



# Digital Signage Hardware Market

North America, Europe, and Asia Pacific Market  
Trend Analysis and Forecasts till 2032

**Important:** This complimentary version does not include all the data provide in the full report. To inquire about receiving the full report, please send us a request at [www.22miles.com/contact-us](http://www.22miles.com/contact-us)



# ABOUT US

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# MARKET SYNOPSIS

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## MARKET DEFINITION

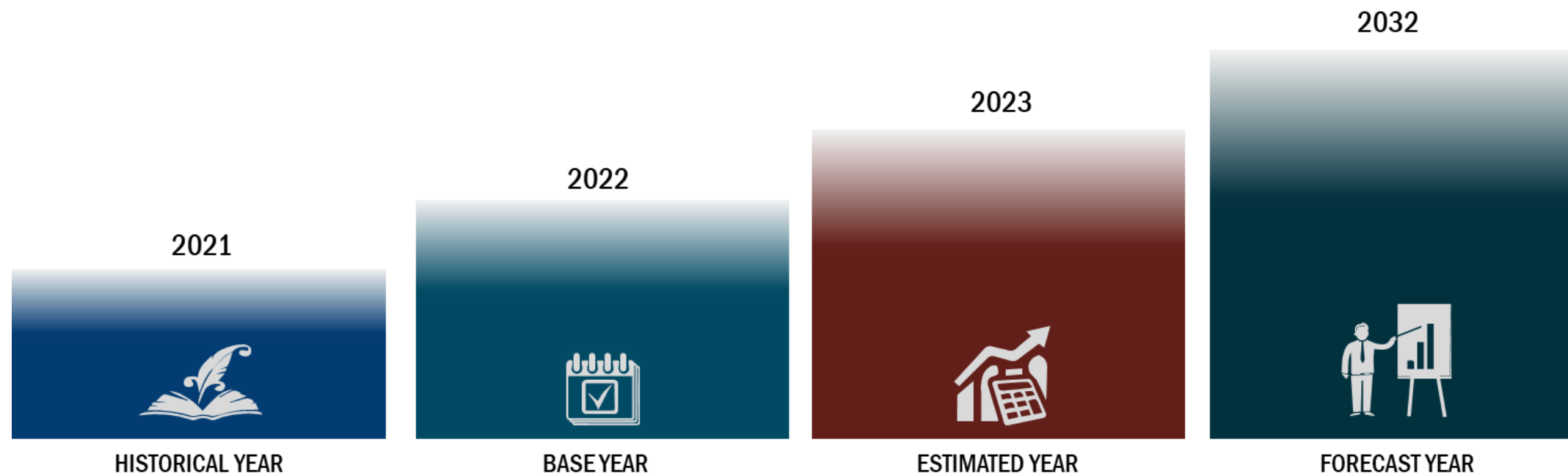
Digital signage hardware market refers to the specific segment of the broader digital signage industry that focuses on the manufacturing, distribution, and sale of physical components and devices necessary for the deployment, operation, and display of digital content on screens or displays. This market includes various hardware components that are integral to the creation and management of dynamic visual displays for informational, advertising, promotional, and interactive purposes. This includes components such as display screens (LED, LCD, OLED), media players, mounts and enclosures, content delivery devices, peripheral devices (touch panels, cameras, sensors), and other accessories that enable the delivery and presentation of multimedia content in various settings, such as retail environments, corporate offices, public spaces, transportation hubs, and more. The digital signage hardware market caters to businesses, organizations, and entities seeking to implement dynamic and visually engaging displays for communication, branding, and customer engagement purposes. The market is characterized by ongoing technological advancements in display technology, enhanced connectivity options, improved interactivity, and integration with software solutions for content management and scheduling. Key aspects of the digital signage hardware market include manufacturing quality, display clarity, durability, compatibility with content management systems, ease of installation, and the ability to support varying content formats and resolutions. The market also considers factors such as screen size, form factor, and the capability to operate in different environments, such as indoor or outdoor settings.

## RESEARCH SCOPE & PREMISE

The report provides market value for base year 2022 and a yearly forecast from 2023 to 2032 in terms of revenue (USD Million). Market for each segment is present for North America, Europe, and Asia-Pacific region/country for the above-mentioned forecast period.

Key industry dynamics, regulatory scenario, major industry dynamics and prospects are analyzed to understand their impact on demand for the forecast period. Growth rates have been estimated using correlation, regression, and time-series analysis.

**FIGURE 1.** YEARS CONSIDERED IN THE STUDY



## RESEARCH METHODOLOGY

A research methodology is a systematic approach for assessing or conducting a market study. Researchers tend to draw on a variety of both qualitative and quantitative study methods, inclusive of investigations, surveys, secondary data, and market observation.

Such plans can focus on classifying the products offered by leading market players or simply use statistical models to interpret observations or test hypotheses. While some methods aim for a detailed description of the factors behind an observation, others present the context of the current market scenario.

## SECONDARY RESEARCH MODEL

Extensive data is obtained and cumulated on a substantial basis during the inception phase of the research process. The data accumulated is consistently filtered through validation from the in-house database, paid sources as well reputable industry magazines.

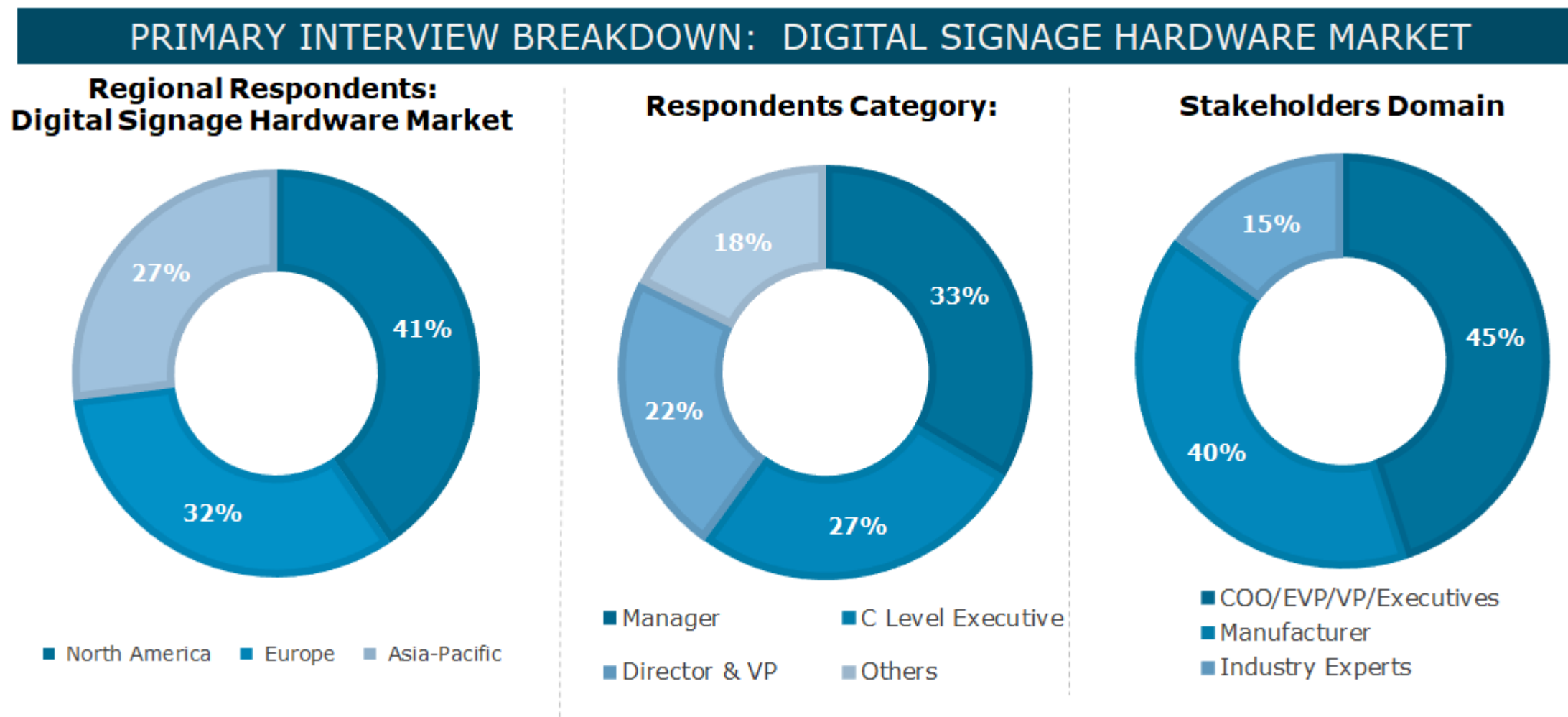
A robust research study requires an understanding of the overall value chain. Annual reports and financials of industry players are referred thoroughly to have a comprehensive idea of the market taxonomy.

## PRIMARY RESEARCH MODEL

Post conglomeration of the data obtained through secondary research; a validation process is initiated to verify the numbers or figures. This process is usually performed by having a detailed discussion with the industry experts. Discussions with the subject matter experts were conducted to obtain quantitative and qualitative information and validate our market research findings.

However, we do not restrict our primary interviews only to the industry leaders. Our team covers the entire value chain while verifying the data. A significant number of suppliers, and stakeholders are interviewed to make our findings authentic. The current trends, which include the drivers, restraints, and opportunities, are also derived through the primary research process.

**FIGURE 2.** PRIMARY INTERVIEW BREAKDOWN: DIGITAL SIGNAGE HARDWARE MARKET





## MARKET ESTIMATION

The market estimation is conducted by analyzing the data collected through both secondary and primary research. This process involves market breakdown, bottom-up and top-down approach.

Moreover, while forecasting the market a comprehensive statistical time series model is designed for each market. Macroeconomic indicators have been taken into consideration to understand the current trends of the market. arriving of data triangulation method to arrive at the final market estimates verifies each data point.

Top-down, as well as the bottom-up approach, were used for the estimation and validation of the market. These methods were applied extensively for the estimation of the market size of the sub-segments as well. Key stages for the market estimation included:

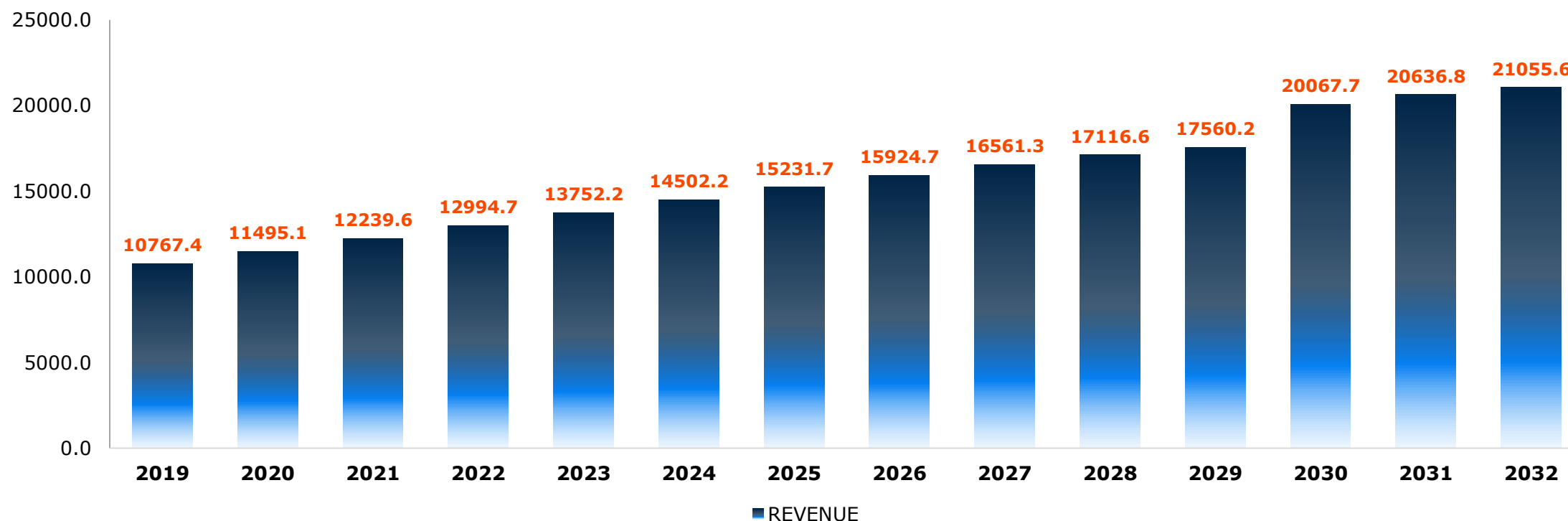
- Identification of the key players in the industry through extensive secondary research
- Determination of the industry's supply chain and market size (in terms of value) through primary and secondary research processes.
- Determination of percentage shares, splits, and breakdowns of each sub segments using secondary sources and its validation through primary sources.

## EXECUTIVE SUMMARY

***The digital signage hardware market was valued at USD 12,994.7 Million (12.99 Billion) in 2022 and is expected to grow at a CAGR of 4.8% in terms of value in the forecast period 2023 to 2032.***

The digital signage hardware market is experiencing a robust and dynamic landscape driven by the increasing demand for visually compelling and interactive display solutions across various industries. As businesses and organizations recognize the potential of digital signage to captivate audiences, communicate messages effectively, and enhance customer experiences, the market is witnessing substantial growth. The convergence of technological advancements, including improved display quality, energy efficiency, and connectivity options, is reshaping the market by encouraging both new deployments and replacement cycles. Furthermore, the integration of data analytics and artificial intelligence is adding a layer of intelligence to digital signage, enabling dynamic content adaptation and personalized experiences. The ongoing convergence of digital signage with other emerging technologies, such as the Internet of Things (IoT) and smart city initiatives, is opening new avenues for market expansion. With the continued focus on customer engagement, information dissemination, and brand promotion, the digital signage hardware market is poised for sustained growth and innovation.

The adoption of digital signage for advertising and promotional activities is rising due to its ability to deliver targeted and contextually relevant messages, leading to increased brand visibility and customer interaction. The advancement of display technology, including higher resolutions, improved color accuracy, and energy-efficient options, is also spurring replacement and upgrade cycles, as organizations seek to modernize their existing digital signage infrastructure. Moreover, the integration of interactivity through touchscreens and sensors is catering to evolving customer preferences for interactive and personalized experiences. The ongoing trend towards omnichannel marketing strategies has led to increased investments in digital signage as a means to bridge the gap between online and offline customer interactions. As the concept of smart cities gains momentum, digital signage hardware plays a vital role in disseminating information, providing directions, and delivering public announcements.

**FIGURE 6.** DIGITAL SIGNAGE HARDWARE MARKET VALUE ANALYSIS (IN USD MILLION), 2019-2032

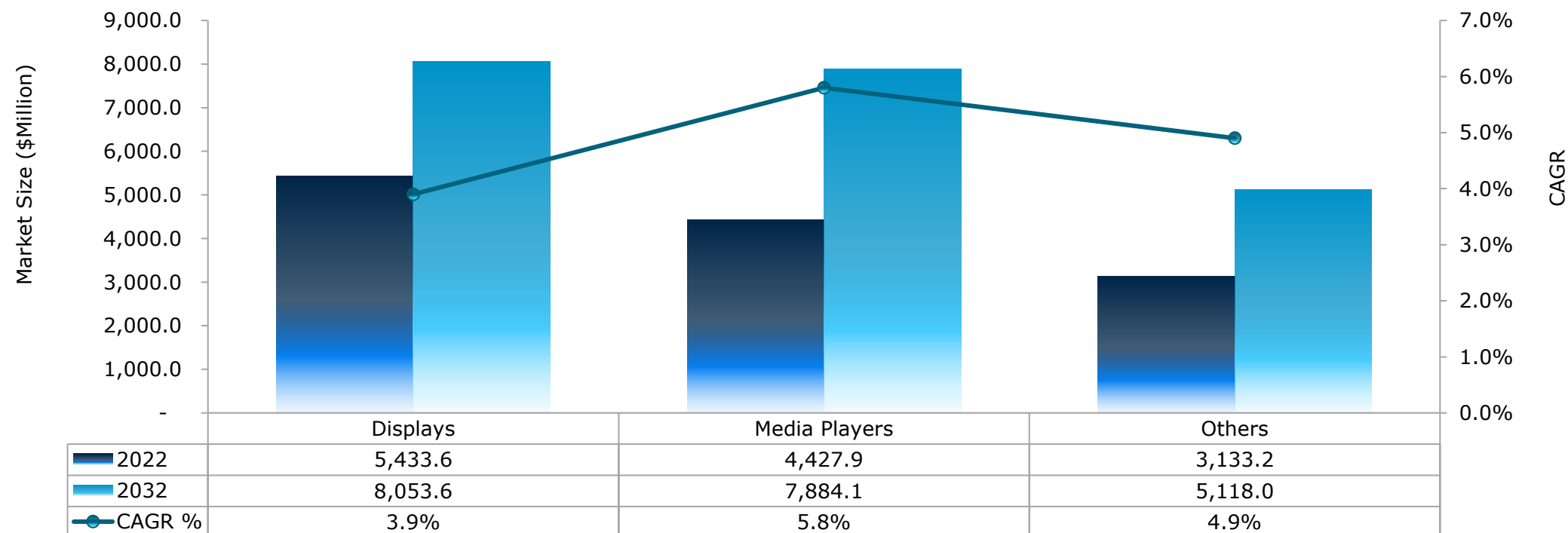
Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

One of the primary reasons for its use is its power to engage audiences in dynamic and interactive ways, whether in retail stores, corporate offices, educational institutions, transportation hubs, or public spaces. By harnessing high-quality display screens and media players, businesses can showcase promotional content, advertisements, wayfinding directions, event information, and real-time updates. For instance, on 13 July 2023, Nanolumens developed a series of pre-packaged solutions tailored for use in airports and transportation centers. These recently designed digital signage solutions provide versatility and simplified installation options, catering

to technology managers and professionals involved in system integration. Furthermore, the adaptability of digital signage hardware to changing trends and customer preferences makes it a versatile tool for enhancing brand visibility, customer engagement, and information dissemination. Its usage extends to creating immersive environments, influencing purchasing decisions, streamlining communication, and conveying messages in visually impactful ways that resonate with modern audiences. As businesses and organizations seek innovative ways to connect with their audiences, digital signage hardware continues to play an essential role in transforming how information is shared and experienced.

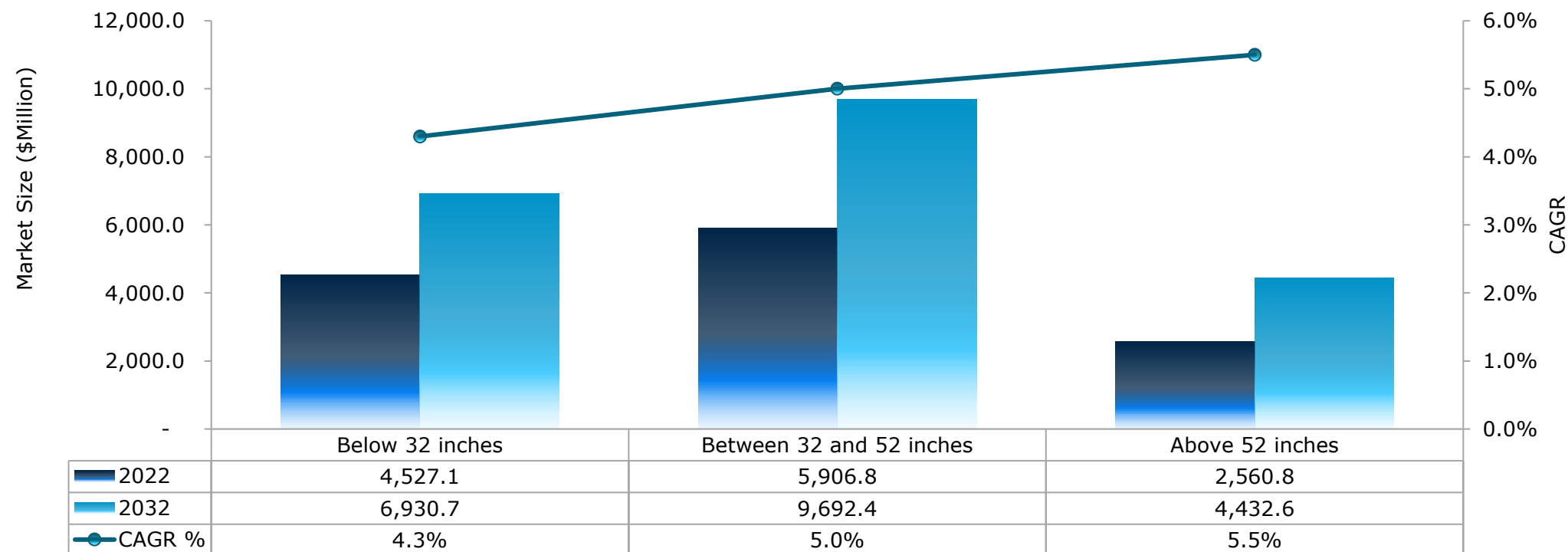
The market is segmented on the basis of Product Type, Screen Size, Screen Resolution, Technology, Location, Application, Industry Type, and Region. The Product Type segment is segmented into Displays, Media Players, and Others. The Screen Size segment is bifurcated into Below 32 Inches, Between 32 And 52 Inches, and Above 52 Inches. The Screen Resolution segment is divided into Standard Definition (SD), High Definition (HD), 4k Ultra High Definition (UHD), And 8k Ultra High Definition (UHD). Standard Definition (SD) is further divided into 640X480 Pixels, and 800x600 Pixels. High Definition (HD) is sub-segmented into 1280X720 Pixels (720p), 1920x1080 Pixels (1080P), and 2560X1440 Pixels (1440P). 4K Ultra High Definition (UHD) is sub segmented into 3840X2160 Pixels (2160P) and 8k Ultra High Definition (UHD) has been sub-divided into 7680x4320 Pixels (4320P). The Technology segment is bifurcated into LCD technology, LED technology, OLED technology, Projection technology, Holographic technology, Quantum Dot technology, Micro-LED technology, and other technologies. The Location segment is divided into Indoor, and Outdoor. Indoor segment is bifurcated into Retail Digital Signage, Corporate Digital Signage, Healthcare Digital Signage, Education Digital Signage, Hospitality Digital Signage, And Others. While, the Outdoor segment is sub-segmented into Transportation Digital Signage, Outdoor Advertising Digital Signage, Sports and Entertainment Digital Signage, And Others. The Application segment is bifurcated into Wayfinding, Video Wall, Room Displays, Digital Menus, Building Directory, Standard Digital Signage Displays, and Other Applications. The Industry Type is divided into Corporate Communications, Healthcare, Government, Education, Venues, Transportation, Banking, Retail, Restaurants, Hospitality, and Other Industries. The Education segment is further bifurcated into Campus, Classroom, Library, Sports and Recreation, and Others. By Region, market is divided into North America, Europe, and Asia-Pacific.

**FIGURE 7.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY PRODUCT TYPE, 2022 & 2032 (USD MILLION AND CAGR IN PERCENTAGE)



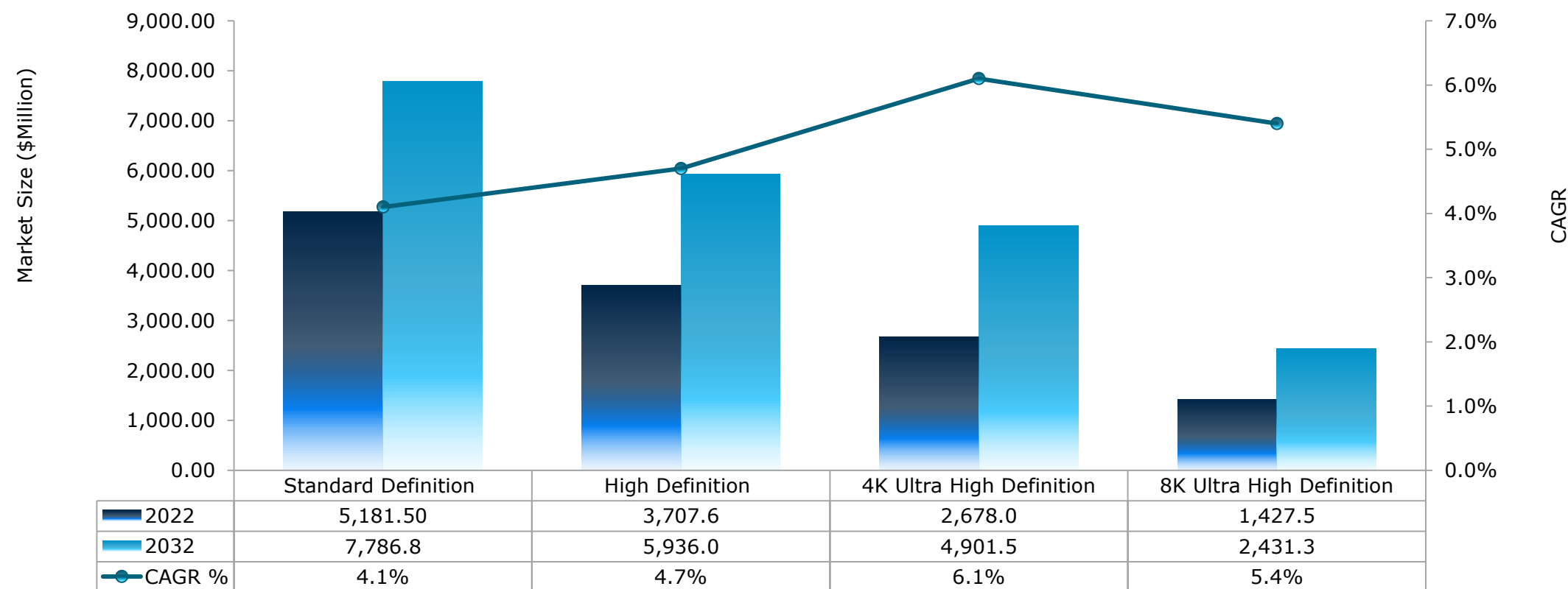
Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

**FIGURE 8.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY SCREEN SIZE, 2022 & 2032 (USD MILLION AND CAGR IN PERCENTAGE)



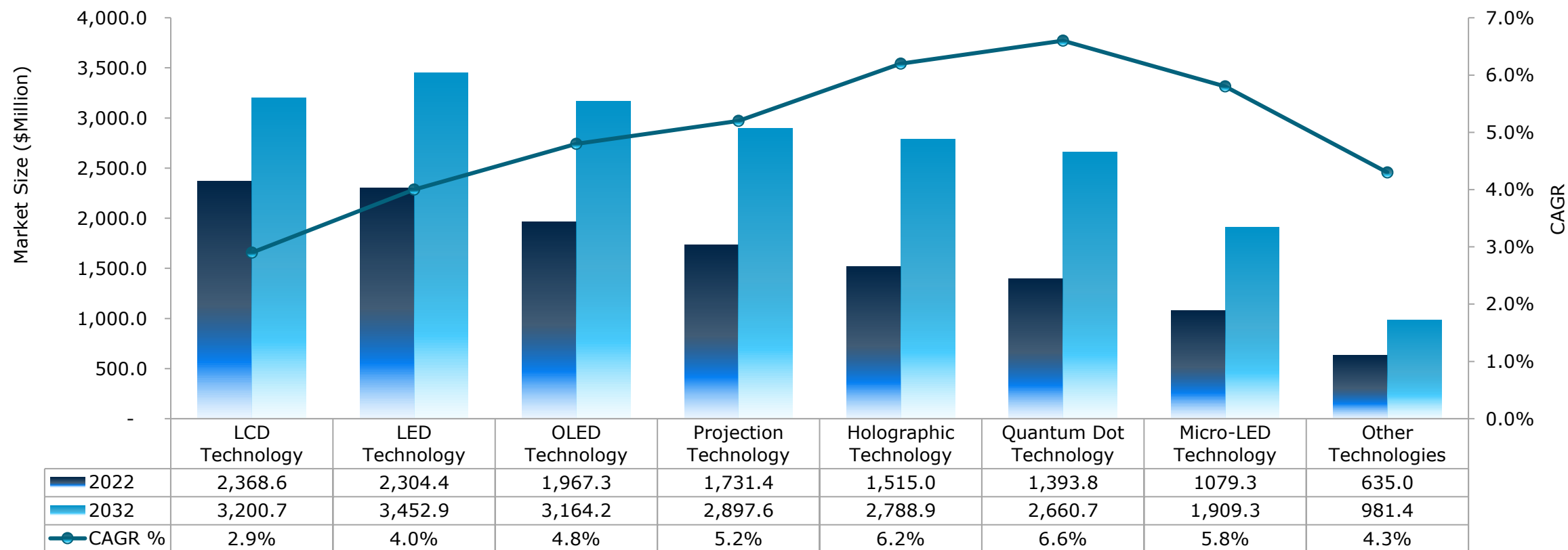
Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

**FIGURE 9.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY SCREEN RESOLUTION, 2022 & 2032 (USD MILLION AND CAGR IN PERCENTAGE)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

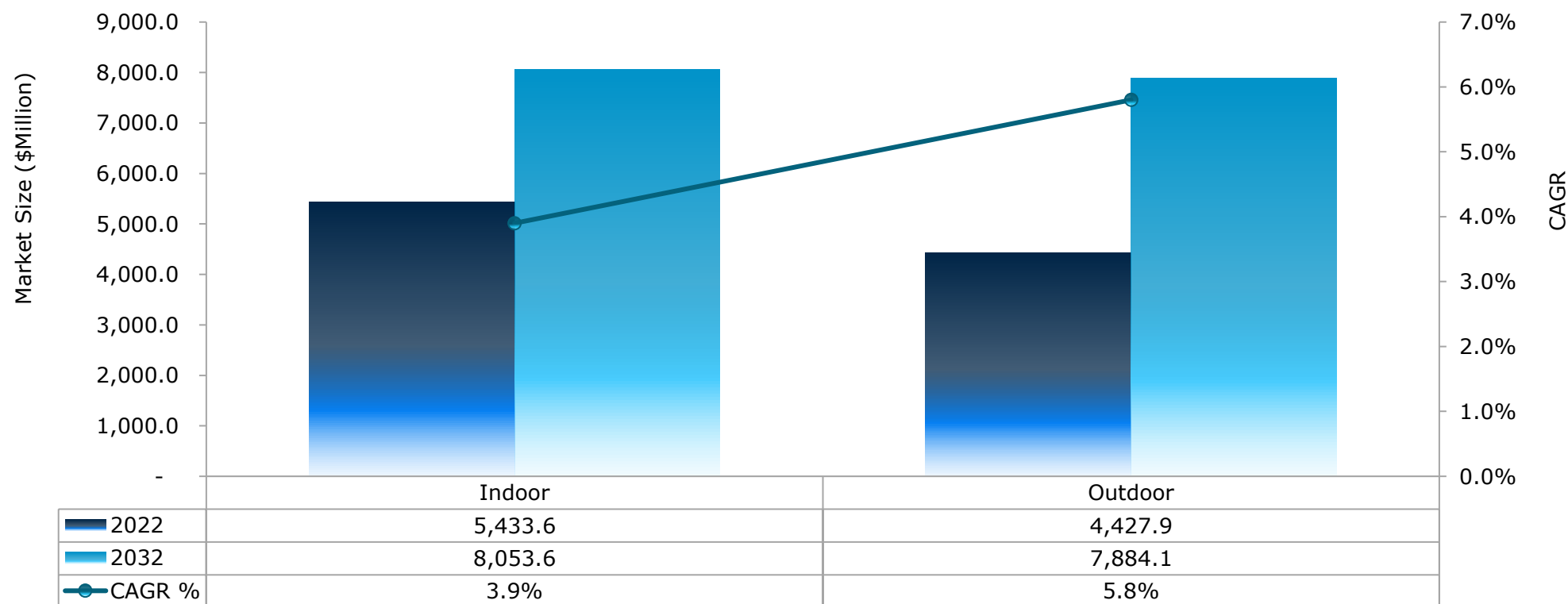
**FIGURE 10.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY TECHNOLOGY, 2022 & 2032 (USD MILLION AND CAGR IN PERCENTAGE)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

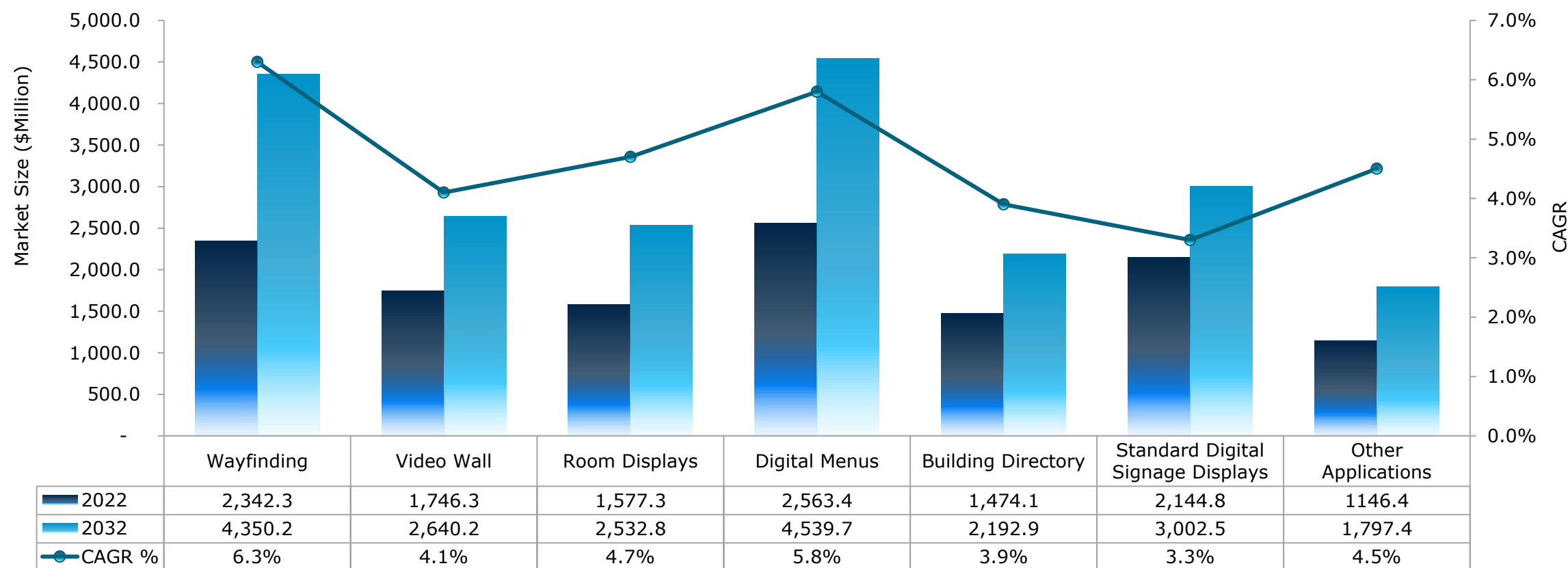


**FIGURE 11.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY LOCATION, 2022 & 2032 (USD MILLION AND CAGR IN PERCENTAGE)



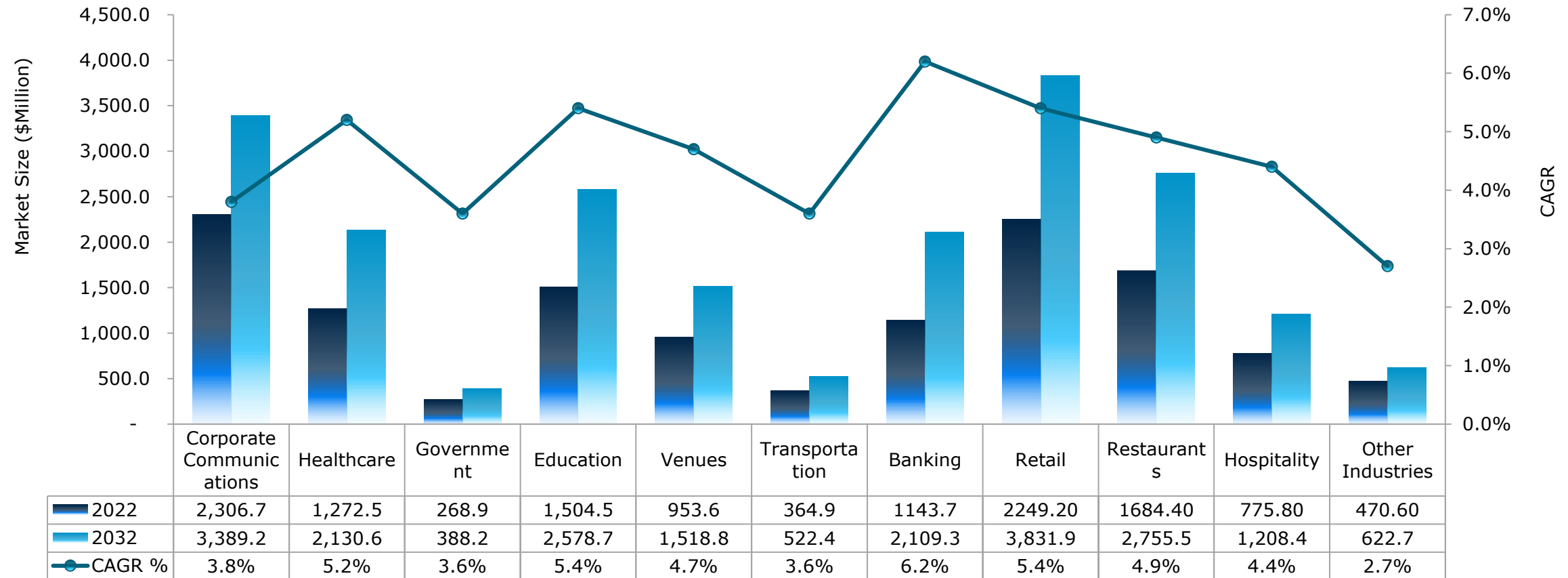
Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

**FIGURE 12.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY APPLICATION, 2022 & 2032 (USD MILLION AND CAGR IN PERCENTAGE)

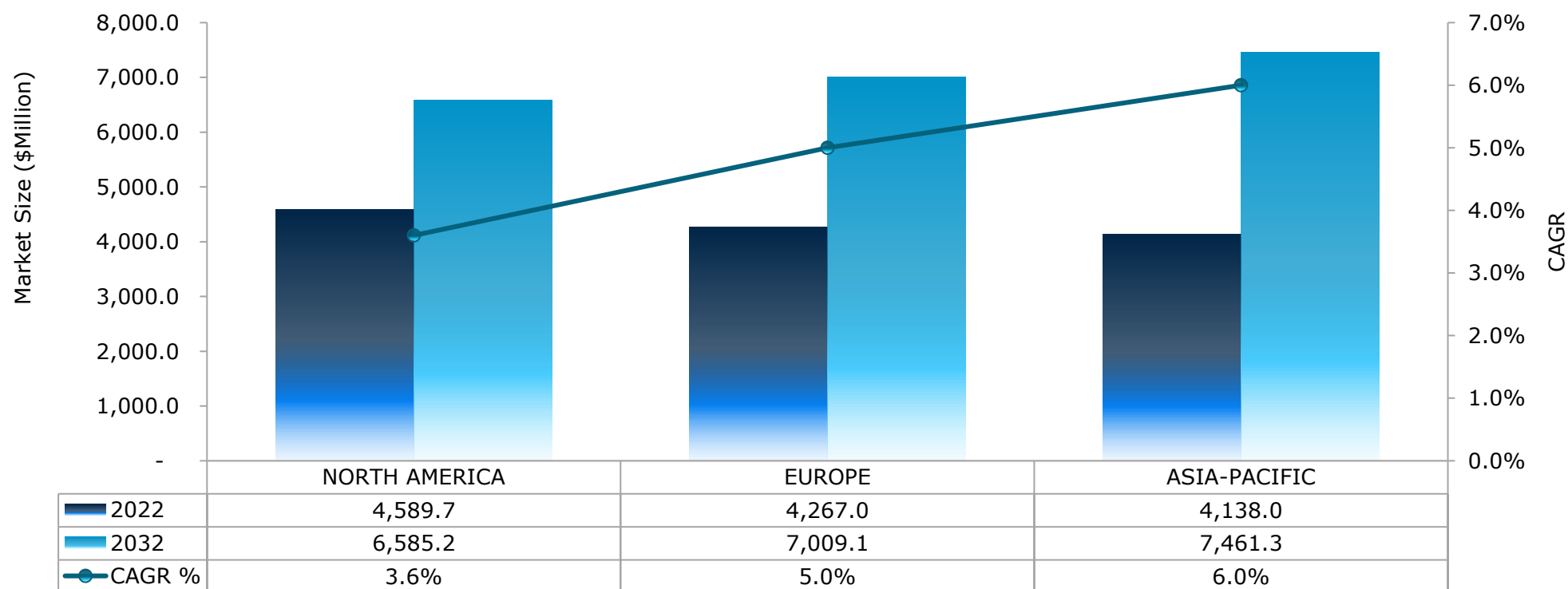


Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

**FIGURE 13.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY INDUSTRY TYPE, 2022 & 2032 (USD MILLION AND CAGR IN PERCENTAGE)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

**FIGURE 14.** DIGITAL SIGNAGE HARDWARE MARKET SEGMENTATION OUTLOOK BY REGION, (USD MILLION)

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

Major companies in the market in display include –

- Samsung Electronics Co Ltd
  - LG Electronics Inc.
  - Sony Corporation
  - Sharp Corporation
  - Koninklijke Philips N.V.
  - Seneca
  - Advantech Co. Ltd
  - ViewSonic Corporation
  - Texas Instruments Incorporated
  - Barco
  - Intel Corporation
  - AG Neovo
  - Elo Touch Solutions Inc.
  - IAdea Corporation
- and Others

Major companies in the market in media players include –

- Samsung Electronics Co., Ltd.
- Advantech Co., Ltd
- Seneca (Arrow Electronics, Inc.)
- Ibase Technology Inc
- Aopen Inc
- BrightSign LLC

- Scala (STRATACACHE)
- ViewSonic Corporation
- IAdea Corporation
- Onelan Limited (Uniguest)
- SpinetiX SA

These companies are strengthening their market position and product offerings with collaborations, strategic development activities, and continuous research and development through employment of technological advancements in their facilities. They are adopting various organic and inorganic strategies such as new product developments, investments & expansions, mergers & acquisitions to strengthen their market shares. The players are also partnering with channel partners such as suppliers to ease their product accessibility.



## INDICATIVE METRICS



## COVID-19 IMPACT

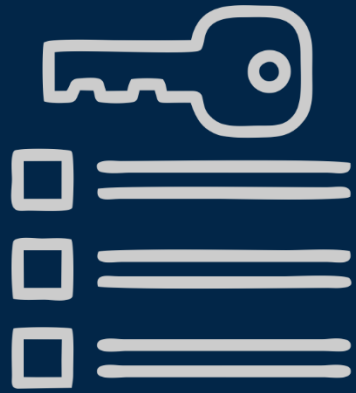
The COVID-19 pandemic had both short-term and potential long-term impacts on the Digital Signage Hardware market. Here is an overview of how the pandemic influenced the Digital Signage Hardware market:

- **Immediate Disruptions and Delays:** The initial wave of the pandemic led to disruptions in manufacturing, supply chains, and logistics, affecting the availability of components and finished products. Lockdowns and restrictions resulted in delays in production and delivery of digital signage hardware.
- **Temporary Demand Decline:** With widespread closures of public spaces, retail stores, and other venues, the demand for new digital signage installations temporarily declined in sectors such as retail, hospitality, and events. Businesses and organizations halted or postponed hardware investments owing to uncertainty.
- **Shift to Remote Work:** As remote work and virtual events became the norm, the demand for digital signage in corporate offices and event venues decreased. There was a shift toward virtual communications and online platforms.
- **Focus on Hygiene and Touchless Solutions:** The pandemic highlighted the need for touchless interactions. This led to a demand for touchless technology, such as gesture control and voice activation, to minimize physical contact with screens.
- **Adaptation and Innovation:** Some businesses adapted their digital signage strategies to cater to changing needs. For instance, restaurants used digital menu boards for takeout and delivery orders, and retailers used screens for virtual shopping experiences.
- **Resilience and Adaptability:** The crisis underscored the importance of adaptable digital signage solutions that can quickly respond to changing information and messaging needs.



## POST-COVID IMPACT ANALYSIS

In the post-COVID-19 era, the Digital Signage Hardware market has witnessed a transformative shift driven by lessons learned from the pandemic. As businesses and public spaces adapted to new norms, the role of digital signage evolved. While the initial disruptions led to a temporary decline in demand, the market rebounded with a heightened emphasis on safety, hygiene, and dynamic communication. Digital signage emerged as a vital tool for disseminating real-time health information, safety protocols, and queue management. Touchless technologies, gesture controls, and voice activation gained traction, aligning with the need for contactless interactions. Hybrid work models spurred innovation in office spaces, promoting the use of signage for flexible communication and employee engagement. The retail sector harnessed digital signage for contactless payments, interactive wayfinding, and virtual shopping experiences. As economies reopened, the market seized opportunities for recovery and growth, with businesses recognizing the versatility and adaptability of digital signage solutions. Looking forward, the post-pandemic digital signage hardware market remains dynamic, underscored by its vital role in efficient communication, safety assurance, and enhancing user experiences in a transformed landscape.



# MARKET SEGMENTATION & IMPACT ANALYSIS

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## SEGMENTATION ANALYSIS

PRODUCT TYPE	SCREEN RESOLUTION	TECHNOLOGY	LOCATION	INDUSTRY TYPE
<ul style="list-style-type: none"> <li>DISPLAYS</li> <li>MEDIA PLAYERS</li> <li>OTHERS</li> </ul>	<ul style="list-style-type: none"> <li>STANDARD DEFINITION (SD) <ul style="list-style-type: none"> <li>640X480 PIXELS</li> <li>800X600 PIXELS</li> </ul> </li> <li>HIGH DEFINITION (HD) <ul style="list-style-type: none"> <li>1280X720 PIXELS (720P)</li> <li>1920X1080 PIXELS (1080P)</li> <li>2560X1440 PIXELS (1440P)</li> </ul> </li> <li>4K ULTRA HIGH DEFINITION (4KUHD) <ul style="list-style-type: none"> <li>3840X2160 PIXELS (2160P)</li> </ul> </li> <li>8K ULTRA HIGH DEFINITION (8KUHD) <ul style="list-style-type: none"> <li>7680X4320 PIXELS (4320P)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>LCD TECHNOLOGY</li> <li>LED TECHNOLOGY</li> <li>OLED TECHNOLOGY</li> <li>PROJECTION TECHNOLOGY</li> <li>HOLOGRAPHIC TECHNOLOGY</li> <li>QUANTUM DOT TECHNOLOGY</li> <li>MICRO-LED TECHNOLOGY</li> <li>OTHER TECHNOLOGIES</li> </ul>	<ul style="list-style-type: none"> <li>INDOOR <ul style="list-style-type: none"> <li>RETAIL DIGITAL SIGNAGE</li> <li>CORPORATE DIGITAL SIGNAGE</li> <li>HEALTHCARE DIGITAL SIGNAGE</li> <li>EDUCATION DIGITAL SIGNAGE</li> <li>HOSPITALITY DIGITAL SIGNAGE</li> <li>OTHERS</li> </ul> </li> <li>OUTDOOR <ul style="list-style-type: none"> <li>TRANSPORTATION DIGITAL SIGNAGE</li> <li>OUTDOOR ADVERTISING DIGITAL SIGNAGE</li> <li>SPORTS AND ENTERTAINMENT DIGITAL SIGNAGE</li> <li>OTHERS</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>CORPORATE COMMUNICATIONS</li> <li>HEALTHCARE</li> <li>GOVERNMENT</li> <li>EDUCATION <ul style="list-style-type: none"> <li>CAMPUS</li> <li>CLASSROOM</li> <li>LIBRARY</li> <li>SPORTS AND RECREATION</li> <li>OTHERS</li> </ul> </li> <li>VENUES</li> <li>TRANSPORTATION</li> <li>BANKING</li> <li>RETAIL</li> <li>RESTAURANTS</li> <li>HOSPITALITY</li> <li>OTHER INDUSTRIES</li> </ul>
SCREEN SIZE		REGION		
<ul style="list-style-type: none"> <li>BELOW 32 INCHES</li> <li>BETWEEN 32 AND 52 INCHES</li> <li>ABOVE 52 INCHES</li> </ul>		<ul style="list-style-type: none"> <li>NORTH AMERICA</li> <li>EUROPE</li> <li>ASIA-PACIFIC</li> </ul>		
APPLICATION				
<ul style="list-style-type: none"> <li>WAYFINDING</li> <li>VIDEO WALL</li> <li>ROOM DISPLAYS</li> <li>DIGITAL MENUS</li> <li>BUILDING DIRECTORY</li> <li>STANDARD DIGITAL SIGNAGE DISPLAYS</li> <li>OTHER APPLICATIONS</li> </ul>				

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

The estimations have been provided in terms of Revenue (USD Million) on the regional level, with 2022 as the base year and a forecast period from 2023 to 2032.

## INDUSTRIAL OUTLOOK

The present market scenario of the digital signage hardware market is marked by dynamic growth and transformation fueled by technological advancements and evolving consumer demands. The demand for visually engaging and interactive displays has surged across various industries, including retail, hospitality, transportation, education, and corporate sectors. As businesses and organizations seek to enhance customer engagement, deliver targeted messages, and create immersive experiences, the adoption of digital signage hardware has become integral to their strategies. The market is witnessing a continuous influx of innovative display technologies, including higher resolutions, enhanced color accuracy, and curved screens, contributing to improved visual quality and impactful content delivery. Moreover, the integration of touchscreens, gesture control, and interactive features has elevated user engagement levels, enabling real-time interactions with displayed content. Cloud-based content management solutions are streamlining operations, allowing for remote content updates, scheduling, and monitoring. As the digital signage hardware ecosystem evolves, a notable shift is seen toward more energy-efficient and environmentally sustainable solutions. With the convergence of digital signage with emerging technologies such as IoT, AI, and data analytics, the market is poised for further growth and innovation, shaping the way businesses communicate, engage, and connect with their audiences.

Digital signage hardware is becoming more versatile, accommodating various installation environments and scenarios. From wall-mounted displays to freestanding kiosks and video walls, the hardware can be tailored to fit specific spaces and design requirements. As sustainability gains prominence, manufacturers are focusing on producing energy-efficient and environmentally friendly digital signage solutions. LED backlighting, low-power components, and automated brightness adjustment contribute to reduced energy consumption and extended product lifecycles. Digital signage hardware is often integrated with other technologies such as IoT sensors, cameras, and AI-driven analytics to enhance interactivity, personalize content, and gather insights. In the present market, digital signage hardware continues to evolve to meet the demands of diverse industries seeking to enhance communication, engagement, and

user experiences. The integration of advanced technologies and the growing focus on personalized content delivery ensure that digital signage hardware remains a vital tool for effective visual communication.

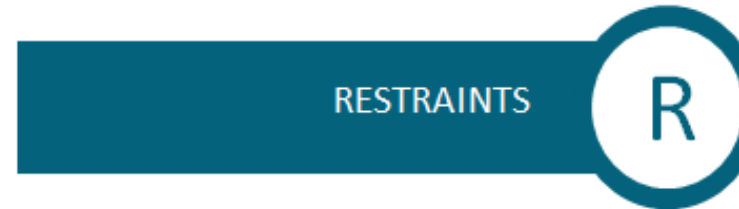
As businesses seek to differentiate themselves and stand out in a crowded market, digital signage hardware provides a dynamic means to capture audience interest. The global expansion of digital out-of-home advertising further bolsters the demand, as advertisers recognize the potential to reach wider audiences with targeted and contextually relevant content. Across industries, businesses are recognizing the value of digital signage hardware as a versatile tool for conveying messages and information. In the retail sector, digital displays enable real-time updates on promotions and products, creating an immersive shopping experience. In corporate environments, digital signage enhances internal communication, displaying announcements, company news, and data dashboards. In healthcare, it facilitates patient education and wayfinding, while in hospitality, it offers personalized guest experiences through interactive kiosks. The adaptability of digital signage hardware to various environments further contributes to its global demand. Whether in indoor retail spaces, outdoor public areas, transportation hubs, or educational institutions, digital signage captures attention and delivers information effectively.

