# 2024 ANNUAL REPORT

Published March 2025

## VISION

# Connecting everyone and everything, everywhere

## MISSION

Fostering highly effective global collaboration among member companies

Delivering excellent connectivity experiences through interoperability

Embracing technology and driving innovation

Promoting the adoption of our technologies worldwide

Advocating for fair worldwide spectrum rules

Leading, developing, and embracing industry-agreed standards

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**Kevin Robinson**
**President and CEO**

> “Wi-Fi is now a critical component of the world’s telecommunications infrastructure and contributes $4.3 trillion USD to the global economy.”

# CEO REMARKS

In 2024, we celebrated Wi-Fi®’s 25th anniversary by reflecting on how far our technology has come since its inception. As one of the world’s most loved technologies, Wi-Fi is now a critical component of the world’s telecommunications infrastructure and contributes $4.3 trillion USD to the global economy[1]. The widespread shift to smartphones and the data consumption it generated was one of the most significant milestones in Wi-Fi’s early history. Wi-Fi quickly became ubiquitous in smartphones, and users now spend the majority of their time connected through Wi-Fi with up to 89% of their consumed data flowing over Wi-Fi[2], highlighting how critical Wi-Fi is for meeting overall connectivity needs.

Wi-Fi Alliance® introduced Wi-Fi CERTIFIED 7™ at CES 2024 to strong demand from the market. Wi-Fi 7 included anticipated features such as Multi-Link Operation, 320 MHz channels, and 4K QAM, which drive enhanced performance and will have a significant impact on markets such as healthcare, automotive, and enterprise. In the first year of certification availability, the industry shipped more than 269 million Wi-Fi 7 devices[3], including leading smartphones and access points, and saw multiple global large-scale Wi-Fi 7 deployments, such as Circuit of the Americas in Austin, Texas and the Passalacqua Hotel in Italy.

Ensuring widespread access to the 6 GHz band remains a key objective for Wi-Fi Alliance. Wi-Fi Alliance and Ramathibodi Hospital in Thailand collaborated on a pilot project to demonstrate the superior experience delivered in the 6 GHz band when supporting dense connectivity scenarios with hundreds of students and doctors. Wi-Fi Alliance also commissioned a study, Wi-Fi Spectrum Requirements, which showed that opening the full 6 GHz band to Wi-Fi was essential to meet Europe’s gigabit connectivity goals. In December, the Federal Communications Commission (FCC) in the U.S. opened the entire 6 GHz band to very low power (VLP) devices such as wearables, healthcare monitors, and in-vehicle devices.

[1]Telecom Advisory Services, 2021
[2]Open Signal, 2024
[3]ABI Research, 2024

Wi-Fi Alliance continued to take action to enhance the value of Wi-Fi CERTIFIED®. We conducted eight Interoperability Events in 2024, covering a range of technologies and use cases, including Wi-Fi 7, WPA3™, client roaming, Wi-Fi HaLow™, and Internet of Things (IoT), with 59 member companies participating with 346 commercial devices. These events provide a unique opportunity for members to identify and characterize interoperability and other challenges that may arise only after mass adoption of a technology begins in the market. To amplify the impact of these events beyond the participants, Wi-Fi Alliance created a new quarterly publication, *Interoperability Insights*, which will help product teams and developers elevate the quality of their products and drive continuous improvements to our testing that increase the relevancy of Wi-Fi CERTIFIED across the entire product life-cycle. Combined with completed improvements to testing and certification efficiency, Wi-Fi Alliance will ensure that Wi-Fi CERTIFIED keeps pace with evolving industry demands and continues to deliver unparalleled value to members and stakeholders.

Looking ahead to 2025, Wi-Fi Alliance will focus on driving industry momentum in several key areas. Wi-Fi Alliance will continue to promote Wi-Fi 7 adoption across current and emerging segments, such as industrial IoT, healthcare, and automotive. Evolving Wi-Fi CERTIFIED to accelerate and maintain market adoption of members’ products, including work to address the complexities of deploying Wi-Fi products in a variety of regulatory environments, will continue into 2025 and is vital to the success of our industry. Finally, the pursuit of a sufficient, globally harmonized 6 GHz band around the world will continue, with Wi-Fi Alliance working alongside regulatory bodies across the globe to secure the necessary spectrum that will allow Wi-Fi to flourish for many years to come. Thanks to its active membership and exceptional staff, Wi-Fi Alliance is prepared for the opportunities that lie ahead, and I consider it a privilege to lead this organization into the future.

