

Initiation Report

VIOMI TECHNOLOGY CO., LTD.



Viomi Technology Co., Ltd. – Targeting Enormous Chinese Smart Home Market with Innovative Product Suite

Viomi Technology Co., Ltd (NASDAQ: VIOT)

Share Price: \$0.89

Valuation: \$4.93

VIOMI

Key Statistics

52 Week Range	\$0.71 - \$1.60
Avg. Volume (3 months)	67.65K
Shares Outstanding	69.1M
Market Capitalization	\$61.15M
EV/Revenue	n/a
Cash Balance*	\$95.35M
Analyst Coverage	8

*Cash balance as of June 2023

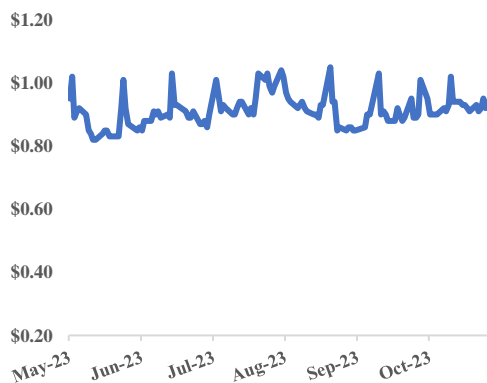
Revenue (in RMB millions)

Dec - FY	2022A	2023E	2024E
1H	1,636.36	1,304.39	1,547.04
2H	1,596.37	1,523.10	1,675.97
FY	3,232.73	2,827.49	3,223.02

EPS (in RMB)

Dec - FY	2022A	2023E	2024E
1H	(0.43)	(0.27)	(0.34)
2H	(0.89)	(0.24)	(0.30)
FY	(1.32)	(0.51)	(0.64)

Stock Price Chart (in \$)



Investment Highlights

- Comprehensive Smart Home Solution Provider** - Viomi Technology is a well-known player in the IoT home devices market with the standout and Integrated “IoT @ Home Platform,” an ecosystem of innovative IoT home devices. As of June 2023, this platform has amassed around 8.1 million household users, with growing adoption rates indicative of potential scalability. Core to Viomi’s business approach are the two major components of this platform: the Viomi business, which primarily markets Viomi-branded products, and a strategic partnership with Xiaomi, a significant shareholder and customer. The company has consistently innovated, launching numerous smart products which leverage AI, 5G IoT technologies, and sensors, further strengthening the extent of IoT and smart technology integration within its product portfolio. Their products are categorized into four business lines: the IoT @ Home portfolio (comprising smart kitchen and other smart products), home water solutions (focused on water purification), essential consumables (water and air filters), diversified small appliances, and other services. A notable value-add is their integrated capabilities within IoT products that facilitate in-app consumer purchases based on real-time data analytics. For instance, their smart appliances can notify users about low supplies, such as laundry detergent, and can even auto-order replacements. The overarching goal is to provide consumers with an integrated, technologically advanced home experience, enhancing convenience and efficiency.
- Viomi’s Emergence in Smart Home Market** - Key to Viomi’s growth has been its commitment to innovation, evidenced by the doubling of its registered patents since 2021 and its strategic launches of state-of-the-art products featuring advanced technologies. The significant extent of IoT integration across the company’s products potentially creates a network effect, motivating consumers to purchase products across multiple segments. This is visible from an increasing number of household users purchasing at least two connected products. However, it’s not just innovation that defines Viomi’s emergence. The brand has created a vast distribution network, leveraging both online platforms, including partnerships with giants like JD.com and Tmall, and offline experience stores, bringing their smart offerings directly to consumers. Notably, while Viomi’s branded products form a substantial percentage of their revenues, their collaboration with Xiaomi isn’t just financial - it provides Viomi invaluable access to Xiaomi’s extensive ecosystem, sales channel, and data resources. The company has also broadened its presence across international markets through strategic alliances and product diversification. Moreover, the positive feedback from users globally underscores their ability to meet and often exceed customer expectations. Viomi’s prominence reflects a synergy of innovative product portfolio and design, a deep distribution network, and strong sales and marketing initiatives, allowing the company to meet global consumer needs in the smart home market.
- Valuation** - Viomi Technology, an emerging player in smart home appliances, boasts capabilities such as modern technology, strong finances, a deep distribution network, and a strong brand name. The company trades below its net cash position and below industry valuations. This gap hints at a potential market oversight or a potential overestimation of associated risks. We have valued Viomi using a blend of Discounted Cash Flow (DCF) and comparable company analysis with assumptions including a discount rate of 12.00%, terminal growth rate of 1.5%, and a Trailing Twelve-Month Enterprise Value to Sales of 1.2x. This blended approach resulted in a valuation of \$4.93 per share, contingent on successful execution by the company.

Company Description

Viomi Technology Co., Ltd develops and sells IoT-enabled smart home products in China, including water purifiers, kitchen appliances, and other smart devices. They distribute products via online platforms and offline stores and have a strategic partnership with Xiaomi Corporation. Based in Guangzhou, the company was founded in 2014.

- **Re-evaluating Market Focus** - Viomi has historically showcased a period of strong growth aided by consistent increase in household users, widening of its product portfolio, deepening of its technological innovations, and robust product demand. Revenue grew from RMB 312 million in 2016 to RMB 5,825 million in 2020, representing a CAGR of 108%. The COVID-19 pandemic in 2020 brought with it significant challenges, leading to a subdued consumer outlook and supply chain disruptions exacerbated by increasing competition in a few product categories, which significantly impacted the industry and the business, necessitating a renewed focus. The company’s strategy seems to be shifting towards consolidating its market presence, while exploring untapped avenues. In the past six months, Viomi has initiated a shift to refine its product offerings, concentrating more on its core product categories, particularly the higher-margin water purification products. Furthermore, during this time, the company has also focused more on user experience, software integration, and enhancing product interoperability, creating a more unified smart home ecosystem. A potential shift could occur starting in 2024 as Viomi optimizes and refines its product portfolio and focuses on its strengths aligning with the broader economic recovery and accommodative regulatory policies.

