.
- Why quality is key to providing your customers with a world-class experience and how that can differentiate you from the competition. Chapter 2 explains why quality management is so important and how analytics can give you the tools you need to effectively and objectively evaluate, monitor, and train your agents to give superior customer service.
- How powering speech and text analytics with artificial intelligence allows your organization to analyze 100 percent of interactions with your customers to give you the insights you need without any human intervention. You discover, in

Chapter 3, how Predictive Behavioral Routing (PBR) matches the customer with the agent most likely to produce a positive outcome for the interaction.

- The future of artificial intelligence in the contact center. In Chapter 4, you learn about the NICE ENLIGHTEN products for improving customer satisfaction, complaint identification, and fraud prevention.
- A roadmap for deploying analytics in your contact center. Chapter 5 lays out the steps you need to take, such as identifying key stakeholders, determining business and staffing requirements, developing proof of concept, selecting between cloud or on-premises deployment, and getting help from experts with managed services.
- Chapter 6 gives you success stories of organizations in different industries deploying analytics in their contact centers.
- Ten takeaways about AI-based call center analytics (Chapter 7)

Icons Used in This Book

The small pictures in the margins of this book are icons. Here is what they mean:

REMEMBER

When you see this icon, I point out core information you should take away from a topic.

TECHNICAL STUFF

This icon points out extra tidbits for your inner technical geek. These items aren't necessary to know so you can skip them if they make your eyes glaze over.

WARNING

I use this icon sparingly, but when you see it, take notice. It calls your attention to potential pitfalls.

IN THIS CHAPTER

- Discovering speech and text analytics
- Understanding omnichannel
- Focusing analytics on outcomes

Chapter 1
Introducing Speech and Text Analytics in the Contact Center

In the past, nearly all interactions between businesses and the customers they serve took place over the telephone, so naturally, the market grasped the value of incorporating speech analytics into their overall customer support to achieve desired outcomes. The arrival of other media such as chat, email, and social media channels, commonly referred to in the industry as *omnichannel communications,* requires going beyond speech analytics and exploring text analytics.

Speech and text analysis are interesting technologies, but you may be wondering how it relates to the contact center. In this chapter, I introduce the concepts of speech and text analytics and why understanding these technologies, and more importantly how they are used in the contact center, is more vital than ever. I point out how the goals of speech and text analytics should be directed at positive outcomes for your business and not just endless amounts of data collection.

Discovering Speech and Text Analytics

Speech analytics is the capability to provide a categorical analysis of recorded phone conversations between a company and its customers. You can use information gathered from recorded interactions to discern valuable insights relating to strategy, product, process, operations, and contact center agent performance. One of the most prominent applications of speech analytics is to use the recorded interactions as a tool for training and evaluation of contact center agents.

The most basic applications of speech analytics software can spot words or phrases, either in real time or in recorded conversations, and categorize these words and phrases to be used for various analyses. For example, you may want to spot words or phrases like "cancel my account" or "speak to the supervisor" to allow you to take some proactive measures to keep the customer from canceling their account or to calm an irate caller. You can also use word or phrase spotting to score contact center agents to ensure, for example, that they mention a promotion or offer a discount, or to ensure they're compliant with procedures and regulations.

REMEMBER

Historically, the quality of keyword and phrase spotting has only been as good as the dictionary you provided to the analytics software. Keyword spotting tools that didn't have the right keywords and phrases, missed out on some important details and insights because they were looking for the wrong thing.

Newer analytics software solutions don't require speaker indexing, or keyword spotting, and are more adept at surfacing topics that may be unknown even to you. If you're looking to implement speech analytics software, you've probably discovered that there are two main technologies in the marketplace. The first is *transcription*, commonly known as Large Vocabulary Continuous Speech Recognition (LVCSR) or more simply, *speech-to-text.* The second is usually called *phonetic indexing and search.*

Transcription

Transcription, or LVCSR, aims to convert the entire audio conversation into text, based on dictionary-recognized words. Transcription is much slower than phonetic indexing because a typical language has thousands of words in each dictionary. Each spoken

word must be identified among this large list of candidates. Transcription does, however, enable data mining and natural language processing (NLP) to automatically determine the root causes of unknown issues.

TECHNICAL STUFF

NLP is simply a generic term for using computers to perform processing on human language. NLP is how a computer understands the meaning of unstructured text, such as who's talking, what they're talking about, and how they feel about a given subject.

Transcription suffers from the flaw that transcribing a spoken interaction is inherently inaccurate. When transcribing a spoken interaction, you must consider several factors such as speaker accent, speech quality, and quality of the call connection. Because transcription relies on the dictionary of the interaction language, every word spoken must be identified among the tens of thousands of candidates. Many words sound similar if not identical so it's statistically likely that some words may be transcribed incorrectly. For example, the word "error" may be transcribed incorrectly as "err or" or even "hair."

WARNING

Categorizing calls based on inaccurate transcriptions leads to inaccurate results. Many calls fall through the cracks because the words that form their context signals are missing or wrong. Any ad hoc search for long phrases often fails to identify the calls in which the given combination of words was said.

Phonetic indexing and search

The second approach to speech analytics is *phonetic indexing and search.* Most languages only have a few dozen unique phonemes. A *phoneme* is a unit of the phonetic system of a language that corresponds to a set of similar speech sounds, which are perceived to be a single, distinctive sound in a language. In English, for example, there are 44 phonemes.

Because most languages have a small number of unique phonemes, identifying and indexing them enables a quick and accurate search for words and phrases. Phonetic indexing also makes for an easy categorization of calls to various topics, even within a large body of calls. Using phonetic indexing also allows you to search for any word or phrase regardless of whether it appears in a dictionary (useful for product names), and quickly view trends in call categories.

Phonetic indexing is a more accurate method of speech analytics. It has the advantage of using a small pool of a few dozen phrases per category, compared to tens of thousands of dictionary words required for a transcription process. An ad hoc search based on a phonetic index is more effective because it can find any word, including those not found in the dictionary. The good news is that you don't have to choose between phonetic indexing and transcription (see the preceding section) because both have their place in a speech analytics solution.

Transcription is effective for data mining and NLP, which are useful for determining root causes of issues. After an issue is identified, such as a spike in repeat calls, you need to apply root-cause analysis to get to the bottom of the problem. For example, analyzing what customers say during repeat calls helps you uncover important clues as to why their original issues went unresolved. On the other hand, phonetic indexing falls short in this case because its search function is most often used for ad hoc search of words and phrases. In many cases, you may not know what to look for. Without advanced data mining covering the entire conversation, the only way to hunt for clues is to listen manually to random calls.

Categorizing calls is fundamental to speech analytics and the first step to understanding the broad context of customer interactions. As calls take place, you need to categorize them as billing, claims, cancellation, repeat, dissatisfied customers, and so on. After you've categorized these calls, you can employ phonetic indexing techniques to identify problems within these types of categories. A spike in calls about service may indicate a sudden outage, or a sudden dip in customer satisfaction (maybe the new format for billing statements is confusing?) may involve your immediate attention — so, the quicker time to insight is essential.

WARNING

Speech analytics systems that don't support phonetic indexing can take four times longer or more to get to the same insights compared to systems that incorporate phonetic indexing!

