

***Pioneer***

## Corporate Guide 2022

Group philosophy

# Move the Heart and Touch the Soul

Group Vision

# Creating the Future of Mobility Experiences

Under its Group Philosophy “Move the Heart and Touch the Soul,” Pioneer has launched a series of world-first, industry-first products and services since its foundation in 1938.

Our new Group Vision “Creating the Future of Mobility Experiences” is about where we aspire to be in 2025. In our pursuit of this vision, we will continue to grow our enterprise value.

People’s values and lifestyles have been undergoing dramatic transformations in the new normal. In this changing environment, Pioneer’s aspiration is to deliver the combined values of products and services in the mobility domain. We will continue to create and offer new hardware products by leveraging our years of expertise and experience in product development and manufacturing. At the same time, we will develop new business models that leverage a massive amount of data collected from inside and outside vehicles through on-board devices to provide the driver with a stream of information in real time to make driving safer and more comfortable; assist the logistics industry in addressing truck driver shortages as well as achieving greater energy efficiency; and help resolve social issues such as traffic congestion and accidents and combat global warming.

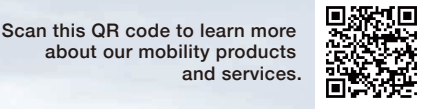
Pioneer is committed to becoming a solution service company that will constantly bring new values and excitement to you by offering products and services that will make your mobility experiences safer, smarter, and more comfortable.



Shiro Yahara  
President and CEO  
Pioneer Corporation



Pioneer engages primarily in the car electronics business globally.  
We leverage our cutting-edge technologies to turn novel and visionary ideas into groundbreaking products and services.



Consumer Market Business

We have a broad range of in-car products in our lineup, including the *carrozzeria* series for the Japanese market, navigation systems, audio/video systems, and speakers. We also provide on-board Wi-Fi routers that enable “connected” in-car experiences, as well as dash cams that help improve road safety and security.



NP Business

Pioneer has been developing services and solutions for a mobility environment, built on our proprietary Piomatix mobility AI platform. Our products and services use voice user interfaces and wireless connectivity to make driving experiences safer and more comfortable. Over-the-air updates enable us to continue to add new features and performance enhancements to purchased products and services. As a first step, we have launched the NP1, the world’s first\* AI-powered connected virtual driving partner, in the consumer market. The NP1 packs a variety of features in a compact body, such as a network-connected dash cam, a voice-based car navigation system, and a Wi-Fi spot.

\*As an AI-powered, voice-based connected in-car device. Source: Market research on car electronics products conducted by ESP Research Institute, Inc. in March and April 2022

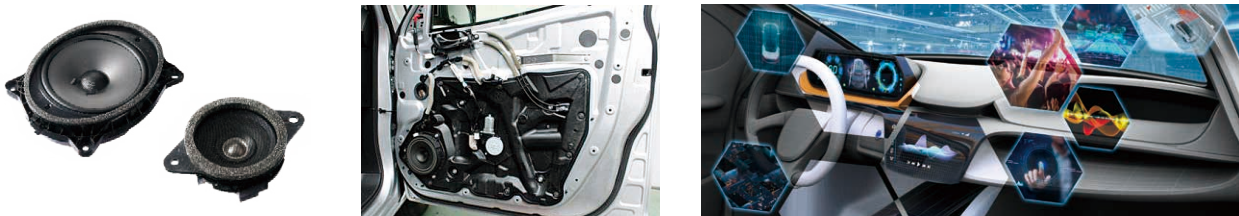


NP1



OEM Business

We supply high-performance navigation systems, audio/video systems, and speakers to leading automakers around the globe. We also develop and offer software applications and solutions to be incorporated into next-generation vehicles.



This rendering represents a designer’s concept.

Data Solutions Business

Over the years, Pioneer has amassed a wealth of real-world mobility data. We use these data assets to develop and provide cloud-based solutions to auto-insurance and trucking companies to help ensure greater road safety and security. Our Vehicle Assist service communicates with navigation systems and dash cams on board commercial fleets of vehicles to help corporate clients prevent road accidents and achieve greater efficiency in fleet management. More specifically, Vehicle Assist offers sophisticated vehicle tracking and dispatching, the monitoring of driver behavior, guidance in safe driving, and the automated production of driving logs.