## MARKET INDICATOR ANALYSIS

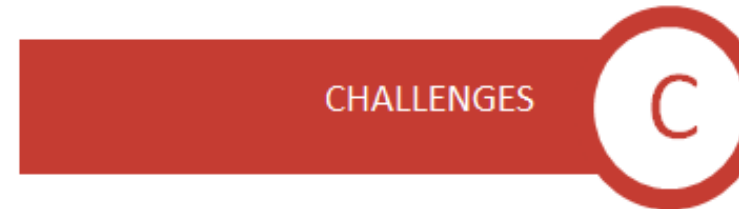
- Growing demand from infrastructural applications.
- Increasing need for omnichannel marketing.
- Rising adoption of cloud-based solutions



- Security concerns related to data privacy and content management
- Lack of standardization in digital signage hardware, which can lead to compatibility issues



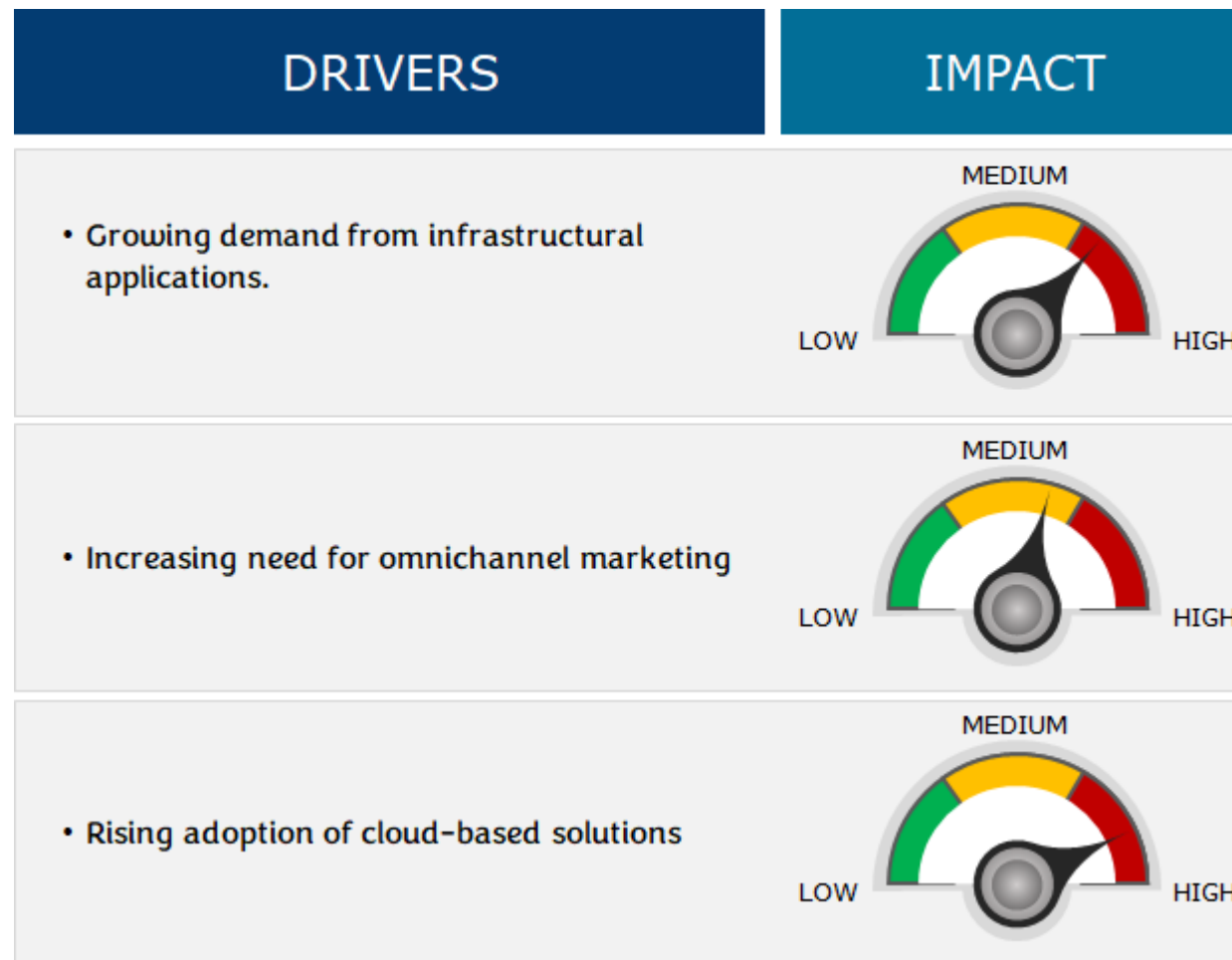
- Emergence of Smart cities
- Growing focus on sustainable marketing practices
- Rising demand for interactive experiences



- Rising concerns regarding the availability of trained workforce
- Issues regarding long-term functionality and reliability

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## MARKET DRIVERS' ANALYSIS



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

#### **1.1.1.1. GROWING DEMAND FROM INFRASTRUCTURAL APPLICATIONS**

The demand for digital signage hardware is experiencing a notable surge within infrastructural applications, driven by the compelling advantages it offers in enhancing communication, information dissemination, and user experiences within various infrastructural settings. Infrastructural environments, such as transportation hubs, airports, train stations, and public spaces, have recognized the transformative potential of digital displays. These displays provide a dynamic platform for delivering real-time updates, schedules, directions, and safety notifications to travelers and visitors. By displaying advertisements and promotions, such as local attractions, businesses, and services, they can create a new stream of income. Advertisers value the captive audience within transportation terminals and public spaces, making digital signage hardware a valuable advertising platform. For instance, on 6 September 2022, Scala, a company specializing in digital signage and marketing solutions, introduced two new offerings aimed at airport displays. This move signifies an expansion of Scala's product portfolio. One of the offerings, known as the Scala Flight Information Display System (FIDS), is designed to handle flight data and efficiently deliver relevant flight information to passengers. The FIDS solution provided by Scala serves as a comprehensive backend solution to address the intricate challenges associated with managing airport data effectively. In addition, interactive wayfinding solutions offered by digital signage hardware simplify navigation through complex infrastructures, reducing confusion and improving overall user satisfaction. The integration of digital signage hardware with the Internet of Things (IoT) further enhances its capabilities, enabling the display of data-driven insights such as crowd density and air quality. Moreover, the revenue-generation potential through advertising and the ability to engage waiting passengers with relevant content contribute to the increasing demand for digital signage hardware in infrastructural applications. As infrastructures continue to modernize and prioritize effective communication and engagement, the versatile and impactful nature of digital signage hardware positions it as an essential component in shaping the future of these environments.



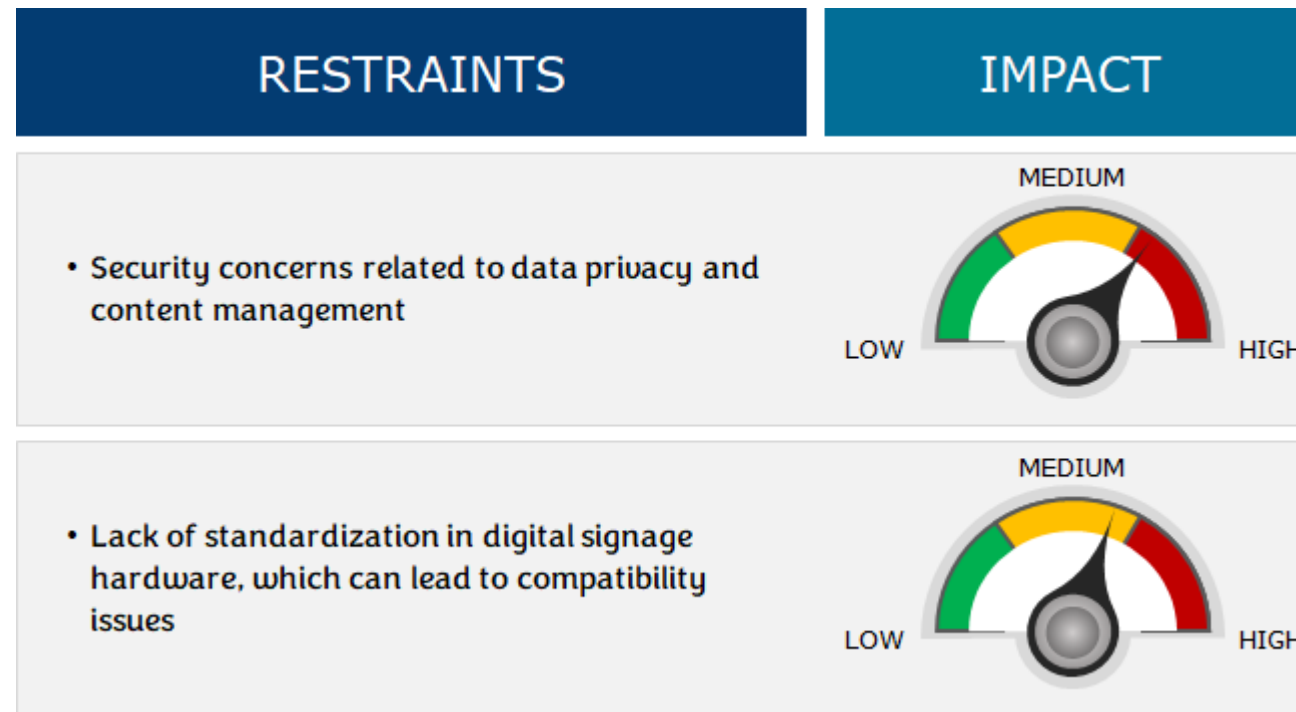
### 1.1.1.2. INCREASING NEED FOR OMNICHANNEL MARKETING

As businesses strive to connect with consumers at multiple stages of their journey, from physical stores to online platforms and mobile devices, the integration of digital displays becomes essential. These displays serve as a bridge between physical and digital realms, allowing brands to convey consistent messaging, promotions, and personalized content across different channels. This convergence enhances customer engagement, strengthens brand recognition, and fosters a more cohesive and impactful customer experience. technologies. Omnichannel marketing thrives on personalization – tailoring messages to individual preferences and behaviors. Digital signage hardware can integrate data-driven insights to display content that resonates with specific audience segments. For instance, if a customer has shown interest in a particular product online, a digital display can reinforce that interest with related promotions when they enter a physical store. This personalized approach drives conversions and revenue growth. In physical retail environments, digital signage hardware can strategically position content that drives impulse purchases. Integrating promotions, limited time offers, or upsell opportunities in real-time can entice customers to make unplanned purchases. This immediate response to customer behavior translates into increased revenues for businesses. In the current landscape of retail, consumers are consistently comparing prices among different stores to achieve optimal results. The utilization of real-time displays allows retailers to present customers with the precise data they seek, tailored for maximum personalization. However, the accessibility of in-store digital signage has been restricted by its high expense. On 15 November 2022, Ynvisible Interactive Inc. has introduced its latest Digital Signage Solution during Electronica 2022. This innovative product lineup offers a budget-friendly range of offerings, including a straightforward, sizeable e-paper display with both digital and alphanumeric functionalities, specifically designed for applications demanding minimal power consumption. These solutions empower various applications, such as retail stores, to tailor displays for point-of-purchase scenarios, enabling personalized content and messages.

### 1.1.1.3. RISING ADOPTION OF CLOUD-BASED SOLUTIONS

Cloud-based solutions have emerged as a game-changer, offering unparalleled flexibility, scalability, and accessibility. As businesses increasingly prioritize remote management, real-time updates, and seamless integration across multiple locations, cloud-based digital signage hardware has become a preferred choice. These solutions enable companies to centrally manage content, schedule updates, and monitor displays from a single dashboard, eliminating the need for on-site maintenance and reducing operational complexities. This newfound ease of management translates to significant cost savings and enhanced efficiency. Furthermore, it facilitates rapid deployment and expansion, particularly important for enterprises operating in diverse environments. Companies can swiftly deploy displays across multiple sites, ensuring consistent branding and messaging while adapting content to suit local preferences. This agility allows businesses to respond swiftly to changing market conditions and trends. The cloud-based approach also aligns with evolving consumer expectations for dynamic, personalized experiences. With cloud-enabled digital signage, content can be tailored in real-time to reflect current trends, promotions, or events, boosting engagement and driving higher conversion rates. This dynamic content delivery enhances the overall customer experience, making interactions more meaningful and relevant. Additionally, the subscription-based model often associated with cloud-based solutions offers cost predictability and flexibility, attracting businesses of various sizes and budgets. As a result, the rising demand for cloud-based digital signage hardware is not only fostering revenue growth but also democratizing access to advanced digital signage capabilities across industries. Companies are also working on various product launches and making innovations in existing product lines. For instance, on 27 June 2023, Fugo introduced its latest product, the Fugo Digital Signage Player, into the market. These devices have garnered popularity among newcomers to digital signage who value their cost-effectiveness and ease of use. The company identified a demand for a specialized device capable of ensuring dependable performance, seamless integration with our platform, and robust security measures for extensive deployments.

## MARKET RESTRAINT ANALYSIS



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

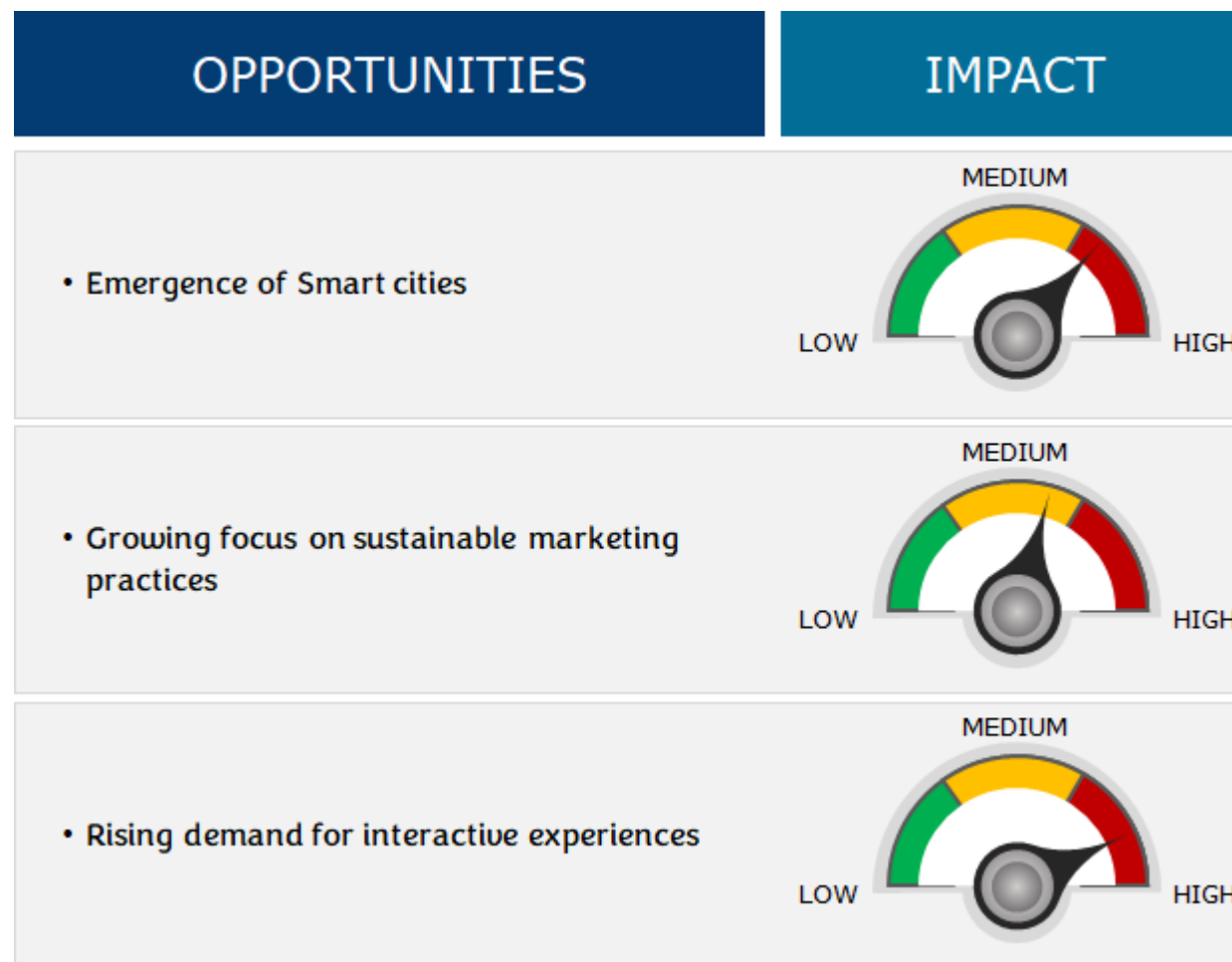
#### **1.1.1.4. SECURITY CONCERNS RELATED TO DATA PRIVACY AND CONTENT**

Security concerns surrounding data privacy and content have emerged as significant barriers restraining the revenue growth of the digital signage hardware market. As businesses increasingly rely on digital signage to disseminate sensitive information and engage with customers, the potential vulnerabilities associated with data breaches, unauthorized access, and inappropriate content display have become paramount. Another dimension of concern involves content control and compliance. Digital signage content can be displayed across various locations and screens, making it challenging to guarantee that the right content is displayed in the right place and at the right time. Without adequate content management and monitoring systems, there's a risk of inappropriate, offensive, or outdated content being displayed, which could negatively impact brand image and customer perception. These security concerns have prompted heightened scrutiny from regulatory bodies and consumers alike. Compliance with data protection regulations, such as GDPR and CCPA, is crucial to avoid severe penalties and legal actions. Businesses must also grapple with the complexities of managing security patches, updates, and monitoring to safeguard against cyberattacks or unauthorized alterations of content. These security challenges have led to hesitation among potential adopters of digital signage hardware, especially in sectors dealing with sensitive customer information, such as healthcare, finance, and retail. Organizations are compelled to invest in robust security measures, including encryption, authentication protocols, and secure content management systems, which can increase deployment costs and complexity.

### **1.1.1.5. LACK OF STANDARDIZATION IN DIGITAL SIGNAGE HARDWARE, WHICH CAN LEAD TO COMPATIBILITY ISSUES**

The diversity and complexity inherent in digital signage solutions have given rise to a landscape where various hardware components, technologies, and communication protocols lack uniformity. The dearth of standardized interfaces and protocols contributes to complications when attempting to combine hardware components from different vendors. As a consequence, businesses face increased complexities during integration, leading to elevated costs and delays in deployment. These compatibility hurdles act as barriers to the widespread adoption of digital signage solutions across industries. Moreover, the lack of standardization has repercussions for innovation and interoperability. Without universally accepted protocols, software developers encounter difficulties when creating applications that seamlessly interact with a broad spectrum of hardware devices. This absence of interoperability curtails the potential development of advanced features and functionalities that could significantly enhance customer engagement and subsequently stimulate revenue growth. For end-users, the absence of standardization can result in vendor lock-in, where reliance on a particular vendor's ecosystem becomes unavoidable due to compatibility constraints. This limits the flexibility of exploring alternative offerings and capitalizing on emerging technologies. To overcome these challenges, the digital signage industry necessitates the establishment of standardized protocols governing communication, connectivity, and integration. Initiatives aimed at defining common interfaces and guidelines have the potential to enhance interoperability, streamline integration complexities, and foster healthy market competition. Collaborative efforts by industry associations, such as the Digital Signage Federation (DSF), are working towards crafting standards that can alleviate compatibility issues and pave the way for the full realization of the revenue potential within the digital signage hardware market.

## MARKET OPPORTUNITY ANALYSIS



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### **1.1.1.6. EMERGENCE OF SMART CITIES**

The rapid emergence of smart cities is catalyzing an unprecedented demand for advanced Digital Signage Hardware solutions. As urban centers worldwide undergo a transformative digital evolution, the integration of technology into various facets of urban life has become pivotal, and digital signage has emerged as a focal point. These smart cities leverage an intricate network of interconnected devices and data-driven insights to enhance urban living, streamline services, and improve overall sustainability. In this dynamic landscape, Digital Signage Hardware plays a multifaceted role in disseminating real-time information, engaging citizens, and facilitating efficient urban operations. These hardware solutions encompass a wide array of interactive displays, LED panels, and projection systems that are strategically positioned across urban environments, ranging from transportation hubs and public squares to shopping districts and educational institutions. Through these digital displays, cities can relay vital information such as traffic updates, public transport schedules, emergency alerts, and event notifications in a visually engaging and timely manner. Moreover, the adaptability of hardware enables the dissemination of targeted advertisements, promotions, and educational content, generating revenue streams and fostering a sense of community engagement simultaneously. As smart cities prioritize sustainability, energy-efficient display technologies contribute to reducing environmental impact. The amalgamation of Digital Signage Hardware with the Internet of Things (IoT) further amplifies its potential, allowing for real-time content updates based on data analytics, enhancing the urban experience. As the demand for seamless information delivery and dynamic urban engagement intensifies, businesses specializing in Digital Signage Hardware are driven to innovate, offering increasingly sophisticated solutions to meet the unique demands of each smart city. In conclusion, the exponential growth of smart cities worldwide has increased Digital Signage Hardware to the forefront of urban infrastructure, playing an integral role in shaping the modern urban landscape through its dynamic information dissemination, revenue generation potential, and contribution to sustainability initiatives.

#### **1.1.1.7. GROWING FOCUS ON SUSTAINABLE MARKETING PRACTICES**

The intensifying emphasis on sustainable marketing practices is significantly augmenting the demand for Digital Signage Hardware, marking a pivotal shift in the way businesses communicate and engage with their audiences. In an era where environmental consciousness is paramount, companies are under heightened pressure to align their strategies with sustainability goals. Digital Signage Hardware has emerged as a compelling solution that not only delivers captivating visual content but also facilitates eco-friendly advertising and communication. These hardware solutions encompass an array of energy-efficient displays, LED panels, and projection systems, enabling businesses to convey their messages in a visually impactful manner while minimizing their carbon footprint. By replacing traditional print advertising and static signage, Digital Signage Hardware substantially reduces paper waste, ink usage, and the need for physical materials, thereby contributing to resource conservation and environmental preservation. Additionally, the adaptability of these displays allows for real-time content updates, eliminating the need for continuous reprints and reducing overall waste. The integration of renewable energy sources such as solar panels to power these displays further exemplifies the commitment to sustainability. Moreover, these digital displays can disseminate information about eco-friendly products, services, and practices, actively promoting responsible consumer behavior. As consumers increasingly gravitate toward environmentally conscious brands, businesses employing Digital Signage Hardware to showcase their sustainable initiatives gain a competitive edge, fostering positive brand perception and consumer loyalty. The synergy between sustainability and technology extends beyond the hardware itself, as cloud-based content management systems enable remote control, minimizing the need for physical maintenance visits and reducing transportation-related emissions. As the global call for eco-friendly practices resonates louder, the demand for Digital Signage Hardware continues to surge, prompting manufacturers and providers to innovate further and integrate greener materials and technologies into their products. In conclusion, the surging demand for Digital Signage Hardware is intricately linked to the growing focus on sustainable marketing practices, making it a cornerstone of modern advertising that not only captivates audiences but also reflects a commitment to a more environmentally responsible future.



### **1.1.1.8. RISING DEMAND FOR INTERACTIVE EXPERIENCES**

The escalating desire for immersive and interactive experiences is driving an unprecedented surge in the demand for Digital Signage Hardware, reshaping the landscape of communication and engagement. As modern audiences become increasingly accustomed to dynamic digital content, businesses and organizations are compelled to innovate their strategies to captivate attention and foster meaningful interactions. Digital Signage Hardware emerges as a pivotal solution in this context, encompassing an array of touch-enabled displays, gesture recognition systems, and interactive kiosks that transcend traditional passive advertising. These hardware solutions empower brands to create engaging narratives, delivering content that not only informs but also actively involves and entertains viewers. The interactivity provided by such displays enables users to navigate through information, customize their experiences, and access real-time data, effectively transforming static messages into captivating dialogues. From retail environments where customers can virtually try on products to educational institutions offering immersive learning experiences, the applications of interactive Digital Signage Hardware are diverse and far-reaching. Businesses are leveraging these hardware solutions to gather valuable customer insights through data analytics, enabling them to tailor content and offerings based on user preferences and behaviors. Moreover, the fusion of Digital Signage Hardware with augmented reality (AR) and virtual reality (VR) technologies further amplifies its potential, transporting users to immersive virtual worlds and bridging the gap between physical and digital realms. The demand for interactive experiences extends beyond commercial spaces, influencing sectors such as hospitality, healthcare, and transportation, where interactive displays streamline processes and enhance user satisfaction. As the demand for interactive Digital Signage Hardware escalates, manufacturers and providers are compelled to refine their offerings, fostering technological advancements that prioritize seamless touch response, intuitive interfaces, and integration with emerging interactive technologies. In conclusion, the surging demand for interactive experiences is catalyzing the growth of Digital Signage Hardware, revolutionizing the way information is disseminated and experiences are crafted. The convergence of interactivity, technology, and communication within these hardware solutions reshapes not only consumer engagement but also the very nature of storytelling in the digital age.

## MARKET CHALLENGES ANALYSIS



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

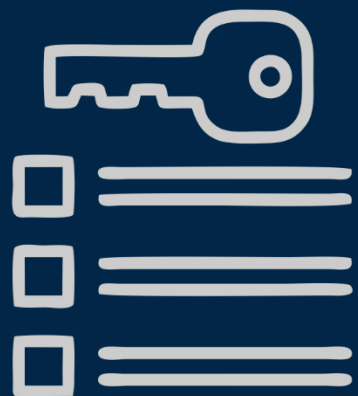
### 1.1.1.9. RISING CONCERN REGARDING THE AVAILABILITY OF TRAINED WORKFORCE

The escalating concern surrounding the availability of a skilled and adequately trained workforce is imposing significant limitations on the demand for Digital Signage Hardware, hindering its full potential and adoption across various industries. While the demand for advanced digital signage solutions continues to rise, the shortage of professionals with the necessary expertise to design, install, maintain, and optimize these systems has emerged as a critical bottleneck. The complexity of Digital Signage Hardware, which

encompasses a wide range of display technologies, content management systems, networking protocols, and integration with emerging technologies, demands a specialized skill set that remains in short supply. This shortage directly affects the seamless implementation and operation of digital signage networks, causing delays, inefficiencies, and potential technical glitches that undermine the intended benefits. The shortage of a skilled workforce is particularly pronounced in industries such as retail, hospitality, transportation, and education, where Digital Signage Hardware holds immense potential for enhancing customer experiences, disseminating information, and streamlining operations. As businesses aim to leverage the interactive, dynamic, and engaging capabilities of digital signage, they face difficulties in finding personnel who can effectively manage and optimize these systems. Moreover, the rapid pace of technological advancement in the digital signage industry further exacerbates the skills gap, as professionals need to continually update their knowledge to keep pace with the evolving hardware and software landscape. To address this challenge, efforts to bridge the skills gap are crucial. Educational institutions, industry associations, and certification programs play a pivotal role in equipping individuals with the requisite skills to work with Digital Signage Hardware effectively. Collaboration between academia and industry can help develop tailored curricula that encompass not only technical aspects but also creative content creation, user experience design, and strategic deployment of digital signage networks. Furthermore, manufacturers and solution providers can contribute by offering comprehensive training programs and resources to their customers, ensuring that end-users have the necessary knowledge to make the most of their digital signage investments. By fostering a well-trained workforce, the industry can alleviate the limitations posed by the skills gap, unlocking the full potential of Digital Signage Hardware, and enabling its broader adoption across diverse sectors. In conclusion, the shortage of a skilled and trained workforce is a significant factor constraining the demand for Digital Signage Hardware. Addressing this challenge through collaborative efforts between academia, industry, and solution providers is essential to overcome this limitation, enabling businesses to fully harness the capabilities of digital signage for enhanced communication, engagement, and operational efficiency.

#### **1.1.1.10. CONCERNS REGARDING LONG TERM FUNCTIONALITY AND RELIABILITY**

The growth of the Digital Signage Hardware market is being hampered by mounting concerns surrounding its long-term functionality and reliability, which has created a sense of hesitation among potential adopters. While the allure of dynamic content delivery and engagement is evident, the technology's perceived vulnerabilities are acting as significant barriers to its widespread adoption across various sectors. Businesses and organizations are wary of investing in Digital Signage Hardware due to apprehensions about its durability, maintenance, and ongoing performance. Questions about the hardware's ability to withstand extended usage periods, environmental conditions, and potential wear and tear over time have led to doubts about its long-term viability. Reliability is of paramount importance, particularly in sectors where downtime or technical failures can result in significant losses, disruptions, or compromised user experiences. The fear of frequent technical glitches, display malfunctions, or the need for frequent repairs has dissuaded potential users from fully embracing the technology. Additionally, concerns about the compatibility of hardware components, software updates, and the ability to seamlessly integrate with other systems have further fueled reservations. To address these concerns and drive wider adoption, manufacturers and solution providers must emphasize the quality, durability, and reliability of their Digital Signage Hardware offerings. Providing transparent information about the expected lifespan, maintenance requirements, and potential points of failure can help potential users make informed decisions. Offering robust warranties, reliable technical support, and proactive maintenance plans can alleviate anxieties about long-term functionality. Furthermore, investing in research and development to enhance the technology's durability and resilience can instill confidence in the market. Incorporating features such as remote monitoring, predictive maintenance, and self-diagnostic capabilities can mitigate potential issues and provide a higher level of reassurance to users. In conclusion, concerns about the long-term functionality and reliability of Digital Signage Hardware are inhibiting its broader adoption. Addressing these concerns requires a concerted effort from manufacturers, solution providers, and industry stakeholders to improve transparency, develop more resilient hardware, and provide comprehensive support services. By building trust in the technology's longevity and performance, the industry can overcome these barriers and unlock the full potential of Digital Signage Hardware across various applications and sectors.



# CURRENT INNOVATIONS AND TECHNOLOGICAL TRENDS

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## DIGITAL SIGNAGE HARDWARE MARKET – TECHNOLOGICAL TRENDS

The digital signage hardware market is driven by several technological trends that shape its growth and development. Some of the key technological trends influencing the market:

- **High-Resolution Displays:** Advancements in display technologies have led to higher resolution screens, including 4K and 8K displays. These displays provide crisp and vibrant visuals, enhancing the impact of content and making it more engaging for viewers.
- **Interactive Touchscreens:** Interactive touchscreens enable users to interact directly with the content displayed. From retail kiosks to educational environments, interactive touchscreens facilitate user engagement, information retrieval, and transactional activities.
- **Augmented Reality (AR) and Virtual Reality (VR) Integration:** The integration of AR and VR technologies with digital signage hardware adds an immersive dimension to the user experience. AR overlays digital information onto the real world, while VR creates entirely virtual environments. This trend enhances engagement and provides innovative ways to deliver content.
- **AI and Data Analytics:** Artificial Intelligence (AI) and data analytics play a crucial role in the Digital Signage Hardware market. AI-powered content optimization, facial recognition for targeted advertisements, and data-driven insights for audience behavior analysis contribute to more effective and personalized content delivery.
- **Remote Management and Cloud Integration:** Digital signage hardware increasingly integrates with cloud-based content management systems, allowing for remote content updates, monitoring, and management. This trend enhances flexibility, scalability, and real-time content deployment.
- **Gesture Recognition and Motion Sensors:** Gesture recognition and motion sensors enable hands-free interaction with digital signage. Users can navigate content, trigger actions, or obtain information through simple gestures, enhancing user convenience and engagement.

- **Internet of Things (IoT) Connectivity:** Digital signage hardware can be integrated into IoT ecosystems, allowing for seamless communication with other connected devices. This enables dynamic content updates based on real-time data from various sources.
- **Biometric Authentication:** Biometric authentication methods, such as facial recognition, are being integrated into digital signage hardware to provide secure access to specific content or services. This trend is particularly relevant in sectors where security is paramount.

## DIGITAL SIGNAGE HARDWARE MARKET – CURRENT INNOVATIONS

Some of the major current innovations influencing the market are as follows:

- **MicroLED Displays:** MicroLED technology is gaining attention for its potential in digital signage. MicroLED displays offer high brightness, contrast, and color accuracy, making them suitable for outdoor and indoor environments. Their modular nature allows for easy scalability and customization of display sizes.
- **Bezel-Less Designs:** Manufacturers are focusing on minimizing the bezels around display screens to create a more seamless and visually appealing viewing experience. Narrow bezels enable video walls and multi-screen setups to look more like a single, cohesive display.
- **Transparent Displays:** Transparent display technology is being used to create eye-catching installations in retail spaces, museums, and showrooms. Transparent screens allow content to be displayed on the screen while still maintaining visibility of the background, creating an engaging visual effect.
- **Smart Signage:** Digital signage was becoming smarter with integrated sensors and cameras. This allowed for audience analytics, content customization based on real-time data, and even interactive experiences using facial recognition and gesture control.
- **Ultra-Wide and Curved Displays:** Ultra-wide and curved displays were gaining traction for their immersive and unique visual experiences. These displays were used in various settings, including retail, hospitality, and corporate environments.
- **Outdoor and Weather-Resistant Displays:** Innovations in outdoor displays were making them more rugged and weather-resistant, enabling their use in various outdoor environments while maintaining visibility in bright sunlight.
- **Wireless Connectivity:** Digital signage was becoming more wireless, with technologies like Bluetooth, Wi-Fi, and NFC enabling content updates and interactions without the need for physical connections.





## 2. DIGITAL SIGNAGE HARDWARE MARKET BY PRODUCT TYPE INSIGHTS & TREND

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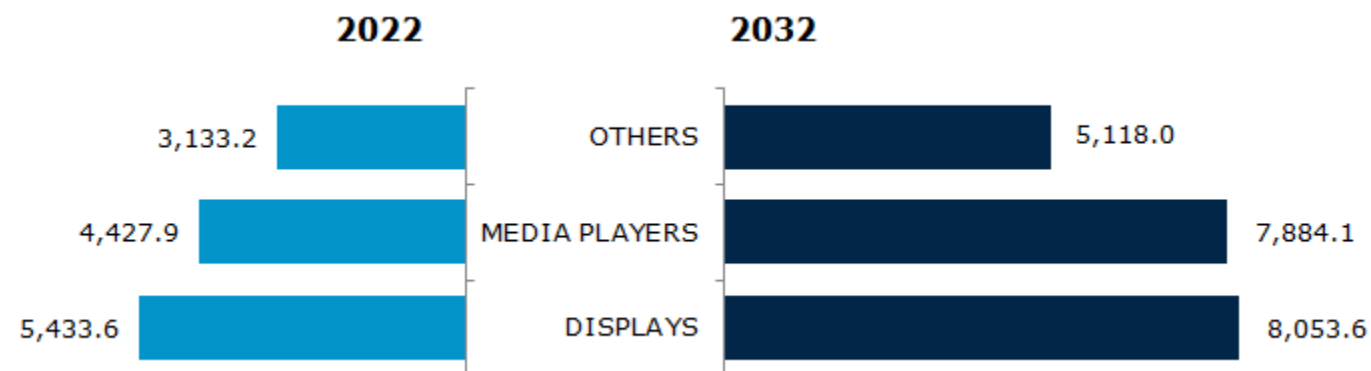
## KEY TRENDS & HIGHLIGHTS

- The demand of displays segment accounted for over 5,433.6 million in 2022 and is expected to grow at a rate of 3.9% in the forecast period.

## PRODUCT TYPE DYNAMICS & MARKET SHARE, 2022 & 2032

By product type, the market is segmented into displays, media players, and others.

**FIGURE 15.** DIGITAL SIGNAGE HARDWARE MARKET: PRODUCT TYPE DYNAMICS (REVENUE IN USD MILLION)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

## DISPLAYS

Digital signage hardware displays are dynamic communication tools that use electronic screens to convey information, advertisements, or messages to a targeted audience in various settings. These displays encompass a range of technologies, including LED, LCD, and OLED panels, and are designed to be visually impactful and easily programmable. They come in various sizes, from small screens in retail environments to large video walls in public spaces. Digital signage hardware displays typically consist of the display screen itself, a media player or content management system that controls the content playback, and connectivity options such as Wi-Fi or Ethernet for remote content updates. These displays offer numerous advantages, allowing businesses and organizations to customize content in real-time, adapting to changing circumstances and audience preferences. They are employed across diverse industries, including retail, hospitality, education, transportation, and healthcare, for purposes such as advertising, wayfinding, information dissemination, and entertainment. The hardware can support a variety of content formats, from images and videos to interactive elements, enhancing engagement and user experience. With the flexibility to schedule content, display targeted messages, and measure viewer engagement, digital signage hardware displays have become indispensable tools for modern communication strategies, enabling effective information delivery and brand promotion. An increasing number of manufacturers are launching new display products, which is driving the revenue growth of the segment. For instance, on 8 June 2023, according to a statement, TCL subsidiary MOKA Technology and digital signage company BrightSign teamed together to create displays with built-in multimedia players. As part of the agreement, a range of player-integrated displays will be created, beginning with the premium MOKA BS60, which makes use of the BrightSign Built-In Platform. Landscape and portrait orientation support, an ultra-narrow bezel, 25% haze, 3H surface hardness, a depth of less than two inches overall, 500 nits of brightness, 90% color gamut, and ultra-high contrast are among the features.

## DIGITAL SIGNAGE HARDWARE MARKET BY DISPLAYS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 4.** DIGITAL SIGNAGE HARDWARE MARKET BY DISPLAYS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	4,617.8	4,888.6	5,161.3	5,433.6	5,701.6	5,959.7	6,206.1	6,629.6	6,790.9	7,818.7	7,966.6	8,053.6	3.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY DISPLAYS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 5.** DIGITAL SIGNAGE HARDWARE MARKET BY DISPLAYS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	1,676.4	1,754.4	1,830.8	1,904.7	1,974.9	2,040.0	2,098.3	2,186.8	2,212.1	2,482.7	2,497.1	2,491.4	2.6%
Europe	1,522.6	1,614.1	1,707.0	1,799.8	1,891.4	1,979.7	2,064.7	2,212.2	2,269.4	2,620.4	2,673.7	2,707.1	4.1%
Asia Pacific	1,418.9	1,520.1	1,623.4	1,729.0	1,835.4	1,940.1	2,043.0	2,230.6	2,309.5	2,715.5	2,795.7	2,855.1	5.0%
Total	4,617.8	4,888.6	5,161.3	5,433.6	5,701.6	5,959.7	6,206.1	6,629.6	6,790.9	7,818.7	7,966.6	8,053.6	3.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

## MEDIA PLAYERS

Digital signage hardware media players are compact devices designed to facilitate seamless playback and management of content on digital signage displays. Serving as the brains behind visual communication, these players are equipped with processing power, storage, and connectivity options to deliver a wide range of multimedia content. They often come in standalone units or as built-in components within digital signage screens. Media players are essential for controlling content delivery, ensuring synchronized playback, and adapting to dynamic messaging needs. These devices support various content formats, such as images, videos, animations, and interactive applications. They can be remotely managed through content management systems, enabling users to update and schedule content across multiple displays from a centralized interface. Digital signage hardware media players are crucial for tailoring messages to specific locations, times, or demographics, enhancing audience engagement and brand impact. Some advanced media players offer features such as touch screen interactivity, real-time data integration, and audience analytics, allowing businesses to gather insights into viewer behavior and preferences. In sectors such as retail, hospitality, and education, media players empower organizations to deliver targeted information, advertisements, and announcements effectively, contributing to a dynamic and efficient communication strategy. An increasing number of manufacturers are launching new media player products, which is driving the revenue growth of the segment. For instance, on 12 June 2023, according to a news release, BrightSign introduced its Series 5 players along with additional tailored features and solutions for niche use cases, such as a locker room solution for sporting venues. As part of a drive for product innovation, MOKA BS60 player-integrated screens created in collaboration with MOKA Technology (previously covered in this journal) are also included. The fifth generation of BrightSign players, which also includes models such as the AU5, LS5, HD5, XD5, and flagship XC5 models, is completed with the XT5 player.

## DIGITAL SIGNAGE HARDWARE MARKET BY MEDIA PLAYERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 6.** DIGITAL SIGNAGE HARDWARE MARKET BY MEDIA PLAYERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	3,560.0	3,840.2	4,129.7	4,427.9	4,732.1	5,039.5	5,344.0	5,922.6	6,178.7	7,379.1	7,657.7	7,884.1	5.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY MEDIA PLAYERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 7.** DIGITAL SIGNAGE HARDWARE MARKET BY MEDIA PLAYERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	1,311.7	1,399.0	1,487.8	1,577.3	1,666.5	1,754.2	1,838.6	1,989.6	2,050.7	2,389.7	2,449.2	2,489.9	4.6%
Europe	1,151.9	1,245.1	1,340.4	1,438.9	1,540.5	1,643.6	1,745.4	1,939.9	2,027.2	2,428.4	2,523.8	2,602.4	6.0%
Asia Pacific	1,096.4	1,196.2	1,301.6	1,411.7	1,525.1	1,641.7	1,760.0	1,993.1	2,100.8	2,561.0	2,684.7	2,791.8	6.9%
Total	3,560.0	3,840.2	4,129.7	4,427.9	4,732.1	5,039.5	5,344.0	5,922.6	6,178.7	7,379.1	7,657.7	7,884.1	5.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

## OTHERS

Other than displays and media player's digital signage hardware also includes connectivity options, mounting hardware and enclosures, touchscreen technology, sensors and audience analytics, external devices, and power management and cooling, among others. In the realm of digital signage, there are several supplementary hardware elements that contribute to the overall functionality and immersive experience of the system. These components encompass a wide range of features, such as audio systems that complement visual content with sound, enhancing engagement and message delivery. Additionally, external sensors such as motion detectors or cameras can enable interactive elements by responding to viewer actions, creating a more personalized and dynamic user experience. In outdoor or high-brightness environments, weatherproof enclosures and high-contrast screens ensure visibility and durability, while in retail settings, shelf-mounted displays can draw attention to specific products. Power management solutions, such as surge protectors and uninterruptible power supplies, safeguard against disruptions, ensuring continuous operation. Moreover, audience measurement tools, including facial recognition or anonymous tracking, offer insights into viewer demographics and behavior, enabling content optimization. These diverse hardware components collectively shape the effectiveness of digital signage, enabling tailored communication strategies across sectors such as retail, hospitality, education, and more, by seamlessly integrating visual, auditory, interactive, and analytical elements into a comprehensive and impactful platform.

## DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 8.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	2,589.5	2,766.3	2,948.6	3,133.2	3,318.4	3,503.0	3,681.6	4,009.0	4,147.0	4,869.9	5,012.5	5,118.0	4.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 9.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	947.1	1,000.7	1,054.4	1,107.6	1,159.8	1,209.9	1,256.9	1,336.6	1,365.9	1,565.0	1,590.7	1,603.9	3.7%
Europe	846.4	905.0	966.2	1,028.3	1,090.2	1,152.0	1,212.2	1,323.7	1,370.6	1,613.4	1,662.9	1,699.7	5.1%
Asia Pacific	796.0	860.7	928.1	997.2	1,068.5	1,141.2	1,212.5	1,348.8	1,410.5	1,691.5	1,758.9	1,814.4	6.1%
Total	2,589.5	2,766.3	2,948.6	3,133.2	3,318.4	3,503.0	3,681.6	4,009.0	4,147.0	4,869.9	5,012.5	5,118.0	4.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis





### 3. DIGITAL SIGNAGE HARDWARE MARKET BY SCREEN SIZE INSIGHTS & TREND

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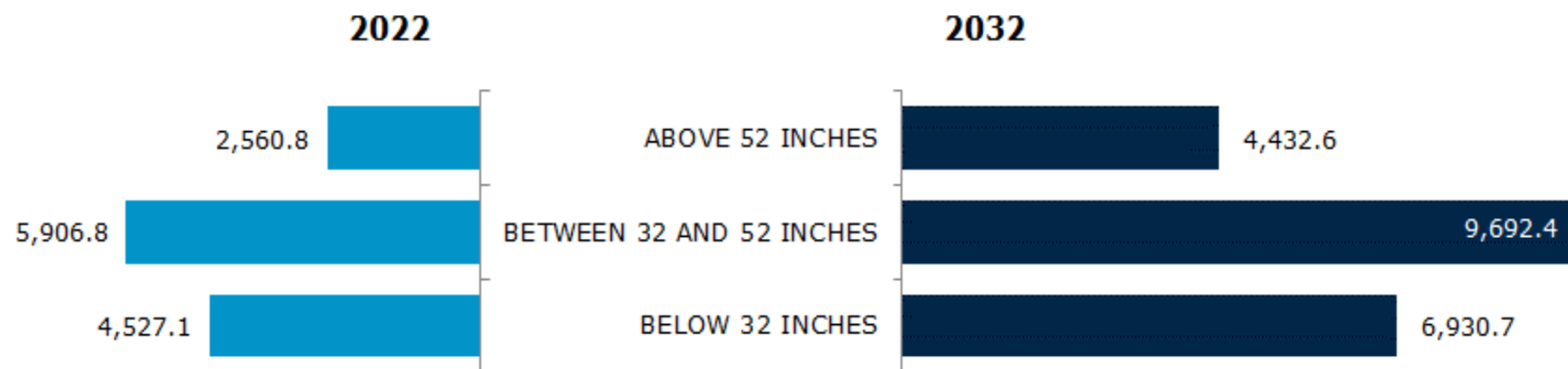
## KEY TRENDS & HIGHLIGHTS

- The demand of below 32 inches’ segment accounted for over 4,527.1 million in 2022 and is expected to grow at a rate of 4.3% in the forecast period.

## SCREEN SIZE DYNAMICS & MARKET SHARE, 2022 & 2032

By screen size, the market is segmented into below 32 inches, between 32 and 52 inches, and above 52 inches.

**FIGURE 16.** DIGITAL SIGNAGE HARDWARE MARKET: SCREEN SIZE DYNAMICS (REVENUE IN USD MILLION)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis



## 4. DIGITAL SIGNAGE HARDWARE MARKET BY SCREEN RESOLUTION INSIGHTS & TREND

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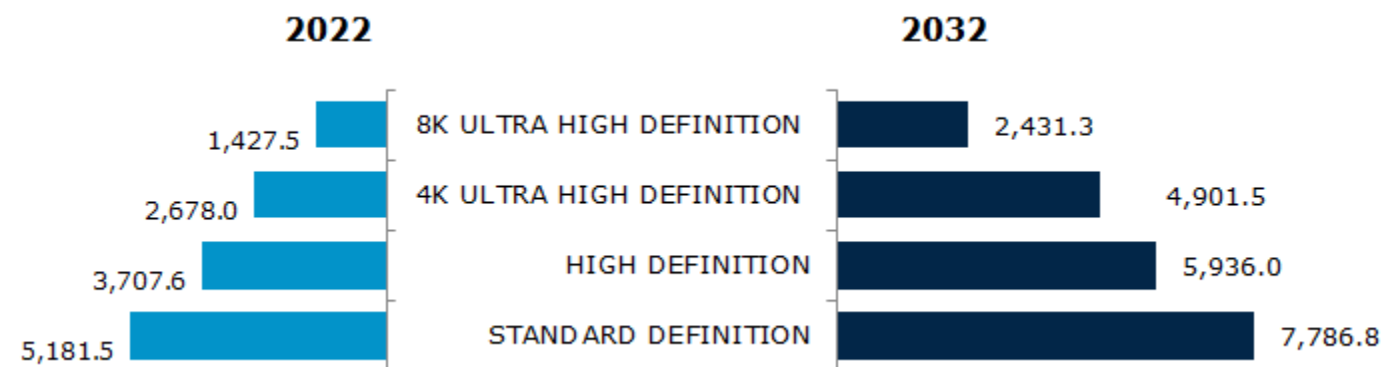
## KEY TRENDS & HIGHLIGHTS

- The demand of Standard Definition (SD) segment accounted for over 5,181.5 million in 2022 and is expected to grow at a rate of 4.1% in the forecast period.

## SCREEN RESOLUTION DYNAMICS & MARKET SHARE, 2022 & 2032

By screen resolution, the market is segmented into Standard Definition (SD), High Definition (HD), 4K Ultra High Definition (UHD), and 8K Ultra High Definition (UHD).

**FIGURE 17.** DIGITAL SIGNAGE HARDWARE MARKET: SCREEN RESOLUTION DYNAMICS (REVENUE IN USD MILLION)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

## 7680X4320 PIXELS (4320P)

Digital signage hardware featuring a resolution of 7680x4320 pixels (4320p), often referred to as 8K Ultra High Definition (UHD), stands as a pinnacle of visual luxury and immersive engagement. Boasting an astonishing pixel count of approximately 33.2 million, displays at 4320p redefine image precision and realism, shattering previous benchmarks. This remarkable pixel density ensures that even the minutest details, from intricate graphics to delicate textures, are presented with unparalleled clarity and vibrancy, bordering on lifelike accuracy. These displays find their calling in environments demanding the utmost visual impact and supreme quality, such as forward-looking retail showcases, awe-inducing museum installations, and sophisticated corporate presentations. The 4320p UHD resolution's ability to unveil nuanced color transitions and realistic textures transforms visual content into an immersive sensory experience, nurturing profound engagement and conveying messages with unprecedented elegance. In settings necessitating uncompromising visual authenticity, 4320p UHD displays mesmerize and take command of attention, providing an unsurpassed platform for immersive storytelling and fundamentally redefining the contours of content presentation. The amalgamation of unmatched resolution and pragmatic effectiveness positions 4320p UHD as the unequivocal choice for businesses and venues aiming to etch an enduring impact through the dynamic canvas of advanced signage.

#### 4.1.1.13. DIGITAL SIGNAGE HARDWARE MARKET BY 7680X4320 PIXELS (4320P), ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 36.** DIGITAL SIGNAGE HARDWARE MARKET BY 7680X4320 PIXELS (4320P), ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,164.0	1,248.6	1,337.6	1,427.5	1,517.3	1,607.7	1,698.9	1,864.8	1,937.0	2,294.7	2,370.7	2,431.3	5.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis

#### 4.1.1.14. DIGITAL SIGNAGE HARDWARE MARKET BY 7680X4320 PIXELS (4320P), ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 37.** DIGITAL SIGNAGE HARDWARE MARKET BY 7680X4320 PIXELS (4320P), ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	422.9	448.3	474.8	500.8	526.6	551.6	575.8	616.8	632.9	732.2	745.9	755.0	4.1%
Europe	381.0	409.3	438.9	469.5	499.3	529.4	560.7	616.8	641.5	761.6	788.8	809.1	5.5%
Asia Pacific	360.2	391.0	424.0	457.1	491.5	526.7	562.4	631.2	662.6	800.9	836.0	867.3	6.5%
Total	1,164.0	1,248.6	1,337.6	1,427.5	1,517.3	1,607.7	1,698.9	1,864.8	1,937.0	2,294.7	2,370.7	2,431.3	5.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews, and Emergen Research Analysis



## 5. DIGITAL SIGNAGE HARDWARE MARKET BY TECHNOLOGY INSIGHTS & TREND

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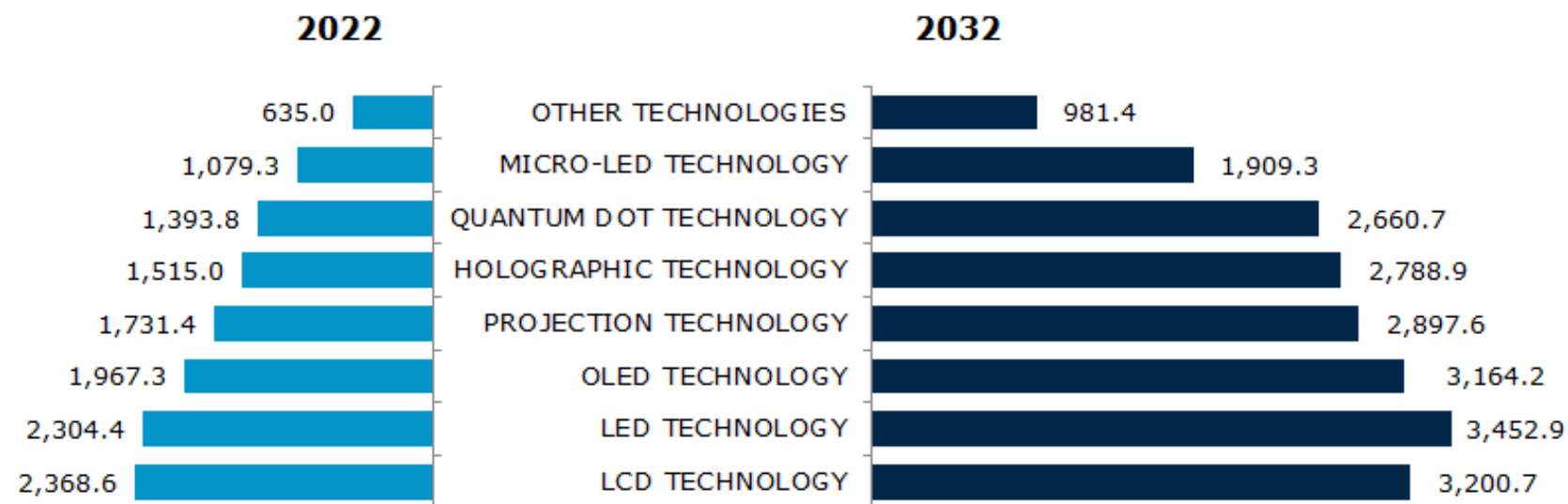
## KEY TRENDS & HIGHLIGHTS

- The LED technology segment accounted for over USD 2,304.4 Million in 2022 and is expected to grow at a rate of 4.0% in the forecast period.