Phonetic indexing also allows you to analyze 100 percent of your calls. Transcription requires intense computation capacity so a single transcription server can analyze a much lower number of calls compared to a server performing phonetic indexing. In many cases, transcription servers can only analyze a random sample of calls. For example, a solution that randomly analyzes 20 percent of calls will only identify 20 percent of customers at

risk of "churn." The other 80 percent of the customers who may defect to another provider remain "off the radar."

Understanding Omnichannel — Why Speech Analytics Isn't Enough

Your company's interactions with customers likely don't take place exclusively on the telephone. Your company probably has a chat and an email feature on your website, and by now, has accounts on one or many social media platforms such as Facebook, Instagram, Twitter, and so on. The term *omnichannel* simply refers to the collection of all your customer interaction channels, both voice and text-based, into one complete aggregated set of data. If you really want to know what your customers are talking about, you must be analyzing interactions over all channels.

Text analytics refers to the actual process of breaking down unstructured text documents into chronological, human readable format such as chats, emails, tweets, articles, reviews, and comments so they can be analyzed further. Text analytics works by breaking down each sentence and phrase into its basic parts. Each part, including parts of speech, tokens, and chunks, serves a vital role in achieving a deeper NLP and contextual analysis.

Applications of text analytics fall into three categories:

- Voice of customer
- Social media monitoring
- Voice of employee

It can take years to gain a customer, but only minutes to lose them. You need to understand what consumers are saying about your brand, products, and services in contact center interactions as well as on social media. Chat and social media users generate a goldmine of natural language content to mine, but comments are generally riddled with spelling errors and loaded with abbreviations, acronyms, and emoticons. A quality analytics solution can help you transform these mountains of hashtags, slang, and poor grammar into useful data and insights into how people feel in their own words.

Focusing Analytics on Outcomes, not Endless Data Collection

Speech and text analytics are useful, but the point isn't just to collect data for its own sake. You can focus your analytics on positive outcomes for your business in the following areas:

- **Customer retention:** Your customer wants to cancel service or defect to a competitor? How do you know? Analytics can help you intervene and keep that valuable customer.
- **Cost reduction:** Agents waste time and money when they spend unnecessary time on hold or don't spend time on customer interactions. You can use analytics to reduce this wasted time and effort.
- **Sales effectiveness:** Are your salespeople using the correct techniques to up-sell or cross-sell? Are they offering relevant promotions and pointing out the right benefits of your products and services? Analytics can help you find out and better train and coach your sales staff.
- **Corporate and regulatory policy compliance:** Failure to adhere to corporate and regulatory policy can cost your business time and money. Non-compliance with government regulations can even lead to fines and penalties for your business. You need to know if your business is always complying with regulations.
- **Customer satisfaction (CSAT):** Satisfied customers are vital to your business. Analytics can help you keep on top of your customers' wishes and inform you of important trends in your customer satisfaction.

IN THIS CHAPTER

- Gaining an advantage with quality management
- Driving quality business results
- Tailoring quality management to your needs
- Using real-time analytics

Chapter 2
Delivering Superior Customer Service with Analytics (Quality is Key)

If you're at all interested in improving your company's competitive advantage by delivering superior customer service with analytics, you've come to the right chapter. In this chapter, you discover how analytics helps you gain a competitive advantage by improving quality management and how you can align quality processes to drive the business results you seek. You also take a look at how you can use analytics to tailor quality management to your needs and to accelerate your quality monitoring with real-time analytics.

Gaining a Competitive Advantage with Quality Management

Your contact center is the most vital point of contact between your company and your customers. How well your contact center agents perform in their roles is directly related to how customers

perceive your company. How are your agents treating your valuable customers? Are they following all company policies and procedures? Are your competitors serving their customers better? How do you know?

A solid quality management program is the cornerstone of a successful business. It's the way by which an organization can ensure consistency and maintain a desired level of excellence, whether it be for a product or service. When it comes to measuring the service level of contact center agents, however, the industry average for reviewing their interactions is a random sample of under 3 percent of their total inbound calls — which doesn't even include digital interactions. If you're responsible for leading the contact center or customer service team, this is nowhere near enough data to make measurable improvements in the quality of the customer experience, and it could ultimately make or break your company's future. Simply put, quality management is essential for your organization's future success.

Some key findings of this research of the contact center industry indicate the following:

- Quality management practices lack on non-phone channels.
- Fifty-five percent of contact centers don't use any type of analytics as part of their quality management programs.
- Just 34 percent of research participants consider contact quality to be a top key performance indicator.
- Only 6 percent of contact center leaders strongly agree that their agents feel the quality assurance (QA) program can help them be successful.

As part of your quality management, start comparing your business to others in your field. This process is called *benchmarking*, where you gather data on how your other effective quality management programs operate and determine how your organization is performing relative to competitors and identifying the direction you want your organization to go.

Take a look at the following example: In 2019, 15-year-old Cori "Coco" Gauff defeated Venus Williams in Wimbledon and became the youngest player to win in 28 years. She also beat a tennis star she idolized her whole life. For Gauff and other athletes aiming to

compete at the highest level, an understanding of how they compare to the most advanced players in the sport gives them a new level to reach for an insight into how they need to improve.

The same understanding gained by elite athletes is essential for quality managers who benchmark their programs against competitors in their industry to be better able to

- Identify best practices used by companies in the same industry.
- Determine how they can improve.
- See industry-wide trends that might otherwise go missed.
- Provide greater value in the contact center.

Aligning Quality Processes to Drive Business Results

The overall goal of quality process monitoring is to evaluate those high-value interactions that have a greater impact on your business initiatives. If your analytics solution allows you to analyze 100 percent of interactions, you can be confident that all opportunities to improve performance are uncovered.

Your analytics solution should enable you to align fully your quality programs with your business initiatives by creating process improvements and monitoring progress with a dashboard that reflects your organization's specific goals, such as the ones I cover in this section.

Increasing customer satisfaction and retention

Customer satisfaction (CSAT) and retention are crucial to your organization's long-term health and success. Your analytics solution should leverage speech and AI-enabled predictive analytics to capture customer sentiment. You can then identify agent behaviors that drive satisfaction levels and provide targeted coaching, training, or kudos jobs well done.

Improving sales effectiveness

How effective is your sales staff? You want a solution that uses analytics to identify missed sales opportunities and to understand and help agents overcome sales objections. You can then incorporate effective sales calls into your best practices and training modules.

Reducing operating costs

Resolving a customer's problem the first time saves you time and money. Your analytics solution should help you to reduce costs by increasing the rate for first-contact resolution by targeting the originating interaction of a repeat contact to identify broken processes and coaching opportunities.

Boosting agent productivity

Your agents are most productive when they handle more interactions in less time. You can use analytics to decrease your average call handling time or hold time for each interaction by using targeted coaching on long interactions.

Ensuring financial and regulatory compliance

In many industries, financial and regulatory compliance guidelines require strict adherence or your organization may face financial and legal penalties. Your analytics solution can help you achieve full visibility into adherence to a script and prevent agent breaches through real-time monitoring of all customer interactions.

Enhancing coaching effectiveness

The better your supervisor's coaching, the more efficient and effective your agents become. Your analytics-driven quality management solution should allow you to deliver near real-time coaching with dashboard alerts of performance trends.

Improve agent retention

Well-trained and high-value agents are the backbone of a successful organization. Your analytics-driven quality management solution should empower agents to improve their performance

with self-help tools and dashboards as well as provide them a mechanism for suggesting process improvements or collecting agent feedback on their performance.