Vehicle Assist



Sound Business

We apply our wealth of technology assets in acoustics to fine-tuning the sound field in the car. We also market TAD-branded high-end speakers and audio components, which have earned critical acclaim worldwide.



TAD  
TECHNICAL AUDIO DEVICES LABORATORIES, INC.

Optical Storage Device Business

We offer Blu-ray/DVD drives for PCs with high-precision reading and writing capabilities, including ones capable of reading Ultra HD Blu-ray discs.



Pioneer has been developing technologies that use massive amounts of data fed from in-car devices, AI, and human-machine interfaces (HMIs) to offer novel value in the mobility field with the combination of groundbreaking hardware products and services.

SaaS Technology Center to develop and operate services

The SaaS Technology Center was established in 2021 to develop and operate data-driven services in-house. The center pushes Pioneer's SaaS business forward by combining products and services to resolve wide-ranging issues in the mobility field.



Streamline development and operations through DevOps



Develop and operate services in-house



Make greater use of data for service development and delivery



Scan this QR code to learn more about the SaaS Technology Center.



Piomatix

Piomatix is a mobility AI platform Pioneer has developed in-house. It combines AI technologies and a voice user interface to provide solutions to diverse issues prevalent in society. Piomatix recognizes in real time what is going on inside and outside the vehicle and offers the most relevant information to the driver via voice at the exact right time. We use Piomatix as a basis for developing a broad range of B2C and B2B solutions, and also offer it as an open platform to corporate partners to jointly provide exciting mobility experiences to a growing number of customers around the globe.



Scan this QR code to learn more about Piomatix.



Developing future-looking technologies

IVI technology for next-generation vehicles

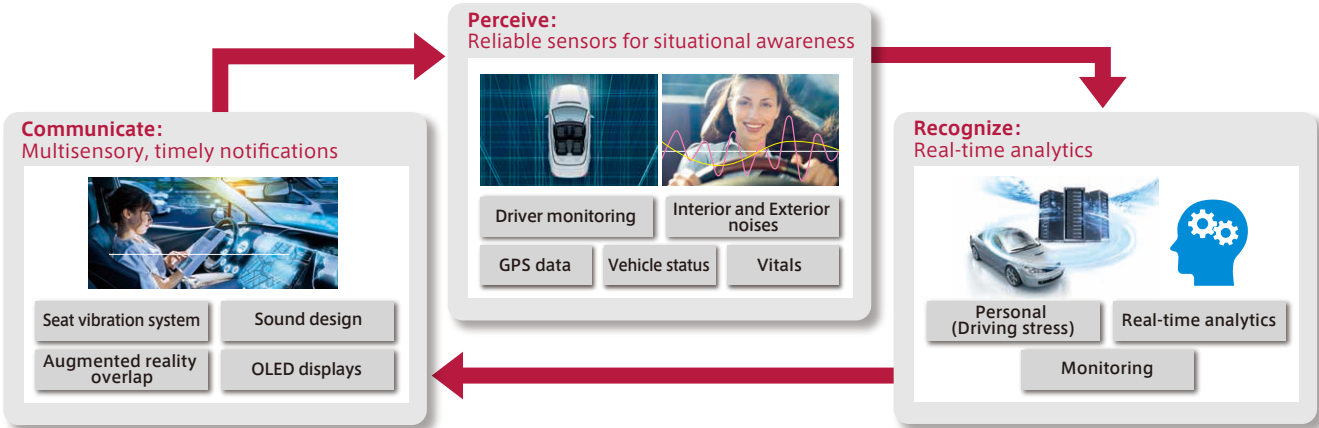
We are working to develop automobile multimedia software packages that will integrate more robust hardware design processes and components of an IVI (in-vehicle infotainment) system, such as navigation, audio, and network connectivity, and will work on a variety of in-car platforms in an emerging CASE (Connectivity, Autonomous, Sharing, and Electrification) environment.