## TECHNOLOGY DYNAMICS & MARKET SHARE, 2022 & 2032

By technology, the market is segmented into LCD technology, LED technology, OLED technology, projection technology, holographic technology, quantum dot technology, Micro-LED technology, and other technologies.

**FIGURE 18.** DIGITAL SIGNAGE HARDWARE MARKET: TECHNOLOGY DYNAMICS (REVENUE IN USD MILLION)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis



## LCD TECHNOLOGY

Digital signage hardware primarily utilizes LCD (Liquid Crystal Display) technology to deliver dynamic visual content. LCD technology is a widely adopted and versatile display method that offers high-quality visuals for various applications. In LCD digital signage, a backlight emits light through a layer of liquid crystals, which can be controlled electronically to manipulate light passage. This enables the creation of vibrant, sharp images and videos. LCD displays are available in a range of sizes, from small to large format, making them suitable for diverse environments like retail stores, airports, corporate offices, and public spaces. These displays offer excellent color reproduction, contrast ratios, and viewing angles, ensuring that content remains vivid and engaging even when viewed from different perspectives. LCD digital signage hardware often includes features like touchscreen functionality, interactive capabilities, and network connectivity for remote content management and updates. As technology advances, LCD displays are becoming more energy-efficient, thinner, and capable of higher resolutions, enabling businesses and organizations to deliver compelling and eye-catching messages to their audiences effectively.

## DIGITAL SIGNAGE HARDWARE MARKET BY LCD TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 38.** DIGITAL SIGNAGE HARDWARE MARKET BY LCD TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	2,060.3	2,164.8	2,267.9	2,368.6	2,465.0	2,555.5	2,638.0	2,768.0	2,809.1	3,171.9	3,199.5	3,200.7	2.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY LCD TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 39.** DIGITAL SIGNAGE HARDWARE MARKET BY LCD TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	763.4	793.4	822.1	849.1	873.8	895.7	914.1	937.2	940.0	1,036.4	1,032.8	1,020.7	1.7%
Europe	669.8	704.7	739.1	772.9	805.3	835.9	863.9	908.6	923.2	1,044.7	1,055.0	1,056.6	3.1%
Asia Pacific	627.1	666.7	706.7	746.6	785.9	823.9	860.0	922.2	945.9	1,090.7	1,111.6	1,123.4	4.1%
Total	2,060.3	2,164.8	2,267.9	2,368.6	2,465.0	2,555.5	2,638.0	2,768.0	2,809.1	3,171.9	3,199.5	3,200.7	2.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## PROJECTION TECHNOLOGY

Projection technology offers distinct advantages in digital signage applications, contributing to unique and impactful visual experiences. One key advantage is its ability to create large-format displays on various surfaces, transcending the limitations of traditional flat-panel displays. This scalability makes projection ideal for unconventional and immersive installations, transforming walls, floors, and even 3D objects into dynamic canvases for content delivery. Projection technology allows for creative and attention-grabbing content delivery in unconventional spaces, such as storefront windows, architectural facades, and indoor environments with irregular shapes. This versatility enables businesses to capture viewer attention in innovative ways that may not be possible with standard displays. Another benefit of projection technology is its potential for interactivity. With the integration of touch or motion-sensing technology, projections can become interactive surfaces, enabling users to engage directly with the displayed content. This feature is particularly advantageous for retail, education, and entertainment applications, enhancing engagement and creating memorable experiences. Projection technology also offers excellent brightness levels, making it suitable for both indoor and outdoor environments. High-brightness projectors can ensure visibility even in well-lit areas, expanding the range of potential deployment scenarios. Moreover, projection technology often boasts long throw distances, allowing content to be projected from a distance, which can be advantageous in venues with limited installation options.

## DIGITAL SIGNAGE HARDWARE MARKET BY PROJECTION TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 44.** DIGITAL SIGNAGE HARDWARE MARKET BY PROJECTION TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,418.7	1,520.5	1,624.0	1,731.4	1,837.4	1,944.1	2,048.4	2,242.0	2,324.9	2,743.4	2,832.7	2,897.6	5.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY PROJECTION TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 45.** DIGITAL SIGNAGE HARDWARE MARKET BY PROJECTION TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	517.3	548.0	578.7	609.6	639.6	669.2	696.4	744.3	762.4	875.9	895.6	903.6	3.9%
Europe	464.2	498.4	533.0	569.2	604.6	640.2	675.6	742.0	770.5	912.2	942.2	965.8	5.3%
Asia Pacific	437.2	474.1	512.4	552.5	593.2	634.7	676.4	755.8	792.1	955.3	994.9	1,028.1	6.3%
Total	1,418.7	1,520.5	1,624.0	1,731.4	1,837.4	1,944.1	2,048.4	2,242.0	2,324.9	2,743.4	2,832.7	2,897.6	5.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## QUANTUM DOT TECHNOLOGY

The demand for Quantum Dot (QD) technology is being driven by several compelling factors that make it a sought-after solution in various industries. One of the primary drivers is its ability to significantly enhance display performance. Quantum Dot displays offer improved color accuracy, wider color gamuts, and higher peak brightness levels compared to traditional display technologies. This results in more vivid, lifelike visuals that are particularly appealing for entertainment, advertising, and content consumption. Energy efficiency is another key factor propelling the demand for Quantum Dot technology. QD displays can achieve higher levels of brightness while consuming less energy than conventional displays, making them attractive options for energy-conscious consumers and businesses. This aligns with the growing emphasis on sustainable and eco-friendly technologies across industries. The demand for larger and higher resolution displays also contributes to the popularity of Quantum Dot technology. As screen sizes increase, maintaining consistent color accuracy and brightness becomes crucial, and Quantum Dot displays excel in this regard. Additionally, the technology's compatibility with 4K and 8K resolutions positions it as an ideal solution for delivering sharp and detailed visuals on large screens.

## DIGITAL SIGNAGE HARDWARE MARKET BY QUANTUM DOT TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 48.** DIGITAL SIGNAGE HARDWARE MARKET BY QUANTUM DOT TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,092.7	1,188.8	1,289.4	1,393.8	1,501.0	1,610.6	1,720.9	1,934.8	2,032.5	2,459.4	2,565.7	2,660.7	6.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY QUANTUM DOT TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 49.** DIGITAL SIGNAGE HARDWARE MARKET BY QUANTUM DOT TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	393.1	423.0	453.3	484.0	515.9	546.8	577.4	634.0	657.9	778.5	797.5	819.5	5.3%
Europe	360.1	392.2	426.2	462.5	497.5	534.6	571.8	644.3	677.6	821.2	859.5	891.4	6.7%
Asia Pacific	339.6	373.6	409.8	447.3	487.7	529.3	571.6	656.5	696.9	859.8	908.7	949.8	7.7%
Total	1,092.7	1,188.8	1,289.4	1,393.8	1,501.0	1,610.6	1,720.9	1,934.8	2,032.5	2,459.4	2,565.7	2,660.7	6.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY MICRO-LED TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 50.** DIGITAL SIGNAGE HARDWARE MARKET BY MICRO-LED TECHNOLOGY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	867.0	935.4	1,004.8	1,079.3	1,150.7	1,224.7	1,298.7	1,436.9	1,498.4	1,787.0	1,855.4	1,909.3	5.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY MICRO-LED TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 51.** DIGITAL SIGNAGE HARDWARE MARKET BY MICRO-LED TECHNOLOGY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	313.9	335.0	355.7	376.8	398.0	419.0	439.2	474.1	488.4	566.9	581.8	591.9	4.5%
Europe	284.0	306.8	330.0	354.4	379.0	403.2	428.0	476.1	497.3	594.9	619.4	637.4	5.9%
Asia Pacific	269.1	293.7	319.1	348.1	373.8	402.5	431.5	486.7	512.7	625.2	654.1	679.9	6.9%
Total	867.0	935.4	1,004.8	1,079.3	1,150.7	1,224.7	1,298.7	1,436.9	1,498.4	1,787.0	1,855.4	1,909.3	5.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis



## 6. DIGITAL SIGNAGE HARDWARE MARKET BY LOCATION INSIGHTS & TREND

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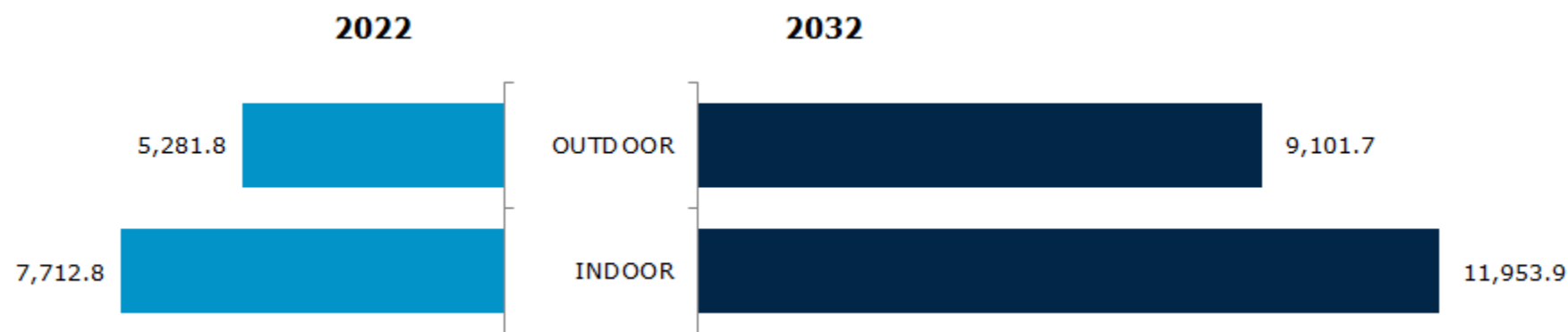
## KEY TRENDS & HIGHLIGHTS

- The demand of the indoor segment accounted for over USD 7712.8 Million in 2022 and is expected to grow at a rate of 4.4% in the forecast period.

## LOCATION DYNAMICS & MARKET SHARE, 2022 & 2032

By location, the market is segmented into indoor and outdoor. Indoor segment has been further sub-segmented into retail digital signage, corporate digital signage, healthcare digital signage, education digital signage, hospitality digital signage, and others. Outdoor segment has also been bifurcated into transportation digital signage, outdoor advertising digital signage, sports and entertainment digital signage, and others.

**FIGURE 19.** DIGITAL SIGNAGE HARDWARE MARKET: LOCATION DYNAMICS (REVENUE IN USD MILLION)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## INDOOR

Indoor digital signage refers to the use of electronic displays and technologies within indoor environments to convey information, advertising, or interactive content. These displays can be found in a wide range of settings, including retail stores, corporate offices, healthcare facilities, educational institutions, museums, airports, and more. Indoor digital signage serves various purposes, such as providing wayfinding and navigation assistance, showcasing promotions, displaying event schedules, sharing news or announcements, and enhancing customer experiences. It can take the form of large video walls, interactive touchscreens, kiosks, and even smaller displays integrated into product shelves or reception areas. The dynamic and customizable nature of indoor digital signage allows businesses and organizations to effectively communicate with their audiences, create engaging experiences, and adapt content in real-time to meet specific needs and objectives. The demand for indoor digital signage is propelled by its capacity to enhance communication, engage audiences, and optimize operational efficiency. These displays offer dynamic content delivery, providing real-time updates, announcements, and interactive information, fostering seamless communication within indoor environments. The ability to capture attention and convey messages effectively improves audience engagement and brand recognition. Moreover, indoor digital signage streamlines processes by serving as wayfinding tools, reducing wait times, and enhancing visitor experiences. The adaptability to diverse settings, from retail to healthcare, meets the growing need for versatile and impactful communication methods, thus driving the demand for indoor digital signage solutions.

## DIGITAL SIGNAGE HARDWARE MARKET BY INDOOR, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 54.** DIGITAL SIGNAGE HARDWARE MARKET BY INDOOR, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	6,473.9	6,881.8	7,295.6	7,712.8	8,126.5	8,533.7	8,922.4	9,616.2	9,894.7	11,496.9	11,770.7	11,953.9	4.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY INDOOR, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 55.** DIGITAL SIGNAGE HARDWARE MARKET BY INDOOR, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	2,365.4	2,486.2	2,605.9	2,723.1	2,835.8	2,943.0	3,041.2	3,199.6	3,252.2	3,686.0	3,726.2	3,736.6	3.1%
Europe	2,110.6	2,246.7	2,385.2	2,525.2	2,664.1	2,801.5	2,933.1	3,169.6	3,265.2	3,804.4	3,900.8	3,966.3	4.5%
Asia Pacific	1,997.9	2,149.0	2,304.5	2,464.5	2,626.6	2,789.1	2,948.1	3,247.1	3,377.4	4,006.4	4,143.7	4,251.0	5.5%
Total	6,473.9	6,881.8	7,295.6	7,712.8	8,126.5	8,533.7	8,922.4	9,616.2	9,894.7	11,496.9	11,770.7	11,953.9	4.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### 6.1.1.11. DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 66.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	692.2	730.4	770.9	810.0	849.8	887.0	923.0	983.9	1,007.2	1,157.2	1,177.6	1,190.1	3.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### 6.1.1.12. DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 67.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	252.6	264.1	275.4	285.9	296.5	306.1	314.6	327.4	331.0	371.5	372.4	372.0	2.6%
Europe	225.0	238.0	251.4	264.8	278.0	290.8	302.8	323.7	331.9	382.1	389.6	394.3	4.0%
Asia Pacific	214.5	228.3	244.1	259.2	275.2	290.2	305.5	332.8	344.3	403.5	415.7	423.8	4.9%
Total	692.2	730.4	770.9	810.0	849.8	887.0	923.0	983.9	1,007.2	1,157.2	1,177.6	1,190.1	3.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, The Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## OUTDOOR

Outdoor digital signage presents a multitude of advantages that redefine communication strategies in outdoor environments. Firstly, its unparalleled visibility and dynamic content capture attention and leave a lasting impression on passersby, making it an effective tool for branding, promotions, and information dissemination. The flexibility of remotely updating content in real-time ensures that messages are always current and relevant, allowing businesses to swiftly adapt to changing circumstances and engage with their target audience in a timely manner. Financially, outdoor digital signage offers cost savings over traditional static signage as the need for repeated printing, installation, and maintenance is eliminated. This not only reduces ongoing expenses but also contributes to a more sustainable approach, minimizing paper waste and the environmental footprint. The interactivity that some outdoor digital signage solutions provide is another key advantage. Touchscreen capabilities allow users to actively engage with content, such as accessing maps, directions, menus, or event details, enhancing the overall customer experience and fostering deeper connections, thus increasing business. These factors are expected to fuel the growth of the outdoor segment.



## 7. DIGITAL SIGNAGE HARDWARE MARKET BY APPLICATION INSIGHTS & TREND

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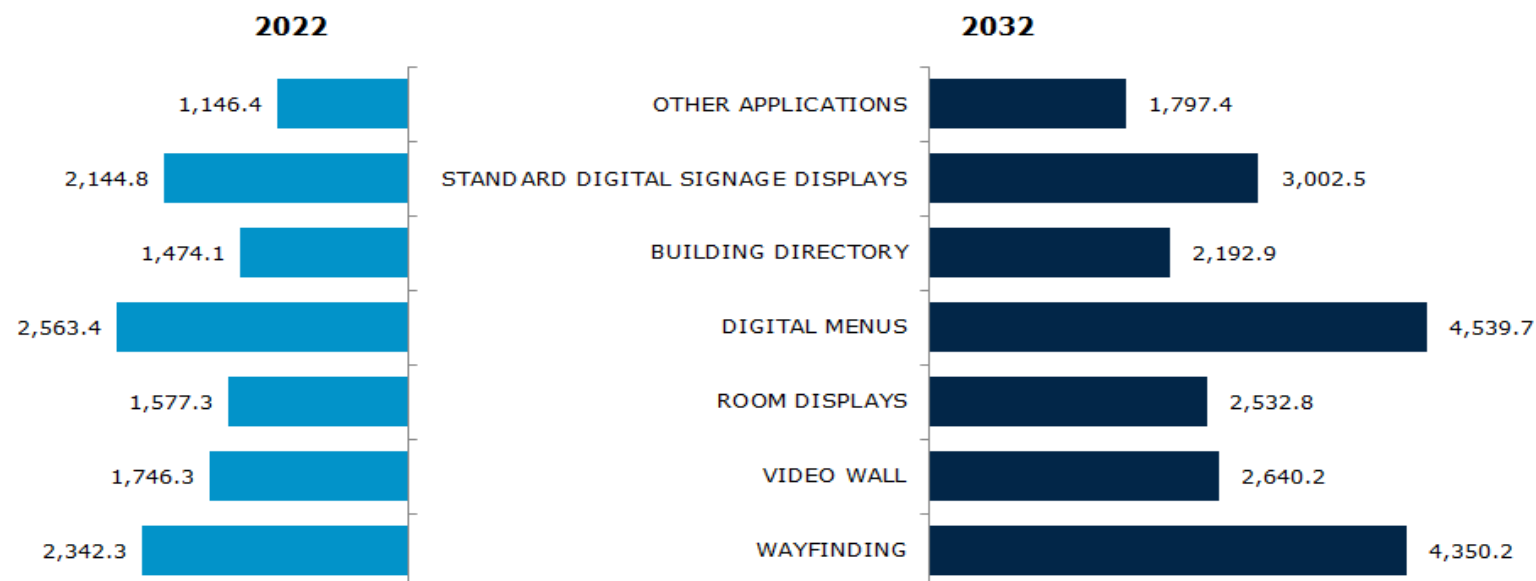
## KEY TRENDS & HIGHLIGHTS

- The demand of digital menu segment accounted for over 2,563.4 million in 2022 and is expected to grow at a rate of 5.8% in the forecast period.

## APPLICATION DYNAMICS & MARKET SHARE, 2022 & 2032

By application, the market is segmented into wayfinding, video wall, room displays, digital menus, building directory, standard digital signage displays, and other applications.

**FIGURE 20.** DIGITAL SIGNAGE HARDWARE MARKET: APPLICATION DYNAMICS (REVENUE IN USD MILLION)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## WAYFINDING

Individuals can navigate a shopping Centre, hospital, office complex, or any other location with the help of effective wayfinding digital signs. Wayfinding not only facilitates navigation but also reduces consumer confusion, making the user experience more cozy and delightful. A dynamic system of electronic signs, maps, and information displays known as wayfinding digital signage aids visitors in easily navigating their surroundings. By clearly indicating direction and destination, wayfinding digital signage helps consumers save time, which is a precious resource. Individuals who utilize digital signs make the most of their trip by spending less time being lost and more time being productive owing to this. Wayfinding systems that are well-designed optimize traffic flow by removing bottlenecks and congestion in densely populated locations. Customers and workers alike will enjoy the enhanced flow that it brings. Advertising and promotional materials are frequently included into wayfinding systems, which is advantageous to both businesses and consumers. For companies and organizations, wayfinding digital signage is a priceless instrument for lowering client uncertainty and producing a smooth, efficient experience. Organizations can boost customer happiness and loyalty by improving the user experience, freeing up time, boosting traffic flow, and offering worthwhile marketing possibilities. Furthermore, airports are looking at new strategies to enhance the passenger experience as air travel becomes more and more popular. The usage of digital wayfinding apps and kiosks is one of the most exciting advances in this field. These apps assist travelers find their way to their gates, provide them up-to-date information on airport services, and give them real-time flight information.

Another factor driving the growth of the segment is the increasing deployment of wayfinding digital signage at various events. For instance, on 21 March 2022, Acquire Digital, the world's foremost provider of location information and digital wayfinding solutions, declared that it would exhibit its cutting-edge Wayfinder technology at the Shoptalk retail expo in Las Vegas, Nevada. By making it simple to navigate the venue's huge show floor and multiple event rooms, the aim is to provide tradeshow guests with a seamless experience. Visitors were given a map of the tradeshow's layout and step-by-step directions to assist them find certain exhibitors, activities, and bathrooms using the digital wayfinding system.



## DIGITAL SIGNAGE HARDWARE MARKET BY WAYFINDING, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 78.** DIGITAL SIGNAGE HARDWARE MARKET BY WAYFINDING, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,855.0	2,011.2	2,173.2	2,342.3	2,514.2	2,690.3	2,866.5	3,203.7	3,355.0	4,040.4	4,208.4	4,350.2	6.3%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY WAYFINDING, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 79.** DIGITAL SIGNAGE HARDWARE MARKET BY WAYFINDING, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	650.7	698.3	747.2	797.1	846.9	896.5	944.3	1,033.2	1,070.3	1,259.3	1,297.4	1,324.7	5.1%
Europe	624.3	677.1	732.4	789.5	848.2	908.2	969.0	1,084.0	1,135.6	1,370.2	1,428.4	1,478.1	6.4%
Asia Pacific	580.0	635.7	693.6	755.8	819.0	885.7	953.2	1,086.4	1,149.1	1,410.9	1,482.5	1,547.4	7.3%
Total	1,855.0	2,011.2	2,173.2	2,342.3	2,514.2	2,690.3	2,866.5	3,203.7	3,355.0	4,040.4	4,208.4	4,350.2	6.3%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## VIDEO WALL

The driving factors behind digital signage hardware video walls stem from their ability to create visually captivating and impactful displays. One key factor is the desire to grab attention and enhance brand visibility in high-traffic areas such as retail stores, trade shows, and public spaces. Video walls offer a larger-than-life canvas that can showcase dynamic content, promotions, and advertisements, effectively drawing in audiences. Moreover, the demand for immersive experiences drives the adoption of video walls in venues such as entertainment venues, museums, and corporate events, where the expansive displays create an engaging environment. The advancements in display technology, such as ultra-narrow bezels and high pixel densities, enable seamless visuals, making video walls an attractive option for conveying complex information, data visualizations, and interactive content. Additionally, the flexibility to tailor content to different sections of the video wall or synchronize it across screens adds versatility to their applications. As businesses recognize the power of impactful visuals, video walls become a valuable tool for storytelling, conveying information, and leaving a lasting impression, ultimately propelling their adoption in various sectors and environments. Another factor driving the growth of the segment is the increasing number of market players launching video wall products. For instance, on 24 March 2022, according to a press statement from the company, Planar, a manufacturer of visualization technology, introduced two LED video wall display lines called the Planar Luminate Pro Series and Planar Venue Pro Series to cater to events and high-ambient light conditions. For temporary and transportable events, the displays will have components that speed up setup and takedown as well as full-front installation and serviceability. For video wall applications, each LED display series has 500x500 millimeter cabinets that can be hung, mounted on a wall or floor, or faceted to create curves.

## DIGITAL SIGNAGE HARDWARE MARKET BY VIDEO WALL, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 80.** DIGITAL SIGNAGE HARDWARE MARKET BY VIDEO WALL, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,475.4	1,564.9	1,655.6	1,746.3	1,835.9	1,921.7	2,004.7	2,150.1	2,205.3	2,550.0	2,604.5	2,640.2	4.1%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY VIDEO WALL, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 81.** DIGITAL SIGNAGE HARDWARE MARKET BY VIDEO WALL, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	547.6	574.3	600.6	626.7	650.8	673.8	694.9	727.6	737.5	831.6	839.9	839.5	2.9%
Europe	476.8	506.4	536.4	566.4	596.7	625.1	652.7	702.5	721.3	836.2	854.7	868.1	4.3%
Asia Pacific	451.0	484.2	518.5	553.2	588.4	622.7	657.1	720.1	746.5	882.2	909.9	932.5	5.3%
Total	1,475.4	1,564.9	1,655.6	1,746.3	1,835.9	1,921.7	2,004.7	2,150.1	2,205.3	2,550.0	2,604.5	2,640.2	4.1%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## ROOM DISPLAYS

The demand for digital signage hardware room displays is fueled by several driving factors that cater to modern communication needs. Firstly, the emphasis on efficient space utilization and seamless scheduling within corporate environments has elevated the importance of room displays. Organizations seek real-time availability information to optimize meeting room usage and avoid scheduling conflicts. Additionally, the need for clear wayfinding in large office complexes, conference centers, and educational institutions propels the adoption of room displays. Interactive touchscreens integrated with mapping and navigation features provide intuitive directions, enhancing visitor experience. Furthermore, the COVID-19 pandemic has heightened the significance of contactless interactions, making room displays equipped with booking systems and QR code integration a safer and user-friendly option for reserving spaces. The demand for data-driven decision-making also contributes to the popularity of room displays, as they can integrate with facility management systems to gather usage analytics. Ultimately, the synergy of efficient resource allocation, enhanced user experience, contactless features, and data insights drives the demand for digital signage hardware room displays, revolutionizing the way spaces are managed and experienced.

## DIGITAL SIGNAGE HARDWARE MARKET BY ROOM DISPLAYS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 82.** DIGITAL SIGNAGE HARDWARE MARKET BY ROOM DISPLAYS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,312.1	1,399.3	1,488.1	1,577.3	1,668.4	1,759.0	1,845.6	2,002.7	2,069.4	2,420.9	2,486.5	2,532.8	4.7%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY ROOM DISPLAYS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 83.** DIGITAL SIGNAGE HARDWARE MARKET BY ROOM DISPLAYS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	481.4	507.7	533.9	558.6	585.1	609.3	631.7	669.4	683.1	780.0	790.1	795.8	3.5%
Europe	427.9	457.1	486.8	517.1	547.0	577.9	607.5	660.4	683.5	801.8	825.2	841.1	4.9%
Asia Pacific	402.8	434.5	467.4	501.6	536.2	571.8	606.5	672.9	702.8	839.1	871.2	895.9	5.9%
Total	1,312.1	1,399.3	1,488.1	1,577.3	1,668.4	1,759.0	1,845.6	2,002.7	2,069.4	2,420.9	2,486.5	2,532.8	4.7%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL MENUS

Digital menus are a significant segment that drives the market for digital signage hardware. In various industries, including hospitality, quick-service restaurants, cafes, and even retail, digital menus have become an essential tool for enhancing customer experiences and operational efficiency. Digital menus offer a visually appealing and interactive way to present menu items, promotions, and other relevant information. High-quality displays with vibrant colors and dynamic content capture customers' attention and provide a more engaging experience compared to traditional static menus. Digital menus allow businesses to update content in real time. This flexibility enables quick adjustments to menu items, prices, and promotions, responding to changing inventory, seasonal offerings, or special events. This real-time customization capability drives the need for efficient and reliable digital signage hardware. Interactive digital menus can be designed to promote upselling and cross-selling by suggesting complementary items or highlighting specials. This strategy can lead to increased average transaction values, boosting revenue for businesses. Digital menus eliminate the need to print and distribute paper menus, reducing printing costs and waste. Additionally, businesses can remotely manage and update menus across multiple locations, saving time and resources. Advanced digital signage hardware can integrate with analytics tools, providing businesses with valuable insights into customer interactions with the digital menus. This data can help optimize menu layouts, item placements, and promotions for better performance. As the demand for interactive and visually appealing digital menus grows, businesses are investing in high-quality digital signage hardware to provide seamless, reliable, and feature-rich solutions.

On August 2023, Palmer Digital Group has introduced a fresh range of outdoor digital menu boards designed for the restaurant sector. This latest lineup is aimed at Quick Service Restaurants (QSRs) and fast casual dining establishments that face spatial limitations for conventional menu board setups. This is especially relevant for businesses situated in outdoor shopping complexes, strip malls, and bustling urban zones. The OWDMB series includes options for single, double, and triple display setups, featuring screen dimensions of 46, 49, and 55 inches respectively.

## DIGITAL SIGNAGE HARDWARE MARKET BY DIGITAL MENUS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 84.** DIGITAL SIGNAGE HARDWARE MARKET BY DIGITAL MENUS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	2,065.4	2,226.3	2,392.6	2,563.4	2,738.5	2,915.1	3,088.6	3,419.7	3,565.8	4,252.0	4,411.6	4,539.7	5.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY DIGITAL MENUS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 85.** DIGITAL SIGNAGE HARDWARE MARKET BY DIGITAL MENUS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	737.3	786.1	835.8	885.9	935.7	984.6	1,031.5	1,115.9	1,150.4	1,339.1	1,372.4	1,394.8	4.5%
Europe	687.0	741.3	797.5	855.5	914.8	975.0	1,034.0	1,147.2	1,197.5	1,430.8	1,486.3	1,531.4	5.9%
Asia Pacific	641.1	698.9	759.4	821.9	888.0	955.5	1,023.0	1,156.6	1,217.9	1,482.1	1,552.9	1,613.5	6.9%
Total	2,065.4	2,226.3	2,392.6	2,563.4	2,738.5	2,915.1	3,088.6	3,419.7	3,565.8	4,252.0	4,411.6	4,539.7	5.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## BUILDING DIRECTORY

The building directory segment significantly drives the market for digital signage hardware, particularly in commercial and public spaces such as office buildings, shopping malls, universities, hospitals, and airports. Building directories serve as navigational aids, providing visitors with information about locations, services, tenants, and events within the facility. Building directories help visitors find their destinations efficiently. Interactive digital signage allows users to search for specific locations, view maps, and get step-by-step directions, enhancing the overall user experience. In dynamic environments, such as office buildings with changing tenants or event venues with evolving schedules, digital building directories can display real-time updates. This capability requires hardware that supports seamless content updates and synchronization with backend systems. Building directories are often strategically placed in high-traffic areas. High-quality displays with clear, legible text and vibrant graphics are essential for conveying information effectively and creating a positive impression. In commercial buildings with multiple tenants, digital directories provide an efficient way to display tenant information, contact details, and floor plans. This information can be organized hierarchically and updated as tenants change. For multi-location businesses or organizations with numerous buildings, central management of content and updates is crucial. The hardware should allow remote management and monitoring. As businesses and organizations continue to prioritize user experience and efficiency in navigating their facilities, the demand for advanced digital building directories is on the rise.



## DIGITAL SIGNAGE HARDWARE MARKET BY BUILDING DIRECTORY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 86.** DIGITAL SIGNAGE HARDWARE MARKET BY BUILDING DIRECTORY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,250.7	1,323.9	1,399.3	1,474.1	1,548.1	1,616.7	1,683.9	1,800.4	1,843.4	2,124.7	2,166.6	2,192.9	3.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY BUILDING DIRECTORY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 87.** DIGITAL SIGNAGE HARDWARE MARKET BY BUILDING DIRECTORY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	466.4	488.2	509.6	530.7	550.0	568.3	584.9	609.8	616.8	692.5	698.0	696.1	2.7%
Europe	402.9	427.4	452.1	477.1	501.8	524.8	547.3	587.5	602.3	696.3	710.6	720.9	4.1%
Asia Pacific	381.4	408.4	437.6	466.3	496.4	523.5	551.8	603.1	624.3	735.8	757.9	775.8	5.1%
Total	1,250.7	1,323.9	1,399.3	1,474.1	1,548.1	1,616.7	1,683.9	1,800.4	1,843.4	2,124.7	2,166.6	2,192.9	3.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## STANDARD DIGITAL SIGNAGE DISPLAYS

The standard digital signage displays segment plays a fundamental role in driving the market for digital signage hardware. These displays serve as the foundation for a wide range of digital signage solutions across various industries and applications. Standard digital signage displays are versatile and can be deployed in various settings, including retail stores, restaurants, corporate offices, healthcare facilities, transportation hubs, and more. Their adaptability drives demand for hardware that can support diverse use cases. These displays provide a platform to showcase dynamic content, advertisements, announcements, and information in an engaging and visually appealing manner. High-quality hardware is essential to deliver clear, vibrant images and videos. Standard displays come in a range of sizes and form factors, from small screens for point-of-sale displays to large video walls for immersive experiences. Hardware manufacturers cater to this variety by offering displays in different dimensions. The market is witnessing advancements in display technologies such as higher resolutions (4K, 8K), improved color accuracy, and better contrast ratios. Hardware must support these advancements to provide the best visual quality. Standard digital signage displays need to integrate with content management systems to facilitate remote content updates and scheduling. Hardware compatibility with software is a key consideration. The standard digital signage displays segment drives manufacturers to develop cutting-edge hardware that aligns with evolving industry trends, displays technology advancements, and customer demands.

## DIGITAL SIGNAGE HARDWARE MARKET BY STANDARD DIGITAL SIGNAGE DISPLAYS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 88.** DIGITAL SIGNAGE HARDWARE MARKET BY STANDARD DIGITAL SIGNAGE DISPLAYS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,850.5	1,949.1	2,048.1	2,144.8	2,237.6	2,328.2	2,412.0	2,546.9	2,595.6	2,953.8	2,990.2	3,002.5	3.3%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY STANDARD DIGITAL SIGNAGE DISPLAYS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 89.** DIGITAL SIGNAGE HARDWARE MARKET BY STANDARD DIGITAL SIGNAGE DISPLAYS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	700.1	728.6	756.1	782.6	806.2	827.8	847.2	871.0	875.6	969.9	967.5	959.0	1.9%
Europe	589.7	622.4	655.0	687.3	718.3	749.1	777.4	823.5	840.9	960.6	974.2	979.1	3.5%
Asia Pacific	560.7	598.0	637.0	674.8	713.1	751.3	787.4	852.4	879.1	1,023.3	1,048.6	1,064.4	4.6%
Total	1,850.5	1,949.1	2,048.1	2,144.8	2,237.6	2,328.2	2,412.0	2,546.9	2,595.6	2,953.8	2,990.2	3,002.5	3.3%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## OTHER APPLICATIONS

Other applications may include entertainment venues, museums and exhibitions, and cinemas & theatres among others. The entertainment venues signage displays segment plays a substantial role in driving the market for digital signage hardware. The entertainment venues signage displays segment demands robust, reliable, and high-quality hardware solutions to deliver seamless content delivery and interactive experiences to large audiences. Manufacturers continually innovate to meet the specific requirements of entertainment venues, driving advancements in display technology, interactivity features, and integration capabilities. As entertainment venues strive to provide unforgettable experiences, digital signage hardware remains a pivotal component in achieving that goal. Entertainment venues such as theaters, stadiums, arenas, concert halls, and amusement parks rely on digital signage to enhance the visitor experience, provide information, and promote events. Digital signage displays are used to promote upcoming events, concerts, sports games, performances, and shows, attracting attention and increasing ticket sales. High-resolution displays enable the delivery of dynamic and visually engaging content, such as video previews, trailers, and teasers, creating anticipation among visitors. Digital signage provides real-time updates on event schedules, changes, delays, and cancellations, helping attendees stay informed. Touchscreen displays allow visitors to interact with content, access additional information, and participate in polls or surveys.

## DIGITAL SIGNAGE HARDWARE MARKET BY OTHER APPLICATIONS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 90.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHER APPLICATIONS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	958.3	1,020.5	1,082.6	1,146.4	1,209.6	1,271.2	1,330.4	1,437.8	1,482.1	1,725.8	1,769.0	1,797.4	4.5%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY OTHER APPLICATIONS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 91.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHER APPLICATIONS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	351.9	370.8	389.7	408.0	426.4	443.6	459.3	486.1	495.0	564.9	571.6	575.2	3.4%
Europe	312.2	332.5	353.3	374.0	395.2	415.1	434.6	470.7	486.0	566.3	581.1	590.4	4.6%
Asia Pacific	294.2	317.1	339.6	364.4	388.0	412.4	436.5	481.0	501.1	594.7	616.3	631.7	5.6%
Total	958.3	1,020.5	1,082.6	1,146.4	1,209.6	1,271.2	1,330.4	1,437.8	1,482.1	1,725.8	1,769.0	1,797.4	4.5%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis



## 8. DIGITAL SIGNAGE HARDWARE MARKET BY INDUSTRY TYPE INSIGHTS & TREND

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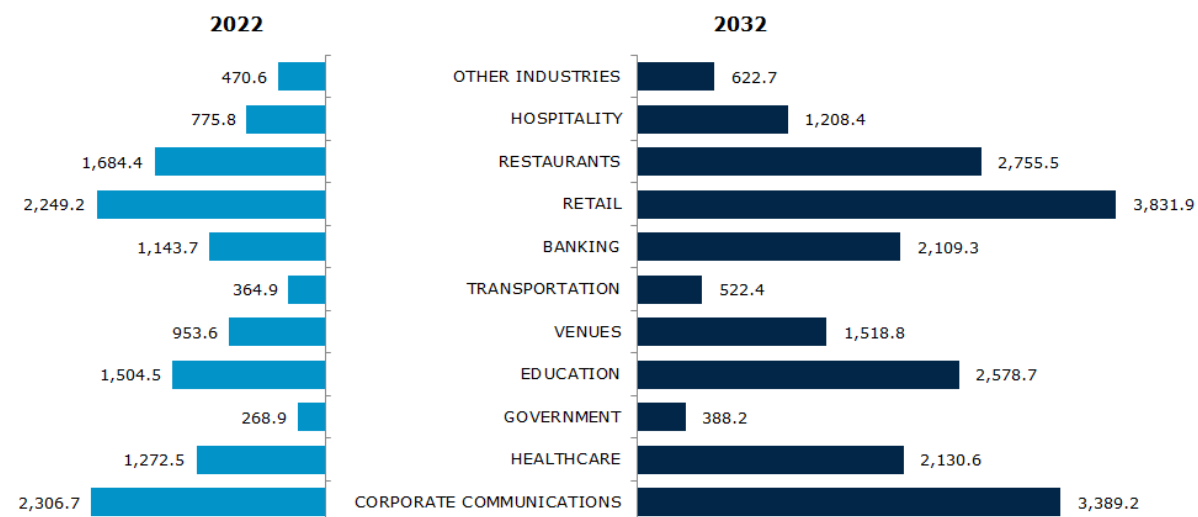
## KEY TRENDS & HIGHLIGHTS

- The demand of corporate communication segment accounted for over 2,306.7 million in 2022 and is expected to grow at a rate of 3.8% in the forecast period.

## INDUSTRY TYPE DYNAMICS & MARKET SHARE, 2022 & 2032

By industry type, the market is segmented into corporate communications, healthcare, government, education, venues, transportation, banking, retail, restaurants, hospitality, and other industries. Education segment is further sub-segmented into campus, classroom, library, sports and recreation, and others.

**FIGURE 21.** DIGITAL SIGNAGE HARDWARE MARKET: INDUSTRY TYPE DYNAMICS (REVENUE IN USD MILLION)



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## CORPORATE COMMUNICATIONS

The corporate communications segment significantly drives the market for digital signage hardware. Businesses and organizations use digital signage for internal communication, engaging employees, sharing company news, and enhancing workplace productivity. Digital signage displays are used to convey important announcements, updates, and messages to employees across different departments and locations. Organizations use digital signage to share news about company achievements, milestones, financial reports, and strategic initiatives. Displays are used to showcase employee achievements, birthdays, work anniversaries, and other recognition programs, fostering a positive work environment. Digital signage can display training materials, videos, and resources to facilitate employee learning and development. Important safety reminders, emergency procedures, and evacuation instructions can be displayed on digital signage in case of emergencies. Interactive displays encourage employees to provide feedback, participate in surveys, and share ideas, fostering a culture of engagement. As businesses recognize the importance of effective internal communication for employee engagement and productivity, the demand for digital signage solutions tailored to corporate communications continues to grow. This demand drives hardware manufacturers to develop displays with features like easy content management, integration with communication tools, interactive capabilities, and real-time updates.



## DIGITAL SIGNAGE HARDWARE MARKET BY CORPORATE COMMUNICATIONS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 92.** DIGITAL SIGNAGE HARDWARE MARKET BY CORPORATE COMMUNICATIONS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,964.5	2,078.2	2,192.7	2,306.7	2,418.9	2,526.1	2,628.0	2,804.2	2,868.4	3,298.4	3,354.8	3,389.2	3.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY CORPORATE COMMUNICATIONS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 93.** DIGITAL SIGNAGE HARDWARE MARKET BY CORPORATE COMMUNICATIONS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	712.7	745.4	777.3	808.1	837.2	864.2	888.2	925.7	934.2	1,048.4	1,051.9	1,046.9	2.5%
Europe	638.7	676.6	714.5	753.0	790.5	826.5	860.5	920.4	943.1	1,086.4	1,106.8	1,120.3	3.9%
Asia Pacific	613.0	656.3	700.9	745.5	791.2	835.4	879.2	958.1	991.2	1,163.5	1,196.1	1,222.0	4.9%
Total	1,964.5	2,078.2	2,192.7	2,306.7	2,418.9	2,526.1	2,628.0	2,804.2	2,868.4	3,298.4	3,354.8	3,389.2	3.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## HEALTHCARE

The healthcare industry's demand for digital signage hardware is driven by the need for clear communication, efficient operations, and improved patient experiences. Hardware manufacturers respond to these needs by developing displays that are reliable, easily customizable, and capable of integrating with healthcare management systems. Digital signage displays provide patients with information about medical services, procedures, treatment options, and health education materials. Interactive displays help patients and visitors navigate complex healthcare facilities, making it easier to find departments, clinics, and other areas. Digital signage can display appointment schedules, wait times, and notifications to help manage patient flow and reduce anxiety. Hospitals use digital signage to communicate with medical staff about critical information, such as emergency alerts and surgery schedules. Displays can show emergency instructions and alerts during critical situations, ensuring patients and staff are informed and safe. Digital signage can display health tips, hygiene practices, and alerts related to disease outbreaks or seasonal health concerns. Pharmacies use displays to showcase prescription information, promotions, and medication pick-up instructions. Displays provide information for visitors, including visiting hours, parking instructions, and accommodation details. The healthcare industry's demand for digital signage hardware is driven by the need for clear communication, efficient operations, and improved patient experiences.

## DIGITAL SIGNAGE HARDWARE MARKET BY HEALTHCARE, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 94.** DIGITAL SIGNAGE HARDWARE MARKET BY HEALTHCARE, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,043.5	1,117.8	1,194.4	1,272.5	1,351.7	1,429.4	1,506.3	1,650.2	1,709.7	2,019.4	2,080.4	2,130.6	5.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY HEALTHCARE, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 95.** DIGITAL SIGNAGE HARDWARE MARKET BY HEALTHCARE, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	382.4	405.1	427.9	450.6	473.0	494.7	515.2	552.0	564.0	651.1	661.6	667.0	3.9%
Europe	341.9	366.8	392.3	418.9	445.5	471.7	497.5	546.4	567.4	671.5	693.1	711.7	5.3%
Asia Pacific	319.1	345.9	374.2	402.9	433.2	463.0	493.6	551.8	578.3	696.8	725.6	751.8	6.3%
Total	1,043.5	1,117.8	1,194.4	1,272.5	1,351.7	1,429.4	1,506.3	1,650.2	1,709.7	2,019.4	2,080.4	2,130.6	5.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## GOVERNMENT

The government segment plays an influential role in driving the market for digital signage hardware. Government institutions and agencies at various levels utilize digital signage to enhance public communication, provide information, and streamline operations. Government entities use digital signage to provide the public with information about services, regulations, policies, and community events. Displays can quickly convey emergency alerts, weather updates, evacuation instructions, and other critical information to ensure public safety. Digital signage helps citizens access information about government services, such as license renewals, permit applications, and tax payment instructions. Displays are used to promote town hall meetings, public hearings, and community initiatives, encouraging citizen participation. The government's demand for digital signage hardware is driven by the need to efficiently communicate with the public, improve accessibility to government services, and enhance community engagement. Hardware manufacturers respond by developing displays that are reliable, secure, and capable of displaying clear and up-to-date information. As governments continue to embrace digital communication solutions, the government segment contributes to the growth and innovation of the digital signage hardware market.

## DIGITAL SIGNAGE HARDWARE MARKET BY GOVERNMENT, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 96.** DIGITAL SIGNAGE HARDWARE MARKET BY GOVERNMENT, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	230.3	243.4	256.3	268.9	282.3	294.3	305.7	327.1	332.2	381.1	388.1	388.2	3.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY GOVERNMENT, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 97.** DIGITAL SIGNAGE HARDWARE MARKET BY GOVERNMENT, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	83.5	87.2	90.8	94.3	97.5	100.5	102.9	109.0	108.0	121.2	122.8	118.2	2.2%
Europe	74.8	79.2	83.3	87.7	92.2	96.2	100.3	106.7	109.1	125.3	127.2	128.8	3.8%
Asia Pacific	72.0	77.0	82.2	87.0	92.6	97.5	102.6	111.4	115.1	134.6	138.1	141.2	4.8%
Total	230.3	243.4	256.3	268.9	282.3	294.3	305.7	327.1	332.2	381.1	388.1	388.2	3.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## EDUCATION

The education segment plays a substantial role in driving the market for digital signage hardware. Educational institutions, ranging from schools to universities, use digital signage to enhance communication, engage students, and create dynamic learning environments. Digital signage displays provide students and staff with information about campus events, schedules, announcements, and news. Faculty members can use displays to share class schedules, syllabi, reading assignments, and important announcements. Interactive displays encourage student engagement by allowing participation in quizzes, polls, and class discussions. Displays can show real-time availability of library resources, book returns, and study room reservations. Prospective students and visitors benefit from digital signage showcasing campus tours and information about academic programs. The education segment's demand for digital signage hardware is driven by the need for effective communication, student engagement, and enhanced learning experiences. Hardware manufacturers respond by developing displays that are durable, user-friendly, and capable of displaying dynamic content. As educational institutions increasingly embrace digital solutions to create modern and engaging learning environments, the education segment contributes to the growth and innovation of the digital signage hardware market.

## DIGITAL SIGNAGE HARDWARE MARKET BY EDUCATION, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 98.** DIGITAL SIGNAGE HARDWARE MARKET BY EDUCATION, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,225.4	1,315.8	1,408.7	1,504.5	1,600.9	1,698.6	1,794.3	1,971.4	2,050.5	2,429.0	2,514.7	2,578.7	5.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY EDUCATION, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 99.** DIGITAL SIGNAGE HARDWARE MARKET BY EDUCATION, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	450.0	477.8	506.0	534.1	562.0	589.1	614.9	658.7	677.8	782.1	800.3	812.4	4.2%
Europe	402.0	432.3	463.5	495.7	528.3	561.5	594.3	655.1	681.8	810.7	840.1	861.8	5.6%
Asia Pacific	373.3	405.7	439.2	474.8	510.6	548.1	585.0	657.7	690.9	836.2	874.3	904.5	6.6%
Total	1,225.4	1,315.8	1,408.7	1,504.5	1,600.9	1,698.6	1,794.3	1,971.4	2,050.5	2,429.0	2,514.7	2,578.7	5.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## CAMPUS

The campus segment, encompassing educational institutions such as schools, colleges, and universities, plays a significant role in driving the market for digital signage hardware. Campuses use digital signage to enhance communication, improve wayfinding, and create dynamic environments for students, faculty, and visitors. Digital signage displays provide up-to-date information about campus events, announcements, news, and important dates. Interactive displays help students and visitors navigate sprawling campuses, find classrooms, offices, and facilities. Faculty members use displays to share class schedules, syllabi, assignments, and other important updates. Interactive displays foster student engagement through polls, surveys, quizzes, and interactive educational content. Displays show real-time availability of library resources, study room reservations, and research assistance. The campus segment's demand for digital signage hardware is driven by the need for effective communication, campus aesthetics, and improved user experiences. Hardware manufacturers respond by developing displays that are durable, customizable, and capable of delivering dynamic content. As educational institutions continue to modernize their campuses and prioritize engaging communication strategies, the campus segment contributes to the growth and innovation of the digital signage hardware market.



### 8.1.1.1. DIGITAL SIGNAGE HARDWARE MARKET BY CAMPUS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 100.** DIGITAL SIGNAGE HARDWARE MARKET BY CAMPUS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	360.2	382.8	405.5	428.4	451.1	473.2	494.5	531.3	546.3	632.2	646.9	655.4	4.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### 8.1.1.2. DIGITAL SIGNAGE HARDWARE MARKET BY CAMPUS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 101.** DIGITAL SIGNAGE HARDWARE MARKET BY CAMPUS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	129.8	136.3	142.8	148.9	155.1	160.7	165.8	173.7	176.4	198.6	200.8	201.2	2.9%
Europe	118.9	126.6	134.3	142.1	149.9	157.4	164.8	177.5	182.8	212.3	217.5	220.4	4.4%
Asia Pacific	111.5	119.9	128.4	137.4	146.2	155.2	163.8	180.2	187.1	221.3	228.6	233.8	5.4%
Total	360.2	382.8	405.5	428.4	451.1	473.2	494.5	531.3	546.3	632.2	646.9	655.4	4.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## CLASSROOM

The classroom segment is a notable driver of the market for digital signage hardware within the education sector. Educational institutions, ranging from K-12 schools to higher education, leverage digital signage to enhance teaching methods, engage students, and create interactive learning environments. Digital signage displays can be used for interactive lessons, quizzes, and educational games, fostering active student participation. Displays enhance teaching by providing visual aids, diagrams, and multimedia content to explain complex concepts. Teachers use digital signage to deliver dynamic presentations, incorporating videos, images, and animations. Interactive displays can function as digital whiteboards, allowing instructors to write, draw, and annotate content. Displays can showcase access to online resources, e-books, and research materials. The classroom segment's demand for digital signage hardware is driven by the need to modernize teaching methods, improve engagement, and provide students with enriched learning experiences. Hardware manufacturers respond by developing displays that are interactive, responsive, and adaptable to the evolving needs of educators. As educational institutions embrace technology-enhanced learning, the classroom segment contributes to the growth and innovation of the digital signage hardware market within the education sector.

### 8.1.1.3. DIGITAL SIGNAGE HARDWARE MARKET BY CLASSROOM, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 102.** DIGITAL SIGNAGE HARDWARE MARKET BY CLASSROOM, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	228.1	247.5	267.8	288.9	310.6	333.0	355.2	398.0	418.0	504.7	527.5	546.0	6.5%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### 8.1.1.4. DIGITAL SIGNAGE HARDWARE MARKET BY CLASSROOM, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 103.** DIGITAL SIGNAGE HARDWARE MARKET BY CLASSROOM, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	85.4	91.6	98.0	104.6	111.1	117.7	124.1	135.6	140.9	165.7	171.2	175.4	5.2%
Europe	74.3	80.8	87.5	94.6	101.9	109.5	117.0	131.5	138.2	167.6	175.3	181.6	6.6%
Asia Pacific	68.4	75.1	82.2	89.8	97.6	105.8	114.1	130.9	138.9	171.4	181.0	189.0	7.6%
Total	228.1	247.5	267.8	288.9	310.6	333.0	355.2	398.0	418.0	504.7	527.5	546.0	6.5%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## LIBRARY

The library segment plays a significant role in driving the market for digital signage hardware. Libraries, both in academic and public settings, use digital signage to enhance visitor experiences, provide information, and promote resources. Digital signage displays promote library collections, new acquisitions, featured books, and multimedia resources. Displays can serve as interactive directories, helping users locate various departments, study areas, and services. Displays can allow users to search the library catalog, check availability, and place holds on items. Displays can show study guides, research tips, and citation formats to assist students and researchers. The library segment's demand for digital signage hardware is driven by the need to modernize library spaces, provide enhanced services, and improve user engagement. Hardware manufacturers respond by developing displays that are user-friendly, visually appealing, and capable of displaying dynamic content. As libraries adapt to changing user preferences and embrace technology to enrich the library experience, the library segment contributes to the growth and innovation of the digital signage hardware market.