Tailoring Quality Management to Your Needs

Your organization isn't like any others, so your analytics-driven quality management solution should provide the flexibility to automate and customize all your quality management processes to deliver greater efficiency and help you uncover important insights. The features that you want to look for in an analytics solution are covered in this section.

Workflows

A *workflow* is an orchestrated and repeatable (and often automated) pattern of activity that's enabled by the organization of resources into processes that provide services, transform materials, and process information. Your solution should offer "out-of-the-box" workflows to help you simplify quality processes, such as distribution of interactions evaluation assignments, evaluation disputes, agent self-assessment, and "audit-the-auditor." You should be able to customize these workflows with a drag-and-drop visual to meet your specific compliance and audit needs.

Forms

You can use forms to be customized, automated, and transformed into calibration requests and/or coaching opportunities for agents. You should be able to associate multiple interactions or transactions with a single evaluation form to provide deeper insights into multi-skilled agents. You can also use hyperlinks with guides to help your evaluators complete forms with consistency.

Reporting and dashboards

A quality analytics solution should provide flexible, customizable reporting that allows you to filter and view data according to your specific needs. You can distribute these reports easily to all stakeholders. These custom reports allow you to track Key Performance Indicators (KPIs). KPIs can be further broken down to submetrics for a more granular view of performance.

Coaching

The main goal of your contact center leaders is to be able to train and coach your agents to do their jobs even better. Your quality management solution should allow your supervisors to send personalized coaching feedback, including links to knowledge resources, instructions, and due dates with the click of a button so your supervisors can easily evaluate coaching effectiveness right from a dashboard.

Accelerating Quality Monitoring with Real-Time Analytics

Many applications of quality monitoring analytics involve post-processing of interactions used to evaluate, train, and coach agents. This is great for general agent improvement and enablement, but to help agents adopt and reinforce what they have learned, coaching sessions can be reinforced while a conversation is happening. There are opportunities where a customer considering defecting to a competitor or who's forming a negative opinion of your brand can be brought to a more positive outcome in the moment. Wouldn't it be better to have these insights immediately *before* it's too late?

Real-time analytics works by processing each interaction as it occurs, looking for insights that you need to take action on. Your analytics solution should be able to analyze interactions in real time and trigger alerts when there's something that an agent needs to take action on. An example may be a case where you have an interaction between an agent and a customer that isn't going as well as you want. Maybe that agent is having a bad day and isn't listening as effectively as he should. With real-time analytics, he can be alerted to this so he can self-correct his conversation in the moment to ensure a positive outcome.

REMEMBER

An analytics solution should help you gain a competitive advantage by allowing you to align your quality management processes to your business goals as well as allowing you to tailor quality management to your needs. Real-time analytics is essential for improving and accelerating your quality monitoring and coaching effectiveness by helping you correct quality problems before it's too late.

IN THIS CHAPTER

- Representing statistical properties of speech
- Measuring emotion in customer interactions
- Using behavior-based evaluations
- Taking a holistic approach to advanced analytics
- Using predictive behavioral routing

Chapter 3
Powering Speech and Text Analytics with AI

In this chapter, you take a deep dive into how artificial intelligence (AI) powers speech and text analytics in the contact center. Here you find important topics such as acoustic and language models, sentiment analysis, behavior modeling, customer journey analysis, and predictive behavioral routing (PBR) to add personalization to customer interactions with agents. If you're ready to discover AI-powered speech and text analytics, you get a lot of valuable information in this chapter.

Developing Acoustic and Language Models

Modern speech recognition systems use both an acoustic model and a language model to represent statistical properties of speech. An acoustic model describes the relationship between the audio signal and the phonetic units (phonemes) in a language. The language model describes word sequences in the language. The combination of these two models derives the top-ranked word sequences corresponding to an audio segment.

TECHNICAL STUFF

Audio can be encoded at different sampling rates (for example, samples per second — the most common are 8, 16, 32, 44.1, 48, and 96kHz) and bits per sample (8, 16, 24, or 32). For example, a standard land-line telephone has only a bandwidth of 64 kbit/s with a sampling rate of 8 kHz and 8 bits per sample so your acoustic models should be trained with 8 kHz/8-bit speech audio files.

REMEMBER

Speech recognition engines work best when their acoustic models are trained with speech audio recorded at the same sampling rate as the speech being analyzed. Speech recognition engines incorporate high-speed algorithms made up of two phases — indexing and searching. The first phase indexes the input speech to create a phonetic search track and is performed only once. The second phase searches the phonetic search track and is performed whenever a search is needed for a word or phrase. After indexing is completed, the search stage can be repeated for any number of queries. Because searches are phonetic, queries don't need to be in a predefined dictionary allowing for searches of proper names, new words, misspelled words, jargon, and product and brand names.

The phonetic search track contains data that can be shared, stored in databases, transmitted via networks, or searched in other environments. Searching begins with parsing the query string containing text specifying one or more of the following:

- Words or phrases (for example, "President" or "Supreme Court Justice")
- Phonetic strings (for example, "_B _IY _T _UW _B _IY", six phonemes representing the acronym "B2B"
- Temporal operators (for example, "cancel my account &15 special offer," representing two phrases spoken within 15 seconds of each other)

Searches use a phonetic dictionary reference for each word within the query term to accommodate unusual words (whose pronunciation must be handled specially for the given natural language) as well as common words. Words not found in the dictionary are processed by consulting a spelling-to-sound converter that gives phonetic representations given the word's orthography, or conventional spelling system.

After searching is complete, the algorithm returns information identifying the media segment associated with the results, the start and end times of the query term found in the media, and a confidence level between 0.0 and 1.0 that the query term occurs as indicated.

Analyzing Sentiment

As important as it is to analyze words spoken or written in an interaction to gain clues as to a positive or negative interaction with your customers, even more important is analyzing sentiment in agent/customer interactions. It's not always about what is said, but rather, how it's said and what emotions are conveyed.

In customer service and contact centers, sentiment is referred to as an approach to measuring emotion in customer and agent interactions. The reason behind measuring sentiment is to analyze these customer interactions to uncover areas in your business that need improvement, to monitor areas critical to customer loyalty and retention, and to monitor agent behaviors.

Analytics and big data tools are available that allow you to create data sets from any number of channels, such as calls, emails, chats, social media posts — any channel stored as voice or text in a database — and probe into these interactions to gather greater insights into where customer sentiment is low or high, and why.

So how do you measure sentiment? First, to be truly effective, the sentiment measurement must be sophisticated enough to identify the relative emotion of agents and customers separately for more accurate results. Sentiment analysis employs language models to find positive and negative words and phrases, spoken or written, as well as AI machine learning trained to predict the outcome of the interaction. The semantics of these language models are key, however, because positive phrases can offset negative ones. Models must be trained to score carefully words and phrases within the context in which they're spoken. Some words that may normally be used in a positive manner can also indicate sarcasm or frustration.

REMEMBER

Some words and phrases like "no problem" and "awesome" are generally positive but can also be negative and show frustration and/or sarcasm. Someone may say "awesome" when in fact they're expressing frustration at an undesirable outcome.

Sentiment models go beyond language by training with added features that create greater accuracy in sentiment scores. For example, laughter detection can indicate a positive change in an otherwise negative conversation. Crosstalk (where both parties talk over each other) can indicate confusion or frustration. Changes in pitch, tone, or speaking rate can signal changing satisfaction during the interaction.