Connected services and data-driven solutions

We are developing in-house AI and data application technologies driven by a massive amount of digital data we have accumulated on driving routes, traffic conditions, and maps. These technologies are designed to create new service for consumers and help resolve social issues.

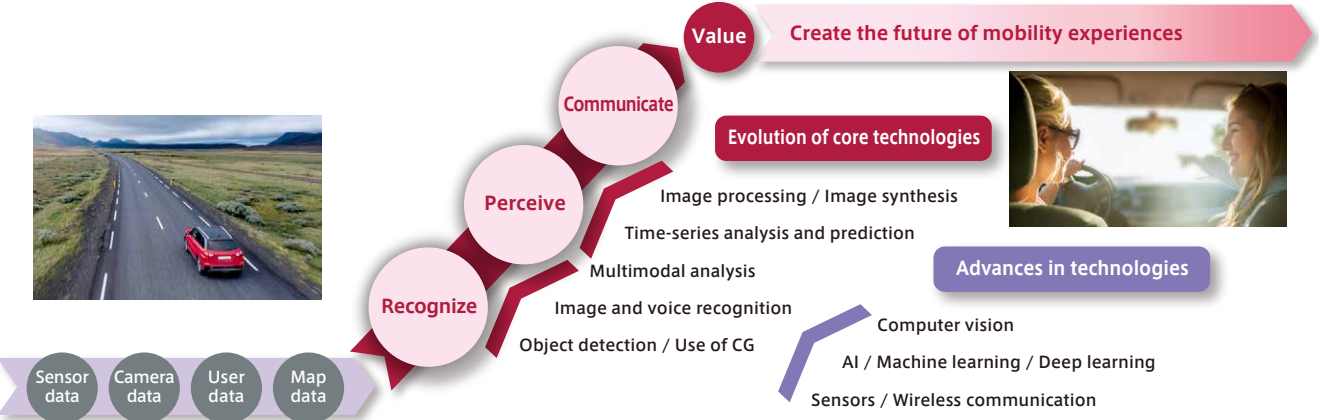
Next-level HMI solutions

We are also working to develop next-level HMI technology and solutions, which will bring enhanced entertainment experience, comfort, and safety into an increasingly complex and sophisticated in-car environment. They will also provide a variety of experiential value optimized for constantly changing driving conditions as well as the needs of the driver and passengers.



Core technologies for next-generation mobility solutions

Fast-paced advances in AI and sensors provide us with the basis for refining our image-recognition and data-analytics technologies. They serve as core enablers for next-generation solutions to bring you novel value and emotionally uplifting experiences.



Scan this QR code to learn more about our future-looking technologies.