- **Competitive Yet Rapidly Growing Home 4.0** - China’s smart home market is valued at RMB 651.56 billion and is characterized by the presence of multiple players with differentiated product offerings. Propelled by the development of 5G Infrastructure, rising disposable income, particularly among the middle-class population, supportive government policy for IoT devices, and rapid proliferation of smartphones and smart gadgets, the market is likely to continue its double-digit growth trajectory. China is the world’s second-largest smart home market, after the United States, with over 78 million households in the country using smart home products. The combination of advanced technology, favorable consumer preferences, and government support has created a conducive environment for the smart home market to thrive. The smart home appliance market in China is a competitive field with global players like Samsung and Apple alongside Chinese stalwarts like Midea, Gree, and Haier, all innovating to gain market share. Amidst this competition, firms are expanding their product offerings and embracing collaboration, contending with rising startups like ORVIBO and Rokid. Viomi stands out among its peers as the only company that has developed a comprehensive whole-house intelligent solution. It boasts the most complete hardware coverage, an evolving software experience, and one-stop services. By leveraging its market expertise, R&D capabilities, and customer-centric approach, Viomi has crafted a robust and extensively integrated ecosystem, establishing a strong position in the dynamic market landscape.

Company Overview

Viomi Technology Co., based in the People's Republic of China, has established itself as a notable entity in the smart home industry through its IoT @ Home platform. This platform offers consumers the ability to seamlessly integrate and manage an array of smart home products. Two main factors underpin the platform's expansive growth: the introduction of an in-house product line under the Viomi brand and a pivotal strategic partnership with tech giant, Xiaomi. Xiaomi not only acts as a shareholder but also a significant customer, extending Viomi's access to a more expansive ecosystem and diversified sales channels. Both Viomi and Xiaomi-branded products play a vital role in strengthening the company's revenue streams. As of June 2023, the company reached approximately 8.1 million households, indicating its expanding presence.¹

In terms of product innovation, Viomi has been at the cutting edge of integrating technology, AI capabilities, and smart hardware. The company's diverse product portfolio spans AI-enabled air conditioners, water purifiers, and various other smart home appliances. Viomi Technology Co. has introduced a 5G IoT home infrastructure that brings together a tech framework, Artificial Intelligence algorithms, 5G IoT chipsets, sensors, intelligent hardware, and cloud storage. This structure enhances its all-inclusive IoT home solutions, presenting users with a variety of smart home appliances, devices, and software services suited for diverse home environments. In 2022, Viomi underscored its commitment to innovation by launching the '1=N44' one-stop intelligent whole-house solution that includes a myriad of smart products, closely followed by the 'AI: Helpful 2.0' software, both emphasizing enhanced user services and user-centric features. To cater to the evolving market dynamics, Viomi restructured its product line in 2020 into four distinct segments: the IoT @ Home collection, home water solutions, consumable products, and compact appliances. The company's sales strategy is a blend of online platforms, brick-and-mortar stores, and partnerships with renowned platforms like Tmall, JD.com, and even global listings on Amazon.

A considerable portion of Viomi's resources is allocated to research and development. By the close of 2022, the R&D team included 342 members, accounting for 37.3% of the total staff. The team's efforts are evident in the company's intellectual property assets, which include several patents and trademarks. Notably, the company's HomeMap app, part of its IoT solution, has received acknowledgment from China's Ministry of Science and Technology. The collaboration between Viomi and Xiaomi remains integral to the company's trajectory. While Xiaomi manages sales and distribution, Viomi focuses on design, research, and product development, ensuring a balanced approach to business growth. In terms of market positioning, Viomi has carved out a share of a large market by merging traditional home appliances with innovative technology. Its aim is not just to offer smart products but to create a holistic ecosystem where all devices seamlessly interact. As urbanization continues to surge in China and consumers become increasingly tech-savvy, the demand for such integrated solutions is expected to rise. To further its reach, Viomi has been exploring strategic partnerships and collaborations. Beyond its relationship with Xiaomi, the company has engaged with other tech giants, startups, and research institutions. These collaborations aim to diversify their product portfolio, tap into new technologies, and enter unexplored market segments. Looking ahead, Viomi Technology Co. is poised to capitalize on the

Viomi Technology Co. thrives in the smart home sector via its IoT @ Home platform, backed by an in-house product range and a strategic alliance with tech leader, Xiaomi

¹ Company Filings

growing IoT and smart home industry. The company's combination of a strong product line, strategic partnerships, and commitment to innovation places it in a promising position.



Exhibit 1: Viomi's Corporate History and Roadmap. Source: Company Presentation

History and Corporate Structure

Viomi Technology Co. initiated its operations in May 2014 through its primary entity, Foshan Yunmi Electric Appliances Technology Co., Ltd (known as Foshan Viomi). This China-based company was established with the core purpose of developing, manufacturing, and marketing IoT products, especially smart water purification systems. Notably, Foshan Viomi was co-founded by Mr. Xiaoping Chen and Tianjin Jinxing Investment Co., Ltd, a subsidiary of the renowned tech giant, Xiaomi. To facilitate foreign investments, Viomi Technology Co., Ltd was incorporated in January 2015 as an offshore holding entity. Soon after, the company established Viomi HK Technology Co., Limited, an intermediate holding company. This entity further founded a wholly owned subsidiary in China, Lequan Technology (Beijing) Co., Ltd., in April 2015. In a strategic move to manage big data, software, and product design, the company formed another domestic entity, Beijing Yunmi Technology Co., Ltd, in January 2015. Several significant corporate actions took place in July 2015. These include the issuance of class A and B ordinary shares in exchange for equity interests in Foshan Viomi. This was a pivotal moment as it marked the company's control over both Foshan Viomi and Beijing Viomi, achieved through a series of contractual agreements with their shareholders.

In 2018, the company underwent some restructuring. Foshan Viomi underwent a change in its shareholders in September, and in July, Guangdong Lizi was established as a specialized facility for smart water purification systems. Notably, Viomi made its presence felt on the global stage when its ADSs began trading on the Nasdaq Stock Market under the ticker "VIOT" in September 2018, raising U.S. \$ 91.4 million from its IPO. The company continued its expansion in 2019 with the establishment of Guangdong AI Touch for the development, production, and supply of touchscreen components for its smart products, and Yunmi Hulian Technology (Guangdong) Co., Ltd. as a holding entity for potential future ventures and investments. The subsequent year, 2020,

saw the foundation of Zhumeng Hulian Technology (Guangdong) Co. Ltd., another subsidiary. Foshan Viomi transferred all its equity interests of Guangdong Lizi to this new subsidiary. Around the same time, Guangdong Lizi expanded its smart water purification product line, incorporating smart sweeper robots and a few small appliances.