### 8.1.1.5. DIGITAL SIGNAGE HARDWARE MARKET BY LIBRARY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 104.** DIGITAL SIGNAGE HARDWARE MARKET BY LIBRARY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	147.2	157.7	168.3	179.5	190.3	201.2	212.1	231.7	240.3	283.1	292.2	298.6	5.1%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### 8.1.1.6. DIGITAL SIGNAGE HARDWARE MARKET BY LIBRARY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 105.** DIGITAL SIGNAGE HARDWARE MARKET BY LIBRARY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	53.8	57.0	60.1	63.5	66.4	69.4	72.3	77.0	79.0	90.6	92.5	93.4	3.9%
Europe	48.4	51.9	55.5	59.2	62.9	66.6	70.4	77.1	80.1	94.7	97.8	100.0	5.3%
Asia Pacific	45.0	48.8	52.7	56.8	60.9	65.2	69.4	77.6	81.3	97.8	101.9	105.2	6.3%
Total	147.2	157.7	168.3	179.5	190.3	201.2	212.1	231.7	240.3	283.1	292.2	298.6	5.1%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## **SPORTS AND RECREATION**

The sport and recreation segment plays a significant role in driving the market for digital signage hardware. Sports facilities, stadiums, arenas, and recreational venues use digital signage to enhance the fan and visitor experience, provide real-time information, and boost revenue through advertising and promotions. Digital signage can complement traditional scoreboards by providing additional game statistics, player bios, and team information. Venues display schedules of upcoming events, including practice sessions, charity games, and community events. The sport and recreation segment's demand for digital signage hardware is driven by the need to create an immersive and engaging fan experience, generate additional revenue through advertising, and streamline venue operations. Hardware manufacturers respond by developing displays that are durable, high-resolution, and capable of delivering dynamic content in real time. As sports and recreational venues seek to enhance the overall visitor experience, the sport and recreation segment continues to drive growth and innovation in the digital signage hardware market.

### 8.1.1.7. DIGITAL SIGNAGE HARDWARE MARKET BY SPORTS AND RECREATION, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 106.** DIGITAL SIGNAGE HARDWARE MARKET BY SPORTS AND RECREATION, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	361.1	390.6	421.3	453.4	485.7	519.2	552.5	615.8	644.7	774.4	807.3	833.6	6.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### 8.1.1.8. DIGITAL SIGNAGE HARDWARE MARKET BY SPORTS AND RECREATION, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 107.** DIGITAL SIGNAGE HARDWARE MARKET BY SPORTS AND RECREATION, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	134.4	143.8	153.4	163.3	172.9	182.5	191.9	208.7	216.1	252.9	260.5	266.4	4.9%
Europe	117.9	127.7	138.0	148.6	159.6	170.8	182.2	203.9	213.6	257.6	268.7	277.5	6.3%
Asia Pacific	108.8	119.1	129.9	141.5	153.3	165.9	178.3	203.3	215.0	264.0	278.1	289.6	7.3%
Total	361.1	390.6	421.3	453.4	485.7	519.2	552.5	615.8	644.7	774.4	807.3	833.6	6.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## OTHERS

Other educational segments comprise vocational training centers, online and distance learning, STEM education, and others. The vocational training centers segment plays an important role in driving the market for digital signage hardware. Vocational training centers focus on providing practical skills and hands-on learning experiences for various trades and professions. Digital signage enhances the learning process, improves safety training, and facilitates effective communication within these centers. Digital signage displays can show step-by-step instructional videos and demonstrations for various vocational skills, helping learners understand techniques visually. Displays are used to showcase safety protocols, hazard prevention guidelines, and emergency procedures in vocational settings. Interactive displays engage learners with quizzes, simulations, and interactive scenarios related to vocational skills. The vocational training centers segment's demand for digital signage hardware is driven by the need to provide effective hands-on learning experiences, enhance safety training, and prepare learners for real-world work environments. Hardware manufacturers respond by developing displays that are durable, interactive, and capable of delivering practical content. As vocational training becomes an increasingly important aspect of skill development, the vocational training centers segment contributes to the growth and innovation of the digital signage hardware market.



### 8.1.1.9. DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 108.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	128.7	137.2	145.8	154.3	163.2	172.0	180.1	194.6	201.2	234.6	240.9	245.1	4.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

### 8.1.1.10. DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 109.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHERS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	46.6	49.1	51.6	53.8	56.5	58.7	60.8	63.8	65.4	74.3	75.4	76.0	3.4%
Europe	42.4	45.3	48.2	51.2	54.1	57.2	59.9	65.0	67.2	78.6	80.8	82.2	4.8%
Asia Pacific	39.6	42.7	45.9	49.3	52.6	56.1	59.4	65.8	68.5	81.7	84.7	86.9	5.7%
Total	128.7	137.2	145.8	154.3	163.2	172.0	180.1	194.6	201.2	234.6	240.9	245.1	4.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## VENUES

The venues segment, encompassing event spaces, conference centers, stadiums, arenas, and similar facilities, plays a significant role in driving the market for digital signage hardware. These venues host a wide range of events, from sports games and concerts to conferences and trade shows. Digital signage enhances the visitor experience, provides information, and facilitates effective event management. Digital signage displays promote upcoming events, concerts, sports games, conferences, and entertainment shows. Displays showcase event schedules, session timings, and speaker information, enabling attendees to plan their activities. Venues use displays to showcase sponsor advertisements and promotions, generating additional revenue. Displays show ticket availability, pricing, and seating options for events. Digital signage can showcase artist bios, performer profiles, and information about acts. Displays can display real-time social media feeds, hashtags, and posts related to the event. The venues segment's demand for digital signage hardware is driven by the need to create engaging and memorable event experiences, enhance visitor satisfaction, and streamline event management processes. Hardware manufacturers respond by developing displays that are durable, adaptable, and capable of delivering dynamic content in real time. As venues continue to host diverse events that cater to various audiences, the venues segment contributes to the growth and innovation of the digital signage hardware market.

## DIGITAL SIGNAGE HARDWARE MARKET BY VENUES, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 110.** DIGITAL SIGNAGE HARDWARE MARKET BY VENUES, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	793.5	845.9	898.8	953.6	1,006.4	1,060.8	1,112.5	1,206.9	1,244.5	1,452.5	1,493.4	1,518.8	4.7%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY VENUES, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 111.** DIGITAL SIGNAGE HARDWARE MARKET BY VENUES, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	289.7	305.3	320.9	336.3	351.2	365.5	379.1	401.8	408.6	463.6	470.7	474.0	3.4%
Europe	259.2	276.7	294.5	312.7	330.5	348.9	366.6	398.3	411.6	482.4	496.5	505.3	4.8%
Asia Pacific	244.6	263.9	283.4	304.6	324.6	346.3	366.8	406.8	424.3	506.5	526.2	539.5	5.8%
Total	793.5	845.9	898.8	953.6	1,006.4	1,060.8	1,112.5	1,206.9	1,244.5	1,452.5	1,493.4	1,518.8	4.7%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## TRANSPORTATION

The transportation segment, which includes airports, train stations, bus terminals, and other transit hubs, plays a significant role in driving the market for digital signage hardware. These transportation facilities use digital signage to enhance passenger experiences, provide real-time information, and streamline travel processes. Digital signage displays provide real-time updates on departure and arrival times, gate changes, delays, and cancellations. Displays show flight status, gate assignments, boarding information, and train schedules. Displays provide information about baggage carousels and arrival times for travelers. Displays provide information about taxis, shuttles, rental cars, and other ground transportation options. Transportation facilities use displays to share travel advisories, road closures, and important travel-related information. Interactive displays allow travelers to provide feedback on their experiences and report issues. The transportation segment's demand for digital signage hardware is driven by the need to improve passenger satisfaction, enhance travel efficiency, and provide essential information in real time. Hardware manufacturers respond by developing displays that are durable, visible in different lighting conditions, and capable of delivering timely updates.

## DIGITAL SIGNAGE HARDWARE MARKET BY TRANSPORTATION, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 112.** DIGITAL SIGNAGE HARDWARE MARKET BY TRANSPORTATION, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	313.2	330.6	347.8	364.9	381.1	397.9	412.9	436.5	447.0	509.1	519.9	522.4	3.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY TRANSPORTATION, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 113.** DIGITAL SIGNAGE HARDWARE MARKET BY TRANSPORTATION, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	113.4	118.3	123.1	127.7	131.9	135.8	139.2	142.6	145.2	160.0	162.0	162.7	2.4%
Europe	101.7	107.5	113.4	118.7	124.3	130.0	135.4	143.6	146.7	168.0	171.3	171.5	3.6%
Asia Pacific	98.1	104.8	111.3	118.5	124.9	132.1	138.3	150.4	155.2	181.1	186.5	188.3	4.7%
Total	313.2	330.6	347.8	364.9	381.1	397.9	412.9	436.5	447.0	509.1	519.9	522.4	3.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## BANKING

The banking segment is a key driver of the market for digital signage hardware. Banks and financial institutions use digital signage to enhance customer experiences, provide information, promote services, and streamline operations. Digital signage displays promote banking products and services such as loans, credit cards, savings accounts, and investment options. Interactive displays allow customers to access account information, request assistance, and explore services independently. Displays provide branch hours, locations, contact information, and directions to help customers find the nearest branch. The banking segment's demand for digital signage hardware is driven by the need to create a seamless and informative customer experience, promote services, and enhance customer engagement. Hardware manufacturers respond by developing displays that are secure, reliable, and capable of displaying clear and up-to-date information. As banks continue to modernize their branches and prioritize customer engagement, the banking segment contributes to the growth and innovation of the digital signage hardware market. Displays provide real-time financial news updates, market trends, and economic insights. Interactive displays can guide customers through the process of opening new accounts or applying for financial products. Digital signage can display emergency instructions and alerts during security breaches or unexpected events.

## DIGITAL SIGNAGE HARDWARE MARKET BY BANKING, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 114.** DIGITAL SIGNAGE HARDWARE MARKET BY BANKING, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	908.1	983.4	1,062.1	1,143.7	1,226.2	1,311.0	1,395.3	1,555.3	1,630.2	1,959.5	2,039.3	2,109.3	6.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY BANKING, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 115.** DIGITAL SIGNAGE HARDWARE MARKET BY BANKING, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	335.7	359.5	383.9	408.6	433.3	457.8	481.9	522.8	542.7	636.0	652.8	669.8	5.0%
Europe	299.6	324.9	351.6	378.9	406.8	435.5	464.0	519.5	544.6	656.5	684.8	707.8	6.3%
Asia Pacific	272.8	299.0	326.6	356.2	386.1	417.6	449.5	513.0	542.9	666.9	701.7	731.7	7.4%
Total	908.1	983.4	1,062.1	1,143.7	1,226.2	1,311.0	1,395.3	1,555.3	1,630.2	1,959.5	2,039.3	2,109.3	6.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## RETAIL

The retail segment plays a significant role in driving the market for digital signage hardware. Retailers use digital signage to enhance customer experiences, promote products, provide information, and create engaging shopping environments. Digital signage displays showcase product offerings, promotions, discounts, and new arrivals to attract customer attention. Interactive displays allow customers to browse products, access additional information, and make purchase decisions. Digital signage can display real-time queue status, wait times, and service availability to improve customer flow. Retailers use displays to showcase advertisements, brand videos, and cross-promotional content. Displays provide pricing information, product details, features, and customer reviews. Digital signage can be used for holiday-themed campaigns, special events, and limited-time offers. Displays show real-time inventory availability, helping customers know if products are in stock. The retail segment's demand for digital signage hardware is driven by the need to create immersive shopping experiences, boost sales, and engage customers effectively. Hardware manufacturers respond by developing displays that are visually appealing, durable, and capable of delivering dynamic content. As retailers adapt to changing consumer preferences and seek to provide seamless shopping journeys, the retail segment contributes to the growth and innovation of the digital signage hardware market.



## DIGITAL SIGNAGE HARDWARE MARKET BY RETAIL, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 116.** DIGITAL SIGNAGE HARDWARE MARKET BY RETAIL, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,835.1	1,969.2	2,107.1	2,249.2	2,391.2	2,535.5	2,676.5	2,940.2	3,052.9	3,612.5	3,735.0	3,831.9	5.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY RETAIL, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 117.** DIGITAL SIGNAGE HARDWARE MARKET BY RETAIL, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	673.5	714.6	756.2	797.8	838.9	878.8	917.2	984.0	1,008.8	1,163.0	1,187.4	1,207.8	4.1%
Europe	602.0	646.9	693.3	740.9	788.9	837.7	885.6	975.2	1,014.3	1,204.3	1,246.7	1,278.7	5.5%
Asia Pacific	559.6	607.6	657.6	710.5	763.5	819.0	873.7	981.0	1,029.8	1,245.2	1,300.9	1,345.3	6.5%
Total	1,835.1	1,969.2	2,107.1	2,249.2	2,391.2	2,535.5	2,676.5	2,940.2	3,052.9	3,612.5	3,735.0	3,831.9	5.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## RESTAURANTS

The restaurants segment plays a significant role in driving the market for digital signage hardware. Restaurants use digital signage to enhance customer experiences, improve order efficiency, promote menu items, and create engaging dining environments. Digital signage displays replace traditional static menu boards, showcasing menu items, prices, descriptions, and images. Restaurants use displays to highlight daily specials, promotions, happy hour deals, and seasonal offers. Interactive displays allow customers to customize their orders, select toppings, and make specific choices. Displays provide updates on the status of orders, notifying customers when their food is ready. Digital displays enable contactless ordering through QR codes and mobile apps for added convenience. The restaurants segment's demand for digital signage hardware is driven by the need to improve customer service, enhance the dining experience, and streamline operations. Hardware manufacturers respond by developing displays that are durable, easy to update, and capable of delivering visually appealing content. As restaurants embrace technology to offer innovative dining experiences, the restaurants segment contributes to the growth and innovation of the digital signage hardware market.

## DIGITAL SIGNAGE HARDWARE MARKET BY RESTAURANTS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 118.** DIGITAL SIGNAGE HARDWARE MARKET BY RESTAURANTS, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	1,392.3	1,487.6	1,585.8	1,684.4	1,785.3	1,883.2	1,979.5	2,155.0	2,230.2	2,621.2	2,695.9	2,755.5	4.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY RESTAURANTS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 119.** DIGITAL SIGNAGE HARDWARE MARKET BY RESTAURANTS, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	509.2	538.0	566.8	595.4	623.4	650.3	675.2	717.3	734.0	843.1	856.3	862.8	3.7%
Europe	455.5	487.4	520.2	553.5	587.4	620.4	653.0	713.3	738.8	870.1	896.2	917.6	5.1%
Asia Pacific	427.6	462.3	498.8	535.4	574.5	612.4	651.4	724.5	757.4	908.0	943.4	975.1	6.1%
Total	1,392.3	1,487.6	1,585.8	1,684.4	1,785.3	1,883.2	1,979.5	2,155.0	2,230.2	2,621.2	2,695.9	2,755.5	4.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## HOSPITALITY

The hospitality segment, which includes hotels, resorts, and other lodging establishments, plays a significant role in driving the market for digital signage hardware. The hospitality industry uses digital signage to enhance guest experiences, provide information, promote amenities, and streamline guest services. Digital signage displays provide guests with information about hotel services, amenities, and local attractions. Displays can offer personalized welcome messages to guests upon arrival, creating a warm and inviting atmosphere. Digital signage can showcase restaurant menus, daily specials, and dining options available within the hotel. Interactive displays allow guests to place room service orders and customize their preferences. Displays can highlight promotional offers, package deals, and loyalty program benefits. Hotels use displays to communicate health and safety measures, COVID-19 protocols, and sanitation practices. The hospitality segment's demand for digital signage hardware is driven by the need to create memorable guest experiences, improve guest satisfaction, and enhance communication. Hardware manufacturers respond by developing displays that are visually appealing, easy to update, and capable of delivering relevant and engaging content. As the hospitality industry continues to innovate and provide personalized services, the hospitality segment contributes to the growth and innovation of the digital signage hardware market.

## DIGITAL SIGNAGE HARDWARE MARKET BY HOSPITALITY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 120.** DIGITAL SIGNAGE HARDWARE MARKET BY HOSPITALITY, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	650.5	691.8	734.2	775.8	818.7	859.8	899.6	972.6	999.4	1,163.0	1,192.5	1,208.4	4.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY HOSPITALITY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 121.** DIGITAL SIGNAGE HARDWARE MARKET BY HOSPITALITY, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	237.0	249.2	261.4	273.3	284.8	295.7	305.4	324.0	327.6	372.3	377.7	375.0	3.1%
Europe	212.3	226.1	240.3	254.2	268.6	282.4	296.0	319.9	329.7	384.4	394.3	401.1	4.6%
Asia Pacific	201.2	216.5	232.5	248.4	265.3	281.7	298.2	328.7	342.1	406.3	420.4	432.2	5.6%
Total	650.5	691.8	734.2	775.8	818.7	859.8	899.6	972.6	999.4	1,163.0	1,192.5	1,208.4	4.4%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## OTHER INDUSTRIES

Other industries may include automotive, real estate, pharmaceuticals, and others. The automotive segment significantly drives the market for digital signage hardware, particularly within the context of car dealerships and showrooms. Automotive businesses use digital signage to transform the way they engage with customers, showcase vehicles, and provide essential information. Digital signage enhances the entire car-buying experience and contributes to the growth of the automotive industry. Car dealerships use digital displays to provide detailed information about vehicles, including specifications, features, pricing, and financing options. Customers can explore different models and trim levels at their own pace, fostering informed decision-making. Digital signage enhances the visual appeal of vehicles by displaying high-resolution images and videos that showcase their design, performance, and technology. This immersive experience helps customers connect with the brand and its products. The demand for digital signage hardware in the automotive segment is driven by the need to create a seamless, informative, and engaging customer experience within dealerships. Hardware manufacturers respond by developing displays that are high-resolution, durable, and capable of delivering dynamic content. As automotive brands continue to embrace digital technology to enhance customer interactions and streamline the car-buying process, the automotive segment remains a significant driver of innovation and growth in the digital signage hardware market.

## DIGITAL SIGNAGE HARDWARE MARKET BY OTHER INDUSTRIES, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

**TABLE 122.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHER INDUSTRIES, ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	411.1	431.3	451.7	470.6	489.5	505.8	521.1	541.8	551.7	622.0	623.0	622.7	2.7%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis

## DIGITAL SIGNAGE HARDWARE MARKET BY OTHER INDUSTRIES, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

**TABLE 123.** DIGITAL SIGNAGE HARDWARE MARKET BY OTHER INDUSTRIES, ESTIMATES AND FORECASTS, BY REGION, 2019-2032, (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
North America	148.1	153.6	158.7	163.5	167.8	171.5	174.5	174.9	177.8	196.4	193.3	188.6	1.3%
Europe	133.0	139.6	146.6	152.9	159.0	164.4	169.2	177.6	180.0	202.7	203.6	204.6	2.8%
Asia Pacific	130.0	138.0	146.4	154.2	162.6	169.8	177.3	189.3	193.9	222.9	226.1	229.6	3.9%
Total	411.1	431.3	451.7	470.6	489.5	505.8	521.1	541.8	551.7	622.0	623.0	622.7	2.7%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Report, Primary Interviews and Emergen Research Analysis



# DIGITAL SIGNAGE HARDWARE MARKET BY REGIONAL INSIGHTS & TRENDS

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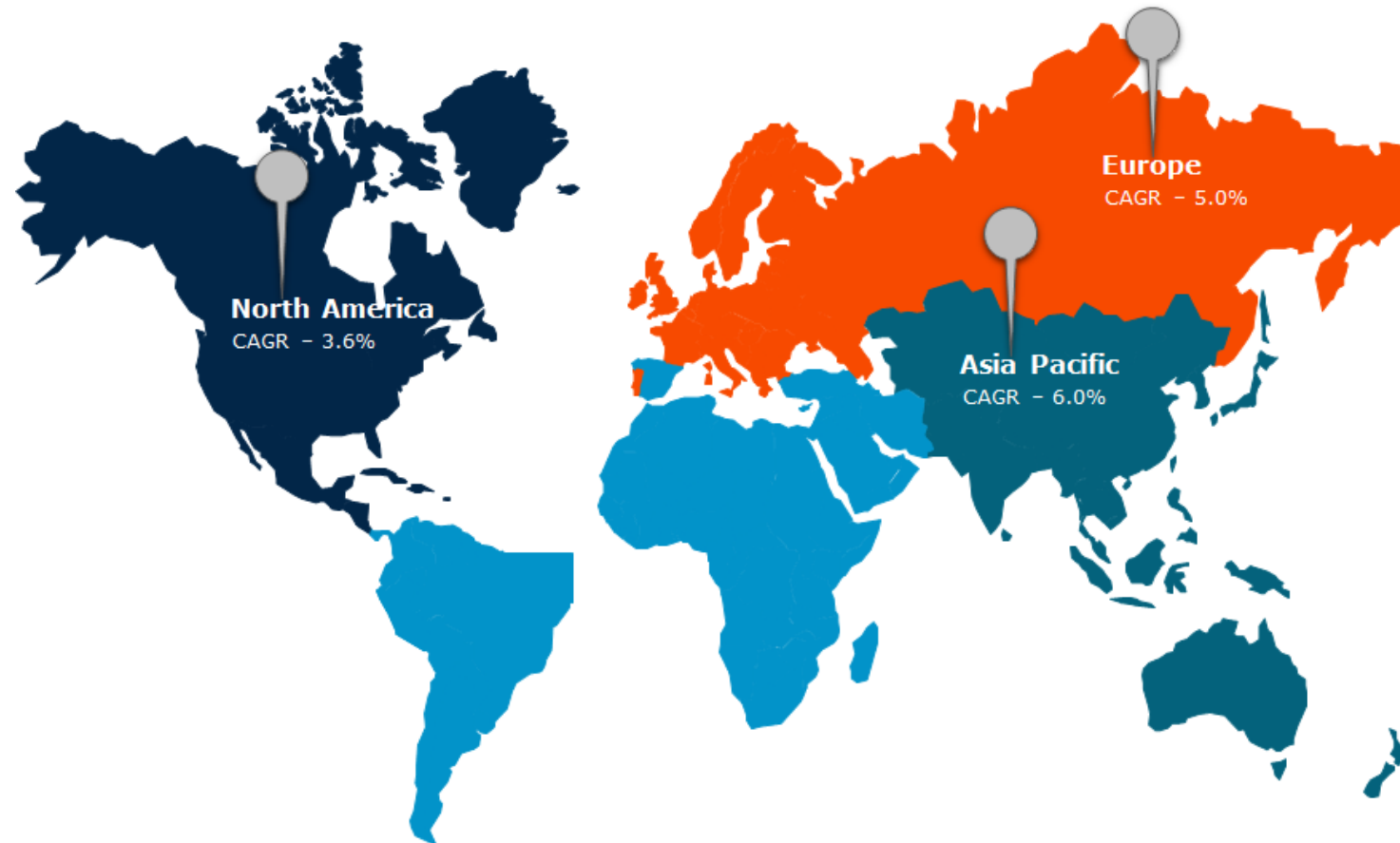




## KEY REGIONAL TRENDS & HIGHLIGHTS

- North America is expected to account for a share of 31.3% in the Digital signage hardware market in 2032.

## REGIONAL DYNAMICS



Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## NORTH AMERICA

### Digital Signage Hardware Market Regional Snapshot 2022 North America

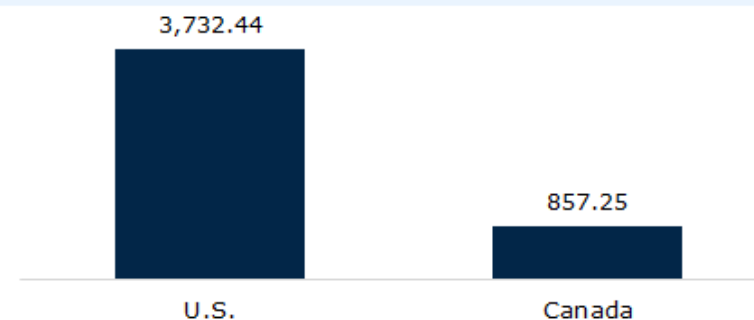


#### Key driving factors of the Digital Signage Hardware Market in North America

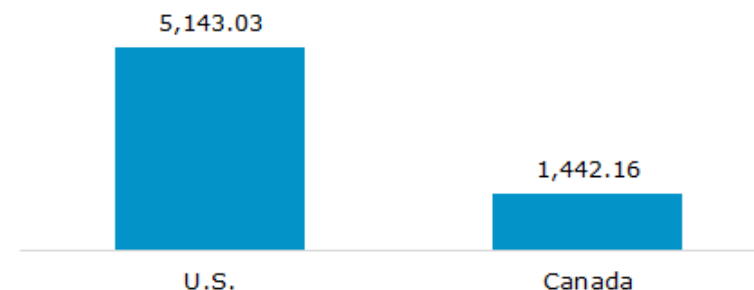
**Significant investments in urban development and smart cities** are a major factor driving the market revenue growth

**Increasing focus on sustainability and rapid advancements in digital technologies** are other key factors contributing to the market revenue growth

North America Digital Signage Hardware Market, 2022 (\$Million)



North America Digital Signage Hardware Market, 2032 (\$Million)



North America comprises of US, and Canada. Rapid adoption of touchscreen and gesture recognition and significant investments in mobile integration are major factors driving the market revenue growth in the region. Connecting digital signage with mobile devices enables interactive experiences. For instance, QR codes can be displayed on screens, allowing viewers to access additional content by scanning with their smartphones. Integrating touchscreens or gesture recognition technology enables interactive experiences, such as wayfinding maps, product exploration, and interactive games. Increasing awareness regarding various benefits of installing digital signage is a major factor contributing to the market revenue growth. For instance, by providing advertising space to local businesses or partnering with external advertisers, digital signage can generate significant revenue. You can offer targeted advertising opportunities and generate additional revenue by leveraging the attention-grabbing capabilities of digital signage.

**NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, 2019-2032 (USD MILLION)**

**TABLE 124.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	3,935.2	4,154.1	4,373.0	4,589.7	4,801.2	5,004.0	5,193.8	5,513.0	5,628.7	6,437.4	6,537.0	6,585.2	3.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY COUNTRY, 2019-2032 (USD MILLION)

**TABLE 125.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY COUNTRY, 2019-2032 (USD MILLION)

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
U.S.	3,238.2	3,404.9	3,568.4	3,732.4	3,889.0	4,037.1	4,173.5	4,394.5	4,468.6	5,066.2	5,126.4	5,143.0	3.2%
Canada	697.0	749.1	804.6	857.3	912.2	966.9	1,020.3	1,118.5	1,160.1	1,371.2	1,410.5	1,442.2	5.2%
Total	<b>3,935.2</b>	<b>4,154.1</b>	<b>4,373.0</b>	<b>4,589.7</b>	<b>4,801.2</b>	<b>5,004.0</b>	<b>5,193.8</b>	<b>5,513.0</b>	<b>5,628.7</b>	<b>6,437.4</b>	<b>6,537.0</b>	<b>6,585.2</b>	<b>3.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)

**TABLE 126.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)

Product Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Displays	1,676.4	1,754.4	1,830.8	1,904.7	1,974.9	2,040.0	2,098.3	2,186.8	2,212.1	2,482.7	2,497.1	2,491.4	2.6%
Media Players	1,311.7	1,399.0	1,487.8	1,577.3	1,666.5	1,754.2	1,838.6	1,989.6	2,050.7	2,389.7	2,449.2	2,489.9	4.6%
Others	947.1	1,000.7	1,054.4	1,107.6	1,159.8	1,209.9	1,256.9	1,336.6	1,365.9	1,565.0	1,590.7	1,603.9	3.7%
<b>Total</b>	<b>3,935.2</b>	<b>4,154.1</b>	<b>4,373.0</b>	<b>4,589.7</b>	<b>4,801.2</b>	<b>5,004.0</b>	<b>5,193.8</b>	<b>5,513.0</b>	<b>5,628.7</b>	<b>6,437.4</b>	<b>6,537.0</b>	<b>6,585.2</b>	<b>3.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

**TABLE 127.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

Screen Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Below 32 inches	1,404.9	1,475.1	1,544.0	1,611.6	1,676.5	1,737.4	1,793.3	1,881.9	1,910.4	2,159.7	2,180.4	2,183.6	3.0%
Between 32 and 52 inches	1,778.4	1,879.5	1,981.4	2,082.4	2,181.2	2,276.7	2,365.7	2,517.7	2,573.9	2,951.3	3,000.9	3,026.9	3.7%
Above 52 inches	752.0	799.4	847.5	895.7	943.5	989.9	1,034.8	1,113.4	1,144.4	1,326.3	1,355.7	1,374.7	4.3%
Total	<b>3,935.2</b>	<b>4,154.1</b>	<b>4,373.0</b>	<b>4,589.7</b>	<b>4,801.2</b>	<b>5,004.0</b>	<b>5,193.8</b>	<b>5,513.0</b>	<b>5,628.7</b>	<b>6,437.4</b>	<b>6,537.0</b>	<b>6,585.2</b>	<b>3.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 128.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	1,615.9	1,693.7	1,770.5	1,845.0	1,916.2	1,982.7	2,043.9	2,136.8	2,165.4	2,439.1	2,458.3	2,457.5	2.8%
• 640X480 pixels	493.9	515.3	536.1	556.0	574.6	591.7	607.0	628.4	633.7	706.8	708.8	705.0	2.3%
• 800X600 pixels	1,122.0	1,178.4	1,234.4	1,289.0	1,341.5	1,391.0	1,436.9	1,508.3	1,531.7	1,732.3	1,749.5	1,752.5	3.0%
High Definition	1,128.3	1,189.9	1,250.9	1,311.4	1,370.2	1,426.5	1,480.2	1,566.1	1,597.1	1,821.8	1,848.3	1,859.7	3.5%
• 1280X720 pixels (720p)	375.0	392.4	409.4	425.8	441.4	456.0	469.3	488.6	494.2	554.3	557.8	556.5	2.6%
• 1920X1080 pixels (1080p)	453.4	478.7	503.8	528.7	553.0	576.4	598.7	634.8	648.1	740.8	752.6	758.0	3.6%
• 2560X1440 pixels (1440p)	300.0	318.8	337.8	356.9	375.8	394.0	412.2	442.7	454.8	526.7	537.8	545.3	4.2%
4K Ultra High Definition (UHD)	768.1	822.1	876.8	932.5	988.2	1,043.3	1,093.9	1,193.3	1,233.3	1,444.3	1,484.5	1,512.9	4.8%
• 3840X2160 pixels (2160p)	768.1	822.1	876.8	932.5	988.2	1,043.3	1,093.9	1,193.3	1,233.3	1,444.3	1,484.5	1,512.9	4.8%
8K Ultra High Definition (UHD)	422.9	448.3	474.8	500.8	526.6	551.6	575.8	616.8	632.9	732.2	745.9	755.0	4.1%
• 7680X4320 pixels (4320p)	422.9	448.3	474.8	500.8	526.6	551.6	575.8	616.8	632.9	732.2	745.9	755.0	4.1%
Total	<b>3,935.2</b>	<b>4,154.1</b>	<b>4,373.0</b>	<b>4,589.7</b>	<b>4,801.2</b>	<b>5,004.0</b>	<b>5,193.8</b>	<b>5,513.0</b>	<b>5,628.7</b>	<b>6,437.4</b>	<b>6,537.0</b>	<b>6,585.2</b>	<b>3.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 129.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	763.4	793.4	822.1	849.1	873.8	895.7	914.1	937.2	940.0	1,036.4	1,032.8	1,020.7	1.7%
LED technology	718.8	753.0	787.1	820.3	851.4	880.7	907.5	948.2	960.6	1,081.5	1,091.7	1,088.8	2.8%
OLED technology	597.7	630.7	663.2	696.0	727.1	756.9	785.2	832.5	849.3	971.6	987.1	990.7	3.5%
Projection technology	517.3	548.0	578.7	609.6	639.6	669.2	696.4	744.3	762.4	875.9	895.6	903.6	3.9%
Holographic technology	435.1	464.9	497.1	528.6	560.7	591.8	622.8	678.1	701.1	823.5	843.3	861.2	4.9%
Quantum dot technology	393.1	423.0	453.3	484.0	515.9	546.8	577.4	634.0	657.9	778.5	797.5	819.5	5.3%
MicroLED technology	313.9	335.0	355.7	376.8	398.0	419.0	439.2	474.1	488.4	566.9	581.8	591.9	4.5%
Other technologies	195.9	206.2	215.7	225.3	234.7	243.8	251.2	264.6	268.9	303.0	307.2	308.8	3.1%
<b>Total</b>	<b>3,935.2</b>	<b>4,154.1</b>	<b>4,373.0</b>	<b>4,589.7</b>	<b>4,801.2</b>	<b>5,004.0</b>	<b>5,193.8</b>	<b>5,513.0</b>	<b>5,628.7</b>	<b>6,437.4</b>	<b>6,537.0</b>	<b>6,585.2</b>	<b>3.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 130.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	2,365.4	2,486.2	2,605.9	2,723.1	2,835.8	2,943.0	3,041.2	3,199.6	3,252.2	3,686.0	3,726.2	3,736.6	3.1%
• Retail digital signage	491.5	515.2	538.6	561.5	582.9	603.3	621.8	650.6	659.5	740.9	748.7	749.4	2.8%
• Corporate digital signage	521.4	541.7	561.1	579.5	596.0	611.0	623.6	639.7	641.9	709.1	706.1	699.2	1.8%
• Healthcare digital signage	393.2	413.6	433.8	453.8	472.7	490.9	507.6	534.8	543.9	616.3	625.7	626.6	3.2%
• Education digital signage	316.8	335.2	353.7	371.8	389.9	407.3	423.6	451.4	461.7	530.8	537.6	543.8	3.8%
• Hospitality digital signage	389.8	416.4	443.4	470.6	497.7	524.4	550.0	595.8	614.3	717.4	735.6	745.7	4.6%
• Others	252.6	264.1	275.4	285.9	296.5	306.1	314.6	327.4	331.0	371.5	372.4	372.0	2.6%
Outdoor	1,569.8	1,667.9	1,767.1	1,866.6	1,965.4	2,061.0	2,152.6	2,313.4	2,376.5	2,751.3	2,810.8	2,848.6	4.2%
• Transportation digital signage	269.1	288.1	307.6	327.5	347.4	366.6	387.0	421.4	436.7	512.7	527.2	538.1	5.0%
• Outdoor advertising digital signage	663.8	705.8	748.4	791.2	833.7	874.4	915.3	984.4	1,012.7	1,173.4	1,199.9	1,217.0	4.3%
• Sports and entertainment digital signage	505.8	535.5	565.4	595.1	624.4	652.1	678.9	724.6	742.1	852.3	867.7	876.2	3.8%
• Others	131.2	138.5	145.7	152.9	159.9	168.0	171.3	183.0	185.0	212.9	216.0	217.3	3.5%
<b>Total</b>	<b>3,935.2</b>	<b>4,154.1</b>	<b>4,373.0</b>	<b>4,589.7</b>	<b>4,801.2</b>	<b>5,004.0</b>	<b>5,193.8</b>	<b>5,513.0</b>	<b>5,628.7</b>	<b>6,437.4</b>	<b>6,537.0</b>	<b>6,585.2</b>	<b>3.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 131.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	650.7	698.3	747.2	797.1	846.9	896.5	944.3	1,033.2	1,070.3	1,259.3	1,297.4	1,324.7	5.1%
Video wall	547.6	574.3	600.6	626.7	650.8	673.8	694.9	727.6	737.5	831.6	839.9	839.5	2.9%
Room displays	481.4	507.7	533.9	558.6	585.1	609.3	631.7	669.4	683.1	780.0	790.1	795.8	3.5%
Digital menus	737.3	786.1	835.8	885.9	935.7	984.6	1,031.5	1,115.9	1,150.4	1,339.1	1,372.4	1,394.8	4.5%
Building directory	466.4	488.2	509.6	530.7	550.0	568.3	584.9	609.8	616.8	692.5	698.0	696.1	2.7%
Standard digital signage displays	700.1	728.6	756.1	782.6	806.2	827.8	847.2	871.0	875.6	969.9	967.5	959.0	1.9%
Other applications	351.9	370.8	389.7	408.0	426.4	443.6	459.3	486.1	495.0	564.9	571.6	575.2	3.4%
<b>Total</b>	<b>3,935.2</b>	<b>4,154.1</b>	<b>4,373.0</b>	<b>4,589.7</b>	<b>4,801.2</b>	<b>5,004.0</b>	<b>5,193.8</b>	<b>5,513.0</b>	<b>5,628.7</b>	<b>6,437.4</b>	<b>6,537.0</b>	<b>6,585.2</b>	<b>3.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 132.** NORTH AMERICA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	712.7	745.4	777.3	808.1	837.2	864.2	888.2	925.7	934.2	1,048.4	1,051.9	1,046.9	2.5%
Healthcare	382.4	405.1	427.9	450.6	473.0	494.7	515.2	552.0	564.0	651.1	661.6	667.0	3.9%
Government	83.5	87.2	90.8	94.3	97.5	100.5	102.9	109.0	108.0	121.2	122.8	118.2	2.2%
Education	450.0	477.8	506.0	534.1	562.0	589.1	614.9	658.7	677.8	782.1	800.3	812.4	4.2%
• Campus	129.8	136.3	142.8	148.9	155.1	160.7	165.8	173.7	176.4	198.6	200.8	201.2	2.9%
• Classroom	85.4	91.6	98.0	104.6	111.1	117.7	124.1	135.6	140.9	165.7	171.2	175.4	5.2%
• Library	53.8	57.0	60.1	63.5	66.4	69.4	72.3	77.0	79.0	90.6	92.5	93.4	3.9%
• Sports and Recreation	134.4	143.8	153.4	163.3	172.9	182.5	191.9	208.7	216.1	252.9	260.5	266.4	4.9%
• Others	46.6	49.1	51.6	53.8	56.5	58.7	60.8	63.8	65.4	74.3	75.4	76.0	3.4%
Venues	289.7	305.3	320.9	336.3	351.2	365.5	379.1	401.8	408.6	463.6	470.7	474.0	3.4%
Transportation	113.4	118.3	123.1	127.7	131.9	135.8	139.2	142.6	145.2	160.0	162.0	162.7	2.4%
Banking	335.7	359.5	383.9	408.6	433.3	457.8	481.9	522.8	542.7	636.0	652.8	669.8	5.0%
Retail	673.5	714.6	756.2	797.8	838.9	878.8	917.2	984.0	1,008.8	1,163.0	1,187.4	1,207.8	4.1%
Restaurants	509.2	538.0	566.8	595.4	623.4	650.3	675.2	717.3	734.0	843.1	856.3	862.8	3.7%
Hospitality	237.0	249.2	261.4	273.3	284.8	295.7	305.4	324.0	327.6	372.3	377.7	375.0	3.1%

Other industries	148.1	153.6	158.7	163.5	167.8	171.5	174.5	174.9	177.8	196.4	193.3	188.6	1.3%
Total	3,935.2	4,154.1	4,373.0	4,589.7	4,801.2	5,004.0	5,193.8	5,513.0	5,628.7	6,437.4	6,537.0	6,585.2	3.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.16. U.S. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 138. U.S. DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)**

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	1,952.3	2,044.1	2,133.1	2,221.6	2,304.9	2,382.3	2,452.2	2,559.5	2,591.3	2,911.9	2,933.5	2,929.8	2.7%
• Retail digital signage	405.9	423.8	441.1	458.1	474.0	488.6	501.6	520.7	525.7	585.3	589.6	587.9	2.4%
• Corporate digital signage	431.2	446.3	460.3	473.7	485.6	495.8	504.1	513.0	512.8	562.0	557.4	549.8	1.4%
• Healthcare digital signage	324.5	340.0	355.0	370.0	384.1	397.3	409.2	427.7	433.3	486.3	492.8	491.2	2.8%
• Education digital signage	261.2	275.3	289.2	303.1	316.5	329.3	341.1	360.6	367.4	419.3	422.4	425.8	3.3%
• Hospitality digital signage	320.8	341.4	361.9	382.9	403.4	423.3	442.2	475.2	488.0	564.9	577.9	583.0	4.2%
• Others	208.7	217.4	225.6	233.8	241.2	248.0	253.9	262.2	264.0	294.1	293.3	292.0	2.1%
Outdoor	1,285.9	1,360.8	1,435.3	1,510.8	1,584.1	1,654.8	1,721.3	1,834.9	1,877.3	2,154.3	2,193.0	2,213.2	3.8%
• Transportation digital signage	219.5	234.1	248.8	263.9	278.8	292.9	308.1	332.7	343.5	399.3	409.4	416.1	4.5%
• Outdoor advertising digital signage	543.5	575.6	607.6	640.1	671.7	701.6	731.6	780.5	799.7	918.4	935.7	945.0	3.9%
• Sports and entertainment digital signage	415.1	437.7	460.1	482.6	504.3	524.6	543.9	576.0	587.6	669.0	678.6	682.4	3.4%
• Others	107.9	113.4	118.8	124.2	129.4	135.7	137.7	145.8	146.4	167.6	169.3	169.7	3.1%
<b>Total</b>	<b>3,238.2</b>	<b>3,404.9</b>	<b>3,568.4</b>	<b>3,732.4</b>	<b>3,889.0</b>	<b>4,037.1</b>	<b>4,173.5</b>	<b>4,394.5</b>	<b>4,468.6</b>	<b>5,066.2</b>	<b>5,126.4</b>	<b>5,143.0</b>	<b>3.2%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## CANADA

Integration of technologies such as e-commerce and multi-screen sync plays major role in driving the market revenue growth. In addition, live data feeds such news updates, stock tickers, or sports scores, can enhance the relevance and real-time nature of the displayed content plays a major role in contributing to the market revenue growth in Canada. Synchronizing content across multiple screens can create impactful visual displays, enhancing storytelling and engagement. Retail digital signage can be linked to e-commerce platforms, allowing customers to make purchases directly from the displayed products. End-use companies in Canada are investing in professional design & components. Combined with modern design, outstanding performance meets IoT-ready features to create efficient solutions. Large format displays incorporate bright and vivid colors, 4K UHD technology and extra wide viewing angles. They also provide numerous customization options making digital signage system unique and remarkable.

### 8.1.1.26. CANADA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 148. CANADA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)**

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	123.4	131.3	139.7	147.4	155.4	163.1	170.4	183.1	187.9	217.6	221.5	224.0	4.1%
Healthcare	68.3	73.7	79.4	84.9	90.6	96.4	102.0	112.6	117.2	139.4	143.9	147.6	5.6%
Government	14.4	15.3	16.3	17.1	18.0	18.9	19.4	21.1	21.7	25.0	25.4	25.6	4.0%
Education	80.8	87.4	94.4	101.2	108.3	115.4	122.4	135.7	141.5	169.1	174.9	179.8	5.8%
• Campus	22.9	24.5	26.2	27.7	29.3	30.9	32.4	35.1	36.1	42.1	43.0	43.7	4.5%
• Classroom	15.6	17.0	18.6	20.1	21.8	23.4	25.1	28.4	29.9	36.4	38.0	39.4	6.8%
• Library	9.6	10.4	11.2	11.9	12.7	13.5	14.3	15.8	16.4	19.5	20.1	20.6	5.5%
• Sports and Recreation	24.4	26.6	29.0	31.3	33.7	36.2	38.6	43.4	45.6	55.3	57.5	59.6	6.5%
• Others	8.3	8.9	9.5	10.1	10.7	11.4	12.0	13.0	13.5	15.9	16.3	16.6	4.9%
Venues	51.1	54.9	58.8	62.6	66.5	70.4	74.5	81.0	83.9	98.9	101.6	103.7	5.1%
Transportation	19.5	20.7	22.0	23.1	24.3	25.5	26.5	28.3	29.0	33.4	33.9	34.1	3.8%
Banking	61.6	67.1	73.0	78.9	85.0	91.3	97.9	109.7	115.2	139.6	145.3	150.3	6.5%
Retail	120.8	130.5	140.9	150.9	161.4	171.9	182.6	201.8	210.4	251.1	259.5	266.6	5.7%
Restaurants	90.4	97.2	104.5	111.4	118.7	125.9	132.6	146.0	151.6	179.5	184.8	189.1	5.3%
Hospitality	41.6	44.5	47.7	50.6	53.6	56.6	59.2	64.8	66.9	78.5	80.4	81.9	4.8%

## EUROPE

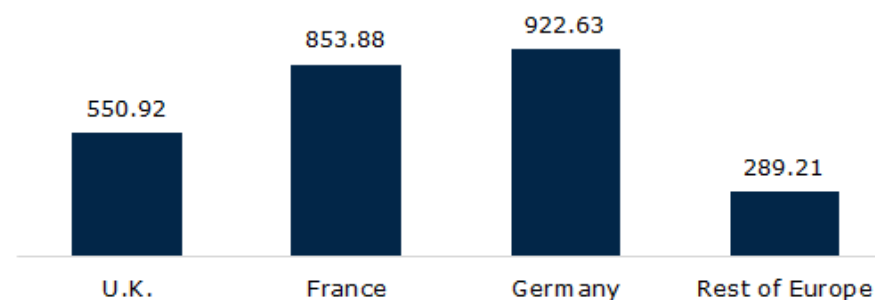
Digital Signage Hardware Market Regional Snapshot 2022  
Europe

## Digital Signage Hardware Market Opportunities in European Countries

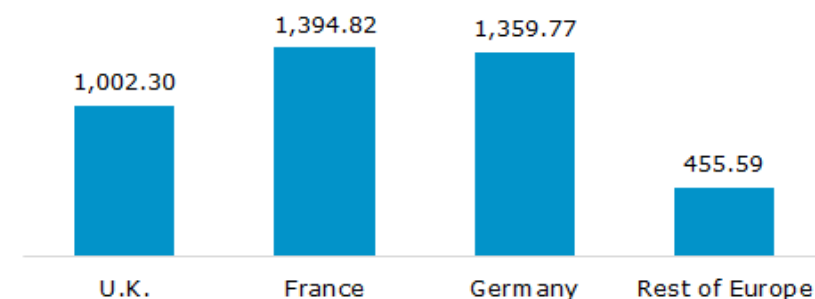
**Real-time updates and remote management of digital content** are major factors driving the market revenue growth

**Increasing demand from retailers and increasing focus on enhancing consumer experience** are major factors contributing to the market revenue growth

Europe Digital Signage Hardware Market, 2022 (\$Million)



Europe Digital Signage Hardware Market, 2032 (\$Million)





Europe comprises of Germany, U.K., Spain, France, Italy, BENELUX, and Rest of Europe. Increasing focus on regional expansion and increasing focus on LED technology due to its ability to produce excellent image resolution at a highly competitive prices are major factors driving the market revenue growth in the region. In addition, LEDs have a longer lifespan compared to other display technologies, which reduces the need for frequent replacements. This is particularly advantageous for digital signage installations that are intended to operate continuously for extended periods. LED displays offer a wide color gamut and excellent color accuracy, allowing for the reproduction of vibrant and true-to-life visuals. This is especially important for advertising, branding, and content that requires accurate color representation.

EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, 2019-2032  
(USD MILLION)

TABLE 149. EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	3,520.9	3,764.1	4,013.5	4,267.0	4,522.0	4,775.2	5,022.4	5,475.8	5,667.1	6,662.3	6,860.4	7,009.1	5.0%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY COUNTRY, 2019-2032 (USD MILLION)

**TABLE 150. EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY COUNTRY, 2019-2032 (USD MILLION)**

Region	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Germany	785.2	831.9	874.9	922.6	967.7	1,011.3	1,052.5	1,123.1	1,149.8	1,319.1	1,346.2	1,359.8	3.9%
U.K.	440.1	474.3	513.7	550.9	590.1	629.8	669.4	745.0	778.9	932.7	971.5	1,002.3	6.1%
Spain	383.8	410.3	437.5	468.0	497.4	526.9	555.8	609.6	632.8	746.2	772.9	792.0	5.3%
France	704.2	752.8	802.7	853.9	904.4	954.5	1,003.4	1,092.7	1,130.3	1,325.8	1,366.0	1,394.8	4.9%
Italy	626.7	677.5	730.5	782.3	836.6	891.4	945.9	1,049.5	1,095.6	1,312.5	1,360.7	1,401.8	5.9%
BENELUX	338.0	361.4	381.3	400.2	420.6	440.4	459.3	492.2	505.0	586.3	595.3	602.8	4.1%
Rest of Europe	242.9	256.0	272.9	289.2	305.2	321.0	336.2	363.5	374.7	439.7	447.8	455.6	4.6%
<b>Total</b>	<b>3,520.9</b>	<b>3,764.1</b>	<b>4,013.5</b>	<b>4,267.0</b>	<b>4,522.0</b>	<b>4,775.2</b>	<b>5,022.4</b>	<b>5,475.8</b>	<b>5,667.1</b>	<b>6,662.3</b>	<b>6,860.4</b>	<b>7,009.1</b>	<b>5.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 153.** EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	1,433.9	1,521.9	1,610.5	1,700.6	1,789.0	1,875.4	1,957.6	2,102.7	2,159.8	2,500.4	2,554.8	2,589.9	4.2%
• 640X480 pixels	439.0	463.6	488.4	513.1	537.1	560.7	582.2	619.2	632.9	725.2	737.3	743.5	3.7%
• 800X600 pixels	994.9	1,058.2	1,122.1	1,187.5	1,251.9	1,314.7	1,375.5	1,483.6	1,526.9	1,775.2	1,817.5	1,846.4	4.4%
High Definition	1,007.9	1,076.4	1,146.5	1,216.9	1,288.6	1,359.8	1,427.1	1,553.0	1,605.4	1,882.8	1,936.2	1,976.2	4.9%
• 1280X720 pixels (720p)	331.2	351.0	371.0	390.6	410.4	429.6	447.4	478.6	490.8	566.2	577.3	583.9	4.0%
• 1920X1080 pixels (1080p)	405.6	433.7	462.4	491.3	520.9	550.2	578.3	630.4	652.5	767.0	789.2	806.8	5.0%
• 2560X1440 pixels (1440p)	271.0	291.7	313.1	335.0	357.3	380.0	401.4	444.0	462.1	549.7	569.6	585.5	5.6%
4K Ultra High Definition (UHD)	698.1	756.6	817.6	880.0	945.2	1,010.7	1,077.0	1,203.2	1,260.5	1,517.4	1,580.6	1,634.0	6.3%
• 3840X2160 pixels (2160p)	698.1	756.6	817.6	880.0	945.2	1,010.7	1,077.0	1,203.2	1,260.5	1,517.4	1,580.6	1,634.0	6.3%
8K Ultra High Definition (UHD)	381.0	409.3	438.9	469.5	499.3	529.4	560.7	616.8	641.5	761.6	788.8	809.1	5.5%
• 7680X4320 pixels (4320p)	381.0	409.3	438.9	469.5	499.3	529.4	560.7	616.8	641.5	761.6	788.8	809.1	5.5%
Total	<b>3,520.9</b>	<b>3,764.1</b>	<b>4,013.5</b>	<b>4,267.0</b>	<b>4,522.0</b>	<b>4,775.2</b>	<b>5,022.4</b>	<b>5,475.8</b>	<b>5,667.1</b>	<b>6,662.3</b>	<b>6,860.4</b>	<b>7,009.1</b>	<b>5.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 154.** EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	669.8	704.7	739.1	772.9	805.3	835.9	863.9	908.6	923.2	1,044.7	1,055.0	1,056.6	3.1%
LED technology	637.0	676.2	715.6	754.3	794.0	832.4	868.7	931.9	956.9	1,107.4	1,129.5	1,145.6	4.2%
OLED technology	534.3	570.9	608.6	646.1	684.6	722.5	759.4	826.6	854.8	1,004.1	1,031.5	1,053.8	4.9%
Projection technology	464.2	498.4	533.0	569.2	604.6	640.2	675.6	742.0	770.5	912.2	942.2	965.8	5.3%
Holographic technology	396.7	429.5	464.6	500.0	537.7	575.7	613.5	685.6	718.5	865.3	902.9	932.5	6.3%
Quantum dot technology	360.1	392.2	426.2	462.5	497.5	534.6	571.8	644.3	677.6	821.2	859.5	891.4	6.7%
MicroLED technology	284.0	306.8	330.0	354.4	379.0	403.2	428.0	476.1	497.3	594.9	619.4	637.4	5.9%
Other technologies	174.8	185.4	196.4	207.6	219.3	230.7	241.5	260.6	268.5	312.5	320.3	326.1	4.5%
<b>Total</b>	<b>3,520.9</b>	<b>3,764.1</b>	<b>4,013.5</b>	<b>4,267.0</b>	<b>4,522.0</b>	<b>4,775.2</b>	<b>5,022.4</b>	<b>5,475.8</b>	<b>5,667.1</b>	<b>6,662.3</b>	<b>6,860.4</b>	<b>7,009.1</b>	<b>5.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 155.** EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	2,110.6	2,246.7	2,385.2	2,525.2	2,664.1	2,801.5	2,933.1	3,169.6	3,265.2	3,804.4	3,900.8	3,966.3	4.5%
• Retail digital signage	438.3	465.6	492.7	520.2	547.4	574.0	599.4	644.1	661.9	766.7	784.3	794.7	4.2%
• Corporate digital signage	463.8	488.2	511.9	535.5	558.2	579.8	599.5	631.5	642.4	728.7	737.5	739.2	3.2%
• Healthcare digital signage	351.4	374.4	397.6	421.1	444.6	467.9	490.1	530.5	546.9	638.2	654.5	666.0	4.6%
• Education digital signage	282.8	302.9	323.9	345.3	366.6	387.9	408.8	447.2	463.2	546.8	564.5	577.4	5.2%
• Hospitality digital signage	349.2	377.6	407.7	438.3	469.3	501.2	532.4	592.5	618.8	741.9	770.5	794.6	6.0%
• Others	225.0	238.0	251.4	264.8	278.0	290.8	302.8	323.7	331.9	382.1	389.6	394.3	4.0%
Outdoor	1,410.3	1,517.4	1,628.3	1,741.8	1,857.9	1,973.7	2,089.3	2,306.2	2,402.0	2,857.8	2,959.6	3,042.8	5.6%
• Transportation digital signage	242.8	263.3	284.7	306.7	329.8	353.0	376.1	421.7	442.0	533.8	556.8	576.4	6.4%
• Outdoor advertising digital signage	596.6	642.4	689.9	738.8	788.5	838.3	888.2	981.8	1,023.0	1,219.4	1,263.8	1,300.7	5.7%
• Sports and entertainment digital signage	453.4	486.2	519.9	554.2	589.1	623.6	658.4	721.0	748.8	884.0	912.0	933.8	5.3%
• Others	117.4	125.5	133.8	142.1	150.6	158.8	166.6	181.7	188.2	220.5	226.9	231.9	4.9%
<b>Total</b>	<b>3,520.9</b>	<b>3,764.1</b>	<b>4,013.5</b>	<b>4,267.0</b>	<b>4,522.0</b>	<b>4,775.2</b>	<b>5,022.4</b>	<b>5,475.8</b>	<b>5,667.1</b>	<b>6,662.3</b>	<b>6,860.4</b>	<b>7,009.1</b>	<b>5.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 156.** EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	624.3	677.1	732.4	789.5	848.2	908.2	969.0	1,084.0	1,135.6	1,370.2	1,428.4	1,478.1	6.4%
Video wall	476.8	506.4	536.4	566.4	596.7	625.1	652.7	702.5	721.3	836.2	854.7	868.1	4.3%
Room displays	427.9	457.1	486.8	517.1	547.0	577.9	607.5	660.4	683.5	801.8	825.2	841.1	4.9%
Digital menus	687.0	741.3	797.5	855.5	914.8	975.0	1,034.0	1,147.2	1,197.5	1,430.8	1,486.3	1,531.4	5.9%
Building directory	402.9	427.4	452.1	477.1	501.8	524.8	547.3	587.5	602.3	696.3	710.6	720.9	4.1%
Standard digital signage displays	589.7	622.4	655.0	687.3	718.3	749.1	777.4	823.5	840.9	960.6	974.2	979.1	3.5%
Other applications	312.2	332.5	353.3	374.0	395.2	415.1	434.6	470.7	486.0	566.3	581.1	590.4	4.6%
<b>Total</b>	<b>3,520.9</b>	<b>3,764.1</b>	<b>4,013.5</b>	<b>4,267.0</b>	<b>4,522.0</b>	<b>4,775.2</b>	<b>5,022.4</b>	<b>5,475.8</b>	<b>5,667.1</b>	<b>6,662.3</b>	<b>6,860.4</b>	<b>7,009.1</b>	<b>5.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 157.** EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	638.7	676.6	714.5	753.0	790.5	826.5	860.5	920.4	943.1	1,086.4	1,106.8	1,120.3	3.9%
Healthcare	341.9	366.8	392.3	418.9	445.5	471.7	497.5	546.4	567.4	671.5	693.1	711.7	5.3%
Government	74.8	79.2	83.3	87.7	92.2	96.2	100.3	106.7	109.1	125.3	127.2	128.8	3.8%
Education	402.0	432.3	463.5	495.7	528.3	561.5	594.3	655.1	681.8	810.7	840.1	861.8	5.6%
• Campus	118.9	126.6	134.3	142.1	149.9	157.4	164.8	177.5	182.8	212.3	217.5	220.4	4.4%
• Classroom	74.3	80.8	87.5	94.6	101.9	109.5	117.0	131.5	138.2	167.6	175.3	181.6	6.6%
• Library	48.4	51.9	55.5	59.2	62.9	66.6	70.4	77.1	80.1	94.7	97.8	100.0	5.3%
• Sports and Recreation	117.9	127.7	138.0	148.6	159.6	170.8	182.2	203.9	213.6	257.6	268.7	277.5	6.3%
• Others	42.4	45.3	48.2	51.2	54.1	57.2	59.9	65.0	67.2	78.6	80.8	82.2	4.8%
Venues	259.2	276.7	294.5	312.7	330.5	348.9	366.6	398.3	411.6	482.4	496.5	505.3	4.8%
Transportation	101.7	107.5	113.4	118.7	124.3	130.0	135.4	143.6	146.7	168.0	171.3	171.5	3.6%
Banking	299.6	324.9	351.6	378.9	406.8	435.5	464.0	519.5	544.6	656.5	684.8	707.8	6.3%
Retail	602.0	646.9	693.3	740.9	788.9	837.7	885.6	975.2	1,014.3	1,204.3	1,246.7	1,278.7	5.5%
Restaurants	455.5	487.4	520.2	553.5	587.4	620.4	653.0	713.3	738.8	870.1	896.2	917.6	5.1%
Hospitality	212.3	226.1	240.3	254.2	268.6	282.4	296.0	319.9	329.7	384.4	394.3	401.1	4.6%



Other industries	133.0	139.6	146.6	152.9	159.0	164.4	169.2	177.6	180.0	202.7	203.6	204.6	2.8%
Total	<b>3,520.9</b>	<b>3,764.1</b>	<b>4,013.5</b>	<b>4,267.0</b>	<b>4,522.0</b>	<b>4,775.2</b>	<b>5,022.4</b>	<b>5,475.8</b>	<b>5,667.1</b>	<b>6,662.3</b>	<b>6,860.4</b>	<b>7,009.1</b>	<b>5.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis





### 8.1.1.32. GERMANY DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 163.** GERMANY DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	475.4	501.5	525.3	551.5	576.0	599.7	621.1	657.0	669.2	761.1	774.0	777.8	3.4%
• Retail digital signage	99.0	104.2	108.8	113.9	118.7	123.2	127.3	133.9	136.0	153.8	156.0	156.3	3.1%
• Corporate digital signage	105.2	109.7	113.5	117.8	121.5	125.0	127.9	131.9	132.6	147.0	147.5	146.2	2.1%
• Healthcare digital signage	79.2	83.6	87.6	92.0	96.2	100.2	103.9	110.0	112.1	127.7	130.0	130.7	3.5%
• Education digital signage	63.4	67.4	71.0	75.1	78.9	82.7	86.2	92.4	94.7	109.0	111.5	112.8	4.0%
• Hospitality digital signage	78.3	83.9	89.2	95.1	100.8	106.5	111.9	121.7	125.7	146.8	151.3	154.0	4.8%
• Others	50.3	52.8	55.1	57.6	59.9	62.1	64.0	67.2	68.1	76.8	77.7	77.8	2.9%
Outdoor	309.8	330.3	349.7	371.1	391.7	411.6	431.4	466.1	480.6	558.0	572.1	582.0	4.5%
• Transportation digital signage	53.7	57.7	61.5	65.7	70.0	74.1	78.1	85.8	88.9	104.9	108.3	111.0	5.3%
• Outdoor advertising digital signage	131.1	140.0	148.3	157.7	166.3	174.9	183.8	198.6	204.7	238.3	244.5	248.9	4.6%
• Sports and entertainment digital signage	99.3	105.5	111.3	117.6	123.8	129.7	135.5	145.3	149.5	172.0	175.8	178.2	4.1%
• Others	25.6	27.2	28.6	30.1	31.6	32.9	34.1	36.5	37.5	42.8	43.5	44.0	3.8%
<b>Total</b>	<b>29.9</b>	<b>53.6</b>	<b>96.1</b>	<b>172.3</b>	<b>308.6</b>	<b>552.7</b>	<b>989.2</b>	<b>3,163.3</b>	<b>5,651.9</b>	<b>18,012.5</b>	<b>32,129.0</b>	<b>57,276.0</b>	<b>78.7%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.33. GERMANY DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 164.** GERMANY DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	133.1	143.2	152.8	163.5	174.2	184.4	194.6	213.4	221.4	261.2	269.2	276.0	5.2%
Video wall	108.4	114.2	119.3	125.0	130.6	135.2	139.7	147.1	149.6	168.8	171.0	172.7	3.1%
Room displays	95.7	101.3	106.5	112.2	117.1	122.7	127.6	135.9	139.0	159.6	162.9	163.2	3.8%
Digital menus	149.0	159.3	169.2	180.0	190.6	200.9	211.0	229.1	236.6	275.7	284.0	289.6	4.8%
Building directory	92.0	96.7	100.9	105.6	110.3	113.9	117.6	123.5	125.5	141.1	142.7	144.1	3.0%
Standard digital signage displays	136.5	142.9	148.4	154.6	159.7	165.2	169.7	176.3	178.1	199.2	200.6	198.5	2.4%
Other applications	70.4	74.3	77.9	81.8	85.2	89.0	92.3	97.7	99.6	113.4	115.8	115.6	3.5%
<b>Total</b>	<b>785.2</b>	<b>831.9</b>	<b>874.9</b>	<b>922.6</b>	<b>967.7</b>	<b>1,011.3</b>	<b>1,052.5</b>	<b>1,123.1</b>	<b>1,149.8</b>	<b>1,319.1</b>	<b>1,346.2</b>	<b>1,359.8</b>	<b>3.9%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

Other industries	29.3	30.5	31.5	32.6	33.5	34.4	34.7	35.9	36.0	39.6	39.5	39.0	1.7%
Total	785.2	831.9	874.9	922.6	967.7	1,011.3	1,052.5	1,123.1	1,149.8	1,319.1	1,346.2	1,359.8	3.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## U.K.

The landscape of digital signage hardware in the United Kingdom (U.K.) is undergoing significant transformations due to technological advancements, changing consumer behaviors, and evolving business needs. For instance, the U.K.'s variable weather conditions have prompted a demand for robust outdoor digital signage hardware that can withstand rain, wind, and temperature fluctuations. These displays are used in transportation hubs, outdoor advertising, and public spaces. In addition, sustainability is a priority in the U.K., and businesses are adopting energy-efficient LED displays, digital paperless signage, and low-power hardware to align with environmental goals. The U.K. is embracing digital signage for wayfinding in public transportation, malls, airports, and other public spaces. Real-time information updates help improve navigation and reduce congestion.

8.1.1.35. U.K. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, 2019-2032 (USD MILLION)

TABLE 166. U.K. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	440.1	474.3	513.7	550.9	590.1	629.8	669.4	745.0	778.9	932.7	971.5	1,002.3	6.1%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.38. U.K. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 169. U.K. DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)**

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	175.4	187.7	201.9	214.9	228.4	241.8	255.0	279.7	290.2	342.1	353.6	361.8	5.2%
• 640X480 pixels	53.4	56.8	60.8	64.4	68.2	71.8	75.4	81.9	84.5	98.6	101.5	103.3	4.7%
• 800X600 pixels	122.0	130.8	141.1	150.4	160.2	170.0	179.7	197.8	205.7	243.5	252.2	258.5	5.5%
High Definition	125.6	135.2	146.4	156.5	167.6	178.9	189.4	210.6	219.9	262.7	273.0	281.6	5.9%
• 1280X720 pixels (720p)	42.0	44.9	48.2	51.1	54.3	57.5	60.4	66.1	68.5	80.5	82.9	84.8	5.1%
• 1920X1080 pixels (1080p)	50.4	54.3	58.9	63.0	67.6	72.2	76.6	85.3	89.2	106.7	111.0	114.7	6.1%
• 2560X1440 pixels (1440p)	33.2	36.0	39.3	42.3	45.7	49.1	52.4	59.2	62.3	75.5	79.0	82.1	6.7%
4K Ultra High Definition (UHD)	90.8	99.1	108.4	117.9	128.1	138.6	148.6	169.6	179.4	219.8	231.2	241.6	7.3%
• 3840X2160 pixels (2160p)	90.8	99.1	108.4	117.9	128.1	138.6	148.6	169.6	179.4	219.8	231.2	241.6	7.3%
8K Ultra High Definition (UHD)	48.3	52.3	57.0	61.7	66.1	70.5	76.3	85.1	89.4	108.1	113.7	117.3	6.6%
• 7680X4320 pixels (4320p)	48.3	52.3	57.0	61.7	66.1	70.5	76.3	85.1	89.4	108.1	113.7	117.3	6.6%
<b>Total</b>	<b>440.1</b>	<b>474.3</b>	<b>513.7</b>	<b>550.9</b>	<b>590.1</b>	<b>629.8</b>	<b>669.4</b>	<b>745.0</b>	<b>778.9</b>	<b>932.7</b>	<b>971.5</b>	<b>1,002.3</b>	<b>6.1%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.39. U.K. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 170. U.K. DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)**

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	84.1	89.2	95.0	100.3	105.6	110.8	115.8	124.4	127.7	147.4	150.6	152.4	4.2%
LED technology	79.8	85.4	91.8	97.5	103.9	110.0	116.0	127.1	131.9	155.8	160.3	164.4	5.2%
OLED technology	66.8	71.9	77.9	83.2	89.3	95.2	101.1	112.4	117.4	140.8	145.7	150.7	6.0%
Projection technology	58.0	62.8	68.2	73.3	78.9	84.5	90.1	100.9	105.8	127.8	133.1	138.0	6.4%
Holographic technology	49.3	53.9	59.2	64.5	69.8	75.5	81.3	92.8	98.2	120.3	128.2	132.6	7.4%
Quantum dot technology	44.8	49.2	54.2	58.9	64.5	70.0	75.7	87.1	92.5	113.8	120.5	126.6	7.8%
MicroLED technology	35.5	38.6	42.2	46.3	49.4	53.2	57.0	64.7	68.2	83.0	87.4	90.9	7.0%
Other technologies	21.8	23.4	25.2	27.0	28.7	30.5	32.3	35.6	37.0	43.8	45.7	46.8	5.6%
<b>Total</b>	<b>440.1</b>	<b>474.3</b>	<b>513.7</b>	<b>550.9</b>	<b>590.1</b>	<b>629.8</b>	<b>669.4</b>	<b>745.0</b>	<b>778.9</b>	<b>932.7</b>	<b>971.5</b>	<b>1,002.3</b>	<b>6.1%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.40. U.K. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 171. U.K. DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)**

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	262.0	281.1	303.2	323.7	345.2	366.8	388.2	428.2	445.7	529.0	548.5	563.3	5.6%
• Retail digital signage	53.9	57.7	62.0	66.0	70.2	74.4	78.5	86.1	89.6	105.6	109.1	111.5	5.3%
• Corporate digital signage	55.2	58.5	62.3	65.7	69.2	72.6	75.8	81.4	83.8	96.6	98.7	99.7	4.1%
• Healthcare digital signage	43.7	46.9	50.6	54.1	57.7	61.3	65.0	71.9	74.9	88.8	92.1	94.6	5.7%
• Education digital signage	36.0	38.9	42.2	45.3	48.6	52.0	55.4	61.7	64.2	77.8	81.2	83.9	6.2%
• Hospitality digital signage	45.8	49.9	54.7	59.2	64.1	69.1	74.1	84.4	88.7	108.1	113.5	118.3	7.0%
• Others	27.4	29.3	31.4	33.3	35.4	37.4	39.3	42.8	44.6	52.1	53.8	55.2	5.1%
Outdoor	178.1	193.2	210.6	227.2	244.9	263.0	281.2	316.8	333.2	403.8	423.0	439.0	6.7%
• Transportation digital signage	30.2	33.0	36.2	39.4	42.8	46.3	49.9	57.0	60.4	74.3	78.4	81.9	7.5%
• Outdoor advertising digital signage	75.2	81.7	89.1	96.2	103.8	111.5	119.3	134.6	141.7	172.0	180.4	187.3	6.8%
• Sports and entertainment digital signage	57.7	62.4	67.7	72.8	78.2	83.7	89.2	99.8	104.6	125.8	131.4	135.8	6.3%
• Others	15.0	16.2	17.5	18.8	20.1	21.5	22.8	25.3	26.5	31.6	32.9	33.9	6.0%
<b>Total</b>	<b>440.1</b>	<b>474.3</b>	<b>513.7</b>	<b>550.9</b>	<b>590.1</b>	<b>629.8</b>	<b>669.4</b>	<b>745.0</b>	<b>778.9</b>	<b>932.7</b>	<b>971.5</b>	<b>1,002.3</b>	<b>6.1%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.41. U.K. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 172. U.K. DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)**

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	78.0	85.3	93.7	101.9	110.6	119.7	128.9	147.3	155.8	191.5	202.0	210.9	7.4%
Video wall	59.6	63.8	68.7	73.1	77.8	82.5	87.1	95.6	98.9	117.2	121.2	124.2	5.3%
Room displays	53.5	57.6	62.3	66.8	71.5	76.2	80.9	89.9	94.2	112.2	116.8	120.4	6.0%
Digital menus	85.9	93.4	102.1	110.4	119.3	128.5	137.7	156.0	164.4	200.2	210.3	218.7	7.0%
Building directory	50.4	53.9	57.9	61.6	65.4	69.3	73.0	80.0	82.6	97.6	100.8	103.1	5.2%
Standard digital signage displays	73.7	78.5	83.9	88.8	93.9	98.9	103.7	112.2	116.1	134.6	138.2	140.4	4.6%
Other applications	39.0	41.9	45.2	48.3	51.5	54.8	58.0	64.1	67.0	79.3	82.3	84.5	5.7%
<b>Total</b>	<b>440.1</b>	<b>474.3</b>	<b>513.7</b>	<b>550.9</b>	<b>590.1</b>	<b>629.8</b>	<b>669.4</b>	<b>745.0</b>	<b>778.9</b>	<b>932.7</b>	<b>971.5</b>	<b>1,002.3</b>	<b>6.1%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.42. U.K. DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 173. U.K. DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)**

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	78.6	83.9	89.9	95.7	101.5	107.3	112.9	123.2	127.5	149.5	154.1	157.4	5.0%
Healthcare	43.0	46.5	50.3	54.4	58.4	62.6	66.7	74.7	78.4	94.5	98.8	102.2	6.4%
Government	9.2	9.8	10.3	11.1	11.8	12.5	13.1	14.2	14.7	17.2	17.7	18.0	4.8%
Education	50.6	54.9	59.6	64.6	69.6	74.8	80.0	90.2	94.9	115.1	120.7	125.3	6.7%
• Campus	15.3	16.4	17.6	18.9	20.2	21.4	22.6	25.0	26.0	30.8	31.9	32.8	5.5%
• Classroom	9.2	10.0	11.0	12.1	13.2	14.4	15.4	17.8	18.9	23.4	24.7	25.9	7.8%
• Library	6.1	6.6	7.2	7.7	8.4	8.9	9.5	10.7	11.2	13.5	14.1	14.6	6.4%
• Sports and Recreation	14.6	16.0	17.5	19.1	20.8	22.4	24.2	27.7	29.3	36.1	38.1	39.8	7.5%
• Others	5.4	5.8	6.3	6.7	7.2	7.7	8.2	9.1	9.5	11.3	11.8	12.1	6.0%
Venues	32.3	34.8	37.5	40.3	43.1	45.9	48.7	54.1	56.4	67.4	70.1	72.2	5.9%
Transportation	12.5	13.3	14.4	15.1	15.9	16.8	17.6	19.1	19.7	23.0	23.6	24.1	4.7%
Banking	38.3	41.9	46.2	50.0	54.3	58.7	63.2	72.2	76.4	93.8	98.9	103.2	7.4%
Retail	75.9	82.2	89.4	96.5	103.9	111.4	119.0	133.8	140.6	170.0	177.9	184.4	6.6%
Restaurants	57.0	61.5	66.8	71.6	76.7	81.9	87.2	97.2	101.7	122.0	127.2	131.3	6.2%
Hospitality	26.6	28.5	30.8	32.7	34.8	36.9	39.0	43.0	44.7	52.9	54.7	56.1	5.4%



Other industries	16.1	17.1	18.5	19.1	20.1	21.0	21.9	23.3	23.9	27.4	27.9	28.1	3.8%
Total	440.1	474.3	513.7	550.9	590.1	629.8	669.4	745.0	778.9	932.7	971.5	1,002.3	6.1%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.45. SPAIN DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

**TABLE 176.** SPAIN DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

Screen Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Below 32 inches	132.7	141.0	149.6	159.1	168.2	177.1	185.8	201.5	208.0	242.5	249.7	254.2	4.7%
Between 32 and 52 inches	174.7	187.0	199.5	213.9	227.6	241.4	254.9	280.3	291.3	344.0	357.1	366.7	5.4%
Above 52 inches	76.4	82.2	88.4	95.0	101.6	108.4	115.1	127.8	133.5	159.7	166.2	171.1	6.0%
Total	<b>383.8</b>	<b>410.3</b>	<b>437.5</b>	<b>468.0</b>	<b>497.4</b>	<b>526.9</b>	<b>555.8</b>	<b>609.6</b>	<b>632.8</b>	<b>746.2</b>	<b>772.9</b>	<b>792.0</b>	<b>5.3%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.46. SPAIN DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 177. SPAIN DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)**

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	154.3	163.6	173.2	183.9	194.0	204.0	213.6	230.7	237.7	275.9	283.6	288.3	4.5%
• 640X480 pixels	46.7	49.3	52.0	54.9	57.6	60.3	62.8	67.2	68.9	79.2	80.9	81.9	4.0%
• 800X600 pixels	107.6	114.3	121.3	129.0	136.4	143.7	150.7	163.5	168.8	196.8	202.6	206.4	4.7%
High Definition	109.4	116.9	124.7	132.9	141.3	149.5	157.5	172.3	178.7	210.2	217.5	222.6	5.2%
• 1280X720 pixels (720p)	36.6	38.8	41.1	43.4	45.8	48.1	50.3	54.1	55.6	64.4	66.1	67.0	4.3%
• 1920X1080 pixels (1080p)	43.9	47.0	50.2	53.5	57.0	60.3	63.6	69.8	72.4	85.4	88.5	90.6	5.3%
• 2560X1440 pixels (1440p)	28.9	31.1	33.5	35.9	38.5	41.1	43.6	48.4	50.6	60.4	62.9	64.9	6.0%
4K Ultra High Definition (UHD)	77.9	84.5	91.0	98.7	106.4	114.2	121.9	137.0	143.9	173.6	181.9	188.5	6.6%
• 3840X2160 pixels (2160p)	77.9	84.5	91.0	98.7	106.4	114.2	121.9	137.0	143.9	173.6	181.9	188.5	6.6%
8K Ultra High Definition (UHD)	42.2	45.3	48.6	52.4	55.7	59.3	62.9	69.6	72.6	86.5	90.0	92.7	5.8%
• 7680X4320 pixels (4320p)	42.2	45.3	48.6	52.4	55.7	59.3	62.9	69.6	72.6	86.5	90.0	92.7	5.8%
Total	<b>383.8</b>	<b>410.3</b>	<b>437.5</b>	<b>468.0</b>	<b>497.4</b>	<b>526.9</b>	<b>555.8</b>	<b>609.6</b>	<b>632.8</b>	<b>746.2</b>	<b>772.9</b>	<b>792.0</b>	<b>5.3%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.47. SPAIN DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 178. SPAIN DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)**

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	73.3	77.1	80.9	85.2	89.0	92.7	96.2	101.8	103.8	117.9	119.8	120.4	3.4%
LED technology	69.6	73.9	78.2	83.0	87.5	92.0	96.3	104.0	107.2	124.6	127.5	129.9	4.5%
OLED technology	58.2	62.2	66.3	70.9	75.3	79.7	84.0	92.0	95.4	112.7	115.9	118.8	5.2%
Projection technology	50.6	54.3	58.1	62.3	66.5	70.7	74.8	82.6	86.0	102.2	105.9	109.3	5.7%
Holographic technology	43.0	46.6	50.4	54.6	58.9	63.2	67.5	75.9	79.8	96.3	101.3	104.5	6.6%
Quantum dot technology	39.1	42.5	46.2	50.3	54.4	58.6	62.9	71.3	75.2	91.0	96.6	99.8	7.0%
MicroLED technology	30.9	33.4	35.9	38.8	41.6	44.5	47.4	52.9	55.4	66.4	69.6	72.1	6.3%
Other technologies	19.0	20.2	21.5	22.9	24.2	25.5	26.8	29.1	30.1	35.1	36.3	37.2	4.9%
<b>Total</b>	<b>383.8</b>	<b>410.3</b>	<b>437.5</b>	<b>468.0</b>	<b>497.4</b>	<b>526.9</b>	<b>555.8</b>	<b>609.6</b>	<b>632.8</b>	<b>746.2</b>	<b>772.9</b>	<b>792.0</b>	<b>5.3%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.48. SPAIN DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 179. SPAIN DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)**

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	234.2	249.3	264.7	282.0	298.5	314.8	330.6	359.5	371.6	434.4	448.0	457.0	4.8%
• Retail digital signage	48.8	51.8	54.9	58.3	61.5	64.7	67.8	73.3	75.6	87.9	90.4	92.0	4.6%
• Corporate digital signage	52.3	55.1	57.8	60.8	63.6	66.3	68.8	73.0	74.5	84.8	86.4	86.9	3.5%
• Healthcare digital signage	38.9	41.4	44.0	46.9	49.7	52.5	55.1	60.0	62.1	72.7	75.0	76.6	4.9%
• Education digital signage	31.1	33.4	35.6	38.2	40.7	43.2	45.7	50.3	52.4	62.0	64.3	66.0	5.5%
• Hospitality digital signage	37.9	41.0	44.2	47.8	51.4	55.1	58.7	65.8	69.0	83.0	86.8	89.7	6.4%
• Others	25.2	26.6	28.1	29.8	31.4	32.9	34.4	37.0	38.1	44.0	45.1	45.8	4.3%
Outdoor	149.6	161.0	172.8	186.0	199.0	212.1	225.2	250.1	261.2	311.8	325.0	335.0	6.0%
• Transportation digital signage	25.9	28.1	30.4	33.0	35.5	38.2	40.8	46.0	48.4	58.6	61.5	63.7	6.7%
• Outdoor advertising digital signage	63.3	68.2	73.2	78.9	84.5	90.1	95.8	106.5	111.4	133.1	138.9	143.4	6.1%
• Sports and entertainment digital signage	48.0	51.4	55.0	59.0	62.9	66.8	70.7	77.9	81.1	96.1	99.8	102.5	5.6%
• Others	12.4	13.2	14.1	15.1	16.0	17.0	17.9	19.6	20.3	23.9	24.7	25.5	5.3%
<b>Total</b>	<b>383.8</b>	<b>410.3</b>	<b>437.5</b>	<b>468.0</b>	<b>497.4</b>	<b>526.9</b>	<b>555.8</b>	<b>609.6</b>	<b>632.8</b>	<b>746.2</b>	<b>772.9</b>	<b>792.0</b>	<b>5.3%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.49. SPAIN DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 180. SPAIN DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)**

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	70.0	75.9	82.0	88.9	95.8	102.8	109.9	123.6	129.7	156.7	164.6	170.7	6.6%
Video wall	51.3	54.5	57.7	61.3	64.7	68.1	71.3	77.2	79.7	92.5	95.1	96.7	4.6%
Room displays	46.6	49.7	53.0	56.6	60.1	63.6	67.1	73.4	75.9	89.5	92.8	95.0	5.2%
Digital menus	76.2	82.2	88.5	95.5	102.4	109.4	116.3	129.8	136.1	162.7	170.0	175.7	6.2%
Building directory	43.2	45.9	48.5	51.5	54.3	57.0	59.7	64.4	66.4	76.9	78.8	80.1	4.4%
Standard digital signage displays	62.7	66.1	69.6	73.5	77.0	80.5	83.7	89.3	91.1	105.2	106.7	107.6	3.8%
Other applications	33.8	36.0	38.2	40.7	43.1	45.5	47.8	52.0	53.8	62.7	64.9	66.3	4.9%
<b>Total</b>	<b>383.8</b>	<b>410.3</b>	<b>437.5</b>	<b>468.0</b>	<b>497.4</b>	<b>526.9</b>	<b>555.8</b>	<b>609.6</b>	<b>632.8</b>	<b>746.2</b>	<b>772.9</b>	<b>792.0</b>	<b>5.3%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.57. FRANCE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 188.** FRANCE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	124.8	135.3	146.4	157.9	169.1	181.4	193.6	216.0	226.1	272.2	284.0	293.5	6.3%
Video wall	95.4	101.3	107.3	113.4	119.4	125.0	130.4	140.2	143.5	166.6	170.4	172.8	4.2%
Room displays	85.6	91.4	97.4	103.5	109.4	115.5	121.4	131.9	136.8	159.5	164.2	167.5	4.8%
Digital menus	137.4	148.2	159.5	171.2	182.7	194.7	206.7	228.7	238.5	284.6	295.7	304.4	5.8%
Building directory	80.6	85.5	90.4	95.4	100.4	105.0	109.4	117.3	119.8	138.8	141.8	143.5	4.1%
Standard digital signage displays	118.0	124.6	131.1	137.7	143.8	149.9	155.5	164.6	168.4	191.4	194.3	195.4	3.5%
Other applications	62.4	66.5	70.6	74.9	79.6	83.0	86.3	94.0	97.2	112.7	115.7	117.6	4.4%
<b>Total</b>	<b>704.2</b>	<b>752.8</b>	<b>802.7</b>	<b>853.9</b>	<b>904.4</b>	<b>954.5</b>	<b>1,003.4</b>	<b>1,092.7</b>	<b>1,130.3</b>	<b>1,325.8</b>	<b>1,366.0</b>	<b>1,394.8</b>	<b>4.9%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.58. FRANCE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 189. FRANCE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)**

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	130.5	138.3	146.1	154.0	161.9	168.9	175.9	187.9	192.5	221.4	225.4	228.7	3.9%
Healthcare	67.8	72.8	77.9	83.1	88.6	93.5	98.7	108.2	112.3	132.6	136.6	140.9	5.3%
Government	15.3	16.2	17.1	18.0	19.0	19.7	20.5	21.9	22.4	25.6	26.0	26.5	3.8%
Education	79.3	85.3	91.5	97.9	104.0	110.7	117.1	128.9	134.1	159.1	165.3	168.8	5.5%
• Campus	23.0	24.4	25.9	27.4	28.8	30.3	31.7	34.1	35.1	40.6	41.7	42.0	4.3%
• Classroom	15.0	16.3	17.7	19.1	20.5	22.0	23.5	26.4	27.8	33.6	35.2	36.3	6.6%
• Library	9.5	10.2	10.9	11.7	12.3	13.1	13.8	15.1	15.6	18.5	19.1	19.5	5.2%
• Sports and Recreation	23.6	25.6	27.7	29.8	31.9	34.2	36.4	40.7	42.6	51.4	53.6	55.2	6.3%
• Others	8.2	8.8	9.4	10.0	10.5	11.1	11.6	12.6	13.0	15.1	15.6	15.8	4.7%
Venues	52.0	55.5	59.1	62.8	66.0	70.0	73.5	79.8	82.4	96.3	99.7	100.4	4.8%
Transportation	20.9	22.1	23.3	24.5	25.3	26.7	27.8	29.5	30.1	34.5	35.5	34.9	3.6%
Banking	57.9	62.8	68.0	73.3	78.7	84.3	89.9	100.5	105.4	126.8	132.5	136.7	6.3%
Retail	118.9	127.8	137.0	146.5	155.6	165.4	174.8	192.3	199.9	236.9	245.9	251.1	5.5%
Restaurants	90.9	97.3	103.8	110.5	117.6	123.8	130.2	142.1	147.1	172.8	177.6	182.7	5.0%
Hospitality	42.8	45.6	48.4	51.3	54.3	57.0	59.6	64.5	66.4	77.3	79.2	80.9	4.5%



Other industries	27.7	29.1	30.5	31.9	33.5	34.4	35.5	37.2	37.7	42.4	42.3	43.2	2.9%
Total	704.2	752.8	802.7	853.9	904.4	954.5	1,003.4	1,092.7	1,130.3	1,325.8	1,366.0	1,394.8	4.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## ITALY

Increasing demand for digital signage commercial or industrial media players is a major factor contributing to the market revenue growth. Digital signage media players are small computers (Mini PCs) designed to display images, videos, or interactive content on a television, monitor, or other digital signage display or screen. The media output will be handled by digital signage player hardware with the assistance of software that will aid in scheduling, playback, and content delivery. Significant investments in advanced computing power with a a range of displays, types, sizes, and customizable options to suit end-user requirements is a major factor contributing to the market revenue growth. Digital signage displays are often used to showcase sophisticated multimedia content, including high-resolution videos, animations, interactive applications, and real-time data feeds. High computational power is essential to smoothly render and display this content without lag or degradation in quality. Businesses are seeking to deliver visually captivating experiences to engage audiences effectively. High computational power enables the rendering of advanced graphics, 3D visuals, augmented reality (AR), and virtual reality (VR) elements.

### 8.1.1.59. ITALY DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, 2019-2032 (USD MILLION)

**TABLE 190.** ITALY DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	626.7	677.5	730.5	782.3	836.6	891.4	945.9	1,049.5	1,095.6	1,312.5	1,360.7	1,401.8	5.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.60. ITALY DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)

**TABLE 191.** ITALY DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)

Product Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Displays	262.4	281.2	300.5	318.9	338.0	356.6	375.2	408.6	422.6	496.5	509.8	520.1	4.9%
Media Players	213.2	232.8	253.6	274.2	296.1	319.1	341.4	386.0	406.7	496.3	519.2	539.7	6.9%
Others	151.1	163.5	176.4	189.1	202.5	215.7	229.3	254.9	266.4	319.7	331.7	342.0	6.0%
Total	<b>626.7</b>	<b>677.5</b>	<b>730.5</b>	<b>782.3</b>	<b>836.6</b>	<b>891.4</b>	<b>945.9</b>	<b>1,049.5</b>	<b>1,095.6</b>	<b>1,312.5</b>	<b>1,360.7</b>	<b>1,401.8</b>	<b>5.9%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.61. ITALY DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

**TABLE 192.** ITALY DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

Screen Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Below 32 inches	215.5	231.6	248.4	264.5	281.3	298.0	314.5	344.9	358.0	423.9	436.9	447.5	5.3%
Between 32 and 52 inches	285.7	309.3	333.8	357.9	383.2	408.8	434.4	483.1	505.0	606.4	629.4	649.2	6.0%
Above 52 inches	125.6	136.6	148.3	159.8	172.1	184.5	197.1	221.4	232.6	282.2	294.4	305.1	6.6%
Total	<b>626.7</b>	<b>677.5</b>	<b>730.5</b>	<b>782.3</b>	<b>836.6</b>	<b>891.4</b>	<b>945.9</b>	<b>1,049.5</b>	<b>1,095.6</b>	<b>1,312.5</b>	<b>1,360.7</b>	<b>1,401.8</b>	<b>5.9%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.81. REST OF EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 212.** REST OF EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	42.5	45.4	49.1	52.6	56.5	60.2	63.9	71.0	74.1	89.2	92.0	94.8	5.9%
Video wall	33.2	34.7	36.8	38.8	40.6	42.4	44.1	47.1	48.2	55.7	56.4	56.9	3.8%
Room displays	29.5	31.1	33.0	35.0	36.9	38.8	40.6	43.8	45.1	52.9	53.8	54.7	4.5%
Digital menus	46.9	49.8	53.5	57.3	61.0	64.8	68.4	75.3	78.3	93.4	95.9	98.4	5.4%
Building directory	28.1	29.4	31.1	33.0	34.2	35.7	37.1	39.4	40.3	46.5	47.0	47.4	3.7%
Standard digital signage displays	41.2	42.8	45.0	47.1	49.1	51.0	52.7	55.5	56.4	64.3	64.5	64.7	3.1%
Other applications	21.7	22.8	24.3	25.5	26.9	28.1	29.4	31.5	32.3	37.7	38.2	38.7	4.1%
<b>Total</b>	<b>242.9</b>	<b>256.0</b>	<b>272.9</b>	<b>289.2</b>	<b>305.2</b>	<b>321.0</b>	<b>336.2</b>	<b>363.5</b>	<b>374.7</b>	<b>439.7</b>	<b>447.8</b>	<b>455.6</b>	<b>4.6%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.82. REST OF EUROPE DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 213.** REST OF EUROPE DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	43.8	45.7	48.3	50.7	53.0	55.2	57.3	60.7	61.9	71.2	71.7	72.4	3.5%
Healthcare	23.6	25.0	26.7	28.4	30.1	31.8	33.4	36.4	37.6	44.4	45.2	46.5	4.9%
Government	5.1	5.3	5.6	5.9	6.2	6.4	6.6	7.0	7.2	8.2	8.1	8.2	3.2%
Education	27.9	29.5	31.7	33.7	35.8	37.9	39.9	43.6	45.2	53.6	55.1	56.0	5.1%
• Campus	8.0	8.4	8.9	9.4	9.8	10.3	10.7	11.4	11.7	13.5	13.7	13.8	3.8%
• Classroom	5.3	5.7	6.2	6.6	7.1	7.6	8.1	9.0	9.4	11.4	11.8	12.2	6.1%
• Library	3.3	3.5	3.8	4.0	4.2	4.5	4.7	5.1	5.2	6.2	6.4	6.4	4.8%
• Sports and Recreation	8.4	8.9	9.6	10.4	11.1	11.8	12.5	13.9	14.5	17.4	18.0	18.4	5.8%
• Others	2.9	3.0	3.2	3.4	3.6	3.8	3.9	4.2	4.4	5.1	5.2	5.2	4.3%
Venues	17.9	18.8	20.0	21.2	22.3	23.4	24.5	26.4	27.2	31.8	32.2	32.8	4.4%
Transportation	7.0	7.3	7.6	8.0	8.3	8.7	9.0	9.5	9.6	11.0	11.2	10.9	3.1%
Banking	20.9	22.3	24.1	25.9	27.7	29.5	31.3	34.8	36.3	43.7	45.2	46.5	5.9%
Retail	41.7	44.1	47.3	50.4	53.5	56.5	59.5	65.0	67.3	79.7	81.5	83.4	5.1%
Restaurants	31.4	33.2	35.4	37.5	39.6	41.7	43.7	47.4	48.9	57.5	58.7	59.7	4.6%
Hospitality	14.6	15.3	16.3	17.2	18.1	18.9	19.8	21.2	21.8	25.4	26.0	26.0	4.1%

Other industries	9.1	9.4	9.8	10.2	10.6	10.9	11.2	11.6	11.7	13.2	13.0	13.2	2.5%
Total	242.9	256.0	272.9	289.2	305.2	321.0	336.2	363.5	374.7	439.7	447.8	455.6	4.6%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## ASIA PACIFIC

### Digital Signage Hardware Market Regional Snapshot 2022 Asia-Pacific

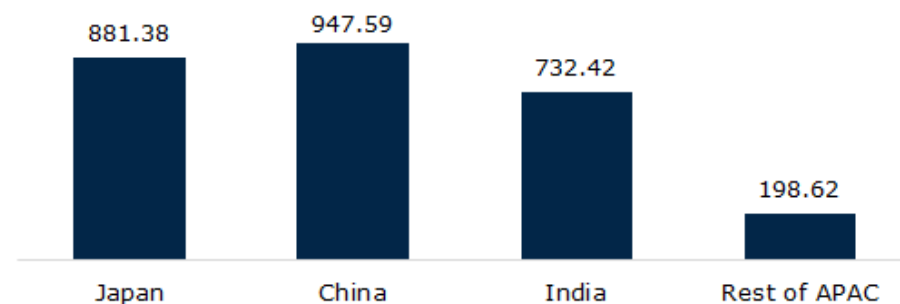


#### Digital Signage Hardware Market Opportunities in Asia-Pacific Countries

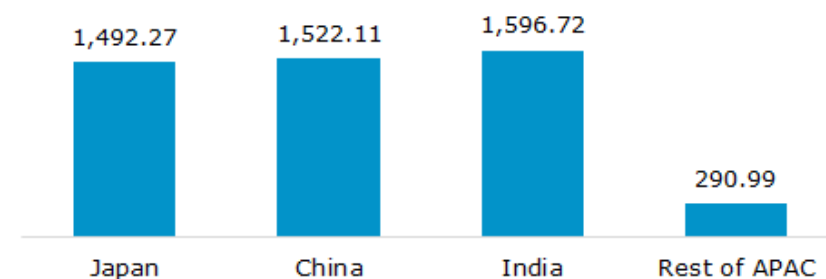
**Increasing demand from education and corporate settings** are major factors driving the market revenue growth

**Increasing awareness regarding tailoring content and improving the effectiveness of campaigns** is another key factor contributing to the market revenue growth

Asia-Pacific Digital Signage Hardware Market, 2022  
(\$Million)



Asia-Pacific Digital Signage Hardware Market, 2032  
(\$Million)



Asia Pacific includes China, India, South Korea, Japan, Asean Countries, Oceania, and Rest of APAC. Significant investments in managing digital experiences, while retaining the flexibility to adapt to local business conditions and audience preference in real time is a major factor driving the market revenue growth in this region. In addition, growing retail and hospitality sectors is a major factor contributing to the market revenue growth. The retail and hospitality industries in APAC are expanding, and businesses are adopting digital signage to enhance customer experiences, showcase products, and provide real-time information. Emerging economies in APAC, such as India, Indonesia, and Vietnam, are witnessing rapid economic growth. This growth has spurred demand for digital signage in various sectors, including retail, transportation, education, and entertainment.

ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, 2019-2032 (USD MILLION)

TABLE 214. ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	3,311.3	3,577.0	3,853.1	4,138.0	4,429.0	4,723.0	5,015.5	5,572.5	5,820.8	6,968.1	7,239.3	7,461.3	6.0%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 218.** ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	1,336.9	1,434.1	1,534.1	1,636.0	1,738.4	1,840.7	1,940.2	2,124.3	2,202.6	2,597.4	2,678.0	2,739.4	5.2%
• 640X480 pixels	410.4	438.2	466.6	495.2	523.7	551.9	579.0	627.9	648.0	756.6	776.4	790.4	4.7%
• 800X600 pixels	926.5	996.0	1,067.5	1,140.8	1,214.6	1,288.7	1,361.2	1,496.4	1,554.6	1,840.8	1,901.6	1,949.0	5.4%
High Definition	946.8	1,021.6	1,098.8	1,179.3	1,260.1	1,342.5	1,424.0	1,578.4	1,646.7	1,966.6	2,041.6	2,100.1	5.8%
• 1280X720 pixels (720p)	312.5	334.4	356.8	379.6	402.3	425.0	447.1	486.6	503.2	590.5	607.5	618.9	4.9%
• 1920X1080 pixels (1080p)	381.3	411.8	443.3	476.2	509.3	543.1	576.7	640.0	668.3	799.8	831.1	855.6	5.9%
• 2560X1440 pixels (1440p)	253.0	275.4	298.7	323.5	348.5	374.4	400.1	451.8	475.2	576.3	603.1	625.6	6.7%
4K Ultra High Definition (UHD)	667.3	730.2	796.2	865.5	939.1	1,013.1	1,088.8	1,238.7	1,308.9	1,603.1	1,683.7	1,754.6	7.2%
• 3840X2160 pixels (2160p)	667.3	730.2	796.2	865.5	939.1	1,013.1	1,088.8	1,238.7	1,308.9	1,603.1	1,683.7	1,754.6	7.2%
8K Ultra High Definition (UHD)	360.2	391.0	424.0	457.1	491.5	526.7	562.4	631.2	662.6	800.9	836.0	867.3	6.5%
• 7680X4320 pixels (4320p)	360.2	391.0	424.0	457.1	491.5	526.7	562.4	631.2	662.6	800.9	836.0	867.3	6.5%
Total	<b>3,311.3</b>	<b>3,577.0</b>	<b>3,853.1</b>	<b>4,138.0</b>	<b>4,429.0</b>	<b>4,723.0</b>	<b>5,015.5</b>	<b>5,572.5</b>	<b>5,820.8</b>	<b>6,968.1</b>	<b>7,239.3</b>	<b>7,461.3</b>	<b>6.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 219.** ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	627.1	666.7	706.7	746.6	785.9	823.9	860.0	922.2	945.9	1,090.7	1,111.6	1,123.4	4.1%
LED technology	597.6	641.0	685.4	729.8	776.0	820.9	865.0	946.7	981.1	1,156.0	1,190.8	1,218.6	5.1%
OLED technology	501.8	541.9	583.4	625.2	669.3	713.5	757.1	840.1	876.9	1,048.8	1,087.1	1,119.7	5.9%
Projection technology	437.2	474.1	512.4	552.5	593.2	634.7	676.4	755.8	792.1	955.3	994.9	1,028.1	6.3%
Holographic technology	374.3	409.6	447.3	486.3	527.5	569.8	612.7	698.7	738.8	905.0	952.2	995.2	7.3%
Quantum dot technology	339.6	373.6	409.8	447.3	487.7	529.3	571.6	656.5	696.9	859.8	908.7	949.8	7.7%
MicroLED technology	269.1	293.7	319.1	348.1	373.8	402.5	431.5	486.7	512.7	625.2	654.1	679.9	6.9%
Other technologies	164.6	176.3	189.0	202.1	215.6	228.3	241.2	265.9	276.5	327.4	340.0	346.6	5.4%
<b>Total</b>	<b>3,311.3</b>	<b>3,577.0</b>	<b>3,853.1</b>	<b>4,138.0</b>	<b>4,429.0</b>	<b>4,723.0</b>	<b>5,015.5</b>	<b>5,572.5</b>	<b>5,820.8</b>	<b>6,968.1</b>	<b>7,239.3</b>	<b>7,461.3</b>	<b>6.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 220.** ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	1,997.9	2,149.0	2,304.5	2,464.5	2,626.6	2,789.1	2,948.1	3,247.1	3,377.4	4,006.4	4,143.7	4,251.0	5.5%
• Retail digital signage	415.7	446.4	477.0	509.0	540.8	573.0	603.6	661.0	685.7	808.7	834.4	853.4	5.2%
• Corporate digital signage	443.6	472.1	499.8	528.4	556.0	583.4	608.6	653.3	670.8	774.6	790.6	799.7	4.1%
• Healthcare digital signage	332.1	357.3	383.2	410.2	437.4	464.9	491.6	542.1	564.3	670.6	694.1	712.2	5.6%
• Education digital signage	266.3	288.6	311.8	335.5	360.0	384.8	409.5	457.0	478.4	574.5	597.8	617.5	6.2%
• Hospitality digital signage	325.7	356.3	388.6	422.1	457.0	492.9	529.2	600.9	633.9	774.5	811.0	844.3	7.1%
• Others	214.5	228.3	244.1	259.2	275.2	290.2	305.5	332.8	344.3	403.5	415.7	423.8	4.9%
Outdoor	1,313.4	1,428.0	1,548.6	1,673.5	1,802.4	1,933.8	2,067.4	2,325.4	2,443.5	2,961.7	3,095.7	3,210.4	6.6%
• Transportation digital signage	223.3	244.7	267.4	291.2	316.0	341.7	368.1	420.2	444.8	547.1	576.1	601.7	7.4%
• Outdoor advertising digital signage	555.0	603.9	655.4	708.8	764.3	820.3	877.8	988.9	1,039.8	1,262.2	1,320.4	1,370.3	6.7%
• Sports and entertainment digital signage	424.5	460.1	497.2	535.5	574.7	614.5	654.6	731.3	766.0	921.6	959.7	991.9	6.3%
• Others	110.5	119.4	128.6	138.0	147.5	157.4	167.0	185.0	192.8	230.7	239.6	246.4	5.9%
<b>Total</b>	<b>3,311.3</b>	<b>3,577.0</b>	<b>3,853.1</b>	<b>4,138.0</b>	<b>4,429.0</b>	<b>4,723.0</b>	<b>5,015.5</b>	<b>5,572.5</b>	<b>5,820.8</b>	<b>6,968.1</b>	<b>7,239.3</b>	<b>7,461.3</b>	<b>6.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

## ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 221.** ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	580.0	635.7	693.6	755.8	819.0	885.7	953.2	1,086.4	1,149.1	1,410.9	1,482.5	1,547.4	7.3%
Video wall	451.0	484.2	518.5	553.2	588.4	622.7	657.1	720.1	746.5	882.2	909.9	932.5	5.3%
Room displays	402.8	434.5	467.4	501.6	536.2	571.8	606.5	672.9	702.8	839.1	871.2	895.9	5.9%
Digital menus	641.1	698.9	759.4	821.9	888.0	955.5	1,023.0	1,156.6	1,217.9	1,482.1	1,552.9	1,613.5	6.9%
Building directory	381.4	408.4	437.6	466.3	496.4	523.5	551.8	603.1	624.3	735.8	757.9	775.8	5.1%
Standard digital signage displays	560.7	598.0	637.0	674.8	713.1	751.3	787.4	852.4	879.1	1,023.3	1,048.6	1,064.4	4.6%
Other applications	294.2	317.1	339.6	364.4	388.0	412.4	436.5	481.0	501.1	594.7	616.3	631.7	5.6%
<b>Total</b>	<b>3,311.3</b>	<b>3,577.0</b>	<b>3,853.1</b>	<b>4,138.0</b>	<b>4,429.0</b>	<b>4,723.0</b>	<b>5,015.5</b>	<b>5,572.5</b>	<b>5,820.8</b>	<b>6,968.1</b>	<b>7,239.3</b>	<b>7,461.3</b>	<b>6.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 222.** ASIA PACIFIC DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	613.0	656.3	700.9	745.5	791.2	835.4	879.2	958.1	991.2	1,163.5	1,196.1	1,222.0	4.9%
Healthcare	319.1	345.9	374.2	402.9	433.2	463.0	493.6	551.8	578.3	696.8	725.6	751.8	6.3%
Government	72.0	77.0	82.2	87.0	92.6	97.5	102.6	111.4	115.1	134.6	138.1	141.2	4.8%
Education	373.3	405.7	439.2	474.8	510.6	548.1	585.0	657.7	690.9	836.2	874.3	904.5	6.6%
• Campus	111.5	119.9	128.4	137.4	146.2	155.2	163.8	180.2	187.1	221.3	228.6	233.8	5.4%
• Classroom	68.4	75.1	82.2	89.8	97.6	105.8	114.1	130.9	138.9	171.4	181.0	189.0	7.6%
• Library	45.0	48.8	52.7	56.8	60.9	65.2	69.4	77.6	81.3	97.8	101.9	105.2	6.3%
• Sports and Recreation	108.8	119.1	129.9	141.5	153.3	165.9	178.3	203.3	215.0	264.0	278.1	289.6	7.3%
• Others	39.6	42.7	45.9	49.3	52.6	56.1	59.4	65.8	68.5	81.7	84.7	86.9	5.7%
Venues	244.6	263.9	283.4	304.6	324.6	346.3	366.8	406.8	424.3	506.5	526.2	539.5	5.8%
Transportation	98.1	104.8	111.3	118.5	124.9	132.1	138.3	150.4	155.2	181.1	186.5	188.3	4.7%
Banking	272.8	299.0	326.6	356.2	386.1	417.6	449.5	513.0	542.9	666.9	701.7	731.7	7.4%
Retail	559.6	607.6	657.6	710.5	763.5	819.0	873.7	981.0	1,029.8	1,245.2	1,300.9	1,345.3	6.5%
Restaurants	427.6	462.3	498.8	535.4	574.5	612.4	651.4	724.5	757.4	908.0	943.4	975.1	6.1%
Hospitality	201.2	216.5	232.5	248.4	265.3	281.7	298.2	328.7	342.1	406.3	420.4	432.2	5.6%

### 8.1.1.88. CHINA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 228. CHINA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)**

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	477.4	508.2	538.9	571.3	601.6	631.8	660.7	711.5	732.1	848.0	866.8	878.3	4.3%
• Retail digital signage	99.8	106.2	112.2	118.8	124.5	130.4	136.0	145.7	149.5	172.2	175.6	177.4	4.0%
• Corporate digital signage	107.9	113.8	119.2	125.1	129.9	134.9	139.3	146.4	148.8	168.0	169.5	169.5	3.0%
• Healthcare digital signage	79.2	84.4	89.3	94.8	99.9	104.9	109.8	118.4	121.9	141.4	144.7	146.7	4.4%
• Education digital signage	63.0	67.6	72.3	77.1	81.8	86.5	91.0	99.3	102.8	120.6	124.0	126.5	5.0%
• Hospitality digital signage	75.9	82.3	88.7	95.4	102.3	109.1	115.8	128.5	134.2	160.0	165.8	170.4	5.8%
• Others	51.6	53.9	57.2	60.0	63.2	66.0	68.6	73.1	74.8	85.7	87.2	87.8	3.7%
Outdoor	304.5	327.6	351.9	376.3	400.5	425.1	449.3	494.2	512.9	607.9	628.0	643.9	5.4%
• Transportation digital signage	51.7	56.0	60.6	65.4	70.1	75.0	79.8	89.1	93.2	112.1	116.6	120.4	6.2%
• Outdoor advertising digital signage	128.7	138.6	149.0	159.4	169.8	180.4	190.8	210.2	218.3	259.2	267.9	274.9	5.5%
• Sports and entertainment digital signage	98.5	105.6	113.0	120.5	127.8	135.1	142.3	155.5	160.8	189.2	194.7	199.0	5.0%
• Others	25.6	27.4	29.2	31.1	32.8	34.6	36.3	39.4	40.6	47.5	48.7	49.6	4.7%
<b>Total</b>	<b>781.9</b>	<b>835.8</b>	<b>890.8</b>	<b>947.6</b>	<b>1,002.1</b>	<b>1,056.9</b>	<b>1,110.0</b>	<b>1,205.7</b>	<b>1,245.0</b>	<b>1,455.9</b>	<b>1,494.7</b>	<b>1,522.1</b>	<b>4.8%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.90. CHINA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 230. CHINA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)**

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	142.3	150.7	159.5	167.7	175.7	183.5	190.9	203.4	207.9	238.3	242.1	244.0	3.7%
Healthcare	75.8	81.4	87.3	92.9	98.5	104.3	109.9	120.2	124.5	146.6	151.0	154.2	5.1%
Government	16.7	17.6	18.7	19.6	20.5	21.4	22.2	23.6	24.1	27.5	27.9	28.1	3.6%
Education	89.1	95.8	102.4	109.9	116.9	124.0	131.0	143.9	149.4	176.7	182.4	186.7	5.3%
• Campus	26.6	28.3	30.0	31.8	33.5	35.1	36.7	39.4	40.5	46.8	47.7	48.3	4.1%
• Classroom	16.3	17.7	19.2	20.8	22.3	23.9	25.5	28.6	30.0	36.2	37.7	39.0	6.4%
• Library	10.8	11.5	12.3	13.2	14.0	14.8	15.5	17.0	17.6	20.7	21.3	21.7	5.0%
• Sports and Recreation	26.0	28.1	30.3	32.7	35.1	37.5	39.9	44.5	46.5	55.8	58.0	59.8	6.1%
• Others	9.5	10.1	10.7	11.4	12.1	12.7	13.3	14.4	14.8	17.3	17.7	17.9	4.5%
Venues	57.6	61.5	65.0	69.5	73.4	77.3	81.0	87.7	90.5	105.5	108.1	109.9	4.6%
Transportation	22.7	24.0	24.9	26.5	27.7	28.9	30.0	31.7	32.4	36.9	37.4	37.5	3.4%
Banking	66.2	71.8	77.5	83.7	89.7	95.9	102.1	113.9	119.1	142.8	148.5	153.1	6.1%
Retail	133.4	143.4	153.2	164.2	174.6	185.1	195.4	214.3	222.4	262.7	271.0	277.4	5.3%
Restaurants	101.1	108.2	115.8	122.9	130.0	137.3	144.3	157.0	162.3	190.1	195.3	199.1	4.8%
Hospitality	47.2	50.2	53.4	56.5	59.6	62.6	65.5	70.6	72.6	84.3	86.2	87.4	4.4%

Other industries	29.7	31.2	33.0	34.1	35.4	36.6	37.7	39.4	39.8	44.6	44.8	44.6	2.6%
Total	781.9	835.8	890.8	947.6	1,002.1	1,056.9	1,110.0	1,205.7	1,245.0	1,455.9	1,494.7	1,522.1	4.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

INDIA

Integration of social media platforms and increasing focus on data-driven marketing strategies are major factors driving the market revenue growth in India. In addition, increasing demand from education and entertainment industries are major factors contributing to the market revenue growth. Digital signage is playing a key role in entertainment venues, stadiums, and events by providing event information, schedules, interactive experiences, and advertisements. Educational institutions are adopting digital signage for announcements, event promotions, wayfinding, and interactive learning experiences, transforming how students engage with information. India's growing focus on sustainability is driving the adoption of energy-efficient displays and eco-friendly materials for digital signage installations. Overall, the transforming landscape of digital signage in India reflects the country's rapid technological progress and the increasing integration of digital solutions into various aspects of daily life. As businesses and organizations continue to adopt and innovate with digital signage, the landscape is expected to evolve further to meet the changing demands of Indian consumers and the broader market.