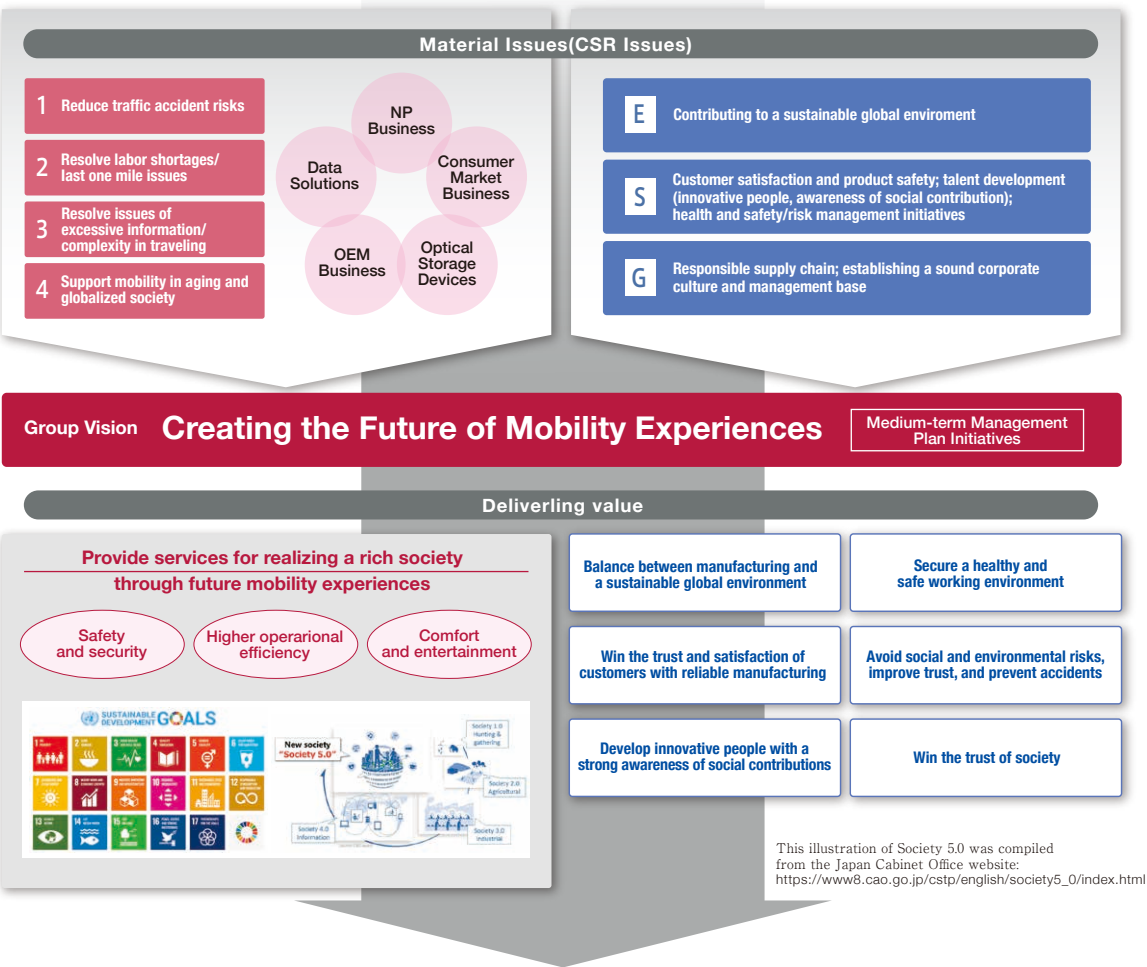


The Pioneer Group bases its corporate activities on its Group Philosophy and aligns them with its vision and medium-term management plans.

Our primary objective in business activities is to achieve CSV (creating shared value), which enables us to increase our enterprise value and deliver greater social value to the public. This can be done by providing products and services that help fulfill the 17 Sustainable Development Goals\*<sup>1</sup> (SDGs) and achieve Society 5.0\*<sup>2</sup>, proposed by the Japanese government. To make our corporate infrastructure more robust, we intend to fulfill our social responsibility with a focus on group-wide organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues, and community involvement and development.

\*1. The 17 goals and 169 targets were adopted by the United Nations in 2015, as part of the 2030 Agenda for Sustainable Development.  
\*2. A human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space

Pioneer's Value Creation Process



The Pioneer Group plays an instrumental role in promoting the sustainable development of society by addressing material issues, such as reducing the risk of road accidents, through actions aligned with its vision and medium-term management plans.

Scan this QR code to access our CSR reports.



Highlights of Business Activities

NP1

The NP1 uses a voice user interface and network connectivity to deliver a variety of functions and services that address diverse issues associated with driving, such as reducing the driver's stress and achieving greater road safety and making road environments safer and more friendly to senior drivers.



Related SDGs

- 3 Reduce traffic accidents by issuing heads-ups
- 9 Expansion of technological innovation
- 11 Mobility support for elderly drivers

Piomatix for Green

Piomatix for Green is a platform to assist in reducing vehicle CO<sub>2</sub> emissions, combining Piomatix, a route-searching technology, and our patented technology to predict vehicle energy efficiency. It is part of our efforts to address environmental challenges in the mobility field.

