HOW BEHAVOX IS TRANSFORMING COMPLIANCE WITH REVOLUTIONARY TECHNOLOGY

BEHAVOX

THE THREAT POSED BY BAD ACTORS

Threats can emerge anywhere
in any language, at any time

There are bad actors lurking within financial institutions. Unfortunately, that's a fact. At some point, they will commit some form of misconduct that, if unchecked, will result in huge regulatory fines, the dismissal of senior executives, and irreparable brand damage.

The only protection that a firm has against these rogue employees is finding and reporting their misconduct before a regulator and law enforcement become involved. This game of cat and mouse is increasingly complex at firms, with thousands of employees spread all over the world. Threats can emerge anywhere, in any language, at any time.

THE SIZE AND SCALE OF COMPLIANCE RISK AT TOP 14 GLOBAL BANKS

When you look into the numbers behind the world's largest banks by total managed asset, you begin to understand the sheer scale that is required of a compliance program. **These workforces are extremely distributed, decentralized, and multilingual.** With an average of 229,000 employees, the only way compliance teams can efficiently and accurately identify risk is by leveraging technology.

BANK	TOTAL ASSETS (IN BILLIONS)	COUNTRY	NUMBER OF EMPLOYEES	NUMBER OF COUNTRIES OPERATING IN
1. Industrial and Commercial Bank of China	$4,324.27	China	453,048	41
2. China Construction Bank	$3,653.11	China	345,971	30
3. Agricultural Bank of China	$3,572.98	China	473,691	15
4. Bank of China	$3,270.15	China	311,000	57
5. MUFG	$2,892.97	Japan	147,000	50
6. HSBC	$2,715.15	UK	232,957	65
7. JP Morgan Chase	$2,687.38	US	256,981	60
8. Bank of America	$2,434.08	US	204,489	35
9. BNP Paribas	$2,429.26	France	202,624	72
10. Credit Agricole	$2,256.72	France	7,395	50
11. Japan Post Bank	$1,984.62	Japan	12,800	3
12. SMBC Group	$1,954.78	Japan	103,000	40
13. Citigroup	$1,951.16	US	204,000	97
14. Wells Fargo	$1,927.26	US	258,700	40
TOTAL			3,213,656	N/A
AVERAGE			229,577	47

Source: S&P Global Intelligence Report 2020

TECHNOLOGY'S OMNISCIENT ROLE IN A DECENTRALIZED WORK ENVIRONMENT

Technology has changed the way compliance teams operate. Yes, there is still a need for a physical presence on trading floors – setting a compliance culture is much easier to do in person – but when it comes to catching instances of misconduct, the most effective means is by monitoring internal communication channels, regardless of where traders and employees are sitting. In an indefinite work-from-home setting caused by COVID-19, this visibility across communications channels, regardless of users' locations, can counter the invisibility that can result from a remote, decentralized risk map.

With millions of emails, phone calls, and instant messages sent every day, it's impossible for firms to efficiently monitor for non-compliance without the help of cutting-edge technology. A powerful AI solution, such as Behavox Compliance, is able to aggregate and analyze huge amounts of communication data and flag suspicious content to the compliance team for review and action – before it's too late.

The key to finding misconduct within an organization is casting your net as wide as possible. You need to aggregate data from every possible source, analyze it for rogue behavior, and act on insights that you can trust.

I n this whitepaper, we break down three fundamental requirements for executing effective global compliance programs and how modern technology provides a solution that did not exist in the past. Acting on these requirements provides compliance teams with the best chance to catch bad actors and protect their firms' integrity in the eyes of their clients.

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1. Monitor the widest range of communications channels

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2. Analyze content in multiple languages

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3. Apply artificial intelligence (AI) and machine learning (ML) conduct analytics to identify a broad array of misconduct risk quickly and accurately.