# CHAIR REMARKS

In 2024, Wi-Fi Alliance celebrated its 25th anniversary with a look at the past, present, and future of Wi-Fi. With more than 45.9 billion Wi-Fi devices shipped to date and 21.1 billion Wi-Fi devices currently in use[1], Wi-Fi contributed $4.3 trillion USD to the global economy in 2024[2]. Wi-Fi Alliance has a lot to celebrate, with cutting-edge Wi-Fi capabilities enabling newer and more advanced applications.

As the President and CEO of Wi-Fi Alliance, Kevin Robinson has driven important changes to the operation of Wi-Fi Alliance, achieved better alignment with member priorities, and secured the long-term growth of the Wi-Fi industry. By implementing a bold strategy, Kevin continues to strengthen the role of Wi-Fi Alliance in the Wi-Fi industry and deliver greater benefit to Wi-Fi Alliance members.

Wi-Fi Alliance helped advance the Wi-Fi industry by enhancing Wi-Fi CERTIFIED and supporting the development and deployment of Wi-Fi technology. Building on the launch of Wi-Fi CERTIFIED 7 at CES 2024, the Wi-Fi 7 momentum campaign continues to drive adoption of the latest Wi-Fi generation across market segments including extended reality (XR), healthcare, and automotive. Furthermore, Wi-Fi Alliance enhanced Wi-Fi CERTIFIED 7 to include certifications for Mobile APs in order to support personal hotspot use cases and applications. Wi-Fi Alliance also developed a solution to address the connectivity of legacy WPA2 devices in certain deployment scenarios by providing a new compatibility mode for WPA3. To further reinforce the relevance of Wi-Fi CERTIFIED, Wi-Fi Alliance conducted a series of Interoperability Events. The purpose of these events is to identify interoperability issues early in the deployment phase and provide guidance to the industry. Wi-Fi Alliance has also delivered greater certification efficiency, reducing test time and test infrastructure requirements by more than 50%.

In 2024, we made significant progress toward global unlicensed access to 6 GHz spectrum. In support of the ongoing efforts of Wi-Fi Alliance, Kazakhstan became the latest country to open the full 6 GHz band to Wi-Fi and the FCC voted to approve very low power (VLP) access to the entire 6 GHz band, which will allow further innovation in areas such as peer-to-peer usage. Wi-Fi Alliance continued its promotion of unlicensed 6 GHz spectrum in Asia and Europe, demonstrating the utility of 6 GHz Wi-Fi at Ramathibodi Hospital in Bangkok, Thailand and publishing a study, Wi-Fi Spectrum Requirements, showing that an unlicensed 6 GHz band was necessary to meet Europe's gigabit connectivity goal.

We are living in an unprecedented and exciting time in our industry. Wi-Fi Alliance continues to expand its powerful support of its members and the broader industry through new services, valuable certifications, increased advocacy, and market and technology development. In 2025, Wi-Fi Alliance will continue to be the collaboration forum of choice where the next generation of innovators broaden Wi-Fi's market success. Growing Wi-Fi's impact and increasing global access to the 6 GHz band remains a primary focus. The organization is poised to deliver significant technological progress, including continued development of Wi-Fi CERTIFIED 7, many important testing simplifications, and AFC-related activities. As Kevin has stated, "Wi-Fi Alliance is proud to play a leading role in one of technology's greatest success stories, and we are grateful to our members for your commitment to driving the Wi-Fi story forward."

Thank you for continuing to support our work and for your commitment to high-quality, secure, and interoperable Wi-Fi.

[1] IDC Research, 2023
[2] Telecom Advisory Services, 2021

**Srinivas Kandala, Ph.D.**
**Chair**

> "Wi-Fi Alliance continues to expand its powerful support of its members and the broader industry through new services, valuable certifications, increased advocacy, and market and technology development."

