

# Accessibility and the Human Experience.

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THE INFLUENCE OF NOISE ON ALL OUR LIVES.

akoio®

# Introduction

This report is unprecedented.

There's much coverage on accessibility, audiology and noise pollution, to our knowledge nothing has been researched and collected beyond noise's harmful affects on accessibility.

In other words, *noise influence on the human experience*.

Bill Schiffmiller is founder of Akoio, a consultancy on Accessibility and Auditory matters. An Accessibility thought leader and business innovator, advocating innovative consumer approaches that opposes demeaning conventional models of patient care and “disabilities.”

A former leader of Accessibility Initiatives at Apple and co-inventor of the Akoio hearing aid battery dispenser, Bill brings years of unique perspectives on design and accessibility.

Michael Piskosz is Akoio Director of Research and Client Relations. Michael is a global thought leader on auditory health, tinnitus innovation, and consumer behavior in the hearing health space and beyond. He is well-connected with leaders in the industry, contributing to the advancement of auditory health through his extensive network.

Together, Bill and Michael, created Akoio Consulting to focus on noise mitigation, accessibility and auditory matters. Leverage from their expertise and network to help your business's goals and objectives.



Bill Schiffmiller  
Founder



Michael Piskosz  
Director of Research



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# Disruptive noise affects accessibility

Noise undermines our capacity to perform at our best, by creating barriers to important cues, signals, and information. Managing noise ensures that everyone can access their full potential and thrive in any environment.

# Who should read this report?

## **The Decision Makers**

CEOs and Founders see addressing noise and accessibility as a competitive advantage, not just a compliance issue. By prioritizing inclusivity, they foster innovation, attract top talent, and enhance brand reputation. Their commitment shows leadership and resonates with stakeholders, driving long-term success.

## **Human Experience Leaders**

Human Resource and Legal leaders shape the workplace by addressing auditory and accessibility needs and creating inclusive environments that boost productivity, job satisfaction, and retention. They ensure legal compliance while promoting diversity, equity, and inclusion, fostering a supportive and thriving workplace.

## **Marketing, Branding & Design Leaders**

These leaders shape the company's image and user experience by integrating auditory management and accessibility into the brand DNA to resonate with a diverse audience, creating inclusive experiences that meet regulatory requirements and drive customer loyalty and brand equity.

## **Sustainability, Strategy & New Business Development**

These forward-thinking leaders address noise and accessibility as key environmental and social issues. By integrating these principles into sustainability strategies, they promote a healthier planet and inclusive society, aligning with long-term goals and driving growth through new market opportunities.

## **Technology Leaders**

IT leaders implement technologies that support noise management and accessibility. By integrating accessibility features and minimizing distractions, they enhance user experience and operational efficiency. Leveraging AI and strong privacy protections, they ensure the technology meets current and future needs.

## **Board & Investor Relations**

These leaders ensure company governance aligns with shareholder interests. By advocating for auditory and accessibility investments, they protect the company's reputation, enhance its value, oversee ethical and fiduciary responsibilities and long-term value creation, and maintain investor confidence.





Do we think about the long-term health impact of persistent and disruptive noise?

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## Noise's Unseen Accessibility Impact

Accessibility and the human experience are profoundly impacted by the influence of noise on our daily lives. Excessive noise can hinder communication, reduce productivity, and elevate stress levels, making inclusive environments essential for well-being. Ensuring accessibility involves designing spaces and identifying technologies that mitigate noise, allowing everyone to participate fully.

Noise has unintended consequences on those with varying vision, hearing, mobility, cognitive, and neurodivergent needs. Thoughtful noise management promotes a calmer and supportive atmosphere, enhancing the overall quality of life. By addressing the auditory environment, we create inclusive communities where everyone can thrive and connect meaningfully.

# Accessibility is “stuck,” why?

## WGCA–Compliance

A checklist based on unforeseen audits, somehow, a threat from the outside.

## Discomfort

Don’t want to offend, unable to empathize or be one’s shoes with different needs. It’s misunderstood, hard to fathom, filled with trepidation.

## “Too much to chew”

It’s about simplification the need to learn and revisit the basics of accessibility.

## An “Afterthought”

Addressing accessibility reactively rather than proactively results in delayed interventions and higher costs.

## No monetary value

Companies don’t know how to target the breakdown of customer segmentation with accessibility needs.