Sentiment models utilize AI machine learning to score interactions as negative, positive, or neutral on a relational scale. Models also score interactions as starting positive and moving to negative, or vice versa, for the purposes of identifying that category of interactions for root cause analysis. There are many causes of positive and negative interactions such as problems with a process or product or frustration with an agent. An interaction that begins positive and ends negative can have many causes such as an agent's confusion helping a customer or a customer not liking what they are hearing (for example, a collections or billing scenario).

On a more granular level, sentiment models observe that phrases occurring toward the end of an interaction have a stronger prediction of outcome than those spoken earlier in the call. Studies show that the latter portion of an interaction drives customers' reported satisfaction more heavily than the former.

REMEMBER

The final piece of sentiment model training is the interaction length. The longer the interaction, the more opportunities there are to drive a sentiment score so it's important to normalize longer interactions with shorter ones so that they score within similar scale.

A quality sentiment model is trained with more than half a million customer interactions and their resulting survey scores across a wide variety of industries. As training and development continues you get more powerful AI sentiment models that accurately score all interactions for further root-cause analysis. False positives become fewer and fewer in the model's algorithms while accuracy and speed to insight improves.

WARNING

Sentiment models score every single interaction, but you should understand that measuring sentiment is most successful in total. While identifying one negative phone call is still important, it doesn't help discover the larger picture of how negative calls are trending and what topics drive them.

Modeling Behavior with AI

One of the greatest challenges facing the quality team in a contact center is the amount of manual work required to select interactions to evaluate to score agent performance. Currently, most quality teams use written guidelines when deciding what constitutes good or poor agent behaviors during an interaction while listening to a call and completing an evaluation form manually. Quality teams then hold calibration sessions regularly to maintain consistency in their evaluation processes.

WARNING

Behavior-based quality evaluations, however, are still a subjective analysis and one that is often based on a small random selection of interactions that are statistically irrelevant. Inconsistent quality evaluations based on inaccurate sampling methodologies can be costly to the whole organization. When quality scores are tied to an agent's performance assessment and compensation, incorrect quality evaluations can contribute to high agent turnover because agents feel unfairly measured and mistrust the quality process.

Speech analytics provides a comprehensive analysis of events based on spoken words or phrases. For example, it can be designed to categorize dissatisfied callers into a single group of interactions based on the sentiment score and relative topic, such as "poor service" or "product defect." These calls can be sent to a queue for quality evaluation and coaching or reviewed for improving processes and procedures.

So how can you gain objectivity when analyzing agent behavior? AI machine learning taps into the vast amounts of data generated in a contact center to find patterns in unstructured behavioral data. Models are trained with these behavior patterns to monitor all interactions and predict which interactions require evaluation and coaching to improve contact center Key Performance Indicators (KPIs).

Behavior data models provide greater accuracy when analyzing a conversation between an agent and a customer compared to subjective human listening of an evaluator where subconscious biases may exist when rating agent performance. For example, when agents are required to handle complex issues, behavioral data analysis models automatically determine if agents posed

effective questions to understand the issue, demonstrated a personal connection with the customer, or actively listened to what a customer said. Because evaluations of "soft skills" like listening and building rapport are consistent with these AI behavior models, agent performance improves dramatically in a way that isn't possible by simply adding more employees to perform manual evaluations.

Analyzing the Customer Journey

Every customer has a story, and every story has a journey. That journey details the joys and pains that each of your customers experience when interacting with your organization. Today's customers navigate through complex journeys across a growing number of channels. Your customers bring a variety of motives and expectations to each interaction. The challenge for most organizations is how to gain visibility into the connections of these interactions and how they overlap and influence the customer experience. Your customers expect you to know their story. Their stories can only come to light when your organization synthesizes and understands customer journeys across channels and over time. Shaping the customer journey into preeminent customer experiences requires a comprehensive approach to advanced AI analytics.

Hearing from the silent majority

In politics and other areas, you often hear the term *silent majority,* which has come to mean an unspecified large group of people who don't express their opinions publicly by answering surveys or contributing to opinion forums. Your organization also has a group of customers who supply critical feedback about your organization but don't want to talk to you about it. These customers are your silent majority. You won't hear from these customers directly through traditional methods such as phone or online surveys. Sentiment scoring captures valuable interactions with live customer agents, but the majority remains silent. This majority expresses the joy and pain of doing business with you through their journeys in more intangible ways; however, they still fully expect for you to hear and respond to what they're experiencing.

Organizations create amazing customer experiences by knowing their customers through their journeys. When you know your customers' histories, your ability to serve them quickly and effectively increases significantly. Customer journeys communicate the steps customers take and the amount of effort they give, good or bad, to complete a task or accomplish a goal. If you don't measure the quality of your customer journeys, you can't hear from your silent majority, and you're forced to play guessing games to improve their experiences.

Knowing the customer story

Organizations that measure omnichannel customer journeys can create amazing customer experiences. To measure the customer journey, you must begin by knowing the customer's story. You must connect customer interactions across channels and over time to better understand consumer behavior. For example, the customer's problem doesn't always begin in the channel where he made his complaint. The customer that called to complain about unexpected charges on his bill is the same one that repeatedly tried to understand these charges on your website and then through your chat channel. If you just manage each channel in its "silo," you'll miss the root cause of the customer's frustration — the difficulty understanding charges on their bill.

Creating Personalized Connections with Predictive Behavioral Routing

Today's consumer craves personalized experiences when interacting with brands and organizations. In fact, surveys show that 84 percent of consumers say personalized experiences are key to winning their business. This personalization will shift $800 billion of revenue to the 15 percent of companies that can get it right, yet 95 percent of companies aren't personalizing interactions with intelligent routing, and in effect, leaving substantial amounts of money "on the table."

Currently, 95 to 99 percent of companies are randomly routing customer calls or using techniques other than intelligent routing to connect calls to agents based on the customer's unique needs. You can't meet the customer's expectations by using random methods to connect them to agents.

Enter Predictive Behavioral Routing (PBR) solutions. These solutions use both historical data and the information known about a customer at the time of his call to connect the customer to an agent who will provide the best experience for him. You don't need agent surveys, customer surveys, or real-time call "pop-ups" for agents. Instead, PBR uses data on the customer's personality, behavioral characteristics, and communication preferences gathered from previous interactions to predict intelligently the best agent to handle the customer's call, and then route the call to that agent.

PBR stores customer data in a massive customer personality and behavior database. This database is updated constantly with the latest customer data points by using analytics, AI, and natural language processing (NLP). When the customer calls, the latest information on the customer is retrieved from the database to make the best match.

When you know your customers through their communication preferences and personality you can provide personalized customer experiences at scale. Using millions of language-based personality algorithms, PBR utilizes a language-based behavioral model with data for hundreds of millions of customers.

IN THIS CHAPTER

- Introducing NICE ENLIGHTEN for customer satisfaction
- Leveraging NICE ENLIGHTEN to identify complaints
- Finding and preventing instances of fraud with NICE ENLIGHTEN

Chapter 4
Seeing the Future of AI in the Contact Center with NICE ENLIGHTEN

When you think of artificial intelligence (AI), you may be reminded of science fiction movies like *The Terminator* or *The Matrix* where AI powers machines to take over the world. Today, the technology is universal and the driving force behind innovation as seen in major network TV prime-time commercials.