# EXECUTIVE TEAM

Kevin Robinson
President and CEO

Jason Fu
Vice President,
Membership

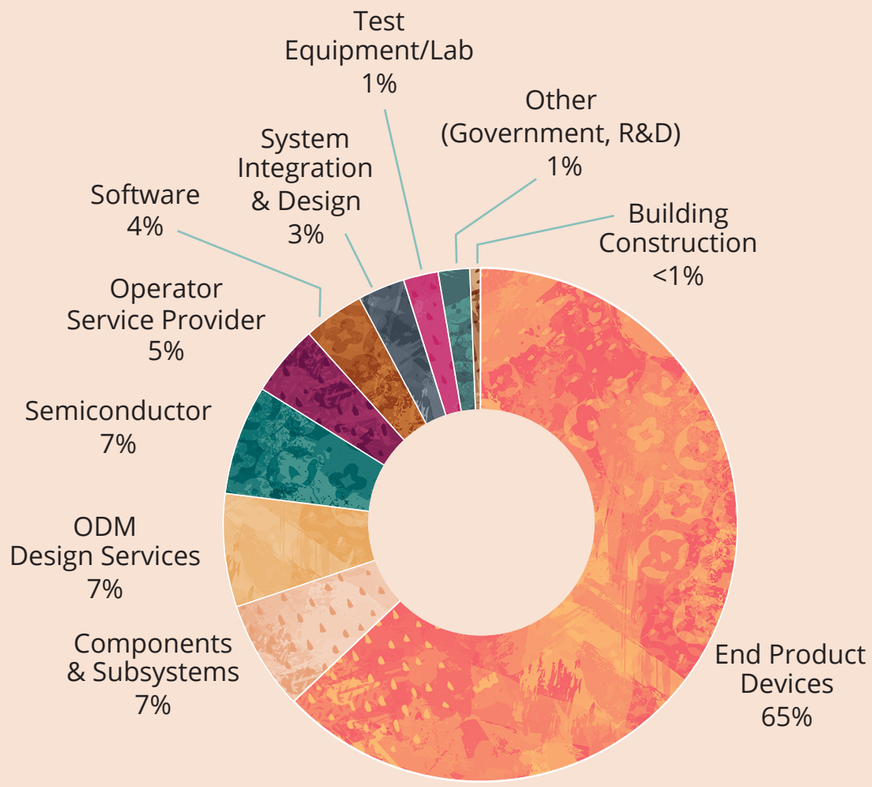
Alex Roytblat
Vice President,
Worldwide Regulatory Affairs