8.1.1.91. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, 2019-2032 (USD MILLION)

TABLE 231. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	550.2	607.5	668.6	732.4	801.1	871.6	944.1	1,090.0	1,160.0	1,439.9	1,522.6	1,596.7	8.0%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.92. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)

**TABLE 232. INDIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)**

Product Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Displays	246.5	269.9	294.2	320.1	347.1	374.5	402.2	456.3	481.4	587.0	615.1	639.2	7.0%
Media Players	172.0	192.0	213.9	236.6	261.5	287.5	314.4	370.8	398.6	504.8	539.0	570.7	9.1%
Others	131.7	145.5	160.5	175.8	192.4	209.6	227.5	262.8	279.9	348.1	368.5	386.8	8.1%
<b>Total</b>	<b>550.2</b>	<b>607.5</b>	<b>668.6</b>	<b>732.4</b>	<b>801.1</b>	<b>871.6</b>	<b>944.1</b>	<b>1,090.0</b>	<b>1,160.0</b>	<b>1,439.9</b>	<b>1,522.6</b>	<b>1,596.7</b>	<b>8.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.93. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

**TABLE 233.** INDIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

Screen Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Below 32 inches	199.5	219.2	239.9	261.5	284.5	307.7	331.7	378.8	401.0	492.4	517.7	539.7	7.4%
Between 32 and 52 inches	247.8	273.9	301.8	331.1	362.5	394.9	428.3	495.7	528.2	656.6	695.8	731.3	8.1%
Above 52 inches	102.9	114.4	126.8	139.9	154.1	169.1	184.1	215.5	230.8	290.9	309.1	325.7	8.7%
Total	<b>550.2</b>	<b>607.5</b>	<b>668.6</b>	<b>732.4</b>	<b>801.1</b>	<b>871.6</b>	<b>944.1</b>	<b>1,090.0</b>	<b>1,160.0</b>	<b>1,439.9</b>	<b>1,522.6</b>	<b>1,596.7</b>	<b>8.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.94. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 234. INDIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)**

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	225.6	247.4	270.3	294.0	319.3	345.2	370.8	421.8	445.6	544.8	571.0	594.9	7.2%
• 640X480 pixels	69.3	75.6	82.2	89.0	96.3	103.6	110.8	124.8	131.2	158.9	165.8	171.9	6.7%
• 800X600 pixels	156.4	171.8	188.1	205.0	223.0	241.6	260.1	297.0	314.3	385.8	405.2	423.0	7.4%
High Definition	157.7	173.9	191.2	209.2	228.6	248.4	268.8	309.6	329.0	407.5	430.9	450.8	7.8%
• 1280X720 pixels (720p)	52.2	56.9	61.9	67.0	72.5	77.9	83.3	93.9	98.6	119.3	124.7	128.9	6.6%
• 1920X1080 pixels (1080p)	63.9	70.4	77.4	84.7	92.6	100.6	108.8	125.4	133.3	165.0	174.5	182.6	7.8%
• 2560X1440 pixels (1440p)	41.7	46.6	51.8	57.5	63.5	69.9	76.6	90.3	97.1	123.1	131.7	139.3	9.1%
4K Ultra High Definition (UHD)	107.7	120.5	134.4	149.2	165.3	182.2	199.8	236.5	254.8	324.0	347.1	367.8	9.3%
• 3840X2160 pixels (2160p)	107.7	120.5	134.4	149.2	165.3	182.2	199.8	236.5	254.8	324.0	347.1	367.8	9.3%
8K Ultra High Definition (UHD)	59.2	65.7	72.7	80.0	87.9	95.9	104.7	122.1	130.6	163.7	173.6	183.3	8.5%
• 7680X4320 pixels (4320p)	59.2	65.7	72.7	80.0	87.9	95.9	104.7	122.1	130.6	163.7	173.6	183.3	8.5%
Total	550.2	607.5	668.6	732.4	801.1	871.6	944.1	1,090.0	1,160.0	1,439.9	1,522.6	1,596.7	8.0%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.95. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 235. INDIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)**

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	103.4	112.4	121.7	131.1	141.0	150.8	160.5	178.8	186.8	223.2	231.4	237.9	6.0%
LED technology	99.0	108.5	118.6	128.9	139.9	150.8	162.4	184.6	194.9	238.1	249.7	260.3	7.1%
OLED technology	83.4	92.1	101.3	110.6	121.1	131.6	142.6	164.3	175.2	216.6	228.4	239.5	7.9%
Projection technology	72.8	80.7	89.1	98.1	107.4	117.7	127.5	148.1	157.8	197.6	210.1	220.3	8.3%
Holographic technology	62.5	70.0	78.1	86.4	96.0	105.5	116.1	137.5	148.5	188.3	201.0	215.6	9.4%
Quantum dot technology	57.0	64.1	71.8	79.8	89.1	98.5	108.6	129.5	140.4	179.2	191.8	204.4	9.7%
MicroLED technology	44.7	49.9	55.4	61.5	67.6	75.0	81.2	95.4	102.1	129.4	138.6	145.3	8.9%
Other technologies	27.1	29.8	32.7	35.9	38.8	41.8	45.3	51.8	54.5	67.5	71.6	73.4	7.3%
<b>Total</b>	<b>550.2</b>	<b>607.5</b>	<b>668.6</b>	<b>732.4</b>	<b>801.1</b>	<b>871.6</b>	<b>944.1</b>	<b>1,090.0</b>	<b>1,160.0</b>	<b>1,439.9</b>	<b>1,522.6</b>	<b>1,596.7</b>	<b>8.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.96. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 236. INDIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)**

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	328.9	361.6	396.2	432.2	470.7	509.9	549.5	629.3	666.7	820.2	863.5	901.4	7.5%
• Retail digital signage	67.4	74.0	80.9	88.0	95.5	103.2	110.9	126.3	133.5	163.3	171.4	178.5	7.2%
• Corporate digital signage	69.1	75.1	81.3	87.5	94.1	100.7	107.1	119.4	124.8	149.4	155.0	159.6	6.0%
• Healthcare digital signage	54.9	60.3	66.1	72.1	78.6	85.2	91.9	105.4	111.7	137.6	145.0	151.4	7.6%
• Education digital signage	45.1	50.0	55.2	60.6	66.4	72.4	78.5	91.0	97.0	120.8	127.9	134.3	8.1%
• Hospitality digital signage	57.6	64.4	71.6	79.2	87.5	96.2	105.1	123.8	132.9	167.9	179.0	189.3	8.9%
• Others	34.9	37.8	41.3	44.8	48.5	52.2	56.0	63.4	66.8	81.3	85.1	88.3	6.9%
Outdoor	221.3	245.9	272.3	300.2	330.4	361.7	394.6	460.7	493.2	619.6	659.1	695.3	8.6%
• Transportation digital signage	38.1	42.6	47.6	52.8	58.6	64.6	71.0	84.2	90.8	115.7	123.9	131.6	9.4%
• Outdoor advertising digital signage	93.6	104.1	115.4	127.3	140.2	153.6	167.7	196.1	210.1	264.4	281.4	297.1	8.7%
• Sports and entertainment digital signage	71.2	78.8	87.0	95.6	104.8	114.3	124.3	144.1	153.9	191.7	203.0	213.6	8.2%
• Others	18.4	20.4	22.4	24.5	26.8	29.1	31.6	36.3	38.5	47.8	50.8	52.9	7.9%
<b>Total</b>	<b>550.2</b>	<b>607.5</b>	<b>668.6</b>	<b>732.4</b>	<b>801.1</b>	<b>871.6</b>	<b>944.1</b>	<b>1,090.0</b>	<b>1,160.0</b>	<b>1,439.9</b>	<b>1,522.6</b>	<b>1,596.7</b>	<b>8.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.97. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 237. INDIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)**

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	93.3	104.6	116.8	129.8	144.2	158.9	174.7	207.1	223.4	285.1	304.5	324.1	9.4%
Video wall	76.0	83.4	91.1	99.2	108.1	116.5	125.6	142.8	150.9	184.3	193.4	202.8	7.2%
Room displays	67.1	74.0	81.3	89.0	96.9	105.8	114.2	131.9	140.2	174.2	184.2	191.6	7.9%
Digital menus	104.4	116.4	129.3	142.9	157.8	173.2	188.8	222.4	238.7	300.9	321.3	340.1	8.9%
Building directory	64.4	70.6	77.1	83.8	91.3	98.2	105.7	119.9	126.6	154.1	161.4	169.3	7.1%
Standard digital signage displays	95.7	104.4	113.4	122.7	132.2	142.4	152.0	171.1	179.7	217.4	226.9	233.1	6.5%
Other applications	49.3	54.3	59.5	64.9	70.5	76.7	83.1	94.8	100.5	123.8	130.9	135.7	7.5%
<b>Total</b>	<b>550.2</b>	<b>607.5</b>	<b>668.6</b>	<b>732.4</b>	<b>801.1</b>	<b>871.6</b>	<b>944.1</b>	<b>1,090.0</b>	<b>1,160.0</b>	<b>1,439.9</b>	<b>1,522.6</b>	<b>1,596.7</b>	<b>8.0%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.98. INDIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 238.** INDIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	103.8	113.6	123.9	134.5	145.8	157.2	169.0	191.1	201.4	245.3	256.8	266.7	6.9%
Healthcare	52.6	58.3	64.4	70.8	77.7	84.8	92.5	107.2	114.4	143.0	151.8	159.7	8.3%
Government	12.2	13.4	14.6	15.8	17.1	18.4	19.8	22.3	23.5	28.5	29.8	30.9	6.8%
Education	61.3	68.0	75.3	83.0	91.3	99.9	108.6	127.2	136.1	170.9	181.7	191.6	8.6%
• Campus	18.5	20.3	22.3	24.3	26.5	28.6	30.7	35.2	37.3	45.8	48.1	50.1	7.3%
• Classroom	11.1	12.5	13.9	15.5	17.3	19.1	21.0	25.1	27.1	34.7	37.2	39.7	9.7%
• Library	7.4	8.2	9.1	10.0	11.0	11.9	12.9	15.0	16.1	20.0	21.3	22.4	8.2%
• Sports and Recreation	17.7	19.8	22.1	24.6	27.2	30.1	32.9	39.0	42.1	53.6	57.4	60.9	9.4%
• Others	6.6	7.2	7.9	8.6	9.4	10.3	11.1	12.8	13.6	16.8	17.7	18.6	7.8%
Venues	40.8	45.0	49.4	54.0	59.0	64.1	68.9	79.8	84.8	105.0	110.8	116.0	7.8%
Transportation	16.7	18.2	19.8	21.5	23.2	25.0	26.4	30.2	31.7	38.4	40.1	41.5	6.7%
Banking	43.9	49.2	55.0	61.1	67.8	74.9	82.1	97.6	105.3	134.2	143.8	152.8	9.4%
Retail	91.9	102.1	112.9	124.3	136.7	149.5	162.4	189.9	203.1	254.7	270.7	285.3	8.5%
Restaurants	70.9	78.4	86.3	94.6	103.6	112.8	122.7	141.5	150.7	187.3	198.3	208.1	8.1%
Hospitality	33.7	37.1	40.6	44.4	48.3	52.4	56.6	64.8	68.7	84.6	89.2	93.1	7.6%



Other industries	22.4	24.3	26.3	28.3	30.4	32.5	34.9	38.5	40.2	48.0	49.7	51.1	5.9%
Total	550.2	607.5	668.6	732.4	801.1	871.6	944.1	1,090.0	1,160.0	1,439.9	1,522.6	1,596.7	8.0%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## **SOUTH KOREA**

Increasing demand from transportation and entertainment industries are major factors driving the market revenue growth in South Korea. End-use industries are significantly investing in flexible video wall configurations and hardware for disseminating public information, such as weather forecasts, emergency alerts, and news updates among others. In office buildings and corporate campuses, digital signage is used to display internal communications, company announcements, and meeting schedules. They are also utilized for employee training and development activities. South Korea is a major hub for semiconductor manufacturers due to significant investments in research & development activities, rising government support, and strategic vision. The country places a strong emphasis on research and development, leading to the creation of advanced technologies and manufacturing processes. Universities and market companies collaborate with industry leaders to foster innovation. For instance, on 28 February 2023, SK Hynix, a semiconductor manufacturer based in Seoul, South Korea, has rolled out a digital signage transformation in partnership with Daktronics and Kinoton Korea Incorporated.

8.1.1.99. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, 2019-2032 (USD MILLION)

TABLE 239. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECASTS, 2019-2032, (USD MILLION)

Market Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Revenue (USD MILLION)	695.3	750.0	806.7	864.8	924.6	984.5	1,043.9	1,156.5	1,206.2	1,439.7	1,493.5	1,537.0	5.8%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.100. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)

**TABLE 240.** SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2019-2032 (USD MILLION)

Product Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Displays	309.2	330.7	352.8	375.0	397.6	419.7	441.2	480.3	496.6	582.1	598.4	610.2	4.9%
Media Players	219.9	239.7	260.7	282.4	305.1	328.3	351.7	397.6	418.8	509.8	534.0	554.9	6.9%
Others	166.2	179.5	193.2	207.4	221.9	236.5	251.0	278.6	290.8	347.8	361.1	372.0	5.9%
<b>Total</b>	<b>695.3</b>	<b>750.0</b>	<b>806.7</b>	<b>864.8</b>	<b>924.6</b>	<b>984.5</b>	<b>1,043.9</b>	<b>1,156.5</b>	<b>1,206.2</b>	<b>1,439.7</b>	<b>1,493.5</b>	<b>1,537.0</b>	<b>5.8%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.101. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)

**TABLE 241. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN SIZE, 2019-2032 (USD MILLION)**

Screen Size	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Below 32 inches	252.2	270.6	289.5	308.7	328.3	347.5	366.8	401.9	416.9	492.4	507.8	519.5	5.2%
Between 32 and 52 inches	313.1	338.2	364.2	390.9	418.4	446.0	473.6	525.9	549.2	656.5	682.5	704.0	6.0%
Above 52 inches	130.0	141.2	153.0	165.2	177.8	191.0	203.6	228.6	240.0	290.8	303.2	313.6	6.5%
Total	<b>695.3</b>	<b>750.0</b>	<b>806.7</b>	<b>864.8</b>	<b>924.6</b>	<b>984.5</b>	<b>1,043.9</b>	<b>1,156.5</b>	<b>1,206.2</b>	<b>1,439.7</b>	<b>1,493.5</b>	<b>1,537.0</b>	<b>5.8%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.102. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 242. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)**

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	283.1	303.2	323.8	344.7	365.8	386.7	407.0	444.2	459.8	540.5	556.4	568.2	5.0%
• 640X480 pixels	86.1	91.8	97.6	103.4	109.2	114.8	120.3	130.0	133.9	155.7	159.6	162.2	4.5%
• 800X600 pixels	197.0	211.4	226.3	241.3	256.6	271.8	286.7	314.2	325.9	384.9	396.8	406.0	5.2%
High Definition	199.1	214.5	230.4	246.8	263.5	280.2	296.8	328.0	341.8	407.0	421.7	433.4	5.7%
• 1280X720 pixels (720p)	66.6	71.2	75.9	80.6	85.4	90.1	94.7	103.0	106.3	124.7	128.1	130.6	4.8%
• 1920X1080 pixels (1080p)	79.9	86.2	92.7	99.4	106.2	113.1	119.9	132.9	138.4	165.4	171.5	176.5	5.8%
• 2560X1440 pixels (1440p)	52.6	57.1	61.8	66.7	71.8	77.0	82.2	92.2	97.1	116.9	122.0	126.4	6.5%
4K Ultra High Definition (UHD)	137.9	150.7	164.3	178.4	193.2	208.4	223.7	254.0	268.2	327.8	344.0	358.1	7.1%
• 3840X2160 pixels (2160p)	137.9	150.7	164.3	178.4	193.2	208.4	223.7	254.0	268.2	327.8	344.0	358.1	7.1%
8K Ultra High Definition (UHD)	75.2	81.5	88.1	94.9	102.0	109.2	116.3	130.2	136.4	164.4	171.4	177.3	6.3%
• 7680X4320 pixels (4320p)	75.2	81.5	88.1	94.9	102.0	109.2	116.3	130.2	136.4	164.4	171.4	177.3	6.3%
Total	<b>695.3</b>	<b>750.0</b>	<b>806.7</b>	<b>864.8</b>	<b>924.6</b>	<b>984.5</b>	<b>1,043.9</b>	<b>1,156.5</b>	<b>1,206.2</b>	<b>1,439.7</b>	<b>1,493.5</b>	<b>1,537.0</b>	<b>5.8%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.103. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 243.** SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	134.9	143.2	151.7	160.0	168.3	176.2	183.7	196.6	201.4	231.8	236.0	238.2	3.9%
LED technology	126.5	135.7	144.9	153.9	163.6	172.9	182.0	198.5	205.5	241.4	248.4	253.6	5.0%
OLED technology	105.0	113.5	122.0	130.6	139.6	148.5	157.4	174.1	181.5	216.3	224.2	230.6	5.7%
Projection technology	91.1	98.7	106.6	115.0	123.0	131.4	139.8	155.9	163.1	196.0	203.9	210.6	6.2%
Holographic technology	77.2	84.2	91.9	99.5	108.2	116.7	125.4	142.5	150.5	184.1	193.3	201.4	7.1%
Quantum dot technology	68.8	75.7	83.1	90.8	98.9	107.3	115.9	133.0	141.1	174.2	183.7	192.1	7.7%
MicroLED technology	56.3	61.5	66.7	72.6	77.7	83.4	89.1	100.2	105.3	127.7	133.4	138.3	6.6%
Other technologies	35.5	37.2	39.9	42.4	45.3	48.0	50.7	55.6	57.8	68.3	70.5	72.2	5.3%
<b>Total</b>	<b>695.3</b>	<b>750.0</b>	<b>806.7</b>	<b>864.8</b>	<b>924.6</b>	<b>984.5</b>	<b>1,043.9</b>	<b>1,156.5</b>	<b>1,206.2</b>	<b>1,439.7</b>	<b>1,493.5</b>	<b>1,537.0</b>	<b>5.8%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.104. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 244.** SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	419.2	450.2	482.2	514.6	548.0	580.9	613.4	673.6	699.5	827.5	854.6	875.6	5.3%
• Retail digital signage	86.9	93.1	99.4	105.8	112.4	119.1	125.1	136.7	141.5	166.3	171.8	175.2	5.1%
• Corporate digital signage	91.5	97.1	102.8	108.4	114.0	119.7	124.5	133.3	136.6	157.2	160.7	162.1	4.0%
• Healthcare digital signage	69.7	74.9	80.3	85.8	91.4	97.0	102.4	112.6	117.0	139.0	143.6	146.9	5.4%
• Education digital signage	56.4	61.0	65.8	70.7	75.7	80.8	85.9	95.5	99.8	119.2	123.9	128.0	6.0%
• Hospitality digital signage	70.0	76.4	83.1	90.1	97.4	104.6	112.2	126.9	133.6	163.0	169.2	176.6	6.8%
• Others	44.6	47.6	50.7	53.9	57.0	59.8	63.2	68.6	70.9	82.7	85.5	86.8	4.8%
Outdoor	276.1	299.7	324.5	350.3	376.6	403.5	430.6	482.9	506.7	612.2	638.9	661.4	6.5%
• Transportation digital signage	47.5	52.0	56.7	61.6	66.7	72.1	77.5	88.2	93.2	114.3	120.1	125.2	7.3%
• Outdoor advertising digital signage	116.8	126.9	137.5	148.5	160.1	171.4	183.0	205.5	215.9	261.2	272.8	282.7	6.5%
• Sports and entertainment digital signage	88.8	96.1	103.7	111.5	119.4	127.6	135.6	151.0	158.1	189.4	197.0	203.2	6.1%
• Others	23.0	24.8	26.7	28.6	30.5	32.5	34.4	38.1	39.5	47.3	49.0	50.3	5.7%
<b>Total</b>	<b>29.9</b>	<b>53.6</b>	<b>96.1</b>	<b>172.3</b>	<b>308.6</b>	<b>552.7</b>	<b>989.2</b>	<b>3,163.3</b>	<b>5,651.9</b>	<b>18,012.5</b>	<b>32,129.0</b>	<b>57,276.0</b>	<b>78.7%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.105. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 245. SOUTH KOREA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)**

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	123.2	134.8	147.1	160.0	172.9	187.1	201.0	228.6	241.5	295.6	310.5	323.5	7.2%
Video wall	94.2	100.9	107.8	115.0	122.0	129.0	135.8	148.4	153.7	180.9	186.4	190.4	5.1%
Room displays	84.5	91.1	97.9	104.6	111.9	119.1	126.2	139.5	145.4	173.2	179.6	184.6	5.7%
Digital menus	135.7	147.7	160.3	173.0	186.8	200.8	214.8	242.1	254.6	309.1	323.3	335.4	6.7%
Building directory	79.6	85.2	90.9	96.9	102.6	108.3	113.9	124.1	128.4	150.7	155.0	158.1	4.9%
Standard digital signage displays	116.5	124.1	131.8	139.2	147.0	154.6	161.7	174.2	179.2	207.8	212.4	215.4	4.3%
Other applications	61.6	66.2	71.0	76.1	81.4	85.6	90.5	99.5	103.3	122.4	126.5	129.6	5.3%
<b>Total</b>	<b>695.3</b>	<b>750.0</b>	<b>806.7</b>	<b>864.8</b>	<b>924.6</b>	<b>984.5</b>	<b>1,043.9</b>	<b>1,156.5</b>	<b>1,206.2</b>	<b>1,439.7</b>	<b>1,493.5</b>	<b>1,537.0</b>	<b>5.8%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.118. ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 258. ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)**

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	73.1	79.5	86.1	93.3	100.0	107.2	114.4	128.3	134.6	162.6	169.3	175.1	6.4%
• 640X480 pixels	22.4	24.3	26.2	28.3	30.2	32.2	34.2	38.0	39.6	47.4	49.2	50.6	5.9%
• 800X600 pixels	50.7	55.2	59.9	65.1	69.9	75.0	80.2	90.3	94.9	115.2	120.2	124.5	6.6%
High Definition	51.7	56.5	61.6	67.2	72.5	78.2	84.0	95.3	100.7	122.9	129.2	134.5	7.1%
• 1280X720 pixels (720p)	17.3	18.8	20.3	22.0	23.5	25.2	26.8	29.9	31.4	37.7	39.2	40.5	6.2%
• 1920X1080 pixels (1080p)	20.8	22.7	24.8	27.1	29.2	31.6	33.9	38.6	40.8	49.9	52.5	54.8	7.2%
• 2560X1440 pixels (1440p)	13.7	15.1	16.5	18.2	19.8	21.4	23.2	26.8	28.5	35.3	37.4	39.2	7.9%
4K Ultra High Definition (UHD)	36.3	40.3	44.6	49.3	53.9	58.9	64.2	74.8	80.0	100.3	106.7	112.5	8.5%
• 3840X2160 pixels (2160p)	36.3	40.3	44.6	49.3	53.9	58.9	64.2	74.8	80.0	100.3	106.7	112.5	8.5%
8K Ultra High Definition (UHD)	19.7	21.6	23.7	26.0	28.2	30.6	33.1	38.1	40.4	50.1	52.8	55.3	7.8%
• 7680X4320 pixels (4320p)	19.7	21.6	23.7	26.0	28.2	30.6	33.1	38.1	40.4	50.1	52.8	55.3	7.8%
Total	180.8	197.9	216.0	235.9	254.7	275.0	295.6	336.5	355.7	435.9	458.1	477.5	7.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.119. ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 259. ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)**

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	36.7	39.6	42.5	45.8	48.6	51.7	54.7	60.2	62.6	74.1	76.5	78.3	5.4%
LED technology	33.8	36.6	39.7	42.9	46.1	49.4	52.7	59.0	61.8	74.5	77.6	80.2	6.4%
OLED technology	27.6	30.1	32.9	35.9	38.7	41.8	44.9	51.0	53.9	65.9	69.2	72.1	7.2%
Projection technology	23.5	25.9	28.3	31.1	33.6	36.4	39.3	45.0	47.7	58.9	62.1	64.9	7.6%
Holographic technology	19.1	21.2	23.5	25.9	28.5	31.2	34.0	39.8	42.6	53.6	57.0	60.2	8.6%
Quantum dot technology	16.8	18.8	21.0	23.4	25.7	28.3	31.0	36.7	39.5	50.1	53.6	56.8	9.2%
MicroLED technology	14.1	15.6	17.2	19.1	20.6	22.5	24.4	28.3	30.2	37.7	40.0	42.0	8.2%
Other technologies	9.2	10.1	10.9	11.8	12.7	13.7	14.7	16.5	17.4	21.1	22.1	22.9	6.7%
<b>Total</b>	<b>180.8</b>	<b>197.9</b>	<b>216.0</b>	<b>235.9</b>	<b>254.7</b>	<b>275.0</b>	<b>295.6</b>	<b>336.5</b>	<b>355.7</b>	<b>435.9</b>	<b>458.1</b>	<b>477.5</b>	<b>7.2%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.120. ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

**TABLE 260.** ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY LOCATION, 2019-2032 (USD MILLION)

Location	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Indoor	109.0	118.8	129.1	140.4	150.9	162.3	173.7	196.0	206.3	250.5	262.1	272.0	6.8%
• Retail digital signage	22.7	24.6	26.7	28.9	31.1	33.3	35.5	39.8	41.9	50.6	52.7	54.6	6.5%
• Corporate digital signage	24.1	25.9	27.9	29.9	31.8	33.8	35.7	39.2	40.8	48.4	49.8	51.1	5.4%
• Healthcare digital signage	18.1	19.8	21.5	23.4	25.2	27.1	29.0	32.7	34.5	41.8	44.0	45.6	6.8%
• Education digital signage	14.6	16.0	17.5	19.1	20.7	22.4	24.2	27.6	29.2	36.1	37.7	39.5	7.5%
• Hospitality digital signage	17.9	19.8	21.9	24.3	26.3	28.8	31.3	36.7	38.8	48.6	51.6	54.1	8.4%
• Others	11.7	12.6	13.7	14.7	15.8	16.9	18.0	20.0	21.0	25.1	26.2	27.1	6.1%
Outdoor	71.8	79.1	86.9	95.5	103.7	112.7	121.9	140.5	149.4	185.4	196.0	205.5	7.9%
• Transportation digital signage	12.1	13.4	14.8	16.4	18.0	19.7	21.5	25.1	26.9	33.9	36.1	38.1	8.7%
• Outdoor advertising digital signage	30.3	33.4	36.7	40.4	43.9	47.8	51.7	59.7	63.5	78.9	83.5	87.6	8.0%
• Sports and entertainment digital signage	23.3	25.6	28.0	30.7	33.3	36.0	38.8	44.4	47.1	58.0	61.1	63.8	7.5%
• Others	6.1	6.7	7.3	8.0	8.6	9.3	10.0	11.3	12.0	14.6	15.4	16.0	7.1%
Total	<b>180.8</b>	<b>197.9</b>	<b>216.0</b>	<b>235.9</b>	<b>254.7</b>	<b>275.0</b>	<b>295.6</b>	<b>336.5</b>	<b>355.7</b>	<b>435.9</b>	<b>458.1</b>	<b>477.5</b>	<b>7.2%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.121. ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

**TABLE 261.** ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY APPLICATION, 2019-2032 (USD MILLION)

Application	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Wayfinding	31.6	35.0	38.8	43.0	47.1	51.4	56.2	65.6	70.4	88.5	93.9	99.3	8.6%
Video wall	24.7	26.7	29.1	31.5	33.8	36.3	38.7	43.4	45.5	55.4	57.7	59.6	6.5%
Room displays	22.0	24.1	26.2	28.6	30.9	33.3	35.8	40.7	43.0	52.3	55.0	57.4	7.1%
Digital menus	35.0	38.6	42.5	46.9	51.0	55.5	60.3	70.0	74.3	92.8	98.5	103.4	8.2%
Building directory	20.9	22.6	24.5	26.6	28.5	30.5	32.5	36.3	38.1	46.2	48.1	49.6	6.4%
Standard digital signage displays	30.7	33.3	35.7	38.5	41.1	43.7	46.4	51.5	53.7	63.6	66.0	67.9	5.8%
Other applications	16.1	17.6	19.1	20.8	22.3	24.2	25.7	28.9	30.6	37.1	38.9	40.4	6.8%
<b>Total</b>	<b>180.8</b>	<b>197.9</b>	<b>216.0</b>	<b>235.9</b>	<b>254.7</b>	<b>275.0</b>	<b>295.6</b>	<b>336.5</b>	<b>355.7</b>	<b>435.9</b>	<b>458.1</b>	<b>477.5</b>	<b>7.2%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.122. ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

**TABLE 262.** ASEAN COUNTRIES DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY INDUSTRY TYPE, 2019-2032 (USD MILLION)

Industry Type	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Corporate Communications	33.5	36.4	39.3	42.5	45.6	48.7	51.8	57.9	60.6	72.8	75.6	78.3	6.2%
Healthcare	17.4	19.1	21.0	23.0	25.0	26.9	29.1	33.3	35.3	43.6	45.8	48.2	7.6%
Government	3.9	4.3	4.6	5.0	5.3	5.7	6.0	6.7	7.0	8.3	8.7	9.1	6.0%
Education	20.4	22.4	24.6	27.0	29.3	31.9	34.5	39.7	42.2	52.3	55.4	57.8	7.8%
• Campus	6.2	6.8	7.4	8.0	8.6	9.2	9.9	11.1	11.7	14.2	14.8	15.3	6.6%
• Classroom	3.6	4.1	4.5	5.0	5.5	6.0	6.6	7.7	8.3	10.5	11.3	11.8	8.9%
• Library	2.5	2.7	3.0	3.3	3.5	3.8	4.1	4.7	5.0	6.2	6.5	6.8	7.5%
• Sports and Recreation	5.8	6.5	7.2	7.9	8.7	9.5	10.4	12.1	12.9	16.3	17.4	18.2	8.6%
• Others	2.2	2.4	2.6	2.9	3.1	3.3	3.6	4.0	4.3	5.2	5.5	5.6	7.0%
Venues	13.4	14.6	15.9	17.3	18.6	20.2	21.6	24.6	25.9	31.8	33.4	34.4	7.1%
Transportation	5.4	5.8	6.3	6.8	7.1	7.7	8.2	9.1	9.5	11.3	11.9	11.9	5.9%
Banking	14.9	16.5	18.3	20.3	22.2	24.3	26.5	31.0	33.2	41.8	44.4	46.8	8.7%
Retail	30.5	33.6	36.9	40.5	43.8	47.7	51.5	59.2	62.9	78.0	82.5	86.0	7.8%
Restaurants	23.3	25.6	27.9	30.5	33.1	35.7	38.4	43.7	46.3	56.7	59.6	62.6	7.3%
Hospitality	11.0	12.0	13.0	14.2	15.3	16.4	17.6	19.9	20.9	25.3	26.6	27.7	6.8%



Other industries	7.1	7.7	8.2	8.8	9.4	9.9	10.4	11.4	11.9	13.9	14.2	14.8	5.1%
Total	180.8	197.9	216.0	235.9	254.7	275.0	295.6	336.5	355.7	435.9	458.1	477.5	7.2%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



### 8.1.1.126. OCEANIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

**TABLE 266.** OCEANIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY SCREEN RESOLUTION, 2019-2032 (USD MILLION)

Screen Resolution	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
Standard Definition (SD)	90.3	97.9	105.7	114.5	122.2	130.7	139.1	155.2	162.4	194.9	203.3	209.6	6.2%
• 640X480 pixels	28.5	30.8	33.1	35.7	37.9	40.3	42.7	47.2	49.2	58.5	60.7	62.3	5.7%
• 800X600 pixels	61.8	67.1	72.7	78.9	84.3	90.3	96.4	108.0	113.3	136.5	142.6	147.3	6.4%
High Definition	61.7	67.2	73.0	79.4	85.2	91.6	98.0	110.5	116.3	141.4	147.7	153.4	6.7%
• 1280X720 pixels (720p)	20.5	22.1	23.8	25.8	27.4	29.2	31.1	34.4	35.9	43.0	44.5	45.7	5.8%
• 1920X1080 pixels (1080p)	24.8	27.0	29.4	32.0	34.4	37.0	39.7	44.8	47.2	57.6	60.2	62.6	6.9%
• 2560X1440 pixels (1440p)	16.4	18.0	19.7	21.7	23.4	25.3	27.2	31.4	33.2	40.9	43.1	45.1	7.6%
4K Ultra High Definition (UHD)	39.6	43.9	48.3	53.4	58.1	63.3	68.8	79.8	85.1	106.5	112.6	118.5	8.2%
• 3840X2160 pixels (2160p)	39.6	43.9	48.3	53.4	58.1	63.3	68.8	79.8	85.1	106.5	112.6	118.5	8.2%
8K Ultra High Definition (UHD)	22.6	24.7	27.2	29.9	32.3	35.1	37.9	43.5	46.2	57.0	60.2	63.2	7.7%
• 7680X4320 pixels (4320p)	22.6	24.7	27.2	29.9	32.3	35.1	37.9	43.5	46.2	57.0	60.2	63.2	7.7%
Total	214.2	233.7	254.2	277.2	297.9	320.6	343.7	389.0	410.0	499.8	523.8	544.7	6.9%

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis

### 8.1.1.127. OCEANIA DIGITAL SIGNAGE HARDWARE MARKET ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)

**TABLE 267. OCEANIA DIGITAL SIGNAGE HARDWARE MARKET REVENUE ESTIMATES AND FORECAST, BY TECHNOLOGY, 2019-2032 (USD MILLION)**

Technology	2019	2020	2021	2022	2023	2024	2025	2027	2028	2030	2031	2032	CAGR (2023-32)
LCD technology	41.6	44.6	47.8	51.3	54.2	57.4	60.5	66.1	68.5	80.5	82.8	84.4	5.0%
LED technology	39.1	42.4	45.8	49.5	52.8	56.4	60.0	66.9	70.0	84.0	87.5	89.9	6.1%
OLED technology	32.5	35.5	38.6	42.0	45.1	48.5	52.0	58.7	61.9	75.3	79.1	81.7	6.8%
Projection technology	28.2	30.8	33.6	36.8	39.7	42.9	46.1	52.5	55.5	68.1	71.8	74.6	7.3%
Holographic technology	23.7	26.2	28.9	31.9	34.8	37.9	41.2	47.8	51.1	63.8	67.6	71.4	8.3%
Quantum dot technology	21.4	23.8	26.4	29.3	32.0	35.1	38.2	44.7	47.9	60.3	64.4	68.1	8.8%
MicroLED technology	17.1	18.8	20.7	22.8	24.7	26.8	29.0	33.5	35.6	44.1	46.1	49.0	7.9%
Other technologies	10.7	11.6	12.5	13.6	14.6	15.6	16.7	18.7	19.6	23.7	24.6	25.6	6.5%
<b>Total</b>	<b>214.2</b>	<b>233.7</b>	<b>254.2</b>	<b>277.2</b>	<b>297.9</b>	<b>320.6</b>	<b>343.7</b>	<b>389.0</b>	<b>410.0</b>	<b>499.8</b>	<b>523.8</b>	<b>544.7</b>	<b>6.9%</b>

Source: The Society of Information Display, Defense Information Systems Agency (DISA), United Nations, European Commission, US International Trade Commission, Government of Canada, Government of Australia-Department of Climate Change, Energy, the Environment and Water, Department of Information Technology (Taiwan), Government of India, Ministry of Economy, Trade and Industry (Japan), U.S. Department of the Interior, Primary Research, Company Website, Annual Reports, Primary Interviews, and Emergen Research Analysis



## 9. COMPETITIVE LANDSCAPE (DISPLAY PROVIDERS)

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## 9.1. DIGITAL SIGNAGE HARDWARE MARKET: COMPANY MARKET SHARE ANALYSIS

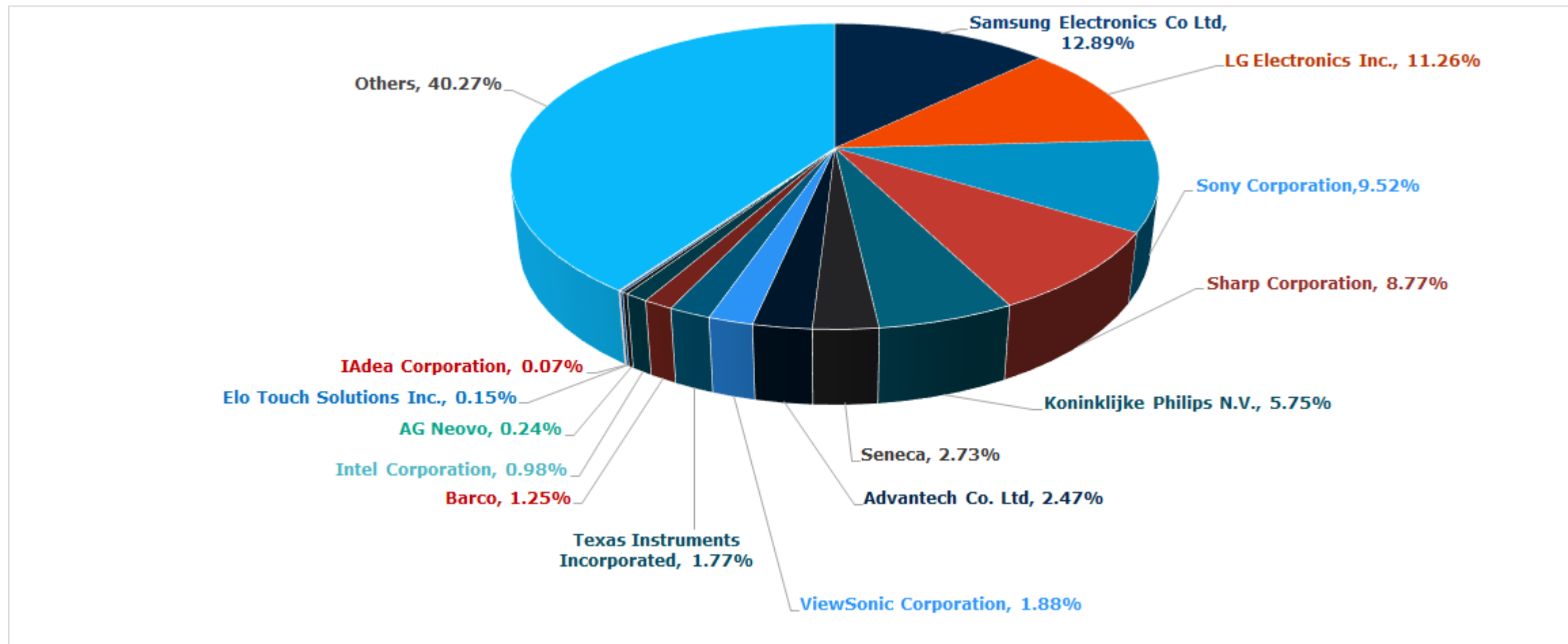
The Digital Signage Hardware Market for display providers is fragmented in nature, with several numbers of established as well as new market players. The top five companies operating in NA, EU, and APAC market together hold 48.18% of the market, as of 2022. Samsung Electronics Co Ltd dominated the market with 12.89% of market share, followed by, LG Electronics Inc., Sony Corporation, Sharp Corporation, and Koninklijke Philips N.V., with 11.26%, 9.52%, 8.77% and 5.75% market shares respectively.

**TABLE 279. DIGITAL SIGNAGE HARDWARE MARKET: MARKET SHARE OF TOP COMPANIES IN DISPLAY**

Company	Market Share
Samsung Electronics Co Ltd	12.89%
LG Electronics Inc.	11.26%
Sony Corporation	9.52%
Sharp Corporation	8.77%
Koninklijke Philips N.V.	5.75%
Seneca	2.73%
Advantech Co. Ltd	2.47%
ViewSonic Corporation	1.88%
Texas Instruments Incorporated	1.77%
Barco	1.25%
Intel Corporation	0.98%
AG Neovo	0.24%
Elo Touch Solutions Inc.	0.15%
IAdea Corporation	0.07%
Others	40.27%

Source: Company Products and Strategy Analysis, Primary Research, Executive Interview, and Emergen Research Analysis

**FIGURE 22.** DIGITAL SIGNAGE HARDWARE MARKET: MARKET SHARE ANALYSIS OF DISPLAY PROVIDERS



Source: Company Products and Strategy Analysis, Primary Research, Executive Interview, and Emergen Research Analysis



Key participants in the North America, Europe and Asia-Pacific Digital Signage Hardware Market are Samsung Electronics Co Ltd, LG Electronics Inc., Sony Corporation, Sharp Corporation, Koninklijke Philips N.V., Seneca Advantech Co. Ltd, ViewSonic Corporation, Texas Instruments Incorporated, Barco, Intel Corporation, AG Neovo, Elo Touch Solutions Inc., IAdea Corporation, and others.

Players in the market are currently increasing efforts with regards to investment & expansion as companies focus on gaining a competitive edge over others in the market through ideas and resource sharing with respective counterparts. Companies are also deploying strategies such as new product launch and entering into agreements and partnerships, to form strategic alliances with crucial end-users or organizations in both the public and private sectors. This is helping them gain a competitive advantage in terms of sales, hence focusing on new product development.

lineup optimized for digital signage applications while also containing modular expandability to allow the flexibility to give different customers the solutions they need to make an impact.

**25 January 2021**

LG Electronics Inc.

LG Business Solutions USA introduced its 2022 interactive displays, rebranded under the LG CreateBoard moniker, and added optional peripheral products such as mounts, mobile carts, and a new Open Pluggable Specification (OPS) system. The launch of the rebranded interactive display line comes on the heels of LG's increased investment in the education space, which includes a new team of subject matter experts and new support structures that make it easier for IT directors and budget managers to select and implement optimized solutions that simplify user operation and maintenance.

*Source: Company Products and Strategy Analysis, Primary Research, Executive Interview, and Emergen Research Analysis*



## **10.** COMPANY PROFILES (DISPLAY PROVIDERS)

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## 10.1. SAMSUNG ELECTRONICS CO., LTD.

*Type: Public*

*Industry: Electrical, and Electronics Manufacturing*

*Founded: 1938*

*Headquarters: Seoul, South Korea*

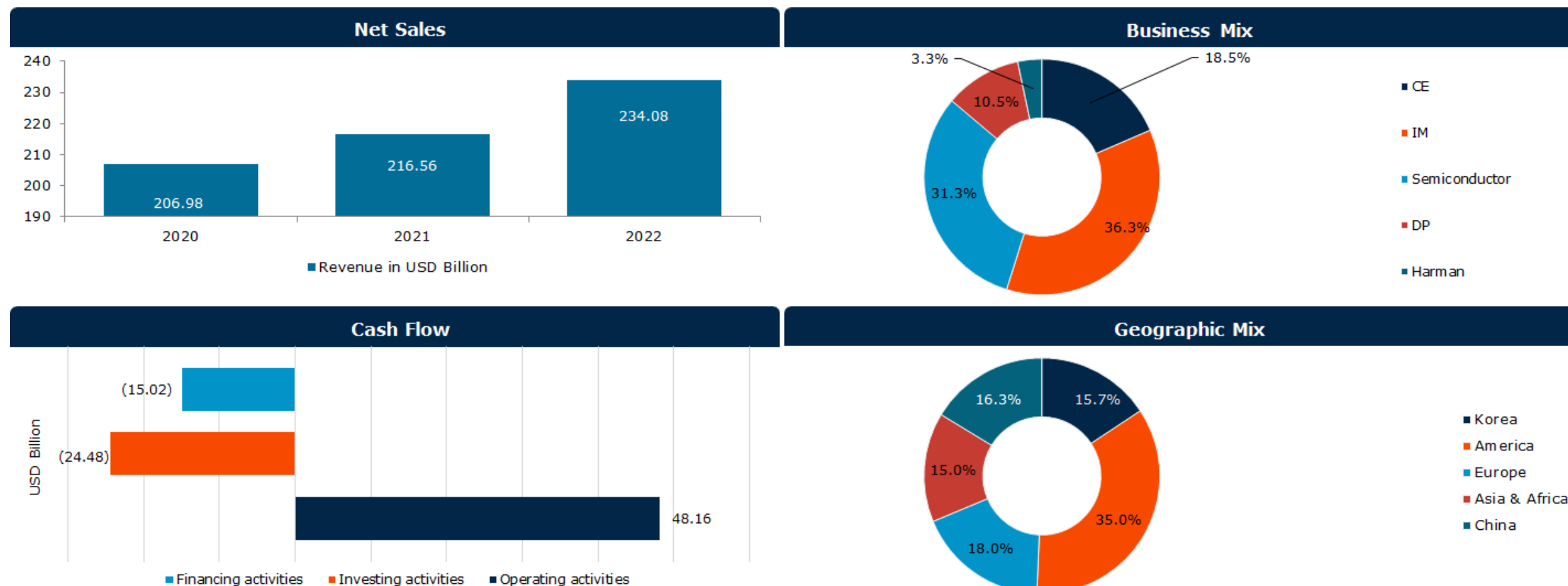
*Website: [www.samsung.com](http://www.samsung.com)*

### 10.1.1. COMPANY SUMMARY

Samsung Electronics Co., Ltd. operates in the consumer electronics, information technology, and mobile communications, as well as device solutions, markets around the world. It sells refrigerators, air conditioners, washing machines, dryers, cooking appliances, dishwashers, vacuum cleaners, air conditioners, and air purifiers. TVs, sound devices, smartphones, tablets, monitors, smart and LED signage, watches, and other accessories are also available, as are memory storage solutions. It also offers medical equipment, software design, development, and supply, toll processing of semiconductors and display panels, general logistics, financing, marketing, consulting, and technology and cloud services, venture capital investment, enterprise automation solutions and connected services, installation and optimization services for network devices, and digital advertising platforms. The company serves retail, hospitality, finance, transportation, education, government, manufacturing, public safety, and healthcare industries. Samsung Electronics Co., Ltd. was established in 1938 and is headquartered in Suwon, South Korea.

### 10.1.2. FINANCIAL INSIGHTS

Samsung Electronics founded 1938 and headquartered in Seoul, South Korea. Samsung global leader in technology, opening new possibilities for people everywhere. Through relentless innovation and discovery, Samsung is transforming the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, medical devices, semiconductors and LED solutions.



Source: Company Website, Annual Report, News & Press Release

## LG ELECTRONICS INC.

*Type: Public*

*Industry: Computers and Electronics Manufacturing*

*Founded: 1958*

*Headquarters: Seoul, South Korea*

*Website: [www.lg.com](http://www.lg.com)*

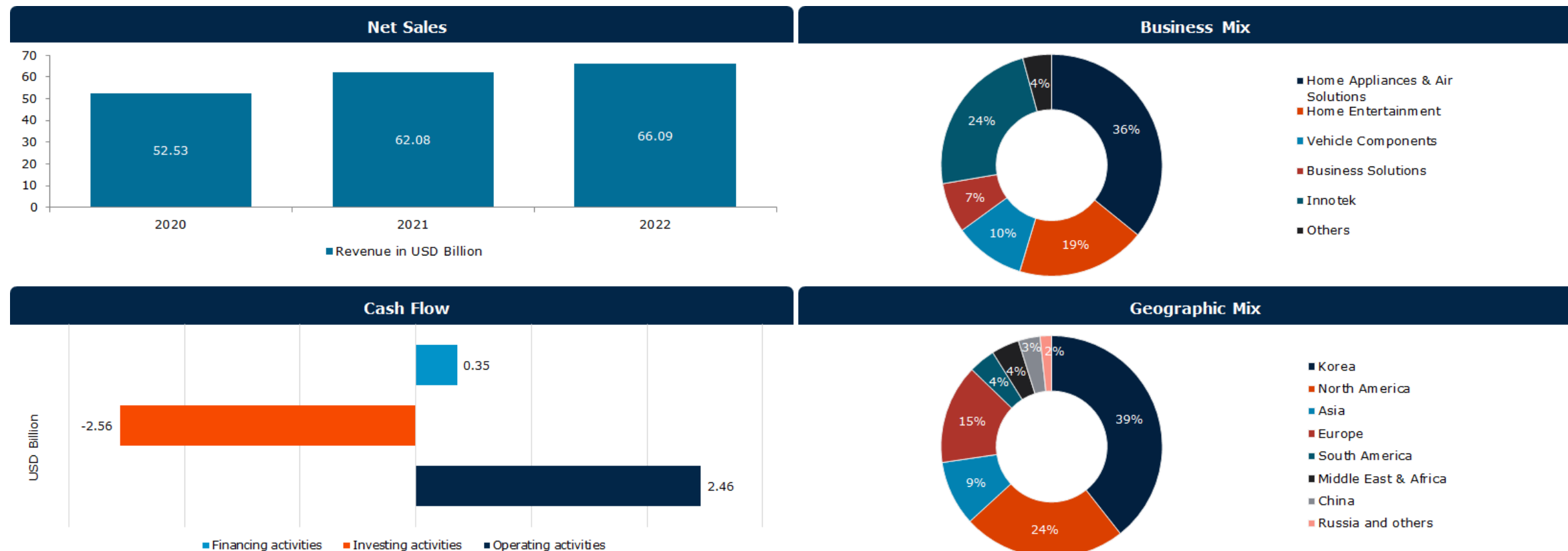
### COMPANY SUMMARY

LG Electronics is a global multinational technology and consumer electronics company, engaged in design and developing a range of business to business and consumer durable products. LG Electronics operates under holding company, LG Corp. The company offers diverse portfolios across areas including TV & home entertainment, kitchen, laundry, computers, air conditioning & solar. LG Electronics founded in the year 1958 and headquartered in Seoul, South Korea. The company controls more than 142 local subsidiaries worldwide, with around 74,000 executives and employees.