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ENHANCING YOUR COMMUNICATION CHANNEL COVERAGE – THE FIRST STEP TO A ROBUST COMPLIANCE PROGRAM
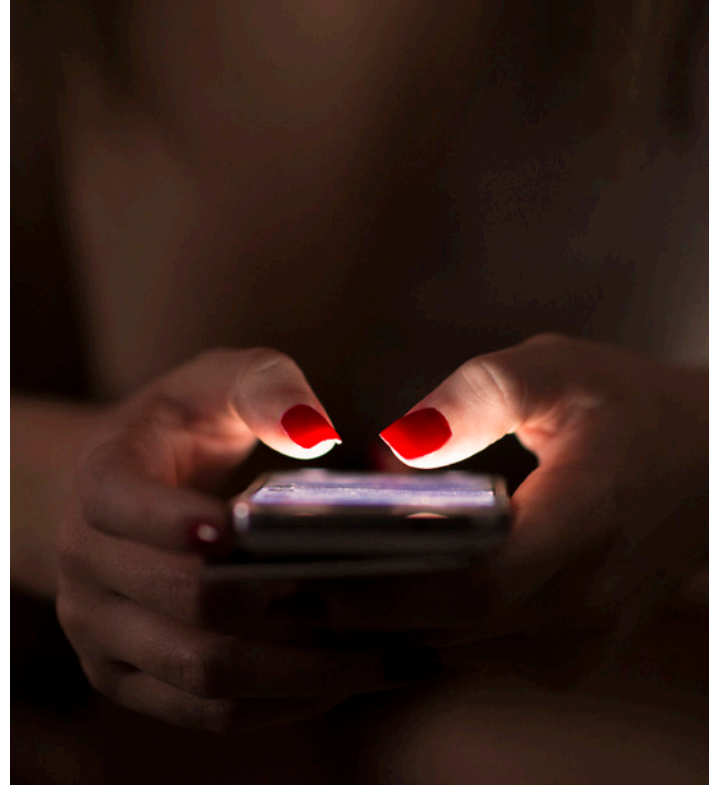
The Problem

Firms aren't monitoring enough communication channels

Think of your average day at work. How do you communicate with your colleagues? You send emails, you join Zoom calls, you message on Bloomberg chat, you may have a phone call every now and then. How many desktop and mobile apps do financial firms use to communicate and collaborate with colleagues and clients?

Communication happens constantly. It occurs across an increasing number of applications and devices. Effectively covering all applications was a challenge for compliance teams prior to the pandemic. With remote workforces blending work and personal time at home, the challenges are magnified significantly. Compliance teams clearly have their work cut out for them. The prevailing paradigm shows no signs of ebbing either.

Legacy solutions and approaches often monitor one or few channels for

misconduct. But, if you're only monitoring email, for example, you're not getting the full picture. Not even close. With communication happening across an

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ever-increasing number of applications, compliance teams must apply solutions that cover all internal communication channels. After all, bad actors are not naive. They are unlikely to use a common communication channel to conduct insider dealings, collude with other firms, or spoof trades. They will utilize quieter channels.

Behavox's Solution

Monitor all of your communication channels

The most effective compliance solution leaves no stone unturned. Behavox Compliance provides teams with the best coverage in the industry. It works seamlessly with dozens of the most popular communication applications pertaining to more than 150 data types across email, SMS, chat, collaborative applications, videoconferencing, phone calls, and more.

> Behavox Compliance provides teams with the best coverage in the industry.

Firms can oversee communication channels in real time, and any suspicious content is flagged in a centralized dashboard for evaluation and investigation.

2 GLOBAL COMPLIANCE PROGRAMS REQUIRE MULTILINGUAL MONITORING

The Problem

Firms only monitor one language, leaving huge compliance blindspots

Covering as many communication channels as possible is a great start on the road toward an effective compliance program – but it's only the first step. If you want to manage compliance on a global scale, you can't afford to only monitor one language. After all, a multinational firm's employee base is communicating over those applications in numerous languages, from German and Spanish to Chinese and Japanese. What good is an English-only solution when the majority of employees speak other languages daily? What good is a compliance program – with all the effort that goes into it – if it is incomplete in coverage of both communication channels and various languages within your firm?

On average, a large bank has operations in 47 countries. There are tens of thousands of employees, across multiple geographies, all communicating in a number of different languages. That is a huge logistical and technological challenge for any compliance team to monitor effectively.

Even if your official business is conducted in English, or French, or Japanese, what about other languages that are used on

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a daily basis? What languages do your employees, clients, and other stakeholders speak? Analyzing communications in just one language creates a huge blindspot for compliance. **If you're a multinational company, you need a compliance solution to match.** Multilingual coverage is a must.

Behavox's Solution

Use a solution that analyzes 10 languages and counting

Behavox Compliance is a multilingual solution for multinational corporations. It covers numerous languages across American, European, Asian, and Latin American theaters, ensuring your compliance team receives relevant alerts from anywhere across your global enterprise. This level of lingual dexterity is unique to Behavox Compliance and supercharges your ability to find bad actors quickly while protecting your firm's integrity and client trust.

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Behavox Compliance Languages

- English
- French
- Spanish
- German
- Swedish
- Danish
- Russian
- Japanese
- Cantonese
- Mandarin

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ENHANCING COMPLIANCE CAPABILITIES WITH ADVANCED ANALYTICS

The Problem

Legacy compliance technology is limited to monitoring for simple lexicon

Your compliance technology is now ingesting data from all of your communication channels and in as many languages as possible. It's a great start to building an effective compliance program. But what do you do with all that information? How do you actually find the bad actors lurking within your organization? The scope of coverage is a critical requirement — languages, communication channels, and the misconduct scenarios you are hunting. But finding bad actors and true positives within that coverage area is the end that justifies the means. Finding bad actors justifies the compliance team's value in the eyes of a firm's managers and executives.