# 70%

Gov’t, news, & e-commerce sites are inaccessible to blind & low-vision users.\*

\* <https://accessiblyapp.com/blog/web-accessibility-statistics/>

# 96%

Top one million websites are not compliance WCAG guidelines.\*\*


\*\* <https://pixelplex.io/blog/web-accessibility-statistics/>





# It's time to rethink Accessibility

Social Trends are rapidly changing	Conventional Business Models are Irrelevant	Healthcare models hardly address auditory matters	Generational Distinction	Reactivity on Hearing is delayed and costly
<p>Today's trends are driven by constant technological advancements and shifting cultural attitudes that impact various aspects of society, from communication to consumer behavior.</p> <p>Keeping up with these trends is crucial for businesses and individuals alike.</p>	<p>Traditional business models are becoming obsolete due to innovative digital transformations and dynamic market demands.</p> <p>Companies must adapt to new paradigms, embracing agility and technology to stay competitive. The rise of the gig economy, AI, and e-commerce exemplifies this shift.</p>	<p>Healthcare systems and medical models often neglect auditory health, failing to provide adequate solutions for auditory issues.</p> <p>This oversight leaves many individuals without proper support and treatment. Improving access to auditory care is essential for overall well-being.</p>	<p>Generational distinctions highlight the varying attitudes, behaviors, and preferences across different age groups.</p> <p>Understanding these differences is vital for effective communication and marketing strategies. Each generation brings unique perspectives and values to the table.</p>	<p>Addressing hearing issues reactively rather than proactively results in delayed interventions and higher costs.</p> <p>Early detection and treatment can significantly improve outcomes and reduce long-term expenses.</p> <p>Proactive hearing care should be a priority in health management.</p>



Humans undergo various stages of life as needs evolve.

## Noise Affects Accessibility for Anyone

Throughout our lifetime, accessibility extends beyond physical barriers. It encompasses the environment in which we live, work and socialize.

Accessibility is about ensuring everyone can live and work to their fullest, regardless of their needs.

An overlooked and unique aspect of this is noise on our daily lives.

In a world where sensory overload is becoming the norm, creating accessible auditory environments is essential for helping people perform their best.





# Noise on our senses.

## Vision

Noise aids navigation and spatial awareness through essential auditory cues. However, excessive noise can cause sensory overload, leading to disorientation and stress. In noisy environments, communication challenges can arise, resulting in misunderstandings and social isolation. Proper noise management is crucial.

## Hearing

Noise on hearing accessibility extends beyond immediate hearing loss effects. Disruptive noise hampers communication, social interaction, and information access, impacting personal and professional relationships and overall quality of life. Constant excessive noise exposure can worsen auditory health over time.

## Cognitive

Noise aids learning by enhancing concentration for auditory learners and providing cues for kinesthetic learners. Quiet environments benefit reading/writing learners. Excessive noise disrupts focus and creates chaos. Properly managed soundscapes enhance learning; poor management hinders comprehension.

## Mobility

Understanding the nuanced effects of noise and sound on our mobility condition can improve environmental design and management to maximize benefits and minimize harms. These conditions impact daily life, requiring support and adaptive strategies to enhance mobility and independence.

# Noise, the Good, the Bad & the Ugly

	Auditory	Vision	Cognitive	Mobility
<b>Benefits</b>	Use of assistive listening devices to enhance hearing	Auditory cues in navigation and spatial awareness	Auditory learning tools enhance comprehension	Auditory cues aid in safe navigation and movement
	Visual alarms and alerts compensate for lack of auditory cues	Enhanced safety through environmental sounds and alerts	Music and sounds support memory and learning	Assistive technologies (VO) enhance independence
	Reducing cognitive decline	Communication facilitated through sound	Speech therapy builds self-esteem and social skills	Music therapy support motor skills and mental well being
<b>Unintended Consequences</b>	Background noise interferes with effectiveness of hearing devices	Sensory overload from excessive noise	Distraction from background noise, reducing focus and comprehension	Sensory overload from excessive noise
	Communication barriers in noisy environments	Difficulty distinguishing important sounds in noisy environments	Difficulty processing information in noisy environments	Fatigue and stress from noisy environments
	Increased isolation due to noise interference with communication	Increased stress and disorientation from loud and unpredictable noise	Increased anxiety and frustration from auditory overload	Missed auditory cues due to background, posing safety risk

# Akoio is your partner on accessibility and auditory matters.







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## Product & Service Delivery

We enhance customer segmentation and messaging through generational insights and consumer behavior analysis. Drawing from our extensive experience in product delivery, retail, and consumer behaviors, we bring unique business insights to audio brands, ensuring they resonate with diverse customer needs and preferences.

# The Akoio Network

Leverage our network to collaborate and connect with companies dedicated to reshaping accessibility and auditory thinking and gaining deeper insights into the realms of noise, sound, and hearing across the healthspan.





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# Workplace Productivity

We leverage our expertise to improve workplace environments and employee well-being through sound wellness initiatives that help businesses create healthier, more productive spaces and stronger employee connections.



FIND OUT MORE.

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