Viomi's principal executive offices are strategically located in Guangzhou, Guangdong, with its registered office positioned in the Cayman Islands. Viomi Technology Co., Ltd is structured as a Cayman Islands holding company that does not directly engage in business operations. Instead, its operations in China are channeled through two primary vehicles: its Wholly Foreign-Owned Enterprises (WFOEs) and its Variable Interest Entities (VIEs). The establishment of such a structure stem from the restrictions and conditions placed by PRC laws and regulations on foreign investments in specific sectors, including internet and related businesses in China. The company's VIEs, notably Foshan Yunmi Electric Appliances Technology Co., Ltd (Foshan Viomi) and Beijing Yunmi Technology Co., Ltd (Beijing Viomi), are instrumental in navigating these regulatory constraints. Through a series of contractual arrangements between the WFOEs, VIEs, and their shareholders, Viomi exercises effective control over its VIEs, despite not having direct equity ownership. This control allows the Cayman Islands-based holding company to consolidate the financial results of the VIEs as per U.S. GAAP.

Merging Technology with Comfort: An Innovative Product Portfolio

Viomi has created a unique platform that includes a range of innovative IoT products, home water solutions, complementary consumable products, small appliances, and more. This platform offers consumers an easy way to interact with a wide range of IoT products naturally and intuitively. The offerings target making customer's daily life more convenient, efficient, and enjoyable. This has allowed Viomi to expand its user base and capture various scenario-driven consumption events in the home environment. As of June 2023, their platform had approximately 8.1 million household users. Viomi categorizes its revenue into two main segments:

- A. **Viomi business:** Mainly consists of products branded as Viomi
- B. **Xiaomi business:** Xiaomi is a strategic partner of Viomi. With strong capabilities in research and development, supply chain resources, and innovative products and services, Viomi complements Xiaomi's offerings, resulting in a mutually beneficial relationship between both companies.

Enabling Convenience: Artificial Intelligence

Viomi has developed a 5G IoT home structure, which integrates a technology framework, AI algorithms, 5G IoT chip modules, sensors, innovative hardware, and cloud storage. This structure encourages further implementation of one-stop IoT home solutions, providing users with smart home appliances, smart home devices, and software services across home scenarios. At a strategic new product launch event in March 2022, Viomi introduced an upgraded one-stop IoT home solution, '1=N44,' which includes:

1. Whole-home product portfolio

Viomi's 5G IoT home structure combines technology frameworks, AI, 5G modules, sensors, and cloud storage. It promotes a one-stop IoT home solution, offering users smart appliances and devices across home settings

2. Four significant smart home capabilities: automatic networking, active intelligence, spatial awareness, and natural interactions
3. Four additional services for users, namely smart home solution design, over-the-air (OTA) update, a membership system, and value-added services.

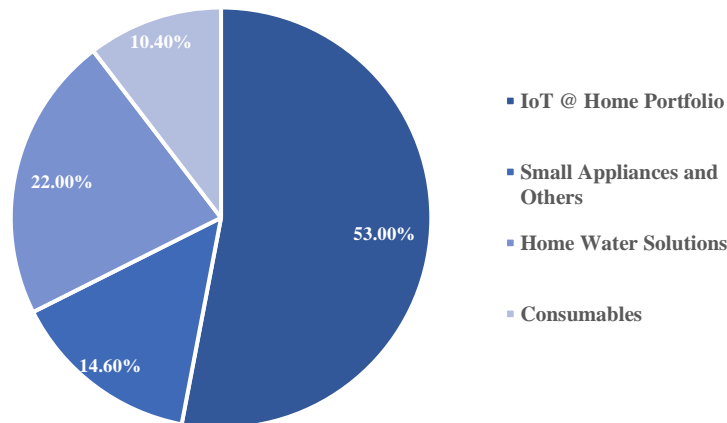
The upgraded one-stop IoT home solution has achieved solid initial traction, owing to a focus on product innovation, service system improvements, and expanded sales channels for whole-home intelligence. In October 2022, Viomi hosted ‘AI: Helpful 2.0,’ an autumn online software launch event, which focused on software upgrades and product iteration across four dimensions, including health care, energy conservation, environmental protection, active intelligence, and natural interaction, further improving one-stop IoT home solutions from the software side.

Viomi’s Product Portfolio

Beginning in the third quarter of 2020, Viomi recategorized various products, after which products are grouped under the following four business lines:

1. **IoT @ Home Portfolio** - It comprises an intelligent home, kitchen, and other innovative products.
2. **Home Water Solutions** - It is composed of innovative water purification products.
3. **Consumables** - These consist of consumable products used in their main products. For example, water filters used in water purifiers.
4. **Small Appliances and Others** - This refers to small appliances and other value-added businesses.

Viomi believes this product regrouping presents businesses in a more precise manner and can help investors better understand their unique IoT @ Home platform. Viomi's revenue distribution clearly showcases its strong foothold in IoT-driven home solutions, which forms a significant portion of its total revenue. Following this, Homewater Solutions highlights the brand's marked expertise in the specialized water product segment. Consumables indicate Viomi's proficiency in capitalizing on auxiliary products, while the segment of Small Appliances & Others demonstrates a diversified product portfolio, catering to a broad spectrum of consumer needs.



Viomi categorizes its products into four segments: the IoT @ Home Portfolio with smart home items; Home Water Solutions for water purification; Consumables like air filters; and Small Appliances and related businesses

Exhibit 2: Viomi’s Revenue Distribution by Product Categories. Source: 1H 2023 Earnings Presentation

IoT @ Home Portfolio

Viomi generates a significant portion of its revenue through the sales of products in its IoT @ Home portfolio. The portfolio primarily targets young, modern, and "new middle-class" consumers looking for innovative IoT products. Viomi has successfully launched a wide range of IoT @ Home products that cater to various essential daily activities and create new consumption scenarios for households. For Viomi, the customer's initial purchase marks the beginning of a long-term relationship rather than the end. This approach drives broad adoption of products across customers' homes and fosters long-term customer loyalty.