Contact center quality assurance is one example of how AI can transform a manual process into a fully automated and adaptive agent performance program that can greatly improve customer satisfaction. AI technology is now available to contact centers of all sizes. In this chapter, you look at the future of AI in the contact center by introducing the NICE ENLIGHTEN AI framework for customer satisfaction, complaint identification, fraud protection, and real-time analytics. This framework allows agents to proactively self-correct during a customer interaction to drive a positive outcome, while monitoring customer behaviors for indications of complaints or fraudster profiles.

Leveraging NICE ENLIGHTEN Behavior Models for Customer Satisfaction

NICE ENLIGHTEN behavioral models derive from years of industry research using billions of interactions. Real-time interaction guidance accurately and immediately scores the specific agent behaviors proven to provide customer satisfaction. Simple recommendations empower agents to deliver excellence on every single interaction.

NICE ENLIGHTEN behavioral models provide unique insights from a massive data set by interpreting specific agent "soft-skill" behaviors that influence customer sentiment. These AI models allow you to score agent behavior accurately and objectively on every single interaction.

When comparing using NICE ENLIGHTEN behavior models for customer satisfaction to manual quality evaluations, it's proven that behavior data models provide greater accuracy when analyzing conversations between an agent and customer compared to the human listening of an evaluator that is subject to unconscious biases when rating agent performance. In Figures 4-1 and 4-2, you see the difference between scoring agent soft skills such as "Build Rapport," "Demonstrate Ownership," and "Listen Actively" between human listening and behavior models for the same set of interactions. Figure 4-1 shows the scoring variance when interactions are scored by humans.

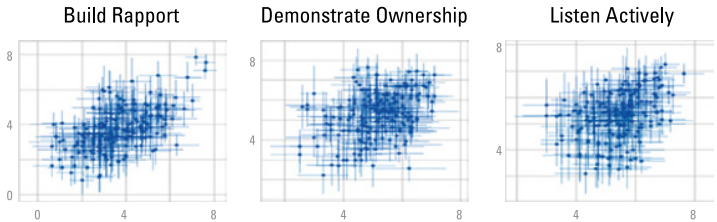

FIGURE 4-1: Scoring variance in human listening of interactions.

In fact, this scoring variance increases and becomes more inconsistent over the thousands of interactions evaluated.

The same data set of interactions scored by NICE ENLIGHTEN behavior analysis models gives you the drastically different results in Figure 4-2. Figure 4-2 shows the straight diagonal line indicating no variance in the evaluation of soft-skill behaviors. The consistency of the evaluation of soft skills across interactions improves agent performance and customer satisfaction in an efficient and systematic way that isn't possible to do by simply adding more employees to perform manual evaluations.

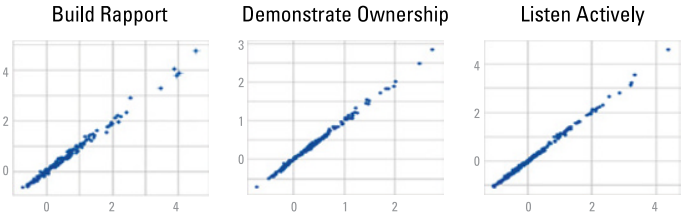

FIGURE 4-2: Scoring variance using NICE ENLIGHTEN behavior models.

True to traditional machine learning techniques, the NICE ENLIGHTEN models for customer satisfaction also maintain and improve their accuracy over time — even with changing business dynamics — because models can be trained across all industry segments. NICE ENLIGHTEN comes with nine built-in behavior models, each incorporating data from millions of contacts across all industries. These behavior models don't require any customization by the client and are trained to provide metrics for both audio and chat interactions. These models include the following behaviors proven to influence customer satisfaction:

- **Demonstrate ownership:** Reassure the caller that the agent understands the issue and is ready and able to help.
- **Actively listen:** Actively respond in the conversation, and don't ask callers to repeat themselves.
- **Empathize:** Acknowledge stated issues and their related impacts to the caller.
- **Build rapport:** Acknowledge the caller's request, actively respond in the conversation, and don't ask the customer to repeat himself.
- **Set expectations:** Summarize actions and next steps by informing the caller of what to expect and/or required actions.

- **Effective questioning:** Ask meaningful questions to explore callers' experience, issues, and/or opportunities.
- **Promote self-service:** Promote the availability of self-service options (IVR, Website, App, and so on) where appropriate.
- **Show respect:** Provide professional, prompt, and courteous support.
- **Inappropriate action:** Deny a caller's request to transfer the contact, use of inappropriate language, and other offensive actions.
- **Acknowledge loyalty:** Take a moment to acknowledge the caller's tenure with the organization and show appreciation for their loyalty.

NICE ENLIGHTEN computes a behavior index that provides a standardized scoring approach based on the ranges of results from the above behavior scores.

Using NICE ENLIGHTEN for Complaint Identification

Customer satisfaction issues are becoming increasingly complex, especially across interactions. Customers expect easy and immediate solutions while regulators are expanding their definition of compliance to include a broad spectrum of complaint management. Regulators tasked with monitoring regulation compliance take a strict approach, often enforcing regulations that require companies to proactively identify complaints (even issues resolved on first contact), track them, and resolve them within a short period of time.

Customer complaints are rarely as straightforward as "I'd like to file a complaint." How about, "Let me speak to your manager." That's definitely a complaint in progress, but what if it's said while the agent is in the process of concluding a successful transaction? Sometimes you can hear a complaint coming in tangentially, as in "That's not fair." This complaint may be missed if the agent is busily trying to resolve the customer's issue or if it was during a routine task, or as the agent is explaining a past interaction to the customer.

Leaving complaint reporting up the agent can mean that some complaints aren't handled early enough. Agents are often reluctant to report complaints because they fear disciplinary action. Unsophisticated tools provide only limited insight into the entire customer interaction journey and common complaint paths.

NICE ENLIGHTEN gathers information from all aspects of a customer's interaction and can detect and manage dissatisfaction at the earliest stages. This intervention halts the escalation of complaints, provides agents with effective real-time guidance, and proactively addresses issues that lead to customer grievances. While this helps with complaint resolution on the first contact, it also gives regulators confidence in your business when they can see accurately reported information and clear, proactive actions taken to resolve customer issues in a timely fashion.

Preventing Fraud with NICE ENLIGHTEN

You can't follow the news without hearing about fraud and identity theft. Fraud is on the rise with no end in sight. Annual losses to fraud total $16 billion. There's a 17 percent year-over-year increase in fraud loss. In 2019, over 165 million records were exposed to fraudsters and there were 2,000 data breaches. Do you know who's on the other side of the call? Knowing who's on the other end of the call is vital because 77 percent of account takeovers involve the voice channel, there are $12 billion worth of phone-based identity fraud each year, 1 in 1000 calls is a fraud attempt, and 60 percent of fraudsters pass authentication using key-based authentication (KBA).