Related SDGs

- 7 Visualization and reduction of vehicle CO<sub>2</sub> emissions to help mitigate global warming
- 11 Solutions based on a proprietary open platform
- 17 Partnerships(collaboration between companies)

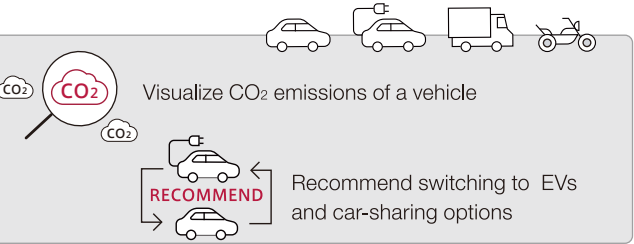
Vehicle Assist

The Vehicle Assist service is a B2B solution built on the technologies and know-how that Pioneer has amassed in the Car Electronics Business. It addresses diverse issues facing the logistics and trucking industry, such as the need to reduce CO<sub>2</sub> emissions and traffic accidents, as well as the need to address shortages of truck drivers.



Related SDGs

- 3 Reduction of traffic accidents by issuing heads-ups
- 7 Fuel efficiency improvement by supporting safe driving and optimal routing
- 8 Productivity improvement by streamlining driving routes
- 11 Reduction of CO<sub>2</sub> emissions by shortening required mileage and time through operational management
- 17 Partnerships(collaboration between companies)



Examples of More Robust Corporate Infrastructure

Achieving carbon neutrality

The Pioneer Group has the goal of reducing its Scope 1\*<sup>3</sup> and Scope 2\*<sup>4</sup> CO<sub>2</sub> emissions by 30% from the 2018 level by March 31, 2030, as a step to achieving carbon neutrality.

\*3. Scope 1 emissions: Direct GHG emissions that occur from sources controlled or operated by a business, such as emissions associated with fuel combustion and manufacturing processes.  
\*4. Scope 2 emissions: Indirect GHG emissions associated with the purchase of electricity, heat, and steam.

Related SDGs

- 12 Resource saving and resource recycling; management of chemical substances
- 13 Prevention of global warming

Implementing community outreach programs

We work closely with communities to undertake a broad range of projects to enrich people's lives. Our projects include the Listen-through-the-Body concerts to help more people experience the joy of music and handcraft workshops for schoolchildren.



Listen-through-the-Body concerts

Related SDGs

- 4 Contribution to culture and diversity by holding Listen through the Body concerts
- 15 Forest conservation activities

Creating a workplace environment in which diverse employees thrive and excel

We provide employees with flexible working arrangements, training programs for their professional growth, and assistance in balancing their work and child- and nursing-care obligations.

Related SDGs

- 5 Promotion of women's participation and advancement
- 8 Promotion of employment of people with disabilities

Scan this QR code to learn more about our environmental initiatives.



Scan this QR code to learn more about our social outreach programs.



## History

Since its founding in 1938, it has been in Pioneer's DNA to deliver unforgettable experiences to people around the world through a variety of world's first and industry's first products and services. In recent years, we have leveraged a combination of our expertise in product development and manufacturing and data-driven services to develop solutions that will resolve social issues and take mobility experiences to a new level.

- 1937 Pioneer's founder, Nozomu Matsumoto, develops the A-8 dynamic speaker.
- 1938 Fukuin Shokai Denki Seisakusho (precursor of Pioneer) founded.
- 1947 Fukuin Denki Kabushiki Kaisha incorporated.
- 1961 Company name changed to Pioneer Electronic Corporation (now Pioneer Corporation).
- 1962 Introduces world's first floor-standing stereo system with detached speakers.
- 1975 Introduces world's first component car stereo.
- 1979 Introduces world's first Laser Disc player (LD) for business use.
- 1984 Introduces world's first CD player for the car.
- 1986 *carrozzeria* brand adopted for consumer-market car audio products in Japan.
- 1990 Introduces world's first GPS car navigation system for consumer market.
- 1992 Introduces world's first 4x speed CD-ROM changer.
- 1996 Introduces DVD player and world's first DVD/LD/CD combination player for home use.
- 1997 Introduces world's first DVD-R drive.