IoT @ Home portfolio can be subdivided into smart kitchen products and other smart products.

Smart Kitchen Products

Smart kitchen appliances include refrigerators, oven steamers, dishwashers, range hoods, and gas stoves. Viomi's flagship 21Face large-screen smart refrigerator lets users manage their home and life with food management, connected living, and entertainment capabilities through voice recognition and hands-free AI technology from anywhere in the kitchen. The refrigerator also has a seamless interface for accessing media content, gourmet recipes, parenting workshops, and purchasing household goods.

Other Smart Products

In addition to its intelligent kitchen products line-up, Viomi also offers a diverse array of IoT products that complement the IoT @ Home portfolio and address user's needs across different home scenarios, such as air conditioning systems, washing machines, water heaters, smart water kettles, interactive smart screens (TVs), sweeper robots, smart locks, smart screen-based control interfaces, and other smart devices, among others.

The inherently connected nature and network effects within the IoT @ Home portfolio is demonstrated by the percentage of household users possessing at least two IoT products increased from 3.5% as of March 31, 2016, to 22.5% as of December 31, 2022.

Home Water Solutions

The core of home water solutions is self-branded and Xiaomi-branded smart water purifiers, which are complemented by easy-to-install replaceable water filter consumable products. Smart water purifiers generally feature precision sensors that enable them to monitor the water purification process and analyze the data collected using AI technology and automatically adjust various aspects of its operation; innovative water purification technologies such as high-flow reverse osmosis membrane and mobile application connectivity enable users to monitor the status of the water purifier and reminds the users to replace the filters. Viomi also introduced a series of large-flux purifiers, a series of premium water purifier products, and a high-end water purifier sub-brand, Quanxian, in 2020, as well as 800 to 2,000 gallons Super series of large-flux water purifiers in 2021 and 2022. In addition, in April 2021, Viomi introduced the high-end EROx mineral water purifier with the application of electro dialysis technique, which can retain the minerals beneficial for human health to meet the diverse demands of users further.

Viomi's New Water Purification Strategy

Viomi's new water purification strategy, as detailed in their roadshow presentation, reveals a comprehensive approach to addressing the evolving needs of the smart home appliance market with a particular focus on water purification technology. Water

The new water purification strategy is a keystone of Viomi's product line. It has been developed to deliver a high level of drinking water purity and efficiency, featuring the "Space 2000G" water purifier, which boasts the industry's largest flux at 2000G, a 5.7 L/min output, and a durable life of the main RO filter lasting ten years. This product exemplifies Viomi's commitment to technological innovation, ensuring super-fast water purification that retains essential nutrients such as silicic acid, making it particularly suitable for families with babies. This is further enhanced by bamboo charcoal filters that adsorb residual chlorine, color, and odor abnormalities in the water. In addition to the Space 2000G, the strategy includes the "Super 2 1200G" and the introduction of AI Mineral Water purifiers that utilize electro dialysis technology for intelligent absorption and effective removal of heavy metals. This not only purifies the water but enhances it for specific uses, such as coffee & tea, porridge & soup, by adjusting the mineral content.

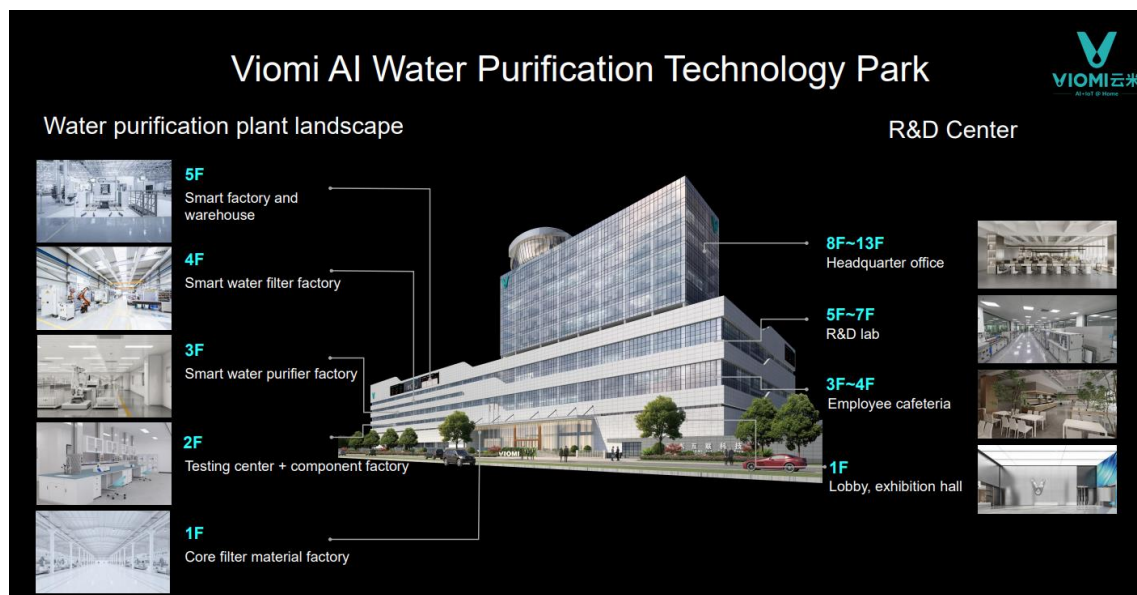


Exhibit 4: Viomi AI Water Purification Technology Park. Source: Viomi's Roadshow Presentation

A central component of Viomi's strategy is the continued investment in R&D, positioning it as a leader in the water purification industry with over nine years of industrial experience. This commitment is exemplified by the Viomi AI Water Purification Technology Park, which integrates a smart factory, warehouse, testing center, and R&D facilities, reflecting a vertically integrated approach that extends from R&D to manufacturing.

Consumables

Viomi offers a range of consumable products that are often essential and complementary to IoT products. These products provide additional, recurring, and ongoing revenue streams throughout the life cycle of IoT products. Consumers can easily purchase these products either through sales channels or e-commerce platforms embedded within various IoT products. The consumables mainly include water filters for smart water purifiers, water pitcher filters, and air filters for refrigerators. The products come with easy installation mechanisms, allowing consumers to install them effortlessly.