NICE ENLIGHTEN for Fraud Prevention is a unique end-to-end solution to detect, expose, and block fraud attempts automatically and continuously. NICE ENLIGHTEN for Fraud Prevention uses predictive models and voice biometrics to help you

- Detect fraudulent behaviors
- Expose unknown fraudsters by leveraging AI-enabled analytics that detects known fraudulent behaviors combined with voice biometrics
- Boost the efficiency of your fraud teams by focusing them on the interactions that matter

- Proactively protect your customers by notifying them of fraud attempts
- Reduce fraud loss

NICE ENLIGHTEN scans millions of calls daily and in real time to detect likely fraud attempts by detecting behaviors such as

- Agents requesting for the caller to repeat themselves
- Callers asking to use alternative authentication criteria
- Callers pressing reasons for quick authentication

In one case, NICE ENLIGHTEN for Fraud Prevention was used to analyze 4 million calls, of which 100,000 were detected as high-risk interactions. This resulted in 99 calls investigated, 33 unknown fraudsters detected who were targeting 125 accounts, and 12 high-risk known fraudsters identified, ultimately saving the company $1.8 million.

SHOWCASING NICE ENLIGHTEN REAL-TIME INTERACTION GUIDANCE AND ANALYSIS

Analytics helps you detect and analyze customer issues and perform agent scoring on interactions, but what if your agents could get guidance in real time while they're interacting with a customer and self-correct proactively to drive a positive outcome? Now they can with NICE ENLIGHTEN real-time analytics. Your business can drive customer satisfaction on every single interaction. Learn how at `www.nice.com/nexidia`.

IN THIS CHAPTER

- Identifying the key players
- Ensuring organizational and staffing requirements
- Building a proof of concept
- Looking at cloud or on-premises solutions
- Getting help from the experts

Chapter 5
Deploying Analytics in Your Contact Center — the NICE Nexidia Way

If you're reading this book, you must be interested in deploying analytics in your contact center. In this chapter, I lay out some steps you need to take to deploy analytics in your contact center and how NICE products can help you along the way. From identifying key stakeholders to getting help from experts, this chapter gives you the tools you need to begin your journey.

Identifying Key Stakeholders

The first step on your journey to analytics begins with identifying your key stakeholders. Your key stakeholders are typically the people in your organization most responsible for customer service and experience as well as regulatory compliance. These people likely include

- Vice President/Director of Customer Care
- Customer Care Officer

- Vice President of Customer Services
- Compliance Officer
- Quality Manager/Supervisor
- Contact Center Site Director
- Customer Experience (CX) Director and/or Officer

Determining Organizational and Staffing Requirements

You've decided to apply an analytics solution in your contact center, so now you need to specify your business and staffing requirements to decide which solution is right for you. There are many business challenges you must consider. In today's environment, many contact center agents are working out of their homes. With this added flexibility, you must keep in mind the following:

- Customer expectations haven't changed just because you have agents working from home.
- Proper agent behavior is crucial to the success of your business.
- There's a lack of visibility into the quality of service delivered to your customers.

Considering this list, your organization must have a top-notch quality program with the goals of improving business processes, improving agent performance, and monitoring for and maintaining compliance with industry and government regulations.

The most pressing problem facing your quality program is how to evaluate and coach your agents objectively and effectively. Scoring of agent traits and "soft skills" is highly subjective, but organizations attempt to score these skills as best they can because those with strengths in these skills are known to produce higher customer satisfaction overall.

In most quality programs, customer support leaders manually analyze individual interactions to evaluate and train agents. This manual analysis isn't objective or comprehensive because it's subject to evaluator bias and often misses the most important

interactions because the best an evaluator can do is review a random sampling of interactions to evaluate. But adding more evaluators at scale only introduces more subjectivity, and ultimately worse results. At this point agents no longer trust the evaluation process and the quality of your customer care as well as your employee retention declines.

In this section, I show you how NICE offers three solutions to help with your business challenges.

Nexidia Analytics

NICE's advanced contact center interactions analytics solution, Nexidia Analytics, offers industry leading speech and text analytics capabilities with pre-built categories and early discovery to help you get started. Advanced capabilities include dashboarding, reporting, and workflows to help you solve your common use cases, such as cost reduction, improved customer loyalty, regulatory and behavioral compliance, increased customer satisfaction, and improved sales effectiveness. Some of these advanced capabilities include

- **Sentiment analysis:** Nexidia Analytics determines sentiment for every agent, team, product, and customer segment so you can figure out the specific source of dissatisfaction and the nature of any specific issue.
- **Artificial intelligence (AI)-powered topic and trend discovery:** Nexidia Analytics' AutoDiscovery uses three main capabilities: automatic categorization, anomaly detection, and query coverage analysis. These features reduce time to insight, reduce effort surfacing high volume or low sentiment categories, improve detection of anomalous activity in contact center trends, and provide visibility into where priority conversations may need increased analysis coverage.
- **Product and service issues:** Nexidia Analytics helps you determine the root cause(s) for product/service issues for each line of business, region, division, and so on, so you can find and fix problems faster.
- **Competitive analysis:** Nexidia Analytics helps you determine trends in competitor mentions and your agents' use of specific objection handling scripts to help you respond to competitive pressures.

- **Sales effectiveness:** Nexidia Analytics helps you spot trend rates at which agents are making specific offers so you can improve sales training.

NICE Quality Central

Quality Central is an automated quality management program that allows you to

- Monitor quality team trends or anomalies for calls or digital interactions.
- Identify interactions that don't meet a specific criterion identified by analytics or metadata (for example, long calls and transfers) for evaluation and coaching.
- Evaluate agents by reviewing and completing an evaluation form that includes automatically answered questions based on analytics results. The form allows you to score each question, override or accept auto-answers, and tally it to get an overall quality score.
- Coach your agents and suggest corrective action.
- Calibrate and audit your agent evaluation process to ensure consistency.
- Measure the effectiveness or determine the results of changes in your operation.

NICE ENLIGHTEN

NICE ENLIGHTEN is the first AI framework for customer engagement. The customer satisfaction models interpret human behaviors that drive business outcomes, objectively scoring them accurately, consistently, and efficiently in a way that manual listening and subjective human listening can't. It uses machine learning and AI to score every interaction by transforming subjective (soft skill) behaviors, decisions, and outcomes into data that's free from bias — all with no human effort. NICE ENLIGHTEN delivers performance metrics that your business can trust.

Developing a Proof of Concept (POC)

After you've laid out your organizational and staffing requirements, you need to determine if and how your analytics solution can work for you to meet these requirements. You can read documents, white papers, and sales documents, but like the old saying goes, the "proof is in the pudding."

A solid proof of concept starts with clearly defined objectives. You can't develop a plan without having a goal in mind. These objectives must spell out

- What you hope to accomplish
- Business "pain points" you need to solve
- A clearly defined decision criteria

After that, you must decide the scope of your proof of concept. Which problems are you looking to have the proof of concept solve? How long should the proof of concept take place to give you the necessary data to make a decision? Then you want to gather executive support and buy-in. By developing a solid business case with a solid return on investment (ROI) projection, your stakeholders can be assured of success so the purchasing decision is easy.

A solid proof of concept must be developed with data that accurately describes the state of your contact center. The most successful POC process will use roughly four to six weeks of your own contact center data, which must include interactions (audio, chats, email) as well as interaction metadata.


TECHNICAL STUFF

Metadata is data about data. Interaction metadata often includes technical details such as caller phone number and source IP address as well as customer information such as account numbers, order history, and any other information you need about the customer.

With a good data set delivered, NICE Nexidia can produce outcomes and projected ROI metrics for your proof of concept, normally within three to four weeks from receipt of customer data. All this is delivered in a live demo.