The problem with legacy compliance solutions is that they employ simple algorithms that only look for the use of specific lexicon. The use of one word or phrase in isolation is rarely an indication of misconduct, however, as there is a

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small chance that it may be, the content is flagged by the system for review. The word "fix" is usually monitored by firms as it can relate to instances of rate manipulation – "can you fix the rate?". But what about if an employee asks for

their computer to be "fixed" or tells their colleague that they're "fixing" an error in a presentation? They would both be flagged by a lexicon-based system, creating a false positive that takes time away from a compliance team – time that could actually be used for identifying and investigating true positives.

Imagine every email, phone call, and instant message that merely contains one specific word or phrase is sent to the compliance team for evaluation. They are completely overwhelmed by hundreds or thousands of alerts a day. They do not have enough hours in the day to comb through all of the flagged content. Instead, they have to close cases in bulk and hope that random sampling is enough to protect their firm against misconduct. **Consider how likely a true positive can slip by unnoticed. Can you afford to take that risk?**

And what about the use of slang and the use of code words? If your solution doesn't detect the use of colloquial terms, then you risk missing instances of misconduct. Bad actors utilize slang to bypass traditional compliance monitoring solutions that aren't regularly updated with new terms and phrases or just lack the intelligence to understand the context of what is being communicated.

Ultimately, context is key in understanding language and communication between employees. Understanding context of word choice, slang, and general conversation represents the future standard for effective, modern compliance solutions.
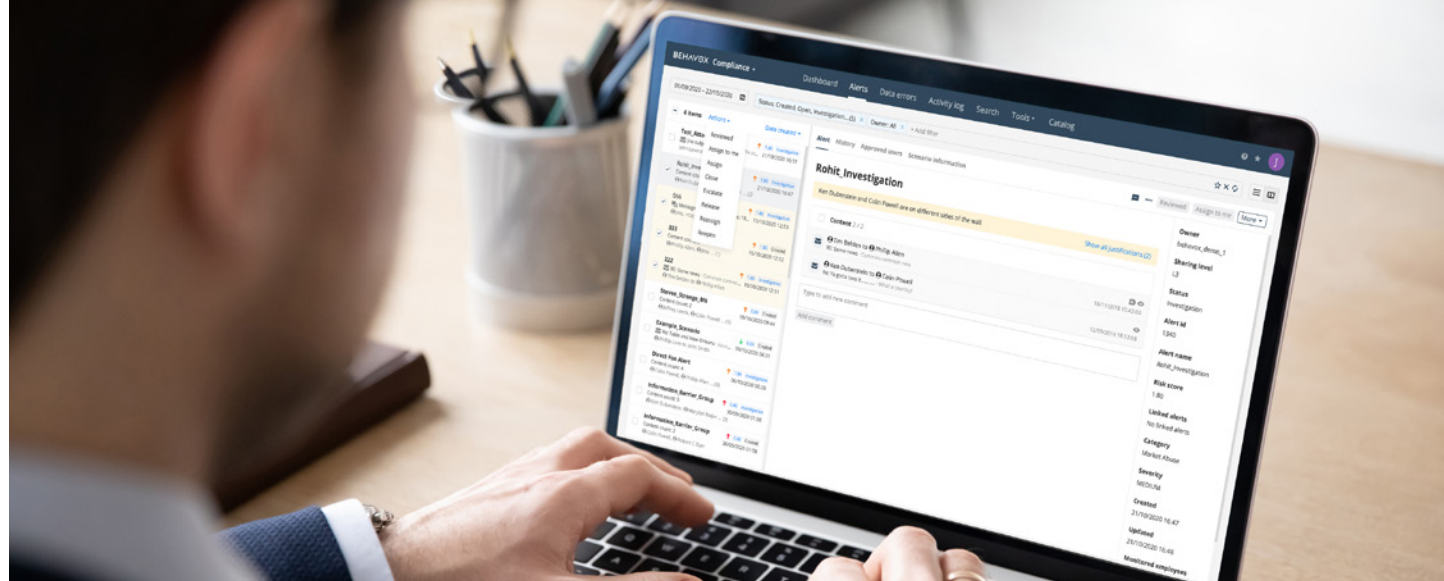
REDUCE FALSE POSITIVES BY 90%, INCREASE ESCALATIONS BY 3X

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Reduce false positives, improve detection of true positives

Behavox Compliance utilizes proprietary algorithms called Scenarios. These Scenarios account for a number of factors that affect the validity of content marked as potential misconduct.