Small Appliances and Others

Viomi offers a variety of other household products to supplement IoT products and promote regular impulse purchases by consumers. These small appliances include water quality meters, water filter pitchers, stainless-steel insulated water bottles, smart toilets, and food waste disposals, among others. Moreover, with the vibrant partner ecosystem, Viomi offers other services that can capture various scenario-driven consumption events in the home environment, such as enabling users to access media and entertainment content quickly and directly, as well as purchase multiple household fast-moving consumer goods when the need arises within the comfort of their home. Viomi achieves this through e-commerce platforms and interfaces embedded within and integrated with various IoT products and close collaboration with ecosystem partners. Viomi works closely with ecosystem partners to deliver these services to users. Viomi also offers certain installation services for products. Consumption scenario refers to a specific combination of location, timing, and user that influences a user's decision to make a purchase. Whenever a household need arises, products can be utilized to address the need. Moreover, products can collect a vast amount of household behaviour data, which can be analyzed using AI technology and deep learning to create accurate household profiles. Consequently, the consumption need can be fulfilled even before the user realizes it. Once the condition is identified, the user can interact with IoT products that are useful in that scenario and order the product or service.

Viomi, through its partner ecosystem, offers services tailored to home consumption scenarios, like media access and instant household purchases. Integrated IoT products, backed by AI and deep learning, anticipate and meet user needs, streamlining their interaction with these devices



Exhibit 3: Viomi's Product Portfolio. Source: Company Website

Product Category	Category Description	SKUs	Price Range (in US\$)
Vacuum Cleaners	Range of automatic vacuum cleaners equipped with advanced features such as smart mapping, routing, and self-cleaning capabilities.	Alpha 3, Alpha 2 Pro, V5 Pro, Alpha(S9), V3 Max, V3, V2 Max, V2 Pro, SE	\$179 - \$482
Cordless Vacuum Cleaners	Designed for effortless maintenance and cleaning. Cordless vacuum cleaners deliver powerful suction, dual-action vacuuming, and mopping with self-cleaning features.	Aeolus 12, Aeolus 11, Aeolus 9, Cyber Pro, Cyber	\$160 - \$392
Water Appliances	Wide range of water purifiers with easy-to-use, high-volume cutting-edge RO technology, and kettles having smart features like temperature control, display, and double layer insulation.	Water Purifier -Blues Pro 1200G, Blues Lite 600G Kettles -Smart Kettle, Water Filter Pitcher	\$32-\$879
Major Appliances	Major appliances include Smart Washing Machines, Smart Refrigerators, and ACs with built-in voice recognition and AI technology, providing more connected living experience.	Washing Machine - Washer and Dryer Master 2 Pro, Washer and Dryer Master 2 Refrigerator -Smart Refrigerator Air Conditioners	\$825 - \$1980
Kitchen Appliances	Revolutionizes cleaning with a six-sided rinse and hot air circulation, eliminating moisture and odor. Coupled with the Smart MiHome App, it offers a customized, efficient cleaning experience.	Smart Dishwasher	\$450
Television	Fully Smart 5G TV which comes in various screen sizes along with the latest Android version, in-built memory & interactive AI technology.	21Face Smart TV	-
Air Care Solutions	Sophisticated range of air care solutions that encompass air purifiers, smart heaters, and fans, integrated with advanced technology to optimize indoor air quality, ensuring a comfortable and healthy living environment.	Air Purifier - Airman, Airman Lite Heater - Smart Heater, Pro 2 Fans - Smart Circulation Fan, Smart Floor Fan	\$72-\$140

Exhibit 5: Viomi's Product Profile. Source: Company's Website, Secondary Research

Prominence of Viomi Brand

Viomi Technology Co. Ltd has significantly marked its presence in the consumer durable industry through its innovative IoT @ Home Platform. This platform encapsulates a vibrant ecosystem of IoT-based home products, a portfolio of home water solutions, and an array of complementary consumables and small appliances. The essence of this platform is to provide a gateway into the consumer’s home, facilitating intelligent interaction with a broad spectrum of IoT products. This platform’s success is marked by several structural characteristics that have allowed Viomi to position itself as a noteworthy player in the market, contributing to its brand’s prominence and sustainability in the competitive landscape of the consumer durable industry. Our notion of the company’s growth in brand value is also confirmed by it being ranked 443rd amongst China’s Top 500 brands and is one of the only two brands representing the smart home sector in a list released by World Brand Lab.² It even valued the Viomi brand valuation at RMB 13.385 billion. The company’s efforts are visible in its consistent growth in the number of cumulative household users and percentage of household users with at least 2 connected products, signifying increased acceptance and widening customer base.

The recent recognition by World Brand Lab and increase in cumulative household users is indicative of company’s rising brand prominence in the Chinese Smart Home Market

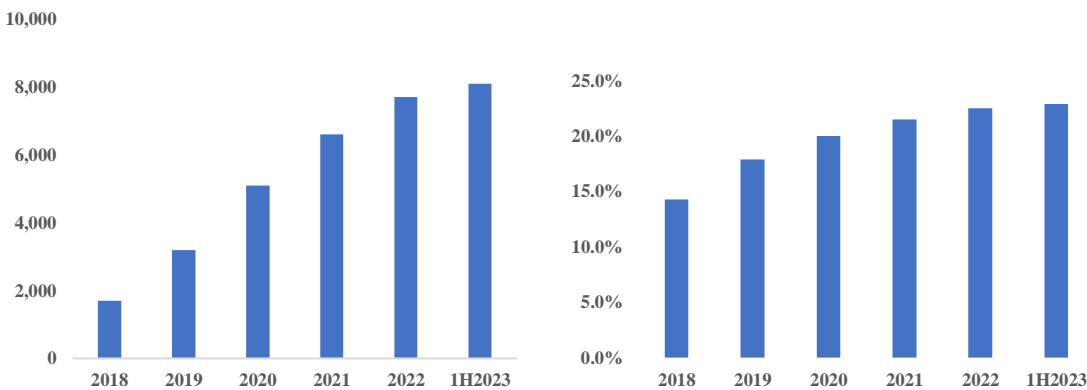


Exhibit 6: Cumulative Household Users (Left) and Product Penetration (Right). Source: Company Presentation (Household Users are in Thousands)