Maureen Gallagher
Vice President,
Marketing

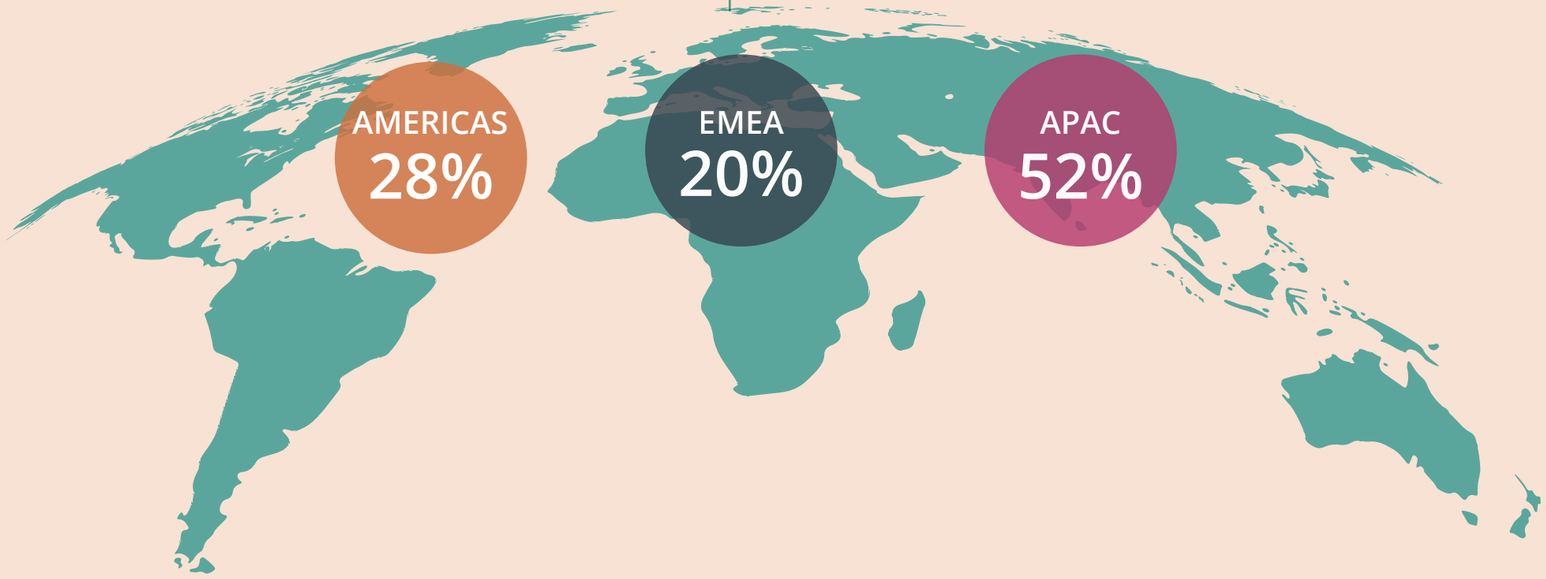
Gaurav Jain
Vice President,
Technology

Dan Peterman
Senior Director,
Finance

# OUR MEMBERS




**930** MEMBER COMPANIES WORLDWIDE



# SPONSOR MEMBERS


# CONNECTING EVERYONE AND EVERYTHING, EVERYWHERE

Wi-Fi is one of the greatest technology success stories, embraced by users at home, work, and on the go. Wi-Fi economic value will grow to $4.9 trillion USD by 2025, and Wi-Fi has proven to be a key driver of digital resilience and innovation, providing benefits for established and developing economies. 2024 saw 21.1 billion Wi-Fi devices in use[1] and 4.1 billion shipments[2], contributing to 45.9 billion cumulative Wi-Fi shipments[3] over the technology's lifetime. Wi-Fi's inherent strengths, new solutions, and additional spectrum will help ensure Wi-Fi continues to connect global users for years to come.

Wi-Fi Alliance is the trusted leader for the Wi-Fi industry, serving as the gold standard in identifying market needs and delivering on those opportunities. Wi-Fi Alliance drives Wi-Fi success with thought leadership, spectrum advocacy, and industry collaboration to ensure that Wi-Fi provides reliable, high-performing, and secure connectivity. By convening the smartest minds, we break barriers and solve problems while acting as the voice of our industry. In all that we do, we are invested in our members and create the pathways for their shared success.

[1]IDC, Worldwide Wi-Fi Technology Forecast, March 2023
[2]IDC, Worldwide Wi-Fi Technology Forecast, November 2023
[3]IDC, Worldwide Wi-Fi Technology Forecast, March 2023

**Trusted Leader**
Gold standard for process, policy, and opportunity

**Powerful Advocate**
Voice of our industry, invested in long-term success of Wi-Fi

**Collaborative Convener**
Bringing people together to break barriers and solve problems

# INITIATIVES TO STRENGTHEN WI-FI CERTIFIED

Wi-Fi Alliance is committed to evolving the affordability, efficiency, and relevancy of Wi-Fi CERTIFIED to ensure our certifications, testing, and events continue to deliver value to our members and stakeholders.

In 2024, we introduced forthcoming changes to Wi-Fi CERTIFIED certification and testing to ensure our programs keep pace with changing industry demands. These changes include reducing barriers to testing, simplifying the certification fee structure, and expanding Wi-Fi CERTIFIED testing so it remains relevant through all stages of technology product lifecycles. These changes highlight our unwavering dedication to the Wi-Fi industry and our commitment to a more sustainable ecosystem for members and Authorized Test Labs. Many of these changes will go into effect in 2026.

Wi-Fi Alliance also enhanced Wi-Fi CERTIFIED by expanding our Interoperability Event cadence to address more topics and technologies relevant to our members. These events covered a range of technologies, including WPA3, Wi-Fi 7, Wi-Fi HaLow, Internet of Things, and roaming. By putting devices in real-world scenarios and allowing members to connect their devices with many different device types and Wi-Fi generations, members are able to identify functionality issues before their devices are released to the market. Wi-Fi Alliance also introduced *Interoperability Insights*, a new quarterly member publication that discusses learnings gleaned from events, lab interoperability research, and certification data — serving as a valuable resource for product teams looking to consistently deliver high-quality Wi-Fi products.

Wi-Fi Alliance is committed to creating pathways for the shared success of our members. We look forward to identifying new opportunities and implementing important updates to ensure Wi-Fi CERTIFIED maintains its market relevancy.

# CELEBRATING 25 YEARS OF WI-FI INNOVATION

2024 marked a significant milestone in the history of Wi-Fi as we celebrated 25 years of connectivity. What began as a novel, untethered solution to meet the growing demand for connectivity in the late 1990s has evolved into a global force. With its decentralized nature and use of unlicensed spectrum, Wi-Fi allows organizations and individuals the freedom to innovate without constraints. One of technology's greatest success stories, Wi-Fi has transformed nearly every facet of modern life, revolutionizing the way we communicate, work, and socialize.