A-8 dynamic speaker (1937)



Component car stereo (1975)



GPS car navigation system (1990)



Cyber Navi (2019)



In-car Wi-Fi router (2020)



NP1 (2022)

- Introduces world's first OLED-equipped car audio product.
- Introduces world's first 50-inch high-definition XGA plasma display for home use.
- Introduces industry's first DVD-based car navigation system.
- 1999 Introduces world's first DVD recorder.
- 2004 Introduces world's first DVD player for professional DJs and VJs.
- 2006 Introduces world's first 50-inch 1080p plasma display.
- 2008 Develops world's first 16-layer BD-compatible optical disc with 400 GB storage capacity.
- 2010 Introduces world's first speaker with HVT (Horizontal-Vertical Transforming) technology.
- 2012 Introduces world's first car navigation system with head-up display to project augmented reality information.
- 2015 Launch Vehicle Assist, cloud-based fleet management service.
- 2018 Pioneer celebrates its 80th anniversary.
- Enters into a partnership with Baring Private Equity Asia.
- 2019 Introduces the new Cyber Navi car navigation system with upgraded capability to access on-demand content and designed to work with docomo in Car Connect service.
- 2020 Pioneer and Continental enter into a strategic partnership to co-develop a new user experience.
- Introduces an in-car Wi-Fi router to bring Internet connectivity to the car.
- 2021 Pioneer and Cerence enter a strategic partnership to develop conversational AI infotainment solutions.
- Establishes the SaaS Technology Center to push the SaaS business forward.
- 2022 Releases the mobility AI platform Piomatix.
- Introduces the world's first AI-powered connected virtual driving partner NP1.

## Evolving into a Solutions and Services Company

## Company Profile

<b>Company</b>	PIONEER CORPORATION	<b>President and CEO</b>	Shiro Yahara
<b>Headquarters</b>	28-8, Honkomagome 2-chome, Bunkyo-ku, Tokyo 113-0021, Japan Phone: +81-3-6634-8777	<b>Capital</b>	57.38 billion yen
<b>Founded</b>	January 1, 1938 (as Fukuin Shokai Denki Seisakusho)	<b>Number of employees</b>	9,153 globally (as of March 31, 2022)
<b>Date of incorporation</b>	May 8, 1947	<b>Plants in Japan</b>	Kawagoe Plant 25-1, Yamada, Kawagoe, Saitama 350-8555, Japan
		<b>Consolidated net sales</b>	269.9 billion yen for fiscal year ended March 31, 2022

Scan this QR code to learn more about our company.



## Group Companies

Pioneer Corporation has 50 subsidiaries and affiliates around the globe that collectively provide industry-leading products and services.

### Japan

Mogami Denki Corporation  
Pioneer Digital Design And Manufacturing Corporation  
Pioneer Finetech Corporation  
Pioneer Sales and Marketing Corporation  
Pioneer Service Network Corporation  
Pioneer System Technologies Corporation  
Pioneer Welfare Services Co., Ltd.  
SOAR CORPORATION  
Technical Audio Devices Laboratories Inc.  
Tohoku Pioneer Corporation

### Americas

Brazil Pioneer do Brasil Ltda.  
Panama Pioneer International Latin America, S.A.  
United States Pioneer Electronics (USA) Inc.

### Europe

Belgium Pioneer Europe NV

### Middle East and Africa

United Arab Emirates Pioneer Gulf, Fze.

### Asia-Pacific

Australia Pioneer Electronics Australia Pty. Ltd.  
East Asia Pioneer China Holding Co., Ltd.  
Pioneer (HK) Ltd.  
India Pioneer India Electronics Private Ltd.  
Singapore Pioneer Electronics Asiacentre Pte. Ltd.  
Thailand Pioneer Electronics (Thailand) Co., Ltd.



The Pioneer logo is centered on a background of large, overlapping triangles in shades of red and light blue. The logo itself is the word "Pioneer" in a white, italicized, sans-serif typeface.

*Pioneer*