- Continuous Product Innovation and Launches** - Since the launch of the first Viomi branded product in 2016, the company has displayed a consistent commitment to product innovation that has been a key driver in creating an integrated 5G IoT Home structure. By continually expending resources into research and development, the company has managed to stay ahead of the technological curve while fostering innovation. This is evident from a more than twofold increase in the number of globally registered patents from 2,986 at the end of December 2021 to 6,322 as of June 30, 2023. The trajectory of product innovation is also visible in its regular rollouts of new smart home products comprising disruptive technologies such as AI algorithms, 5G IoT chip modules, sensors, smart hardware, and cloud storage. With the launch of several smart products like 21Face Interactive Smart Screen (TV), a range of premium water purifiers, HomePad screen-based control interface, CPE products, and the Viomi-branded sweeper robots, among many others during 2021, this trend continued well into 2022 that marked the launch of

Viomi’s relentless innovation journey since 2016 has seen a significant increase in the number of registered patents and constantly redefining the smart home experience with groundbreaking launches

² <https://www.worldbrandlab.com/brandmeeting1/2023china500/202306/>

multiple new products with a particular emphasis on interconnectedness through AI. This narrative underscores Viomi's relentless pursuit of product innovation and launches, showcasing a brand that is not merely content with the status quo but is continually pushing the boundaries to offer consumers technologically advanced, user-friendly solutions, thus reinforcing Viomi as a brand synonymous with consumer-centric smart home solutions.



Exhibit 7: Number of Patents. Source: Company Presentation

- **Wide Distribution Network** - Viomi Technology has engineered a multifaceted distribution network to proliferate its brand and products across various market segments. This network is segmented into online and offline channels, each with distinct strategies to maximize market penetration.
 - Online, Viomi leverages popular e-commerce platforms like JD.com, Tmall, and Pinduoduo, alongside its proprietary mobile app and WeChat program, to reach a broad consumer base. Strategic collaboration in 2022, like the one with Tmall for one-stop smart home solutions and the ‘Viomi 420 JD Day’ with JD.com, exemplify Viomi’s endeavor to promote smart home ecology and introduce new products. Also, a partnership with JD Logistics has been forged to enhance service delivery through better logistics and installation services.
 - Offline, Viomi's physical presence is felt through its experience stores, which offer a tangible brand experience and allow for controlled marketing, pricing, and product presentation. A notable strategy, “larger store, better merchant”, has been adopted since 2021 to collaborate with experienced merchants in opening larger experience stores, providing a more comprehensive, scenario-based consumer experience. Expansion of this strategy continued into 2022 with the inauguration of additional Viomi 4S and 5S flagship stores across China, enhancing its “Tech Fashion” brand positioning.
 - Moreover, strategic alliances with entities like KUKA in 2022 aim at integrating smart home ecology with whole-house customization business, while partnerships with various online-to-offline (O2O) outlets and home design enterprises further augment

Viomi Technology blends its online presence on platforms like JD.com with offline experience stores and key partnerships, establishing a robust distribution network across China

its market access, brand awareness, and overall sales endpoints. This intricate combination of online and offline channels, coupled with strategic partnerships and a focused approach towards both market penetration and consumer experience, underscores the breadth and effectiveness of Viomi’s distribution network.

- Market Expansion and Global Outreach** - Viomi Technology is advancing its overseas business by refining its distribution channels and re-evaluating its product categories to cater to a global audience. Beginning in the latter half of 2021, Viomi initiated collaborations with agents in Germany, Singapore, and Northern Europe, transitioning from smaller distributors to high-caliber international sales agents to better optimize its overseas operations. A significant milestone was achieved with the opening of its first self-operated store on U.S. Amazon in August 2021, which was further expanded to Italy, Germany, and France in the first half of 2022, marking a move to penetrate key European markets. The global outreach continued with Viomi marking its inaugural presence at IFA 2022 in Berlin, one of the preeminent technology marketplaces globally, where it showcased an array of new products, positioning itself as a notable player in the consumer electronics arena. The expansion narrative also saw the introduction of diversified product categories such as air conditioners, washing machines, and refrigerators in Northern Europe and water purifiers and smart door locks in Southeast Asia. The company continued to enrich its product categories across the overseas markets, with revenues contributed by new product categories accounting for over 60% of the overseas market revenues in the first half of 2023. The overseas market is crucial for Viomi as it diversifies revenue streams and enhances brand prestige on the global stage. By tapping into international markets, Viomi not only broadens its customer base but also benchmarks its offerings against global standards, fostering innovation and positioning itself as a global contender in the smart home technology landscape.
- Buyer’s Testimonials and Product Reviews** - The excellence of Viomi’s innovative product offerings is reflected through multiple product reviews on e-commerce platforms such as Amazon. These reviews signify the high regard customers have for Viomi’s innovative offerings. With 4+-star reviews on some of its best-selling product listings, it’s clear that Viomi has successfully met the expectations of its consumer base. The positive feedback not only reinforces the brand’s reputation for quality but also provides reliable data for prospective buyers to make well-informed decisions.



Exhibit 8: Reviews of Viomi’s Select Product on Amazon. Source: Amazon.com

- Focusing on Core Product Categories** - In the past six months, Viomi has embarked on strategic adjustments to streamline and optimize its product mix with increased emphasis on core product categories, particularly higher gross margin water purification products. This focus is further bolstered by significant investments in Research and development (R&D), as seen through the recognition of its subsidiary, Guangdong Lizi Technology Co. Ltd., as a ‘Little Giant’ enterprise for its R&D and innovation capabilities in the water purification sector. By harnessing its industrial chain capabilities, Viomi has managed to independently develop advanced filtration technology, material manufacturing processes, and a comprehensive set of proprietary solutions, thereby enhancing its brand value and consumer trust in its water purification products. These efforts highlight the comprehensive strength and a customer-centric approach to addressing the fundamental need for clean water. Through this focused product optimization strategy, Viomi Technology is adeptly positioning itself for potentially improved financial performance and long-term growth in the smart home technology sector.

Industry Growth Prospects

The Internet of Things (IoT) represents a network of interconnected devices that exchange data through the Internet. These devices encompass next-gen consumer products, enhanced with the capability to process, analyze, and relay data via mobile apps or other network mediums. They're employed across diverse settings, from homes and offices to vehicles and wearable gadgets.