Over the past quarter-century, Wi-Fi has grown into a foundational technology that powers everything from smart homes to industrial operations. Wi-Fi's influence has even expanded beyond the stratosphere, supporting lunar exploration during NASA's Artemis mission by facilitating communication between astronauts and mission control and enabling wireless cameras on spacecraft. Wi-Fi brings the spectacular to life, but its ubiquity is never more evident than in everyday use cases that are easily taken for granted. In healthcare, Wi-Fi enhances patient care by giving providers real-time access to critical electronic medical records and MRI results. In manufacturing and logistics, Wi-Fi supports essential infrastructure in factories and fulfillment centers. During the pandemic, Wi-Fi was the lifeline that sustained remote education, work, and collaboration.

The past 25 years of Wi-Fi have seen unprecedented evolution, and emerging Wi-Fi applications promise cutting-edge innovation. With advancements in spectrum availability and device performance, Wi-Fi is poised to meet the demands of complex use cases that are quickly becoming mainstays, including enhanced automotive safety features, improved efficiency in tomorrow's factories, and lifelike extended reality in gaming. Wi-Fi not only provides crucial connectivity but also serves an integral component of our daily lives, empowering progress and human connection – and its momentum shows no signs of slowing down.


Wi Fi™
ALLIANCE

# 6 GHz WI-FI: TRANSFORMING THE FUTURE OF HEALTHCARE

In November 2024, Wi-Fi Alliance and Faculty of Medicine Ramathibodi Hospital, Mahidol University completed a seven-month trial demonstrating the value of full-band 6 GHz Wi-Fi in healthcare. By testing 6 GHz Wi-Fi's ability to support medical training and education in a high-density environment, Wi-Fi Alliance, in collaboration with member partners Hewlett Packard Enterprise, Intel, and Meta, successfully showcased its potential to revolutionize healthcare by enabling cutting-edge Wi-Fi technologies that enhance patient care and operational efficiencies.

A demonstration during the trial explored two critical deployment scenarios using only the three 160 MHz channels available in the lower 500 MHz of the 6 GHz band versus the seven 160 MHz channels available in the full 1200 MHz of the 6 GHz band. The demo tested the efficient use of AR/VR technologies for medical training, as well as streaming and file transfers in dense deployments. The demonstration confirmed that seven channels are necessary to achieve optimal performance and consistently deliver gigabit connectivity in dense environments, and attendees saw first-hand the criticality of making the full 6 GHz spectrum available for Wi-Fi to deliver the stringent latency requirements and data throughputs these advanced medical use cases demand.

Making the entire 6 GHz band available for Wi-Fi ensures that healthcare facilities are prepared to support future innovations and paves the way for other industries in countries that are currently determining regulations and policies for the band. Wi-Fi Alliance's successful demonstration illustrates how 6 GHz Wi-Fi can strengthen medical training practices and serves as a model for nationwide adoption of the band in Thailand and around the world.

# STRATEGIC PARTNERS

AECC
AUTOMOTIVE EDGE COMPUTING CONSORTIUM

broadband forum

csa connectivity standards alliance

CTIA Certification™

CEPT ECC
Electronic Communications Committee

TELECOM INFRA PROJECT

WIRELESS BROADBAND ALLIANCE

WIRELESS INNOVATION FORUM®
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This report has been prepared without audit from the Wi-Fi Alliance books and records. The information in this report is given as of the date specified and Wi-Fi Alliance assumes no responsibility for updating this report. An audit for fiscal year 2024 is currently being prepared and will be available to members upon request when it is completed. Management does not expect the audited balance sheet nor the audited changes in net assets for fiscal year 2024 to be materially different from the unaudited results presented in this report. Wi-Fi Alliance assumes no responsibility for updating these financial reports and statements for e vents which may have occurred subsequent to December 31, 2024.

The projected budget for fiscal year 2025 is based upon Wi-Fi Alliance's performance in 2024 and in earlier years, as well as anticipated developments that management believes are likely to occur in 2025. Statements concerning 2025 are forward-looking statements; they are based on management's current expectations and assumptions, which are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict. Actual outcomes and results may differ materially from these expectations and assumptions due to changes in global political, economic, business, technological, market, regulatory, and other factors. Management undertakes no obligation publicly to update or review any forward-looking information whether as a result of new information, future developments, or otherwise.

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