LG Electronics business is reportedly segmented into the areas of home appliance & air solution (H&A), home entertainment (HE), vehicle component solutions (VS), business solutions (BS), and other segments. The company has Korea's largest research and development park dedicated to technological convergence and committed development to develop, manufacture world-classes products and solution to meet the requirement of current market trends. In the financial year 2022, LG Electronics has allocated USD 1.89 Billion for research and development.

## FINANCIAL INSIGHTS

LG Electronics is one of the world's leading manufacturers of consumer electronics. The company's products are sold in over 100 countries around the world. LG Electronics is known for its innovative products and its commitment to quality.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1 USD= 1088.35 KRW, In 2021, 1 USD= 1190.44 KRW, and In 2022, 1 USD= 1262.90 KRW

## PRODUCT INSIGHTS

Type	Product	Description
<ul style="list-style-type: none"> <li>Standard</li> </ul>	<ul style="list-style-type: none"> <li>400 nits FHD Essential Commercial TV</li> </ul>	LG Commercial Lite TVs are specially designed for hospitality and business. LG has created a new Quick Menu (version 3.0), making it easier and more user friendly than ever. A creation tool enables production of hotel promotional videos.
<ul style="list-style-type: none"> <li>Video Wall</li> </ul>	<ul style="list-style-type: none"> <li>55" 700 nits FHD 0.44mm Even Bezel Video Wall</li> <li>55" 500 nits FHD 0.44mm Even Bezel Video Wall</li> <li>55" 500 nits FHD Slim Bezel Video Wall</li> <li>55" 700 nits FHD Slim Bezel Video Wall</li> <li>500 nits FHD Slim Bezel Video Wall</li> <li>700 nits FHD Narrow Bezel Video Wall</li> </ul>	LG's Video Wall allows advertisements and broadcast video in sync with the target needs, while quality and performance is enhanced. Near-seamless video wall delivers an artistic, multi-sensory experience to immerse viewers
<ul style="list-style-type: none"> <li>High Brightness</li> </ul>	<ul style="list-style-type: none"> <li>High-brightness Open-frame Display</li> <li>1,300nits FHD Outdoor Touch Open-frame Display</li> <li>1,500nits FHD IP-rated Outdoor Display</li> <li>Window Facing Display</li> <li>75" UHD 4,000nits Window-facing Display</li> <li>Outdoor Display</li> <li>75" UHD 3,000nits Open-frame Display</li> <li>3,000nits FHD Open-frame Display</li> <li>3,000nits UHD Open-frame Display</li> </ul>	LG's High Brightness with outstanding visibility and high performance, is the perfect outdoor display for advertising & information.



▪ Interactive	<ul style="list-style-type: none"> <li>▪ LG CreateBoard</li> <li>▪ UHD IR-touch Type CreateBoard</li> <li>▪ Touch Open Frame</li> <li>▪ UHD IR-Type Touch Interactive Digital Board</li> <li>▪ Interactive Digital Board</li> </ul>	LG's Interactive is a perfect solution for effective meetings, with advanced touch technology and high-performance system-on-chip.
▪ One: Quick	<ul style="list-style-type: none"> <li>▪ One: Quick Flex</li> <li>▪ One: Quick Works for Zoom Rooms</li> <li>▪ One: Quick Works</li> </ul>	LG One: Quick Flex has won the CES Innovation Awards Honoree and the Red Dot Award consecutively, and it has received worldwide recognition for its technology and design.
▪ Special	<ul style="list-style-type: none"> <li>▪ LG Self-ordering Kiosk</li> <li>▪ LG Thermal Sensing Terminal</li> <li>▪ Ultra Stretch Signage</li> </ul>	LG's Special allows to experience effective and entertaining signages, designed to the particular requirements of a commercial environment.
▪ LED Signage	<ul style="list-style-type: none"> <li>▪ Indoor LED</li> <li>▪ Outdoor LED</li> <li>▪ LG Magnit</li> <li>▪ LG Miraclass</li> <li>▪ Transparent LED Film</li> </ul>	LG's LED Signage consists of a wide range of indoor and outdoor signage that provides eye-catching experiences with industry leading technology.

Source: Company Website, Annual Report, News & Press Releases

## STRATEGIC INITIATIVES

Date	Type	Description
25 January 2021	Product Launch	LG Business Solutions USA introduced its 2022 interactive displays, rebranded under the LG CreateBoard moniker, and added optional peripheral products such as mounts, mobile carts, and a new Open Pluggable Specification (OPS) system. The launch of the rebranded interactive display line comes on the heels of LG's increased investment in the education space, which includes a new team of subject matter experts and new support structures that make it easier for IT directors and budget managers to select and implement optimized solutions that simplify user operation and maintenance.

Source: Company Website, Company Annual Reports, News & Press Releases

## SONY CORPORATION

*Type: Public*

*Industry: Multinational conglomerate corporation*

*Founded: 1946*

*Headquarters: Minato City, Tokyo, Japan*

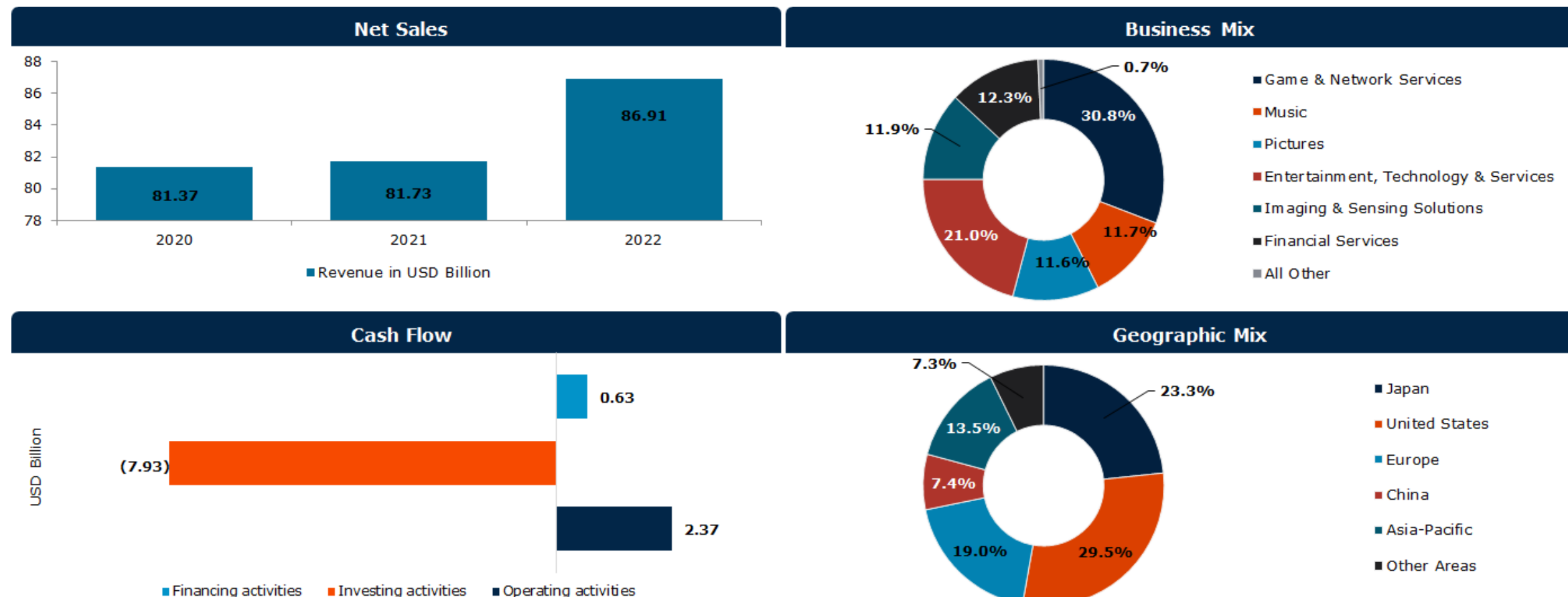
*Website: [www.sony.net](http://www.sony.net)*

### COMPANY SUMMARY

Sony Corporation is a Japanese multinational conglomerate headquartered in Minato, Tokyo. The company is one of the largest electronics and media conglomerates in the world, and is engaged in a wide range of businesses, including consumer electronics, gaming, entertainment, and financial services. Founded in 1946, Sony has grown to become one of the world's leading technology and entertainment companies, with a global presence and a rich history of innovation. Sony's commitment to high-quality products, innovative technologies, and entertainment content has helped them maintain a strong global brand presence. They continue to invest in research and development to stay at the forefront of emerging technologies. Sony's subsidiary, Sony Semiconductor Solutions Group (SSS) is a division of Sony Corporation that develops, manufactures, and sells semiconductor products and solutions. The group's main focus is on image sensors, but it also produces a variety of other semiconductor products, including micro-displays, LSIs, and semiconductor lasers.

## FINANCIAL INSIGHTS

Sony Corporation is a Japanese multinational conglomerate headquartered in Minato, Tokyo. The company is one of the largest electronics and media conglomerates in the world.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1 USD= 110.591608 JPY, In 2021, 1 USD= 121.391894 JPY, and In 2022, 1 USD= 132.775948 JPY

## SHARP CORPORATION

*Type: Public*

*Industry: Consumer Electronics*

*Founded: 1912*

*Headquarters: Osaka, Japan*

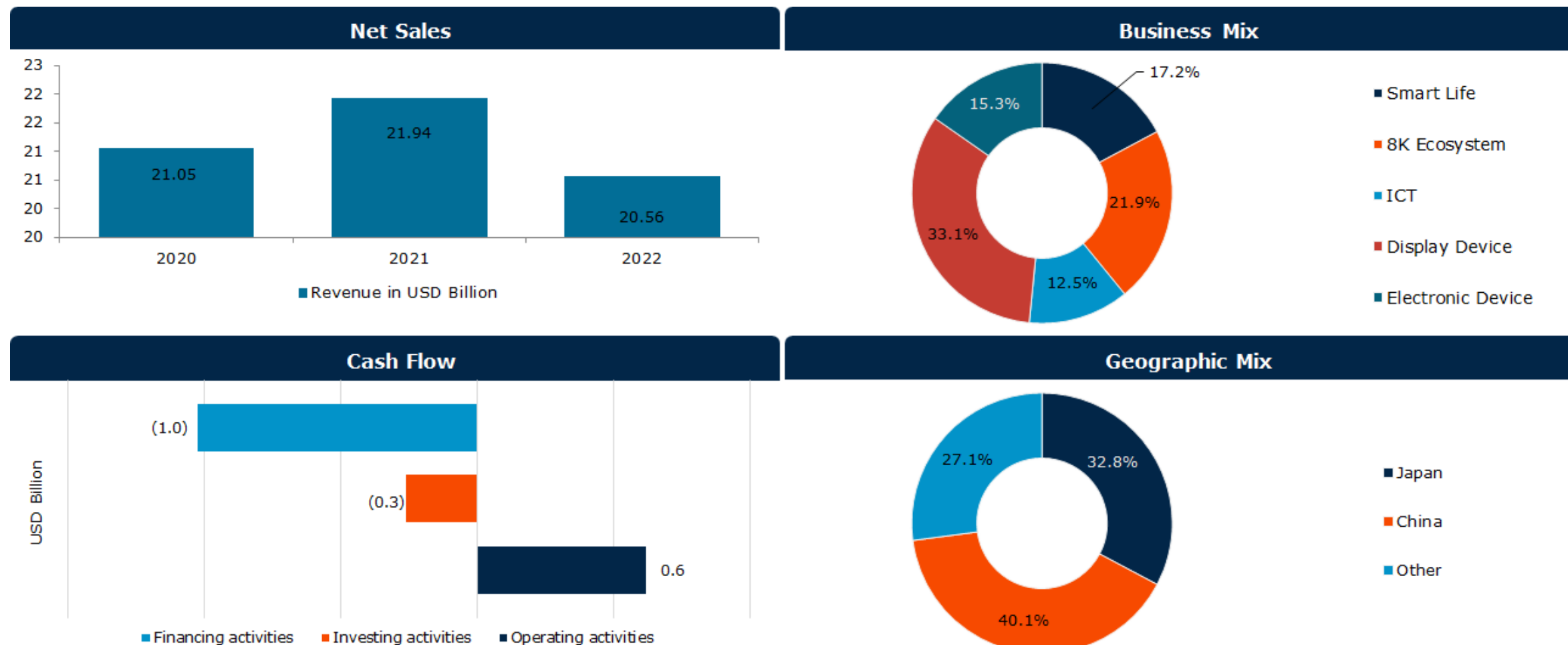
*Website: [www.global.sharp](http://www.global.sharp)*

### COMPANY SUMMARY

Sharp Corporation is a leading multinational technology company renowned for its innovative contributions to the electronics industry. Sharp has continuously demonstrated a commitment to delivering cutting-edge products that shape the way people interact with technology and information. The company has evolved into a global powerhouse known for its diverse portfolio of products and solutions. The company's areas of expertise encompass a wide range of technologies, including display solutions, home appliances, audiovisual equipment, solar panels, and advanced electronics components. Sharp has pioneered high-quality LCD panels and LED displays that have become integral to a wide range of applications, from consumer electronics to professional displays and interactive signage. Beyond its technological advancements, Sharp's commitment to environmental sustainability is evident in its production of solar panels and energy-efficient appliances. As a global player, Sharp's influence spans continents, serving a vast network of partners and customers. The company continues to shape the course of electronics by creating products that enhance daily lives and lead the industry into the future with an enduring dedication to innovation, user-centric design, and societal impact.

## FINANCIAL INSIGHTS

Sharp Corporation is a leading multinational technology company renowned for its innovative contributions to the electronics industry.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1 USD= 107.496802 YEN, In 2021, 1 USD= 110.591608 YEN, and In 2022, 1 USD= 121.391894 YEN

## KONINKLIJKE PHILIPS N.V.

*Type: Public*

*Industry: Hospitals and Health Care*

*Founded: 1891*

*Headquarters: Amsterdam, Netherlands*

*Website: [www.philips.com](http://www.philips.com)*

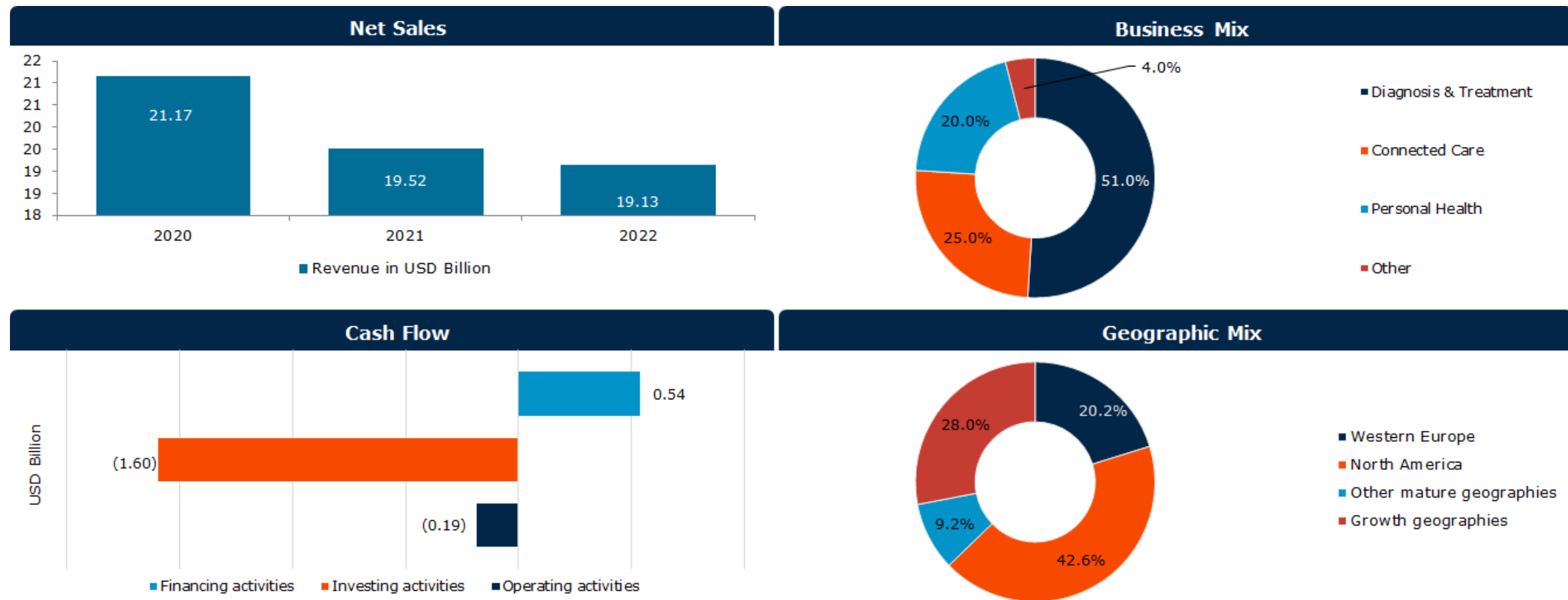
### COMPANY SUMMARY

Koninklijke Philips N.V., commonly known as Philips, is a Dutch multinational conglomerate that operates in various sectors of technology, healthcare, and consumer lifestyle products. It is a health technology business with the goal of enhancing people's health along the entire health continuum, from preventative measures and healthy living to medical diagnosis, care at home, and therapy. The business provides goods and services in consumer health, home care, patient tracking, image-guided therapy, diagnostic imaging, and health informatics.

In 2022, the reportable segments were Diagnosis & Treatment companies, Connected Care businesses, and Personal Health businesses, with each responsible for global business management. In the medical field, Philips is renowned for its cutting-edge medical imaging, diagnostic, and patient monitoring solutions. These advanced technologies assist healthcare professionals in accurate diagnosis and treatment, contributing to better patient outcomes. Philips offers integrated solutions for healthcare providers that focus on patient care, clinical informatics, and hospital management. These solutions help optimize workflows, enhance patient experiences, and improve operational efficiency within healthcare institutions.

## FINANCIAL INSIGHTS

Koninklijke Philips N.V., commonly known as Philips, is a Dutch multinational conglomerate that operates in various sectors of technology, healthcare, and consumer lifestyle products.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1 USD= 0.817788 Euro, In 2021, 1 USD= 0.879004 Euro, and In 2022, 1 USD= 0.931766 Euro



## SENECA (ARROW ELECTRONICS, INC.)

*Type: Public*

*Industry: IT Services and IT Consulting*

*Founded: 1946*

*Headquarters: Centennial, Colorado, United States*

*Website: [www.arrow.com](http://www.arrow.com)*

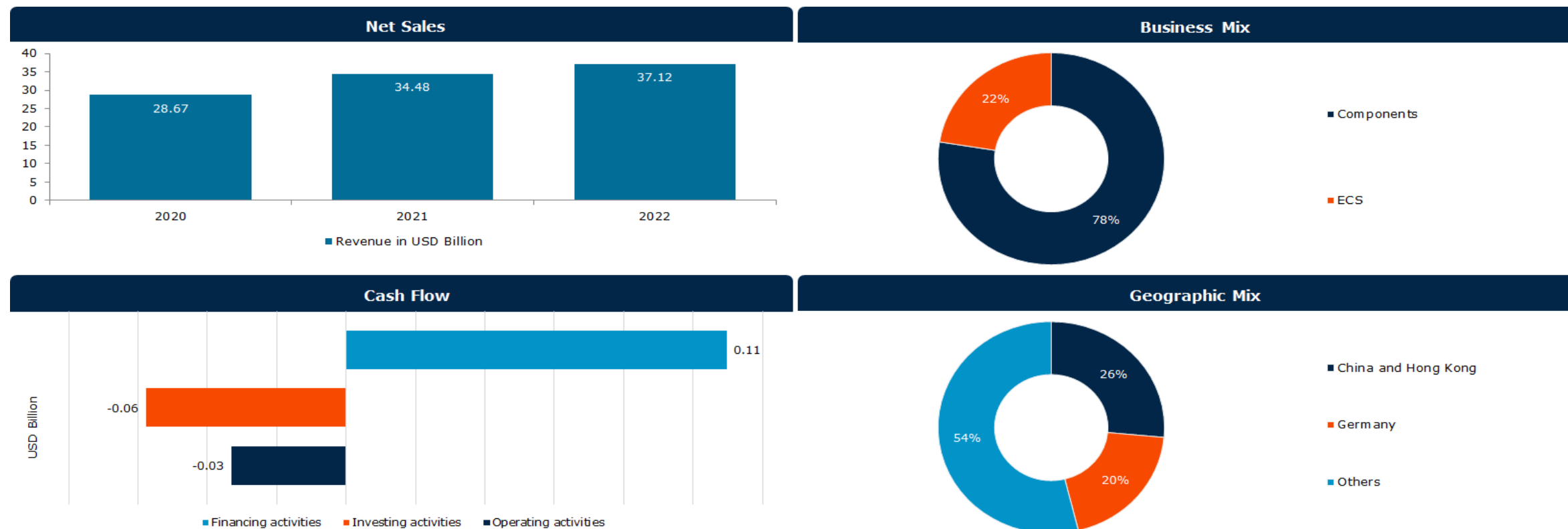
### COMPANY SUMMARY

Seneca designs and develops digital signage setups globally. In 2014, Arrow Electronics has acquired Seneca Data and presently the company operates under subsidiary of Arrow Electronics, Inc. Seneca offers an array of digital signage solutions designed to provide effortless out-of-the-box experiences. Ranging from video wall controllers (VWC) to media players and beyond, our diverse selection of digital signage products is characterized by simplicity, reliability, scalability, and the flexibility to be customized according to your requirements.

Arrow Electronics business is majorly segmented into the areas of the global components business and the global enterprise computing solutions (ECS) business. With a presence in more than 90 countries, the organization operates through a network of over 220 sales establishments and 43 distribution and value-added hubs. Its operations span across the major electronics markets of the Americas, Europe, Middle East, and Africa (EMEA), as well as the Asia Pacific regions. Arrow's strategic vision revolves around becoming the foremost technology-focused provider of go-to-market and supply chain services worldwide.

## FINANCIAL INSIGHTS

Seneca manufactures digital signage media players, comprehensive all-in-one digital signage displays, and versatile video wall controllers, all meticulously tailored to suit the distinct requirements of your enterprise. Seneca provides a diverse range of digital signage solutions that ensure effortless setup. From video wall controllers (VWC) to media players.



Source: Company Website, Annual Report, News & Press Releases

			<ul style="list-style-type: none"> <li>• Life time 50,000 hrs</li> <li>• Fanless design</li> <li>• Optical Touch with Multi Touch Support</li> </ul>
	<ul style="list-style-type: none"> <li>▪ DSD-5028</li> </ul>	<ul style="list-style-type: none"> <li>▪ 28" Industrial Stretched Signage Display</li> </ul>	<ul style="list-style-type: none"> <li>• 28" High Resolution Stretched Display (1920 x 360) with LED backlight</li> <li>• Ultra wide viewing angle (178/178)</li> <li>• Dynamic contrast adjustment</li> <li>• Super color tone function</li> <li>• Signal interface with VGA/DVI/HDMI</li> <li>• Durable and Professional design</li> <li>• Wall mounting interface 200 x 100 mm</li> <li>• Ideal for Information Display</li> </ul>
	<ul style="list-style-type: none"> <li>▪ DSD-5038</li> </ul>	<ul style="list-style-type: none"> <li>▪ 38" stretched display, 16 : 4.5</li> </ul>	<ul style="list-style-type: none"> <li>• 38" High Resolution Stretched Display (1920 x 538) with LED backlight</li> <li>• Ultra wide viewing angle (176/176)</li> <li>• Dynamic contrast adjustment</li> <li>• Super color tone function</li> <li>• HDMI/DVI/VGA input</li> <li>• Durable and Professional design</li> <li>• Wall mounting interface 200x100mm</li> <li>• Ideal for Information Display</li> </ul>

Source: Company Website, Annual Report, News & Press Releases

## STRATEGIC INITIATIVES

Date	Type	Description
11 January 2021	Product Launch	Advantech, a leading provider of intelligent computing solutions, launched UTK-615, a modular self-service kiosk aimed at indoor self-ordering applications. Powered by a Rockchip ARM Cortex-A17 RK3288 processor that supports Android 8.1 OS, the UTK-615 kiosk delivers high-performance computing in a compact form factor. The system features a 15.6" touchscreen with projected capacitive touch control, as well as a QR code scanner, NFC reader, EMV reader, and receipt printer to support a wide range of payment methods popular in different countries, ensuring worldwide applicability.
07 October 2020	Product Launch	Advantech, a leading provider of service automation solutions, launched UTK-752—a 21.5-inch interactive touchscreen kiosk aimed at automated self-service industries. Featuring a fanless 6th gen Intel Core i5-6300U processor and up to 16 GB of DDR3L memory, UTK-752 is an off-the-shelf modular solution that delivers exceptional computing performance for diverse self-service applications.

Source: Company Website, Annual Report, News & Press Releases

## VIEWSONIC CORPORATION

*Type: Private*

*Industry: IT Services and IT Consulting*

*Founded: 1987*

*Headquarters: Brea, California, United States*

*Website: [www.viewsonic.com](http://www.viewsonic.com)*

### COMPANY SUMMARY

ViewSonic is a globally recognized technology company that has established itself as a leading provider of visual display solutions. With a strong commitment to innovation and customer-centricity, ViewSonic delivers a diverse range of cutting-edge products that span monitors, projectors, interactive displays, digital signage, and other visual communication tools. With a history dating back to its founding in 1987, ViewSonic has consistently pushed the boundaries of visual technology. The company's offerings cater to a wide spectrum of industries and applications, including education, business, entertainment, and professional settings. ViewSonic's solutions are renowned for their exceptional performance, reliability, and intuitive user experiences. At the core of ViewSonic's philosophy is a dedication to creating products that enhance communication, collaboration, and engagement. ViewSonic's portfolio is designed to meet the evolving needs of modern users from high-resolution monitors that deliver stunning visuals to interactive displays that foster interactive learning and dynamic presentations.

		10W stereo speakers, the EP5542T delivers customized multimedia messaging with vivid clarity. Photo and video files can be played back using the embedded Quad-core media player and 16GB of internal memory, or add your own media player using the convenient media player cradle inside the lockable security door. Works with optional cloud-based Content Management Software.
Digital Signage Displays	<ul style="list-style-type: none"> <li>▪ CDE5512 - 55" Display, 3840 x 2160 Resolution, 290 cd/m2 Brightness, 16/7</li> </ul>	The ViewSonic CDE5512 is a 55" 4K Ultra HD large format wireless presentation display. With features including a razor-sharp resolution of 3840 x 2160, 290-nit high brightness, 178-degree ultra-wide viewing angles, 2 x 10W speakers, and wireless screen sharing, the CDE5512 transforms meeting rooms into a dynamic communications hub. The built-in ViewBoard® Cast screen sharing software* (along with the optional ViewSonic vCastSender app), and myViewBoard Display software, enables both on-site and online users to participate in conferences and simultaneously share content.
	<ul style="list-style-type: none"> <li>▪ CDE6512 - 65" Display, 3840 x 2160 Resolution, 290 cd/m2 Brightness, 16/7</li> </ul>	The ViewSonic CDE6512 is a 65" 4K Ultra HD large format wireless presentation display. With features including a razor-sharp resolution of 3840 x 2160, 290-nit high brightness, 178-degree ultra-wide viewing angles, 2 x 10W speakers, and wireless screen sharing, the CDE6512 transforms meeting rooms into a dynamic communications hub. The built-in ViewBoard® Cast screen sharing software* (along with the optional ViewSonic vCastSender app), and myViewBoard Display software, enables both on-site and online users to participate in conferences and simultaneously share content.
	<ul style="list-style-type: none"> <li>▪ CDE5520-W1 - 55" Display, 3840 x 2160 Resolution, 350 cd/m2 Brightness</li> </ul>	The ViewSonic CDE5520 is a 55" premium 4K large format presentation display. With features including a razor-sharp resolution of 3840 x 2160, 350-nit high brightness, 178-degree ultra-wide viewing angles, 2 x 10W speakers, and wireless screen sharing, the CDE5520 transforms meeting rooms into a dynamic

		communications hub. The built-in ViewBoard screen sharing software*, ViewBoard® Cast (along with the optional ViewSonic vCastSender app) and myViewBoard Display software, enables both on-site and online users to participate in conferences and simultaneously share content.
Digital Signage Displays	<ul style="list-style-type: none"> <li>▪ CDE7512 - 75" Display, 3840 x 2160 Resolution, 330 cd/m2 Brightness, 16/7</li> </ul>	The ViewSonic CDE7512 is a 75" 4K Ultra HD large format wireless presentation display. With features including a razor-sharp resolution of 3840 x 2160, 330-nit high brightness, 178-degree ultra-wide viewing angles, 2 x 10W speakers, and wireless screen sharing, the CDE7512 transforms meeting rooms into a dynamic communications hub. The built-in ViewBoard® Cast screen sharing software* (along with the optional ViewSonic vCastSender app), and myViewBoard Display software, enables both on-site and online users to participate in conferences and simultaneously share content.
	<ul style="list-style-type: none"> <li>▪ EP5542 - 55" Display, 3840 x 2160 Resolution, 400 cd/m2 Brightness, 16/7</li> </ul>	The ViewSonic EP5542 is a 55" 4K Ultra HD all-in-one free-standing digital ePoster kiosk with a sleek, slim design. Great for grabbing attention in busy, high-traffic areas, the EP5542 comes with a scratch-proof tempered glass faceplate for added durability. Featuring an IPS-type panel, 4K Ultra HD resolution, 178°/178° wide-angle viewing, 400-nit brightness, 1,300:1 contrast ratio, and dual 10W stereo speakers, the EP5542 delivers customized multimedia messaging with vivid clarity. Photo and video files can be played back using the embedded Quad-core media player and 16GB of internal memory, or add your own media player using the convenient media player cradle inside the lockable security door.
	<ul style="list-style-type: none"> <li>▪ EP1052T-A - 10.1" Scheduling Panel, Meeting Room Touch Controller, POE+, NFC, RFID, WI-FI, Camera, Mic, GPIO</li> </ul>	The ViewSonic EP1052T-A is a 10.1" all-in-one interactive digital ePoster that can be used as a video conferencing touch controller, meeting room scheduler and communication signage display. For video conferencing, the EP1052T-A provides one-touch join, easy content-sharing, and a seamless meeting experience across

		an integrated multi-core processor and 16GB of internal memory, allowing customers to playback multimedia content via USB without the need for a PC.
Digital Signage Displays	<ul style="list-style-type: none"> <li>▪ CDE4320-E1 - 43" Display, 3840 x 2160 Resolution, 350 cd/m2 Brightness</li> </ul>	The ViewSonic CDE4320 is a 43" (42.51" viewable) premium 4K large format presentation displays purpose-built to deliver eye-catching imagery for hotels, restaurants, retail, business, and more. With stunning 3840x2160 resolution, 350-nit high brightness, wide viewing angles, and dual 10W speakers, this display provides immersive, high-impact messaging wherever needed. In addition to HDMI and DVI inputs to connect with various high-definition devices, this display utilizes an integrated multi-core processor and 16GB of internal memory, allowing customers to playback multimedia content via USB without the need for a PC.
	<ul style="list-style-type: none"> <li>▪ CDE6520-W1 - 65" Display, 3840 x 2160 Resolution, 450 cd/m2 Brightness</li> </ul>	The ViewSonic CDE6520-W is a 65" premium 4K large format presentation display. With features including a razor-sharp resolution of 3840 x 2160, 450-nit high brightness, 178-degree ultra-wide viewing angles, 2 x 16W speakers, and wireless screen sharing, the CDE6520-W transforms meeting rooms into a dynamic communications hub. The built-in ViewBoard® screen sharing software*, ViewBoard® Cast (along with the optional ViewSonic® vCastSender app) and myViewBoard Display software, enables both on-site and online users to participate in conferences and simultaneously share content.

Source: Company Website, Company Annual Reports, News & Press Releases



STRATEGIC INITIATIVES

Date	Type	Description
07 March 2023	Product launch	ViewSonic Corp., a leading global provider of visual solutions, announced the launch of its new line of Direct View LED displays as it continues to expand its lineup of commercial display solutions. The new series provides ProAV installers and dealers with expanded choices for immersive, big screen messaging that delivers impact. The new solutions include the LDS mobile solution, the LDM mainstream series, and the LDP premium series of all-in-one Direct View LED displays. ViewSonic is introducing these new lines of Direct View LED display solutions to provide more choices for our ProAV partners and installers to offer their customers.

Source: Company Website, Company Annual Reports, News & Press Releases

## TEXAS INSTRUMENTS INCORPORATED

*Type: Public*

*Industry: Semiconductor Manufacturing*

*Founded: 1930*

*Headquarters: Dallas, Texas, United States*

*Website: [www.ti.com](http://www.ti.com)*

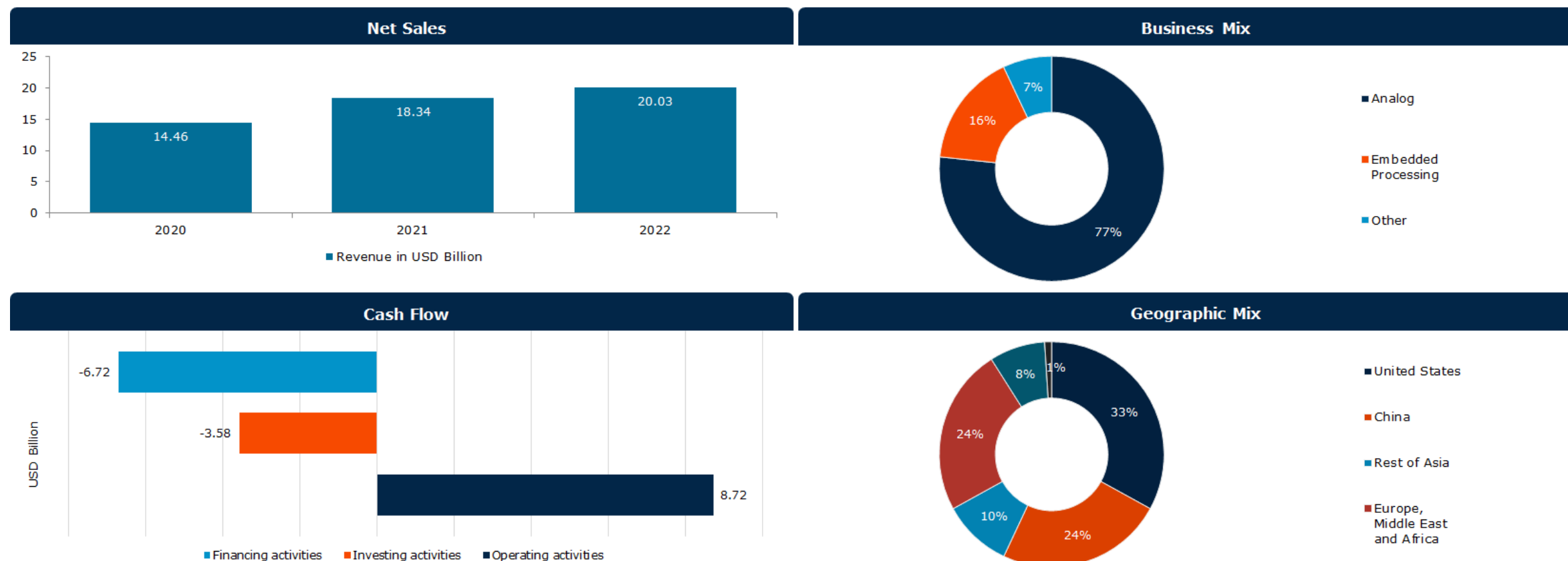
### COMPANY SUMMARY

Texas Instruments is a major global technology company renowned for its innovation and leadership in the semiconductor industry. The company designs, manufactures and distributes 80,000+ products to more than 100,000+ customers across more than 30+ countries. Texas Instruments founded in the year 1930 and headquarters in Dallas, Texas, United States, manages semiconductor manufacturing facilities across North America, Asia, Japan, and Europe. Some of its key competitors include Analog Devices, NXP, Infineon, STMicroelectronics, Maxim Integrated, Dialog Semiconductor, Cirrus Logic, MPS, Ams, and Nordic Semiconductor.

Texas Instruments operates through two business segments, Analog and Embedded Processing. The Analog segment of the Company includes product lines such as High-Volume Analog & Logic (HVAL), Power Management (Power), High-Performance Analog (HPA), and Silicon Valley Analog (SVA). The Company's Embedded Processing segment's product line includes Processor, Microcontrollers, and Connectivity. Processor products include digital signal processors (DSPs) and application processors. The success of the company's operations is efficiently designing, manufacturing and promoting innovative products in a timely manner while managing costs effectively. In financial year 2022, the company allocated USD 1.67 Billion towards research and development initiatives, aimed at enhancing current technologies and products, creating novel solutions to align with evolving customer requirements, and enhancing production procedures.

## FINANCIAL INSIGHTS

Texas Instruments Incorporated stands as a distinguished global technology enterprise celebrated for its pioneering spirit and industry leadership within the semiconductor realm. Spanning more than eight decades, TI has steadfastly driven technological frontiers, translating ideas into tangible achievements.



Source: Company Website, Annual Report, News & Press Releases

## BARCO

*Type: Public*

*Industry: Appliances, Electrical, and Electronics Manufacturing*

*Founded: 1934*

*Headquarters: Kortrijk, Belgium*

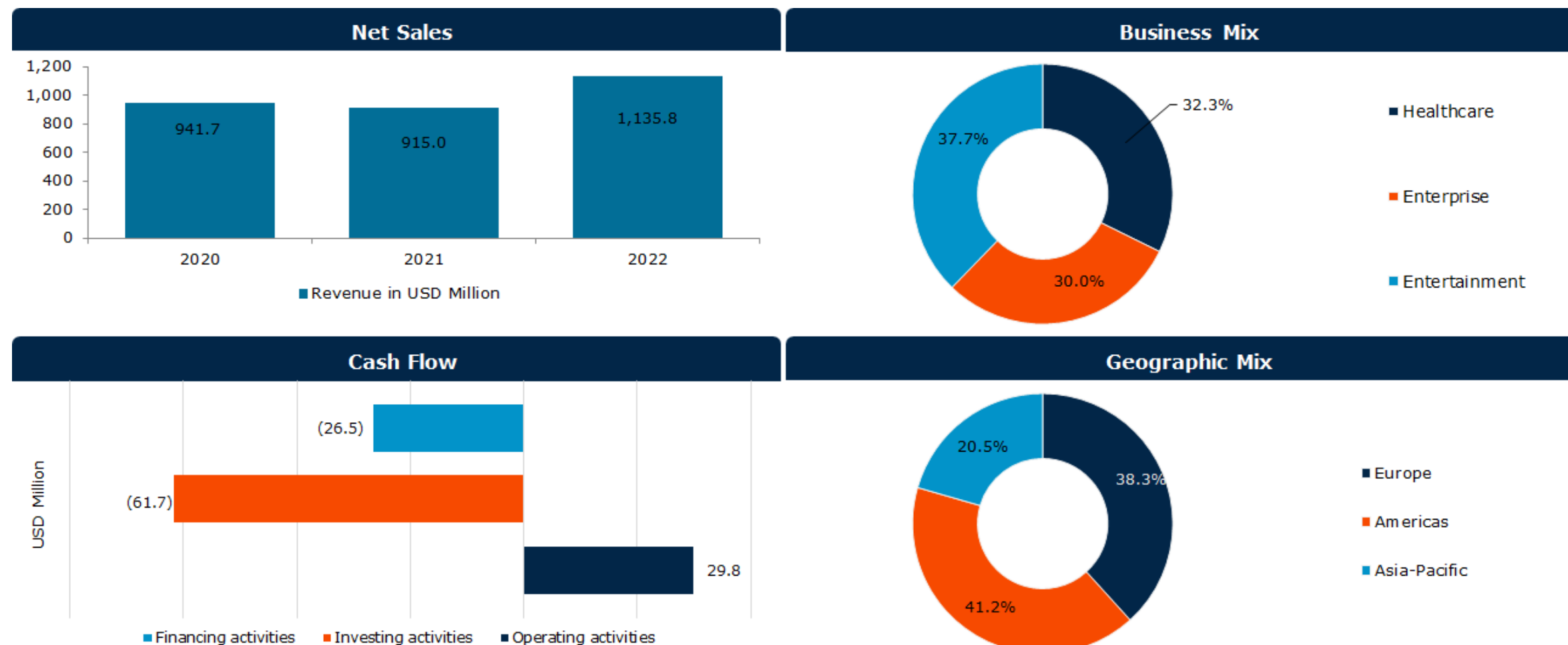
*Website: [www.barco.com](http://www.barco.com)*

### COMPANY SUMMARY

Barco is a renowned company operating at the forefront of technology solutions, specializing in visual communication and collaboration. With a rich history and a global presence, Barco has earned a reputation as a leader in developing innovative visualizations that enhance communication and engagement across various industries. Through its state-of-the-art technology, Barco delivers solutions that transform the way people connect and interact, whether it's in business, entertainment, healthcare, or other sectors. The company's offerings encompass a wide range of advanced visual solutions, including high-quality projectors, LED displays, video walls, and immersive visualization solutions. These cutting-edge products are designed to create impactful and immersive experiences that captivate audiences and elevate communication to new heights. Barco continues to shape the future of visual communication and collaboration with a global network and a diverse range of partnerships. The company's vision is centered around using technology to create meaningful connections and drive positive outcomes across industries and disciplines. As a result, Barco remains a trusted and influential player in the realm of visual technology, driving advancements that reshape the way we see and experience the world around us.

## FINANCIAL INSIGHTS

Barco is a renowned company operating at the forefront of technology solutions, specializing in visual communication and collaboration.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1USD= 0.817788 EURO, In 2021, 1 USD= 0.879004 EURO, In 2022, 1 USD= 0.931766 EURO

## INTEL CORPORATION

*Type: Public*

*Industry: Semiconductor Manufacturing*

*Founded: 1968*

*Headquarters: Santa Clara, California, United States*

*Website: [www.intel.com](http://www.intel.com)*

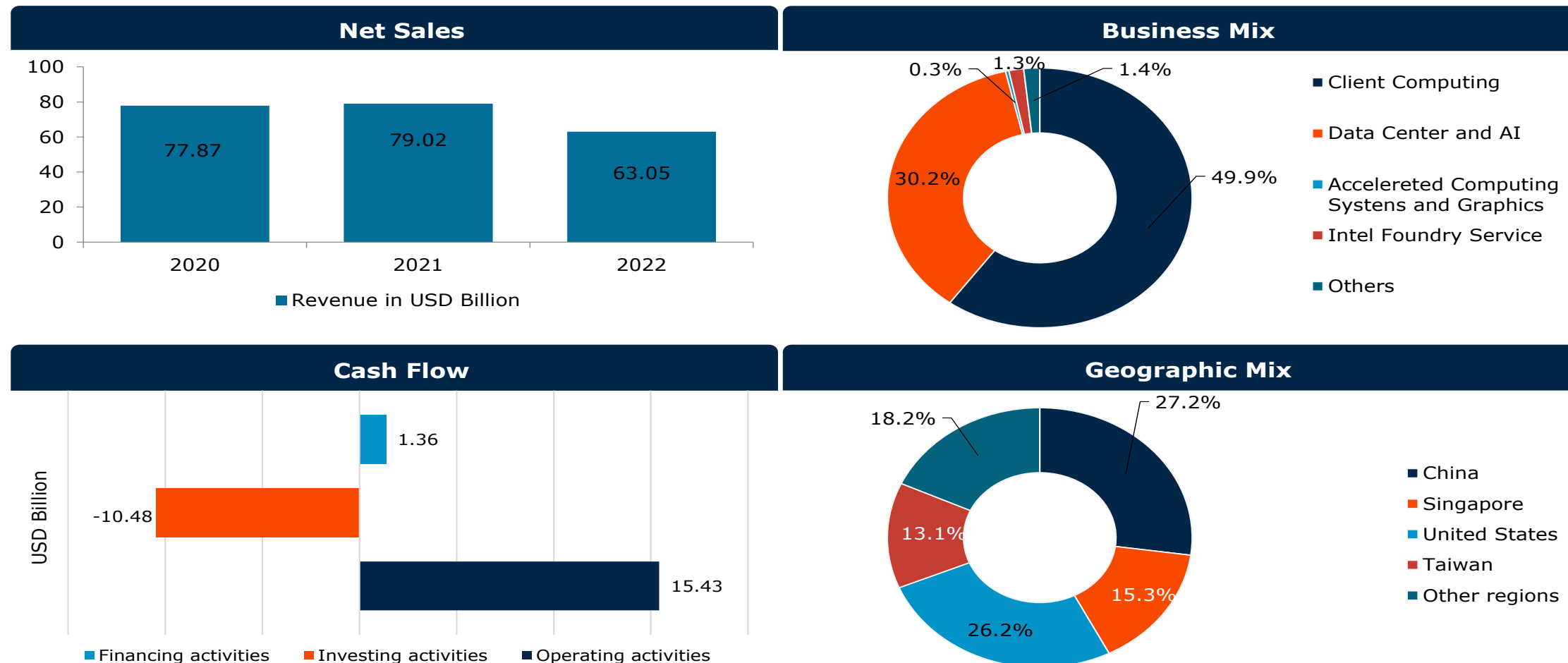
### COMPANY SUMMARY

Intel Corporation is a global leading semiconductor manufacturing company, involves in creating world changing technology which enables global progress and enrich lives. The company aims to develop hardware platform and software with industry-defining standards. Intel Corporation is founded in the year 1968 and headquartered in Santa Clara, California, United States. Intel corporation business is expanded in the region across China, Singapore, United States, Taiwan, and other regions. The company has a highly trained workforce of 132,000. Intel is best known for its microprocessors, which serve as the brains of computers, servers, and a vast array of electronic devices. The company's processors have played a pivotal role in driving the advancement of computing capabilities, enabling faster processing speeds, improved energy efficiency, and enhanced performance across various applications. Intel Corporation business is reportedly segmented into the areas of client computing, data center, internet of things (IoT), programmable solution and others.

In recent years, Intel has also invested significantly in areas such as artificial intelligence, autonomous driving, and edge computing. The company's technological advancements and expertise have led to innovations that support data-centric computing and enable the development of complex applications, from AI-driven analytics to high-performance computing.

## FINANCIAL INSIGHTS

Intel Corporation is a global leading semiconductor manufacturing company, involved in creating world changing technology which enables global progress and enrich lives.



Source: Company Website, Annual Report, News & Press Releases

## AG NEOVO

*Type: Public*

*Industry: Computer Hardware Manufacturing*

*Founded: 1999*

*Headquarters: Taipei, Taiwan*

*Website: [www.agneovo.com](http://www.agneovo.com)*

### COMPANY SUMMARY

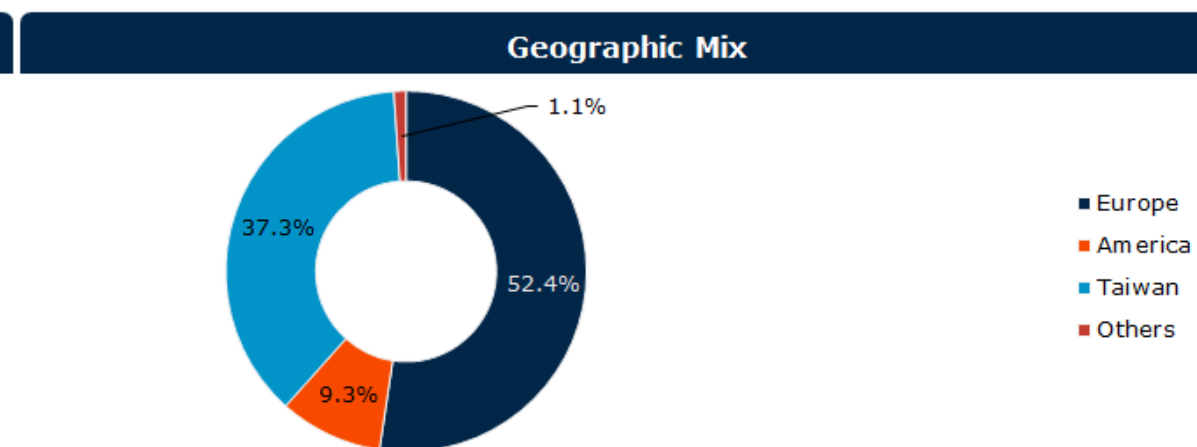
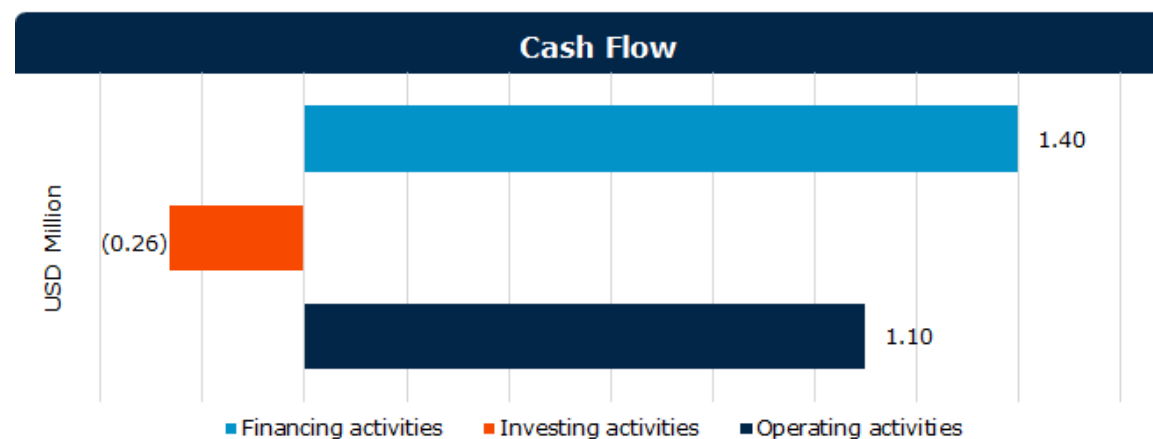
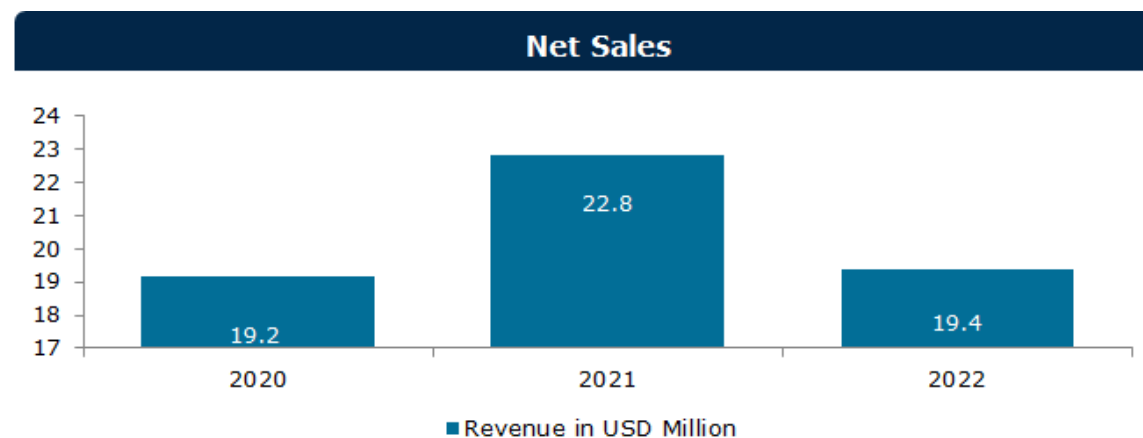
AG Neovo is a global leader in display-centric solutions and healthcare devices for professional markets. The company was created in 1999 and is headquartered in Taipei, Taiwan, with offices in Europe, Asia, and North America. Police stations, museums, science labs, hotels, classrooms, airports, and hospitals are all places where AG Neovo displays can be found. The displays are created with the client and use scenario in mind, which means they are the ideal fit for the use environment. AG Neovo has become the preferred option of professionals from a number of industries due to the company's commitment to producing display devices that meet the practical and aesthetic criteria of multi-user and public situations.