Overview of IoT Consumption Scenarios

The Consumer Internet of Things (CIOT) represents an evolution in the world of consumer electronics and appliances. At its core, CIOT encompasses a myriad of devices, often termed "smart devices," that are capable of connecting and communicating via the internet. These devices aren't just limited to smartphones or wearable tech; they span across a diverse range, from smart refrigerators to voice-controlled home assistants. Integrated with advanced features, these products have the capability to receive, process, analyze, and transmit data, either through mobile applications or other networked devices. The Consumer Internet of Things (CIOT) industry has shown significant growth in recent years, and current data underscores its substantial market potential. As per recent figures by Grand View Research, the CIOT market was valued at USD 220.50 billion in 2022.³ Projections suggest that this market will witness a Compound Annual Growth Rate (CAGR) of 12.7% from 2023 to 2030, taking it to a big USD 451.81 billion market. Furthermore, the China's smart home market is valued at RMB 651.56 billion with over 78 million households in the country using smart home products.⁴

The global Consumer IOT market stood at USD 220.50 billion in 2022 and is expected to grow at a CAGR of 12.7% from 2023 to 2030, reaching USD 451.81 billion

This growth can be attributed to several factors. Technological advancements have paved the way for devices with enhanced functionalities. These devices, ranging from smart thermostats to internet-enabled refrigerators, are becoming more commonplace, meeting consumer demands for efficiency and convenience. Changing consumer preferences also play a role in this growth. With an increase in disposable income, many consumers are looking to incorporate smart devices into

³ <https://www.grandviewresearch.com/industry-analysis/consumer-iot-market-report>

⁴ Statista

their lives. This trend is seen across various age groups, with both younger and older consumers recognizing the benefits of CIOT products. Economic conditions further influence the market's trajectory. As global economies stabilize and grow, disposable incomes have seen an uptick. This, coupled with the allure of smart living, results in a heightened demand for CIOT products. Another factor to consider is the increasing internet penetration globally. As CIOT devices rely on connectivity, a broader internet user base translates to a larger potential market for these products. On the industry side, continuous innovation is evident. Manufacturers are consistently refining their products, adding new features, and improving device capabilities. This not only meets consumer demand but also ensures a competitive market landscape. Regulatory support is also noteworthy. Many governments, seeing the economic potential of the CIOT sector, are formulating policies that are conducive to its growth. This can range from incentives to favorable regulations, further aiding the industry's expansion.

Evolution of the IoT-Enabled Smart Home Industry

Consumption patterns in the modern world can be segmented based on where individuals spend their time: at home, at work, outdoors, or traveling. Of these, the home stands out as the primary space, with individuals spending anywhere from 8 to 12 hours daily. This makes the home a focal point for monetization opportunities. Products tailored for the home environment, especially IoT-enabled smart products, can tap into various consumption scenarios, presenting significant monetization potential. IoT-powered smart home products can be segmented into:

- **Smart White Goods:** Major appliances like intelligent refrigerators, washing machines, air conditioners, etc.
- **Smart Brown Goods:** Primarily consumer electronics, such as smart televisions.
- **Smart Small Appliances:** Portable devices like smart water purifiers, air purifiers, etc.
- **Other Smart Products:** Includes items like smart door locks, cameras, sockets, and more.

The progression of the IoT-enabled smart home industry can be seen through distinct phases, each marked by the level of technological integration and consumer convenience. Initially, the industry was dominated by traditional appliances. These were basic in design and functionality, focusing solely on their primary utility without any advanced features or connectivity. The next phase ushered in the era of isolated smart home products. In this period, products had the ability to connect to the internet, allowing for remote operations. For instance, during this phase, it became common for households to have water heaters that could be controlled via mobile apps, enabling users to set them while they were still away from home. However, a significant limitation of this phase was that each product operated independently, often requiring its own unique app or control mechanism. Looking ahead, the industry seems to be moving towards an integrated IoT-enabled smart home platform. This vision entails a system where devices are not just connected to the internet but can also communicate with one another. For example, in such a setup, a smart water purifier might share data with a washing machine to optimize washing cycles based on the water's quality. Additionally, with advancements in technology, especially in areas like voice recognition, the interaction between users and their smart devices is expected to become more streamlined and user-friendly.

The smart home industry evolved from basic appliances to isolated internet-connected devices. Now, it's transitioning to integrated platforms where devices communicate with each other, enhanced by advancements like voice recognition

Consumer Electronic Sector is the Highest Contributor to the CIOT Industry

The consumer electronics sector stands out as a prominent contributor to the IoT industry's growth. In 2022 alone, this segment contributed to over 37.35% of the total market revenue. This dominance can be credited to a rising consumer trend of integrating smart electronic devices within their living spaces. The incorporation of advanced technologies, such as sophisticated sensors, digital assistants, and the possibilities brought forth by cloud computing, has actualized the dream of home automation in our daily lives. Reports suggest that there is a strong momentum accelerating, with projections indicating that nearly 15% of households worldwide will have at least one smart home appliance by the end of 2023.

Industry and Consumer Trends Driving IoT-Enabled Smart Home Adoption in China

1. **Aspiration-Driven Consumption Upgrade:** Economic dynamism in China, paired with rising disposable income, has ushered in a conspicuous consumption upgrade. As a result, there's an evident shift towards higher living standards. Chinese consumers, equipped with increased purchasing power, are exhibiting a strong inclination for products that are not just of high quality but also emblematic of their aspirations. These products often stand out due to their innovative features and functionalities.
2. **Technological Openness and Adoption:** China's younger and more modern demographic, often referred to as the "new middle class", demonstrates a pronounced receptivity towards groundbreaking technologies, especially those rooted in Artificial Intelligence (AI) and the Internet of Things (IoT). Technologies such as voice activation and motion-controlled interfaces are becoming increasingly popular as consumers gain a better understanding of their practical applications in everyday life.
3. **Product Innovation and Technological Advancements:** There is a continual wave of product innovations that are elevating the consumer experience by delivering enhanced functionalities for the modern home environment. Moreover, advancements in technology and a competitive market landscape have led to cost reductions in critical components like microchips, sensors, and networking infrastructure. This price decline is subsequently making smart home products more financially accessible to a broader audience.
4. **Urbanization and the Quest for Convenience:** Rapid urbanization, combined with a globally connected environment and demanding professional commitments, means that the modern Chinese consumer leads a busier life than ever before. Consequently, there's a strong demand for solutions that can simplify daily routines, especially within the home environment. Consumers are not only seeking convenience but are also willing to invest in solutions that promise to elevate their domestic experience.
5. **Holistic IoT Experience:** The evolving consumer in China envisages a smart home experience that isn't just limited to isolated functionalities but rather seeks a holistic IoT @ Home lifestyle. They desire platforms that can effortlessly integrate with a variety of IoT products, ensuring a seamless and interconnected living experience.