Choosing Cloud or On-Premises

Today, businesses have a choice on how they deploy software solutions. It is increasingly accepted that the arrival of highly secure cloud computing in the past two decades creates a far more agile environment for businesses today.

An obvious advantage to the Software as a Service (SaaS) model of software delivery is that your business no longer needs to own and maintain the necessary infrastructure to install, maintain, and support this software.

REMEMBER

NICE Nexidia's cloud solutions provide you the agility, scalability, security, reliability, and cost-effectiveness to offer businesses of all sizes to apply world-class analytics solutions to their businesses.

Getting Help from Experts with Managed Services

Many software companies offer what they call "managed services" to their customers to help them get the most value out of their software. Managed services arrangements typically involve a software company providing business experts in your industry who develop an intimate knowledge of your business and help you tailor use of your software to your unique business needs.

REMEMBER

With Nexidia managed services, you can enjoy the following benefits of a partner for your success, including

- Fast results
- Low costs
- Higher ROI (when compared with companies who implement and run analytics solutions on their own).

Nexidia managed services offers you the technology expertise, industry knowledge, leadership, and better trained experts in many industries, not just a single business.

IN THIS CHAPTER

- Achieving long-term loyalty
- Improving customer intelligence
- Enhancing customers' happiness
- Looking at trends in the customer experience
- Adopting a holistic approach to customer experience
- Driving sales excellence
- Achieving higher customer retention

Chapter 6
Driving Success with NICE Nexidia Analytics

If you're looking at deploying an analytics solution for your business, you may be curious how it's worked out for other businesses. In this chapter, you look at several case studies where NICE Nexidia has helped other businesses succeed.

Driving Lasting Loyalty

Alliance Data is a global provider of data-driven marketing and loyalty solutions that offer credit card (private label, co-brand, and business) and loyalty programs for many recognizable brands. Alliance Data operates ten customer care centers in seven states in the United States that perform multiple functions, such as incoming customer care calls, incoming and outgoing collections calls, incoming and outgoing fraud calls, and transaction data capture and analysis. Alliance Data employs 6,300 customer agents (including hundreds that work from home) who

handle approximately 24.1 million incoming calls annually while the Interactive Voice Response (IVR) annual volume reaches 86 million calls offered.

Alliance Data offers a combination of customer insight and loyalty marketing expertise, which it translates into highly effective multichannel marketing for its clients. But Alliance Data wanted an even deeper understanding of specific conversation types and superior insight into customer sentiment. Its existing, on-premises analytics solution provided valuable insight, but it couldn't deliver these insights at scale or with enough depth. The next step of decision making with customers in mind requires detailed and immediate insights for customer care leaders.

REMEMBER

Alliance Data worked with NICE to deploy Nexidia Analytics, Engage Recording, Back Office, Quality Management, Workforce Management, and Voice of the Customer to implement the next step of their customer journey. Lee Williams, Senior Manager Enterprise Tools, describes the collaboration by saying that direct involvement fostered an environment of collaboration and excitement and then leveraged that energy to drive user adoption. By deploying the NICE solutions, Alliance Data achieved the following successes:

- A 95 percent reduction in full-time equivalent (FTE) employees required to review possible high-risk interactions

  FTE is a unit of measure that helps employers forecast workforce needs. For example, if an organization considers 40 hours per week full-time, and if there are four employees who work 10 hours per week, those four employees would make an FTE of 1.0.
- An 11 percent reduction in hold time per hold
- A 4.2 percent reduction in agent handling calls despite an 8.1 percent increase in overall incoming call volume

Improving Customer Intelligence

CSU is a leading business process outsourcer in the Brazilian high-tech service market, offering customer relations and transaction services. CSU serves banks, finance companies, retailers,

service companies, and consumers throughout Brazil providing them loyalty programs, e-commerce sales, collection, credit, and customer service. CSU has over 20 years of history and has created a unique and innovative model of operations, with technological solutions customized to handle highly complex interactions.

CSU recognized a need for accurate customer intelligence and realized that comprehensive call monitoring and analysis would give them the needed information. CSU also recognized it needed to improve its quality assurance processes, which were manual and dependent on human intervention, monitoring, and reporting. Improving its quality assurance processes also allowed CSU to take the added strategic step to offer quality assurance as a stand-alone service to its customers. Daniel Moretto, Sales Director, points out that NICE Nexidia helped transform CSU into a more competitive organization.

REMEMBER

CSU deployed Nexidia Analytics and NICE Quality Central to achieve the following results:

- Interactions captured 100 percent of the time
- Average interaction analysis time reduced by 80 percent
- First-of-its-kind independent quality assurance monitoring services

Creating Happier Customers

Banco BMG is one of Brazil's leading retail banks. BMG provides payroll deductible credit card withdrawals through more than 800 branches to its 4.8 million clients who opened 830,000 new accounts and 4 million new cards in 2019 alone.

BMG employs 14,000 remote representatives and over 790 contact agents located in two Brazilian states. These representatives handle approximately 4.8 million voice interactions annually.

Banco BMG sees its primary mission in customer service as providing the best possible experience with the highest operational efficiency. As its business grew rapidly, it saw the efficiency of customer support and back office processes decrease. It also realized that there was an increasing risk of fraud and sales calls

auditing consumed too much personal effort. Analysis of customer interactions became inconsistent and incomplete and required a tremendous commitment of time and resources.

Banco BMG embarked on its Analytics 360 Program with the goals of

- Reducing time and effort devoted to sales calls auditing
- Improved capabilities to prevent fraud
- Improved customer experiences
- Mitigation of complaints reaching the financial sector's regulatory agency

REMEMBER

Banco BMG chose Nexidia Analytics and Quality Central as the cornerstone of its Analytics 360 Program. Flávio Vinicius, Customer Experience Manager, said that NICE Nexidia helped Banco BMG fully understand the customer experience in calls and chats. The solution helped the company achieve the following:

- 50 percent reduction in dissatisfied customers
- 90 percent reduction in agent effort
- 41 percent reduction in non-talk time
- 20 percent reduction in average hold time

Identifying Trends in Customer Experience

Northwestern Mutual is a financial services company, providing life, disability income, and long-term care insurance, annuities, and wealth and asset and estate planning services. Northwestern Mutual has 4.5 million clients served by more than 6,400 financial advisors in more than 300 offices in the United States.

Northwestern Mutual serves its customers and field force with more than 1,000 client services representatives handling more than 3 million calls per year with contact centers based in Wisconsin and Florida.

Northwestern Mutual faced several challenges due to manual processes logging calls and categorization in its contact centers. Its challenges were

- Agents tended to default to common call types.
- Call classification by agents was subjective meaning the same call could be classified differently.
- Manual processing took time away from answering incoming client and field calls.
- Learning the call categorization was time-consuming and new agents struggled to pick the correct option out of an extensive list.