The organisation actively invests in the medical industry, with the goal of lowering obstacles to healthcare services, particularly for the elderly, crippled, and isolated rural residents. AG Neovo believes that doing the right thing and advancing in the right way, while focusing on medical product quality, would improve brand service and make the world a better place. The company's leadership in hard glass technology illustrates its capacity to bring important innovation to market. AG Neovo's proprietary NeoV Optical Glass has become the most trusted hard glass protection available today, specifically designed to handle the problems of multi-user and public contexts. NeoV Optical Glass, which is featured on a number of environment-specific display series, gives professionals the confidence to introduce displays into public spaces.



## FINANCIAL INSIGHTS

AG Neovo is a global leader in display-centric solutions and healthcare devices for professional markets. The company was created in 1999 and is headquartered in Taipei, Taiwan, with offices in Europe, Asia, and North America.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1 USD= 28.088103 NT, In 2021, 1 USD= 27.715108 NT, and In 2022, 1 USD= 30.635059 NT

		brightness and 16/7 operation, the PM-Series is the ideal signage solution for restaurants, retail stores, medical offices, corporate meeting areas or hotels.
▪ PN-SERIES	<ul style="list-style-type: none"> <li>▪ PN-46D2</li> <li>▪ PN-55D3</li> </ul>	The PN-Series with ultra narrow bezel is designed for advanced video wall solutions. Given the built-in scheduler, OPS slot, and UniWall function, these premium displays are easy to set up and maintain. With up to 700 nits of brightness and premium-grade panels, visually stunning video walls can be displayed in demanding environments — from large public venues to 24/7 operation control rooms.
▪ PD-SERIES	<ul style="list-style-type: none"> <li>▪ PD-65Q</li> <li>▪ PD-55Q</li> <li>▪ PD-43Q</li> </ul>	The PD-Series features a narrow bezel and a full slate of inputs, including HDMI, DisplayPort 1.2 for 4K 2×2 video wall setups, RS-232, and RJ45 ports for remote and network-based control. The displays also include other signage-friendly features such as landscape and portrait modes, simple scheduling, and a switch-on delay mechanism. Furthermore, the PD-Series also fits for security control room usages with its premium-grade panel and 24/7 design.
▪ PO-SERIES	<ul style="list-style-type: none"> <li>▪ PO-5502</li> <li>▪ PO-55H</li> </ul>	The PO-Series displays, with a brightness level of 2,500 cd/m2, help maintain image quality and increase readability in environments with high luminance light sources. The PO-Series displays additionally provide flexibility in customisation, ideally for integration into any customised designs such as kiosks, columns, and wall fixtures, catering for any commercial needs in outdoor public areas.
▪ PF-SERIES	<ul style="list-style-type: none"> <li>▪ PF-55H</li> </ul>	The PF-Series freestanding digital kiosk displays are capable of delivering crisp images in diverse indoor environments. The PF-Series can easily integrate IPC or media players for digital signage solutions and is ideal for indoor public settings with a durable metal housing and movable floor stand.
▪ MEETBOARD 3	<ul style="list-style-type: none"> <li>▪ IFP-8603</li> <li>▪ IFP-6503</li> </ul>	Meetboard 3 interactive displays are highly mobile, all-in-one collaborative hubs designed for use in multiple settings. Eliminating the need for additional devices or software, Meetboard 3 keeps classrooms, meeting rooms and co-working spaces organized and uncluttered and allows teaching and meetings to begin right away.

## ELO TOUCH SOLUTIONS, INC.

*Type: Private*

*Industry: Computer Hardware*

*Founded: 1971*

*Headquarters: Milpitas, California, United States*

*Website: [www.elotouch.com](http://www.elotouch.com)*

### COMPANY SUMMARY

Elo Touch Solutions is a well-known company that specializes in manufacturing and developing touchscreens and interactive digital solutions. The company was originally founded in 1971 as "Elographics," and it played a significant role in the commercialization and popularization of touchscreen technology. Elo Touch Solutions became widely recognized for its high-quality touchscreens, ranging from single touch to multi-touch devices. These touchscreens found applications in various industries, including retail, hospitality, healthcare, gaming, transportation, and more. The company's products were used in point-of-sale systems, interactive kiosks, digital signage, self-service terminals, industrial automation, and other interactive solutions.

Elo Touch Solutions focused on creating touchscreens with superior durability, accuracy, and responsiveness, making them suitable for heavy use in public and commercial settings. Their product lineup included a range of sizes and form factors, from small displays for handheld devices to large interactive displays for kiosks and retail environments. The product portfolio comprises interactive touchscreen displays ranging in size from 7 to 65 inches, all-in-one touchscreen computers, OEM touchscreens and touchscreen controllers, and touchscreen monitors.

## IADEA CORPORATION

*Type: Private*

*Industry: Electrical, and Electronics Manufacturing*

*Founded: 2000*

*Headquarters: Taipei, Taiwan*

*Website: [www.iadea.com](http://www.iadea.com)*

### COMPANY SUMMARY

IAdea is prominent manufacturer and distributor of worldwide digital signage hardware market. The company specializes in crafting forward-looking, commercial-grade digital signage media players and integrated displays. The company was founded in the year 2000 and is headquartered in Taipei, Taiwan. Idea's products have been acknowledged for their impeccable quality, resilience in real-world settings, seamless integration with prominent third-party solutions, and continuous innovation for last 20 years. IAdea offering its products and solutions to corporates, academic institutions, retail, and other industries.

IAdea Corporation's major business is segmented into the areas of facility management, digital signage, software, services, and accessories. IAdea takes pride in its compatibility with leading third-party solutions, facilitating seamless integration and unmatched versatility. Also, IAdea's worldwide impact is magnified by our comprehensive ecosystem founded on open standards. The products and solutions of Idea Corporation encompass a broad range of business sectors, delivering flexible and scalable choices to cater to a variety of requirements.



## **11.** COMPETITIVE LANDSCAPE (MEDIA PLAYERS)

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## 11.1. DIGITAL SIGNAGE HARDWARE MARKET: COMPANY MARKET SHARE ANALYSIS

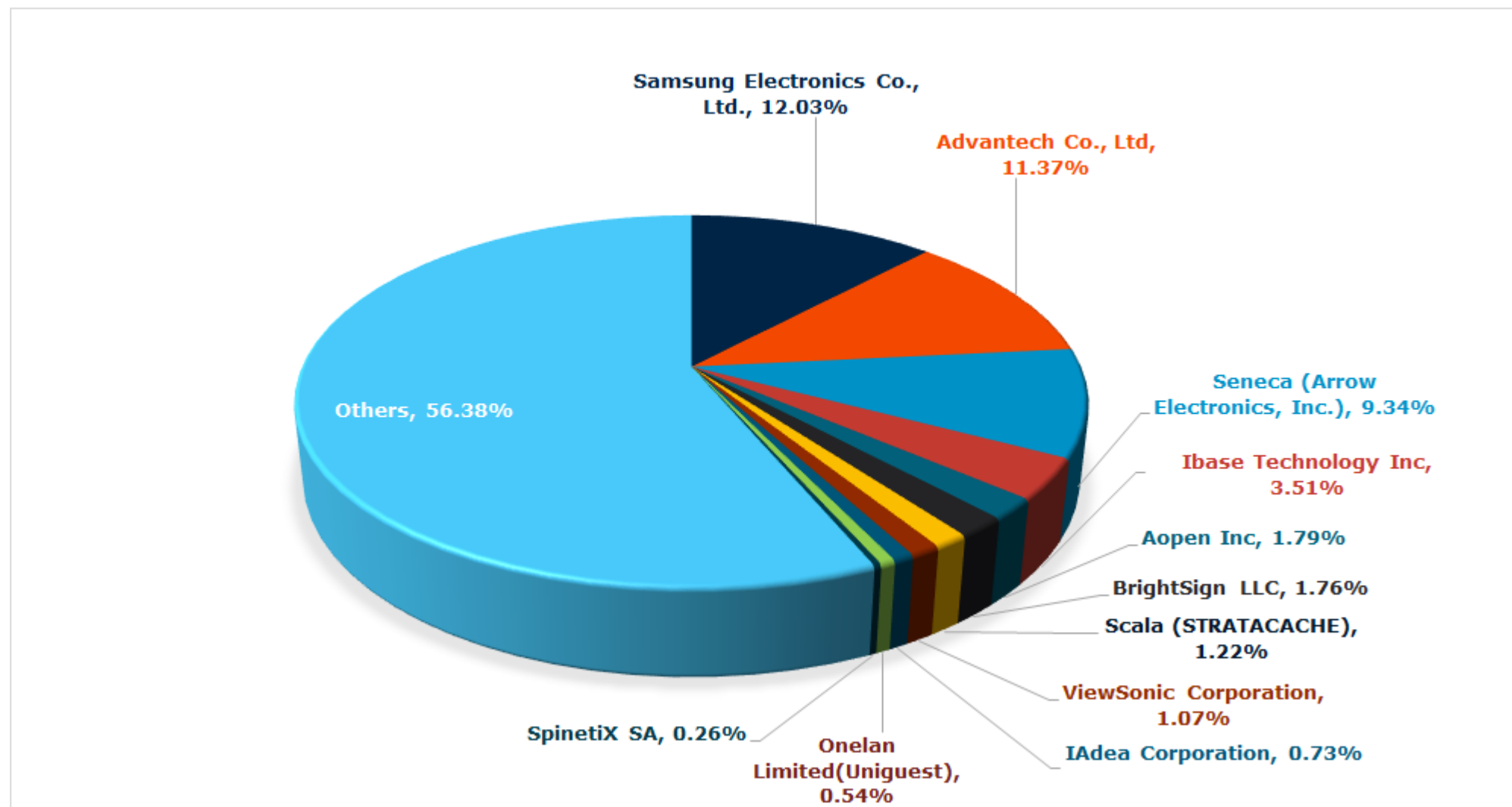
The Digital Signage Hardware Market for Media Players is fragmented in nature, with several numbers of established as well as new market players. The top five companies operating in NA, EU, APAC market together hold 38% of the market, as of 2022. Samsung Electronics Co. Ltd. dominated the market with 12.03% of market share, followed by Advantech Co., Ltd, Seneca (Arrow Electronics, Inc.), Ibase Technology Inc, and Aopen Inc, with 11.37%, 9.34%, 3.51% and 1.79% market shares respectively.

**TABLE 282. DIGITAL SIGNAGE HARDWARE MARKET: MARKET SHARE OF TOP COMPANIES IN MEDIA PLAYERS**

Company	Market Share
Samsung Electronics Co., Ltd.	12.03%
Advantech Co., Ltd	11.37%
Seneca (Arrow Electronics, Inc.)	9.34%
Ibase Technology Inc	3.51%
Aopen Inc	1.79%
BrightSign LLC	1.76%
Scala (STRATACACHE)	1.22%
ViewSonic Corporation	1.07%
IAdea Corporation	0.73%
Onelan Limited (Uniguest)	0.54%
SpinetiX SA	0.26%
Others	56.38%

Source: Company Products and Strategy Analysis, Primary Research, Executive Interview, and Emergen Research Analysis

**FIGURE 24.** DIGITAL SIGNAGE HARDWARE MARKET: MARKET SHARE ANALYSIS OF MEDIA PLAYERS



Source: Company Products and Strategy Analysis, Primary Research, Executive Interview, and Emergen Research Analysis

**TABLE 286.** ACQUISITION IN DIGITAL SIGNAGE HARDWARE MARKET, 2020-2023

DATE	COMPANY NAME	DESCRIPTION
02 May 2023	Uniguest	Uniguest has completed acquisition of Bunch, a video solutions provider that focuses on business-oriented video-based engagement. Bunch places a strong emphasis on providing outstanding customer support, ensuring content encryption and security, fostering audience engagement, and prioritizing ease of use. These principles harmonize seamlessly with Uniguest's core values and guiding principles.

Source: Company Products and Strategy Analysis, Primary Research, Executive Interview, and Emergen Research Analysis





## **12.**COMPANY PROFILES (MEDIA PLAYERS)

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## 12.1. SAMSUNG ELECTRONICS CO., LTD.

*Type: Public*

*Industry: Electrical, and Electronics Manufacturing*

*Founded: 1938*

*Headquarters: Seoul, South Korea*

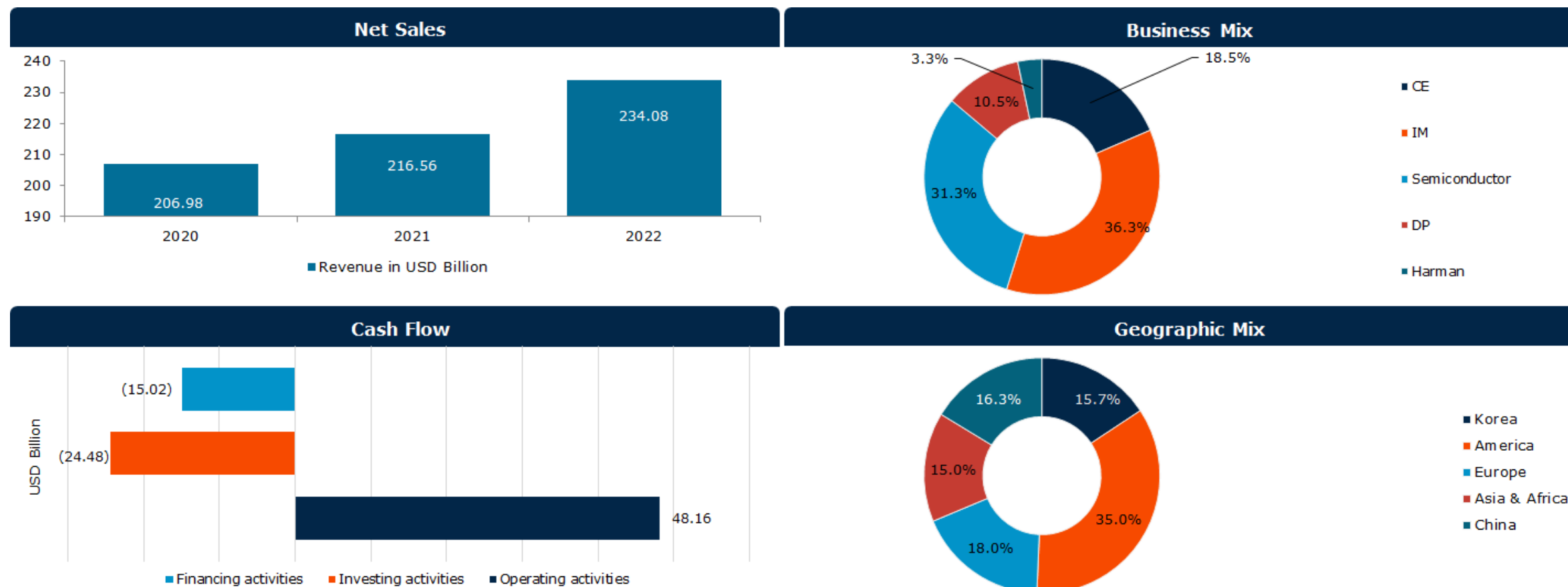
*Website: [www.samsung.com](http://www.samsung.com)*

### 12.1.1. COMPANY SUMMARY

Samsung Electronics Co., Ltd. operates in the consumer electronics, information technology, and mobile communications, as well as device solutions, markets around the world. It sells refrigerators, air conditioners, washing machines, dryers, cooking appliances, dishwashers, vacuum cleaners, air conditioners, and air purifiers. TVs, sound devices, smartphones, tablets, monitors, smart and LED signage, watches, and other accessories are also available, as are memory storage solutions. It also offers medical equipment, software design, development, and supply, toll processing of semiconductors and display panels, general logistics, financing, marketing, consulting, and technology and cloud services, venture capital investment, enterprise automation solutions and connected services, installation and optimization services for network devices, and digital advertising platforms. The company serves retail, hospitality, finance, transportation, education, government, manufacturing, public safety, and healthcare industries. Samsung Electronics Co., Ltd. was established in 1938 and is headquartered in Suwon, South Korea.

## 12.1.2. FINANCIAL INSIGHTS

Samsung Electronics founded 1938 and headquartered in Seoul, South Korea. Samsung major global player in technology, opening new possibilities for people everywhere. Through relentless innovation and discovery, Samsung is transforming the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, medical devices, semiconductors and LED solutions.



Source: Company Website, Annual Report, News & Press Release

## 12.2. ADVANTECH CO., LTD

*Type: Public*

*Industry: Industrial Automation*

*Founded: 1983*

*Headquarters: Neihu District, Taipei, Taiwan*

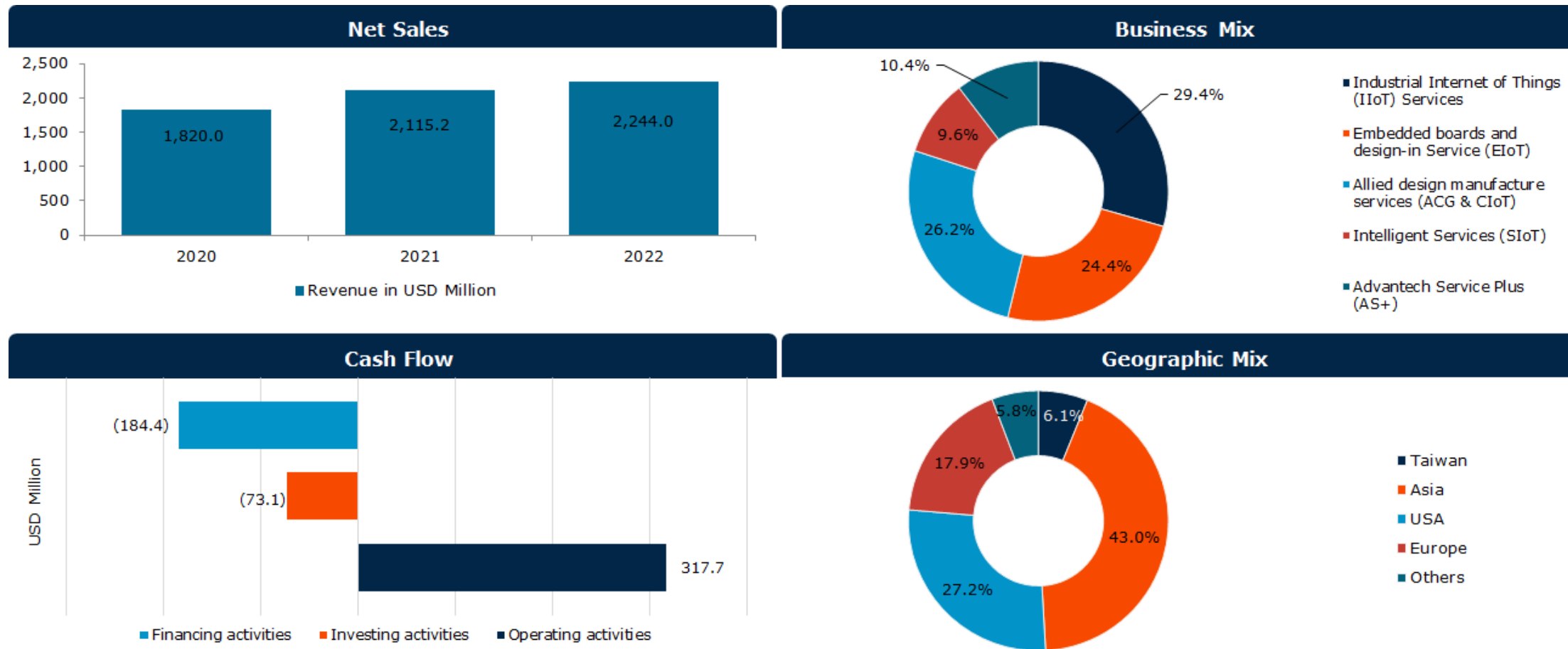
*Website: [www.advantech.com](http://www.advantech.com)*

### COMPANY SUMMARY

Advantech Co. Ltd. is a global company that specializes in providing intelligent systems and embedded platforms. Founded in 1983, Advantech is headquartered in Taipei, Taiwan. The company is a leader in providing industrial computing and IoT (Internet of Things) solutions for various industries including manufacturing, healthcare, transportation, retail, and more. Advantech offers a wide range of products and solutions, including industrial computers, embedded systems, IoT devices, industrial communication solutions, automation products, and various software solutions. These products are designed to enable digital transformation and enhance operational efficiency in various industries. Advantech plays a significant role in the Industry 4.0 movement by providing technologies and solutions that enable the integration of automation, data analytics, and smart manufacturing processes. Their offerings help businesses collect, analyze, and act on data to improve decision-making and optimize operations. With a strong international presence, Advantech operates in numerous countries and regions, providing localized support and solutions tailored to specific market needs. Advantech collaborates with a wide range of industry partners, including technology providers, system integrators, and solution developers. These partnerships help create comprehensive and innovative solutions that address complex business challenges. The company focuses on various vertical markets, such as industrial automation, retail, healthcare, transportation, and energy. By understanding the unique requirements of each industry, Advantech develops specialized solutions that cater to specific demands.

## FINANCIAL INSIGHTS

Advantech Co. Ltd. is an international corporation with expertise in delivering smart systems and embedded platforms. Established in 1983, the company is based in Taipei, Taiwan.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1USD= 28.088103 TND, In 2021, 1 USD= 27.715108 TND, In 2022, 1 USD= 30.635059 TND

## 12.3. SENECA (ARROW ELECTRONICS, INC.)

*Type: Public*

*Industry: IT Services and IT Consulting*

*Founded: 1946*

*Headquarters: Centennial, Colorado, United States*

*Website: [www.arrow.com](http://www.arrow.com)*

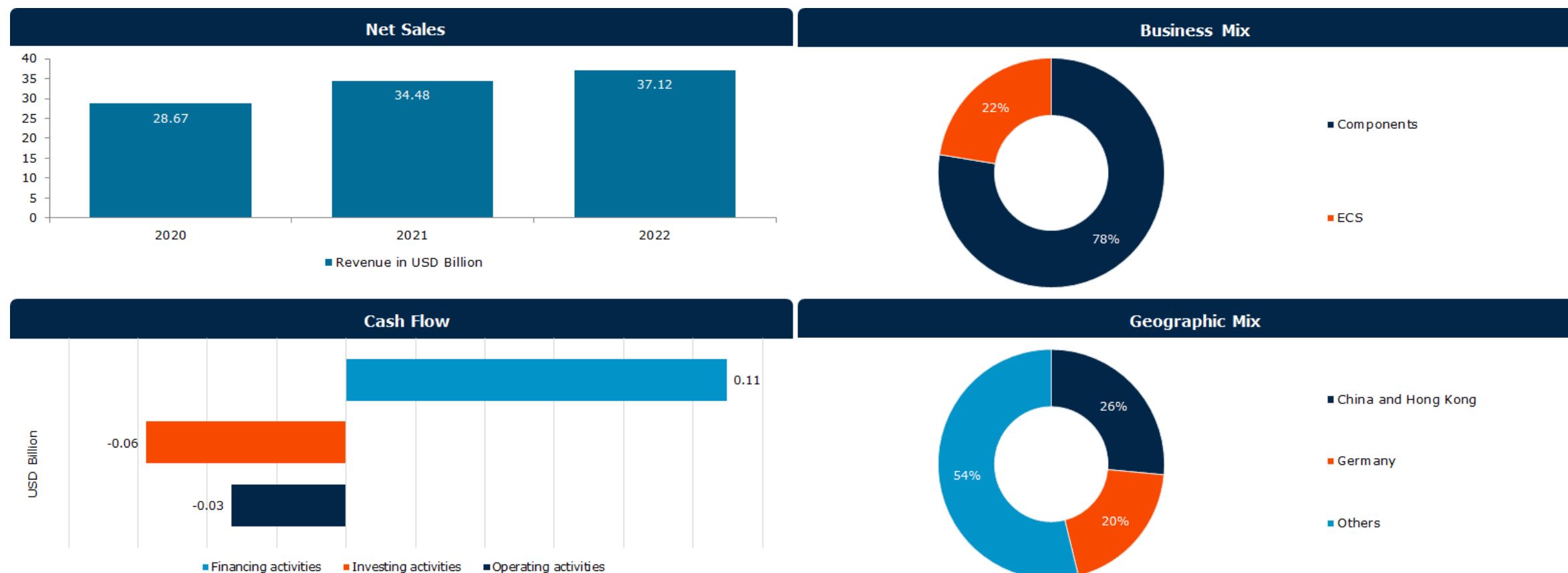
### 12.3.1. COMPANY SUMMARY

Seneca designs and develops digital signage setups globally. In 2014, Arrow Electronics acquired Seneca Data and presently the company operates under subsidiary of Arrow Electronics, Inc. Seneca offers an array of digital signage solutions designed to provide effortless out-of-the-box experiences. Ranging from video wall controllers (VWC) to media players and beyond, the diverse selection of digital signage products is characterized by simplicity, reliability, scalability, and the flexibility to be customized according to customer requirements.

Arrow Electronics business is segmented into the strategic key areas of the global components business and the global enterprise computing solutions (ECS) business. With a presence in more than 90 countries, the organization operates through a network of over 220 sales establishments and 43 distribution and value-added hubs. Its operations span across the major electronics markets of the Americas, Europe, Middle East, and Africa (EMEA), as well as the Asia Pacific regions. Arrow's strategic vision revolves around becoming the foremost technology-focused provider of go-to-market and supply chain services worldwide.

## 12.3.2. FINANCIAL INSIGHTS

Seneca manufactures digital signage media players, comprehensive all-in-one digital signage displays, and versatile video wall controllers, all meticulously tailored to suit the distinct requirements of enterprise. Seneca provides a diverse range of digital signage solutions that ensure effortless setup. From video wall controllers (VWC) to media players.



Source: Company Website, Annual Report, News & Press Releases

## 12.4. IBASE TECHNOLOGY INC

*Type: Public*

*Industry: Electrical, and Electronics Manufacturing*

*Founded: 1995*

*Headquarters: Taipei, Taiwan*

*Website: [www.ibase.com](http://www.ibase.com)*

### 12.4.1. COMPANY SUMMARY

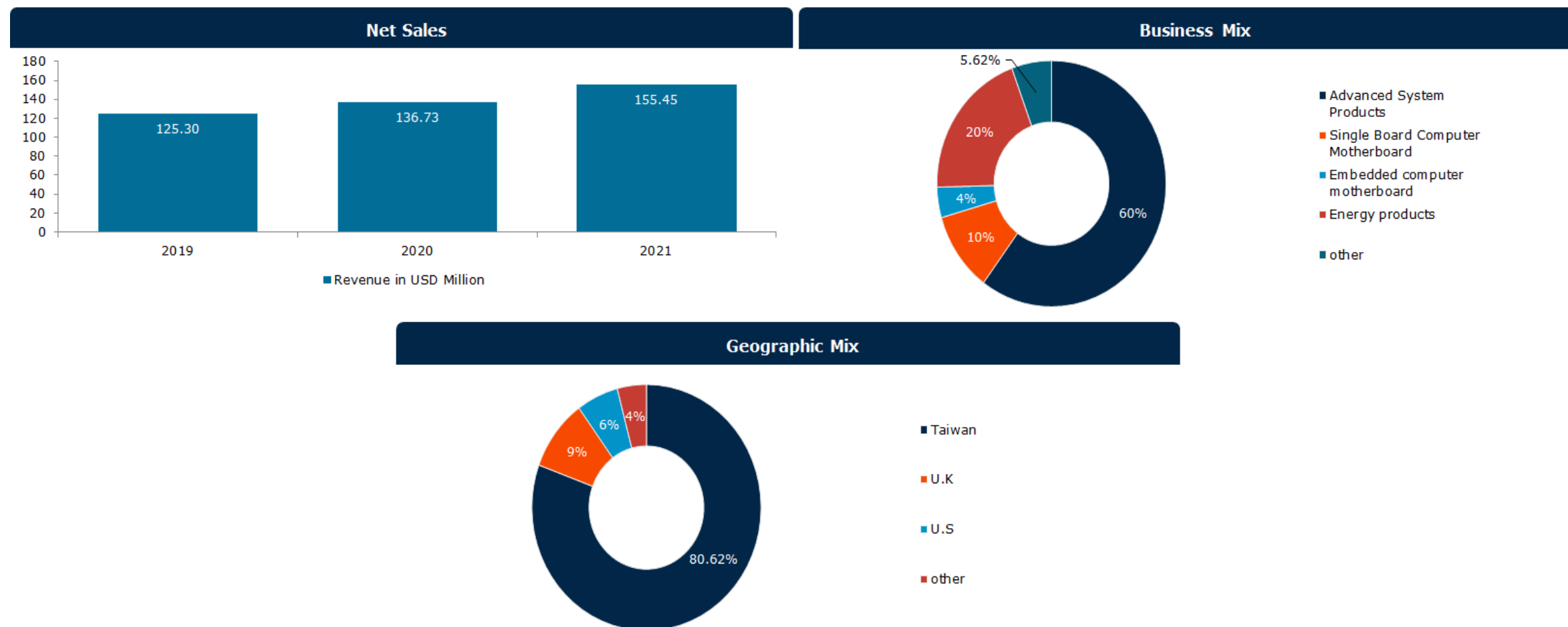
IBASE Technology specializes in the development and manufacture of various durable industrial PC products. The company incorporated in the year 1995, headquarters in Taipei, Taiwan and delivered high-quality products and exceptional service to customers. IBASE operates three manufacturing facilities in Taiwan, with two in New Taipei City and another in Taoyuan City. The manufacturing facilities of IBASE technology hold certifications for ISO 9001, ISO 13485, ISO 14001, and ISO 27001 standards. IBASE Technology is publicly traded on the Taipei Exchange and has positioned itself as a prominent worldwide supplier of inventive solutions within the realm of industrial and embedded computing.

IBASE Technology's business is majorly segmented into the areas of Advanced System Products, Single Board Computer Motherboard, Embedded computer motherboard, Energy Products and others. Presently, the range of products available includes industrial motherboards built on both x86 and RISC architectures, embedded systems, panel PCs, digital signage players, and network appliances. These products are tailored for various applications across sectors such as AIoT, industrial automation, smart retail, intelligent transportation, networking, communication, and the medical field. Also, the company has dedicated design and development team to design, manufacture and deliver products and solutions based on market as well as industry requirements.



## 12.4.2. FINANCIAL INSIGHTS

IBASE Technology focuses on the design and production of a range of resilient industrial PC products. Established in 1995 and headquartered in Taipei, Taiwan, the company has consistently provided customers with top-notch products and outstanding service.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2019, 1 USD= 31.36 NT\$, In 2020, 1 USD= 28.09 NT\$, In 2021, and In 2021 1 USD= 27.72 NT\$

## 12.5. AOPEN INC

*Type: Public*

*Industry: Appliances, Electrical, and Electronics Manufacturing*

*Founded: 1996*

*Headquarters: Taipei City, Taipei, Taiwan*

*Website: [www.aopen.com](http://www.aopen.com)*

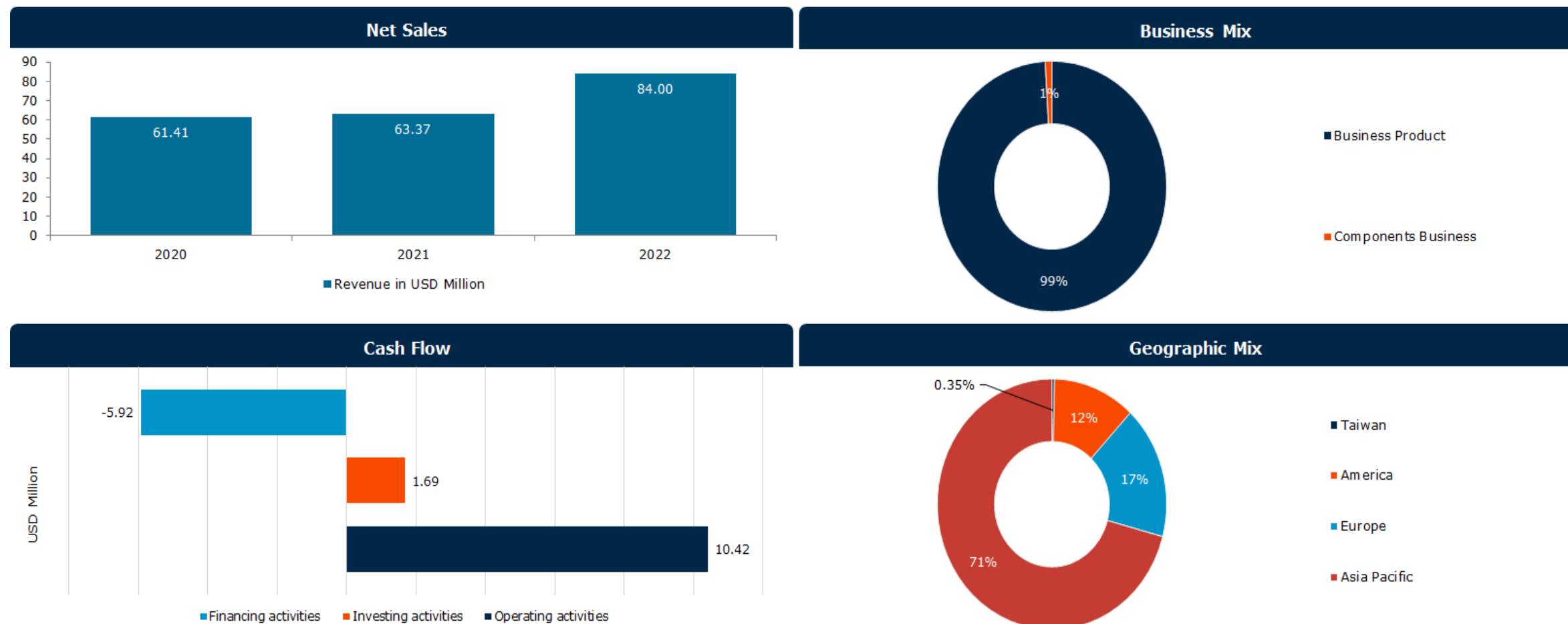
### 12.5.1. COMPANY SUMMARY

AOPEN inc is a electronics manufacturer specializing in the production of computers and computer components. The company was founded in the year 1996 and headquarters are in Taipei City, Taipei, Taiwan. AOPEN provides top-tier, cross-platform, commercial-grade smart vision solutions in cloud-based digital signage and applied computing. The company designs designing, develops solutions to meet both present and future market requirements in applied computing and smart vision products. These solutions empower applications in AIoT and Machine Learning across diverse industries like QSR, Smart Retail, Smart Manufacturing, Hospitality, and Transportation.

AOPEN's business is segmented into the areas of business products and components. The company manufactures an array of industrial embedded pc, touch pannel pc, AiCu, commercial products and consumer products. AOPEN is actively shaping the landscape of applied computing and smart vision products. The company also offers array of commercial-grade solutions that are tailored to match the specific requirements of retail industries such as, Point of Sale (POS), Intelligent Kiosks, Wayfinding Systems, Smart Retail Solutions, Smart Manufacturing Innovations, Machine Learning Applications, Cloud-based Solutions, AIoT (Artificial Intelligence of Things). AOPEN Inc continues to lead the way in driving transformation within the electronics and technology sector by grounded in innovation, versatility, and a commitment to industry-leading performance.

## 12.5.2. FINANCIAL INSIGHTS

AOPEN Inc, headquartered in Taiwan, is a prominent player in the field of electronics manufacturing. Renowned for legacy of innovation, we excel in crafting state-of-the-art computers and components that drive a wide array of applications.



Source: Company Website, Annual Report, News & Press Releases

Note: In 2020, 1 USD= 28.09 NT\$, In 2021, 1 USD= 27.72 NT\$, and In 2022, 1 USD= 30.64 NT\$

<ul style="list-style-type: none"> <li>DE3125</li> </ul>	<p>The DE3125 media player with Intel N-series quad-core Processor N100 and Intel UHD Graphics supports 4K@60 on two HDMI2.0 displays. Higher CPU and GPU turbo frequency can deliver a better user experience.</p>	<ul style="list-style-type: none"> <li>UHD (4k) content playback</li> <li>-20°C operating temperature</li> <li>Fanless design</li> <li>Trusted Platform Module 2.0</li> </ul>
<ul style="list-style-type: none"> <li>DE3650</li> </ul>	<p>The DE3650 is a digital signage media player with Intel Celeron quad-core Processor J6412 and Intel UHD Graphics support 4K@60 on two displays. DE3650, also with in-band and out-of-band remote management control, allows you to cold boot or perform an OS recovery or backup even when the OS is hung up. Fanless chassis and solid-state storage design suitable for various applications in different environments.</p>	<ul style="list-style-type: none"> <li>UHD (4k) content playback</li> <li>-20degC operating temperature</li> <li>Fanless design</li> <li>AOPEN intelligent Control</li> </ul>
<ul style="list-style-type: none"> <li>AOPEN ACE MAX (DEX5750)</li> </ul>	<p>The DEX5750 is a fanless design computer with 4-screen output; support 11th Gen Intel Core processors deliver a balance of performance and responsiveness in a low-power platform built on third generation 10nm process technology. With new Intel Iris</p>	<ul style="list-style-type: none"> <li>ChromeOS Flex certified, supports high-resolution 4-screen output</li> <li>UHD (4K) content playback</li> <li>-20degC operating temperature</li> <li>4-screens output player</li> <li>Intel Core-i Platform</li> <li>Support AiCU Out-of-Band (OOB) remote management (optional)</li> </ul>
<ul style="list-style-type: none"> <li>AOPEN ACE Xtreme (DEX5750-W)</li> </ul>	<p>The first AOPEN Intel-based system capable of supporting hardware accelerated AV1 8K playback. As if that wasn't enough, the DEX5750-W has a 12 ~ 24V DC for automotive use and a legacy RS232/422/485 COM Port selectable by BIOS, making the system very suitable for automation purposes.</p>	<ul style="list-style-type: none"> <li>Intel Core-i Platform</li> <li>-20° operating temperature</li> <li>4-screens output player</li> <li>AOPEN Intelligent Control (AiCU)</li> </ul>

Source: Company Website, Annual Report, News & Press Releases

## 12.6. BRIGHTSIGN LLC

*Type: Private*

*Industry: Computer Hardware Manufacturing*

*Founded: 2002*

*Headquarters: Los Gatos, California, United States*

*Website: [www.brightsign.biz](http://www.brightsign.biz)*

### 12.6.1. COMPANY SUMMARY

BrightSign designs, develops and manufactures digital signage media players for array of markets such as retail, enterprise, finance, healthcare, hospitality, restaurants, education and others. The company founded in the year 2002 and headquarters in Los Gatos, California, United States. The company has operational presence in more than 130+ countries and global network of more than 4,000 authorized resellers. BrightSign professionals and collaborators work together to discover innovative and captivating methods of leveraging BrightSign technology. The company partners with major companies across worldwide such as IKEA, BestBuy, LG, Nissan, GoPro and others.

BrightSign's business is strategically segmented into the areas of brightsign ecosystem, brightsign players and experiences. BrightSign's products and solutions are renowned for dependability, robust security measures, ease of maintenance, user-friendly interface, and unparalleled performance. Across its complete range of players, BrightSign incorporates its own operating system BrightSignOS, a distinctive and custom-designed operating system crafted to facilitate the creation, authoring, publishing, and supervision of digital signage content. Also, the company has developers and engineers to design and develop products which are specifically designed for specific market requirements.

## 12.7. IADEA CORPORATION

*Type: Private*

*Industry: Electrical, and Electronics Manufacturing*

*Founded: 2000*

*Headquarters: Taipei, Taiwan*

*Website: [www.iadea.com](http://www.iadea.com)*

### 12.7.1. COMPANY SUMMARY

IAdea is prominent manufacturer and distributor of worldwide digital signage hardware market. The company specializes in crafting forward-looking, commercial-grade digital signage media players and integrated displays. The company was founded in the year 2000 and is headquartered in Taipei, Taiwan. Idea's products have been acknowledged for their impeccable quality, resilience in real-world settings, seamless integration with prominent third-party solutions, and continuous innovation for last 20 years. IAdea offering its products and solutions to corporates, academic institutions, retail, and other industries.

IAdea Corporation's major business is segmented into the areas of facility management, digital signage, software, services, and accessories. IAdea takes pride in its compatibility with leading third-party solutions, facilitating seamless integration and unmatched versatility. Also, IAdea's worldwide impact is magnified by comprehensive ecosystem founded on open standards. The products and solutions of Idea Corporation encompass a broad range of business sectors, delivering flexible and scalable choices to cater to a variety of requirements.

## 12.8. SPINETIX SA

*Type: Private*

*Industry: Electrical, and Electronics Manufacturing*

*Founded: 2006*

*Headquarters: Hergiswil, Switzerland*

*Website: [www.spinetix.com](http://www.spinetix.com)*

### 12.8.1. COMPANY SUMMARY

SpinetiX is a major company in digital signage solution delivering cutting-edge technology for customers and businesses. The company founded in the year 2006 and headquarters in Hergiswil, Switzerland. SpinetiX holds the status of a Gold member within the Intel Partner Alliance, a worldwide network consisting of over 400 member companies. This alliance serves as a collaborative ecosystem offering scalable and interoperable solutions, designed to expedite the implementation of intelligent devices and comprehensive analytics solutions. SpinetiX has array of leading customer across worldwide, some of its major clients are CocaCola, Vodafone, NASA, MercedesBenz, AGCO, Maersk, and others.

SpinetiX business is segmented into the core areas of solutions and products. Products and solutions of SpinetiX offerings encompass open-source technology alongside a comprehensive digital signage solution, simplifying its seamless integration with external systems and technologies. SpinetiX offers the market's most versatile complete digital signage solution, encompassing acclaimed HMP media players, the Elementi software featuring over 250 widgets, the advanced SpinetiX ARYA cloud platform, and the innovative DSOS operating system.

## 12.9. SCALA (STRATACACHE)

*Type: Private*

*Industry: Advertising Services*

*Founded: 1987*

*Headquarters: Malvern, Pennsylvania, United States*

*Website: [www.scala.com](http://www.scala.com)*

### 12.9.1. COMPANY SUMMARY

Scala is a digital signage software and hardware provider, the company founded in the year 1991. The company headquarters are located in Philadelphia, Pennsylvania USA and has 28+ offices worldwide. In 2016, Stratacache acquired Scala, which was Scala's primary competitor in the digital signage sector. As a member of the Stratacache group of marketing technology firms, Scala now benefits from an extensive suite of in-house software, hardware, services, and support, driven by an unparalleled global delivery capacity. The company operates globally in more than 100+ and heavily focuses on the retail and restaurant sector, but also has customers in other verticals such as education, corporate communications, transportation, and government.

Scala's business can be segmented into the areas of software and hardware. Scala offers an extensive array of proprietary software, hardware, services, and support, complemented by an unparalleled worldwide distribution proficiency. The company forges strategic alliances with organizations seeking a marketing first perspective to revolutionize their physical environments, spanning from retail outlets and financial establishments to restaurants, transportation hubs, and more. Scala has a sizable group of imaginative experts, technology resource, business growth and marketing professionals, along with development teams, relish the opportunity to take on endeavors of varying scales, scopes, and intricacies.



## 12.10. ONELAN LIMITED (UNIGUEST)

*Type: Private*

*Industry: Software Development*

*Founded: 1986*

*Headquarters: Nashville, Tennessee, United States*

*Website: [www.uniguest.com](http://www.uniguest.com)*

### 12.10.1. COMPANY SUMMARY

Uniguest is a global frontrunner in delivering secure engagement solutions, empowering clients to engage with their audiences through contemporary and impactful digital avenues. The company founded in the year 1986 and headquarters in Nashville, Tennessee, United States. In the year 2016, Uniguest has acquired Onelan, a U.K. based digital visual communications company to expand its operations in the U.S. with its wayfinding, digital signage and meeting space products. For nearly four decades, Uniguest has been a specialist in hotel and hospitality technology, continuously elevating its offerings through strategic acquisitions, mergers, and valuable partnerships with top-tier brands across various market segments. The company serving its solutions across diverse sectors, including hospitality, casinos, corporate environments, banking, finance, sports venues, stadiums, arenas, healthcare facilities, government institutions, military organizations, senior living communities, retail establishments, and educational institutions.

Uniguest solutions are segmented into the areas of digital signage, IP Video, Engagement Apps, Managed Hardware, Hardware and delivering connected content from anywhere to anywhere for customers and partners. Also, the serves as the hub for various professional AV and market-specific solutions, encompassing a range of names such as Tripleplay, Onelan, MediaStar, Otrum, eStream, Touchtown, Sagely, Janus, Volara, Eversound, Bunch, and UCView. Additionally, Uniguest collaborates with premier technology distributors and integrators worldwide, further enhancing its position in the industry.

## 12.10.2. PRODUCT INSIGHTS

Product	Description	Features
<ul style="list-style-type: none"> <li>NTB-HDN-RTL1-S</li> <li>NTB-HDN-RTL1-S-W</li> </ul>	The NTB-HDN-RTL1 represents ONELAN's fanless player tailored explicitly for the retail sector, catering to budget-conscious or space-constrained scenarios. It is optimized for single-zone usage.	<ul style="list-style-type: none"> <li>Resolutions up to 1920 x 1080 p60</li> <li>Slim profile for back of screen mounting</li> <li>HD stream-in, dual band Wi-Fi and touch options</li> <li>Intel Celeron processor</li> <li>Video, HTML5, images, text and audio</li> <li>Includes Standalone and Subscriber capability</li> </ul>
<ul style="list-style-type: none"> <li>RTL-UP-HD-1</li> <li>RTL-UP-HD-10</li> </ul>	The NTB-HDN-RTL1F is ONELAN's budget single zone player. Ideal for cost sensitive or space restricted applications.	<ul style="list-style-type: none"> <li>HD Stream-in and touch options</li> <li>Available as Subscriber (S) or using a CMS Player Licence (0)</li> <li>Supports resolutions up to (FHD) 1920 x 1080 at 60p</li> <li>Active fan cooling</li> <li>Intel Celeron Processor</li> <li>Video, HTML5, images, text and Audio</li> </ul>
<ul style="list-style-type: none"> <li>NTB-HDN-1-S</li> <li>NTB-HDN-1-S-W</li> </ul>	The NTB-HDN-1 represents ONELAN's fanless player optimized for four zones and designed with budget considerations in mind. It serves as an excellent	<ul style="list-style-type: none"> <li>Resolutions up to 1920 x 1080</li> <li>Slim profile for back of screen mounting</li> <li>HD stream-in, dual band Wi-Fi and</li> </ul>

	solution for scenarios where cost efficiency or limited space are key factors, such as in retail, corporate, or educational settings.	<ul style="list-style-type: none"> <li>▪ touch options</li> <li>▪ Intel Celeron processor</li> <li>▪ Video, HTML5, images, te</li> </ul>
<ul style="list-style-type: none"> <li>▪ NTB-HDN-10-S</li> <li>▪ NTB-HDN-10-S-W</li> <li>▪ NTB-HDN-10-0</li> <li>▪ NTB-HDN-10-0-W</li> </ul>	The NTB-HDN-10 stands as ONELAN's fanless player offering unlimited zones, tailored for scenarios where budget constraints or space limitations are prominent factors. It proves to be an excellent fit for applications such as corporate environments or hospitality settings.	<ul style="list-style-type: none"> <li>▪ Resolutions up to 1920 x 1080 p60</li> <li>▪ Slim profile for back of screen</li> <li>▪ mounting</li> <li>▪ HD stream-in, dual band Wi-Fi and</li> <li>▪ touch options</li> <li>▪ Intel Celeron processor</li> <li>▪ Video, HTML5, images, text and</li> <li>▪ audio</li> <li>▪ Includes Standalone and</li> <li>▪ Subscriber capability</li> </ul>
<ul style="list-style-type: none"> <li>▪ NTB-HDN-10F-S-W</li> <li>▪ NTB-HDN-10F-0-W</li> </ul>	The NTB-HDN-10F serves as ONELAN's player designed for unlimited zones, making it a perfect fit for scenarios requiring touch interactivity or HD video wall capabilities. It finds its ideal applications in corporate environments or hospitality settings, for instance.	<ul style="list-style-type: none"> <li>▪ HD stream-in and touch options</li> <li>▪ Available as a Subscriber (S) or</li> <li>▪ using a CMS Player Licence (0)</li> <li>▪ Supports resolutions up to (FHD)</li> <li>▪ 1920 x 1030 at 60p</li> <li>▪ Active fan cooling</li> <li>▪ Intel Celeron Processor</li> <li>▪ Video, HTML5, images, text and audio</li> </ul>
<ul style="list-style-type: none"> <li>▪ V4</li> <li>▪ V9</li> </ul>	The NTB-4K-1000 from Uniguest is a fanless 4K digital signage media player that seamlessly integrates with Onelan's Digital Signage CMS. This player can	<ul style="list-style-type: none"> <li>▪ Supports resolutions 3840 x 2160 p60 H.265 video</li> <li>▪ Slim profile for back of screen mounting</li> <li>▪ HD stream-in, dual band Wi-Fi and touch options</li> <li>▪ Intel i3 processor</li> </ul>

	be utilized either as part of a signage network or as a standalone unit, making it well-suited for applications involving feature video walls, as well as corporate and retail settings.	<ul style="list-style-type: none"><li>▪ 4K video, HTML5, images, text and audio</li><li>▪ Includes Standalone and</li><li>▪ Subscriber capability</li></ul>
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Source: Company Website, Annual Report, News & Press Releases

12.10.3. STRATEGIC INITIATIVES

Date	Type	Description
2 <sup>nd</sup> May 2023	Acquisition	Uniguest has completed acquisition of Bunch, a video solutions provider that focuses on business-oriented video-based engagement. Bunch places a strong emphasis on providing outstanding customer support, ensuring content encryption and security, fostering audience engagement, and prioritizing ease of use. These principles harmonize seamlessly with Uniguest's core values and guiding principles.
1 <sup>st</sup> February 2023	Product Launch	Uniguest, launched a fresh lineup of NTB Digital Signage Players for its Onelan enterprise digital signage platform at ISE2023. This latest iteration of digital signage media players merges cutting-edge hardware technology with the trusted reliability that Onelan has built its reputation upon. Users can now leverage upgraded devices featuring advancements like expanded solid-state drive capacity, doubled memory for enhanced performance, and built-in Wi-Fi as a standard feature.

Source: Company Website, Annual Report, News & Press Releases

## 12.11. VIEWSONIC CORPORATION

*Type: Private*

*Industry: IT Services and IT Consulting*

*Founded: 1987*

*Headquarters: Brea, California, United States*

*Website: [www.viewsonic.com](http://www.viewsonic.com)*

### 12.11.1. COMPANY SUMMARY

ViewSonic is a globally recognized technology company that has established itself as a leading provider of visual display solutions. With a strong commitment to innovation and customer-centricity, ViewSonic delivers a diverse range of cutting-edge products that span monitors, projectors, interactive displays, digital signage, and other visual communication tools. With a history dating back to its founding in 1987, ViewSonic has consistently pushed the boundaries of visual technology. The company's offerings cater to a wide spectrum of industries and applications, including education, business, entertainment, and professional settings. ViewSonic's solutions are renowned for their exceptional performance, reliability, and intuitive user experiences. At the core of ViewSonic's philosophy is a dedication to creating products that enhance communication, collaboration, and engagement. ViewSonic's portfolio is designed to meet the evolving needs of modern users from high-resolution monitors that deliver stunning visuals to interactive displays that foster interactive learning and dynamic presentations.

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