Keywords and phrases are just the tip of the iceberg. The proximity of words within an email. The frequency of communication between people. The time at which communication happens. Whether the person is whispering on the phone. Suspicious email attachments. These are all factors which are considered in real-time by artificial intelligence-based algorithms before content is sent to the compliance team for evaluation.

This approach **reduces false positives by 90% compared to legacy solutions while driving three times more escalations** of actual misconduct. According to some customers, Behavox Compliance's ability to reduce false positives so dramatically results in compliance practitioners saving five hours of their work days that would

typically be consumed by addressing false alerts. This time saving accounts for 25 hours in a week per compliance practitioner – more than half of a 40-hour work week freed up for identifying and investigating real true positives more thoroughly.

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The efficiency of accurate detection, and its ability to reduce the alert pool, accelerates the identification of true positives. By finding bad actors quickly, the strategic standing and performance of a compliance team is elevated in the eyes of their firm's executives and operators. It's a cascading effect that benefits the value compliance teams deliver to their firm, ultimately preserving business continuity, revenue, and brand standing.

KEEPING UP WITH REGULATORY CHANGES

The Scenarios included with Behavox Compliance are extremely successful in catching bad actors lurking within organizations. Customers are often shocked when they turn on Behavox for the first time and see the number of true positives in their data.

The Scenarios are so powerful because they are the result of continuous, rigorous refinement. They are constantly being enhanced via machine learning and artificial intelligence. Every customer has access to Scenarios that have already proved effective for large, global firms at catching bad actors before they cause company-ending crises.

Scenarios are also constantly updated to incorporate the latest financial regulations from around the world. These updates are included in product releases 15 times a year, ensuring customers are always operating in-line with regulators' expectations. Behavox is more than a technology provider. It is a regulatory resource and an invaluable extension of your compliance team.

DEMYSTIFYING ARTIFICIAL INTELLIGENCE

Artificial intelligence is a term that's used widely in risk management and compliance, but vendors tend to be vague about how it is actually employed within their solution. Here's how we utilize cutting-edge AI to help firms find bad actors quickly and accurately.

Behavox Compliance leverages the power of Machine Learning (ML), Natural Language Processing (NLP), and Natural Language Understanding (NLU) to provide the industry's most comprehensive and sophisticated out-of-the-box Scenarios. This technology ensures precise voice and text-based detection of true positives while dramatically reducing the number of false positives.

1. Relationships

Numerical and visual representations of relationships between monitored employees based on their interaction with other colleagues.

2. Text Data Classifiers

Enhances qualitative insights and false positive suppression on text data like email and chat.

3. Voice Analytics

Provides contextual insights by surfacing urgent concerns, enabling organizations to track changes in sentiment over time in both textual (e.g. SMS, long messages, chats) and audio (e.g. phone calls) content.

4. Voice Analytics

Advanced audio segmentation capabilities, including paralinguistic features, voice biometry, speech diarization, and language detection and transcription.

5. Behavior Modeling

Profiling of behavioral patterns pertaining to one or more individuals (peer group) based on analysis of historical communication data. The models are utilized to look for instances of communications that exhibit considerable deviations from normal behavior.

FUTURE-PROOFING YOUR REGULATORY COMPLIANCE PROGRAM

As a global enterprise, you need to know if an employee in your London headquarters is colluding with another firm; a trader based in Hong Kong is sharing insider information with a client; or if your colleague in New York is spoofing the market.

The only way to future-proof your global compliance program is to ingest communication data from the most sources possible, in the most languages, and apply cutting-edge analysis that quickly and accurately finds true positives. That's it. There are no shortcuts to finding bad actors within your organization. You either have complete visibility or you don't. There is no value in compliance programs that are "good enough" or based on "partial visibility". Anything short leaves the glaring potential for a company-damaging, or worse, company-ending crisis on your watch.

Behavox Compliance provides full global coverage, ensuring the best possible protection against the threat of bad actors. Behavox's team of regulatory experts has successfully implemented Behavox

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Compliance at the world's largest banks, hedge funds, and private equity firms, providing them with a multilingual solution that helps their multinational corporations scale their compliance program. Our customers have been able to shift away from monitoring on a local level by embracing a globally scoped, integrated compliance program powered by Behavox Compliance.

At a time when there is widespread uncertainty across the industry and no margin for error, businesses simply cannot risk taking a brand, PR, and financial blow. Behavox Compliance is the only solution to offer peace of mind that you are doing everything in your power to ensure the business continuity of your firm.

Behavox Compliance vs. Legacy Compliance Solution

	BEHAVOX COMPLIANCE	LEGACY COMPLIANCE SOLUTION
Communication applications	40	1-3
Data types	150	5-10
Languages	10+	1
Scenarios	80+	0 (lexicon-based algorithms)