REMEMBER

Northwestern Mutual decided to integrate Nexidia Analytics and Quality Central into its call center workflows. The company realized that sophisticated speech analytics gave them the most effective method of automating call categorization and tallying within the billing and payments contact center. Chris McFadin, Call Analytics & Insights Consultant, pointed out that NICE Nexidia helped drive the transformation from manual tallying and estimates to statistically valid samples and robust data. Nexidia Analytics and Quality Central yielded the following results:

- 100 percent call recording and analysis for the billing and payments contact center
- Average hold time reduced by 6 seconds per all 1.2 million calls
- Estimated 40 percent improvement in reporting efficiency

Adopting a Holistic Approach to Customer Experience

US Bank is the fifth-largest bank in the United States with 74,000 employees and $467 billion in assets. US Bank serves its customers by operating more than 12 contact centers in the United States that employ approximately 4,000 agents, working 24/7, who handle around 55 million interactions on an annual basis.

US Bank sought to understand accurately its customer experience to better serve its clients and to optimize operations and improve employee performance. US Bank was using quality assurance reviews and customer surveys to capture customer information, but in practice, the company was only capturing and reviewing 20 to 25 percent of all customer interactions. The huge blind spot in its processes was the unstructured data and feedback from their clientele.

US Bank deployed Nexidia Analytics, Voice of the Customer, and Engage Recording to provide comprehensive interaction capture including all structured and unstructured data. Nexidia Analytics offered US Bank the most omnichannel capabilities and provided it sentiment analytics for both speech and text communications. Jason Bettini, Customer Analytics Leader, said that Nexidia holistically captures data and extracts insights that US Bank wasn't able to access before, filling in the most critical gaps.

REMEMBER

Within just the first 90 days, the benefits were noticeable:

- $83,000 in savings
- The equivalent of 2.01 FTE
- Potential $2.6 million in cost savings across the company

Driving Sales Excellence

TTEC Holdings, Inc. is a leading global customer experience technology and services provider focused on the design, implementation, and delivery of solutions for many of the world's best-known and disruptive brands. TTEC delivers customer engagement solutions through its digital consultancy that designs and builds customer experience solutions for clients. TTEC employs 49,700 people on six continents. Over 40,000 of these employees are agents at TTEC's Humanify Customer Engagement Centers located around the world.

TTEC leverages insights, experience, and artificial intelligence and machine learning and embraces market innovation and the best available technology. The company tested multiple speech

analytics tools at its contact centers to better understand and anticipate their clients' customers.

TTEC contact centers needed a centralized analytics solution that could increase the contact center and analytics teams' efficiency, and provide the robust information the company's clients expect. TTEC deployed NICE Engage to capture 100 percent of customer calls and Nexidia Analytics to generate comprehensive insights.

At the same time, TTEC is also generating revenue for its clients, with average agent revenue increasing by 159 percent since deployment. Barbara Wingle, VP Insights and Analytics, added that with NICE, the company was able to quickly and efficiently understand VoC and VoA. That helped make data-driven decisions that impacted business performance in a positive way — also accurately measuring the results.

REMEMBER

TTEC applied the performance lessons learned to the training environment, resulting in a 360 percent increase in sales production during agent nesting. This effect continued and was multiplied in the first week of regular employment where sales production increased 833 percent compared to pre-Nexidia results.

Centralizing Systems

Total Administrative Services Corporation (TASC) provides organizations with employee benefit accounts and charity administration services. TASC serves businesses of all sizes in all 50 United States and American embassies abroad. TASC contact centers are in Wisconsin and offshore in the Philippines. These contact centers handle 1.3 million voice, chat, text, and email interactions related to healthcare and other employee benefits as well as an additional 30,000 interactions related to charitable giving through the U.S. government's Combined Federal Campaign.

TASC's challenges revolved around the multiple disparate system applications to handle benefit administration due to several acquisitions the company completed over the years. TASC determined a need to move to a single, centralized system to handle these processes more effectively. Gary Hartung, Manager of Operations Support Technology, explained that the company

chose NICE solutions because it was sold on the ability to get the right information, without delay, which helped identify the drivers behind customer calls.

REMEMBER

TASC deployed Nexidia Analytics, Quality Central, Workforce Management, and Value Realization Services to achieve

- $100,000 savings in customer retention efforts
- Reduced customer attrition

IN THIS CHAPTER

- Understanding the importance of your contact center agents' ability
- Uncovering what customers say about your brand
- Using the NICE Nexidia Customer Engagement Analytics Framework of analytics products

Chapter 7
Ten Takeaways about AI-Enabled Analytics in the Contact Center

In this chapter, you get ten important takeaways from this book:

- **Customer churn is extremely expensive.** Acquiring a customer is expensive. Losing that customer is even more expensive due to the lost good-will and negative word-of-mouth. Your business must do all it can to understand and improve the customer experience.
- **How customers feel is more important than what they say.** It's not enough to analyze interactions for the words customers say to glean understanding. If you aren't capturing context-based and AI-enabled sentiment metrics, your analysis will be incomplete and erroneous.
- **The contact center is your most crucial asset for your business.** The contact center is where critical interactions with your customers take place. A team of happy, engaged, well-equipped, and trained agents is your competitive differentiator.

- **Agent training and evaluation is the key to an outstanding contact center.** A world-class analytics-driven quality assurance (QA) program is essential. You need the ability to evaluate, train, and coach your agents in an efficient and objective manner that your agents can trust. Use NICE ENLIGHTEN AI to measure nine agent "soft skills" proven to impact customer satisfaction. Real-Time Interaction Guidance helps reinforce training and coaching sessions with easy-to-understand prompts so agents can improve customers' experiences on every single interaction.
- **Speech analytics is more effective when deployed with phonetic analysis.** A robust speech analytics solution must have abilities beyond word spotting. It must also have a capability to perform phonetic analysis on speech for efficient analysis and to detect misspellings, jargon, acronyms, and brand names.
- **Predictive Behavioral Routing is revolutionizing the contact center experience.** Consider the experience of placing a customer service call. How cool would it be for the AI behind the call routing to understand your personality and match you with the agent best able to work with you to resolve your question, while keeping you as a satisfied customer? The future is here with NICE's Predictive Behavioral Routing.
- **Omnichannel analytics is required for real customer understanding.** You can't measure agent performance on just the voice channel if you want to achieve service excellence, just as you can't truly know what customers are saying if you aren't analyzing all the ways they communicate with you.
- **Your organization is missing critical feedback from the "silent majority."** The vast majority of your customers aren't completing your surveys or providing you feedback. You need analytics to find out what the customer is saying but not telling you directly.
- **Fraud is on the rise.** Annual losses to fraud total $16 billion. How do you know who's on the other end of the call? NICE ENLIGHTEN uses artificial intelligence to root out fraudsters who could be costing your company millions of dollars.
- **NICE ENLIGHTEN is the first AI framework for customer engagement, with pre-trained models that measure agent and customer behaviors.** This enables organizations of any size to move the needle on metrics such as customer satisfaction, complaints, customer retention, fraud prevention, and more. All with reduced time and effort, and increased accuracy.

Enter the future of contact center analytics

There are trillions of recorded interactions in the world, and that number will more than double in the next five years. Unlocking the value in those interactions can only be accomplished with artificial intelligence (AI) that can find discrete and behavioral patterns that no amount of human effort can surface. Learn how AI-enabled analytics transcends the limits of traditional analytics and makes it possible for businesses to improve customer experiences, identify complaints, prevent fraud, and more.

Inside...

- Intro to speech and text analytics
- Why quality management is key for KPIs
- Powering analytics with AI
- NICE ENLIGHTEN — AI analytics' future
- How to deploy contact center analytics
- Case studies — success with analytics
- Ten ways you can use AI analytics

NICE

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