In 2022, the consumer electronics sector contributed 37.35% to IoT market revenue, driven by the adoption of smart devices in homes. Advanced technologies have made home automation a reality, with 15% of global households expected to own a smart appliance by 2023

- Demand for Intuitive and Future:** Proof Solutions: Modern consumers place a premium on user-friendly interfaces and platforms that are both intuitive and affordable. Beyond the immediate benefits, there's a clear preference for solutions that are dynamic, adaptive, and capable of receiving updates to incorporate future functionalities. Such future-proofing ensures that consumers can leverage their investments for extended periods without the technology becoming obsolete.

The proliferation of IoT devices across regions is marked by distinct trends and patterns. As of 2023, Greater China takes the lead, with Europe and North America following closely.

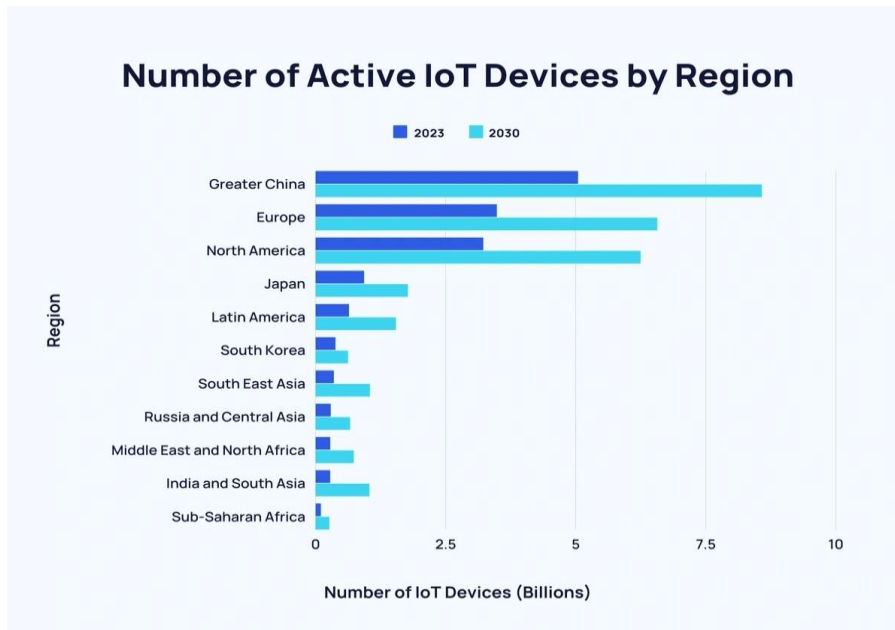


Exhibit 9: Number of Active IoT Devices by Region. Source: Transforma Insights

The projected figures for 2030 indicate a continued dominance of Greater China in the IoT domain, reflecting the region's integrated supply chain, vast consumer market, and commitment to innovation and digital transformation. This emphasizes the enormous potential for Viomi to expand within its home market. However, the rapid growth in other regions, particularly North America and Europe, indicates a global appetite for IoT solutions and suggests greater expansion opportunities outside of Greater China. The growth in IoT adoption over recent years has been notably substantial. The exhibit highlights the increasing inclination towards IoT devices, particularly after 2015. By 2025, IoT devices are anticipated to dominate a significant share of the global device market. For Viomi, this suggests a rising demand and an evident shift in consumer preferences toward integrated smart home ecosystems. As global interest in IoT devices surges, Viomi, situated in a leading IoT market, is in a prime position to harness this momentum. As the sector expands, the emphasis on product differentiation and ensuring compatibility will be pivotal for Viomi.

By 2030, Greater China is expected to lead the IoT sector due to its robust supply chain, large consumer base, and focus on innovation, highlighting significant growth opportunities for Viomi in its home market

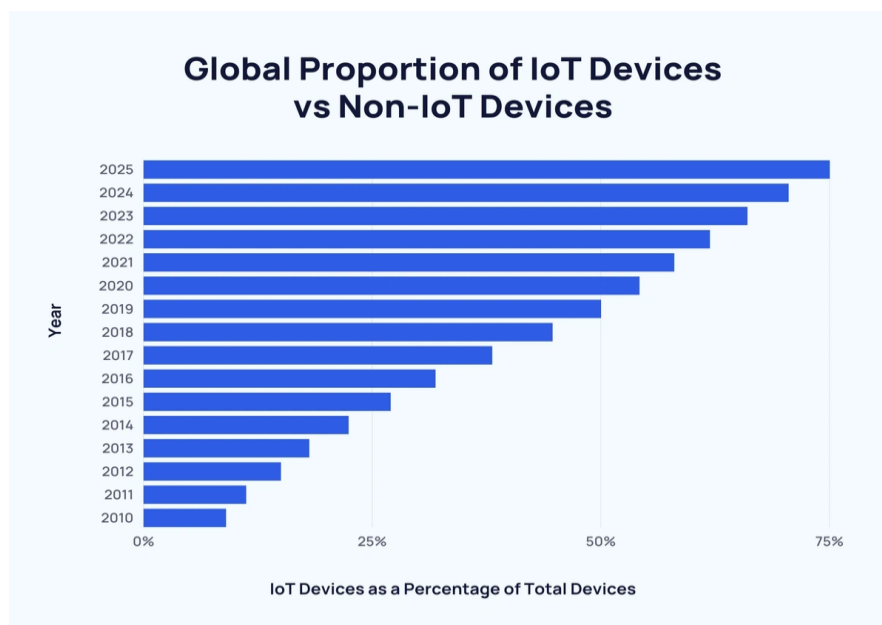


Exhibit 10: Global Proportion of IoT Devices. Source: IoT Analytics

Comparison of U.S. and China's IoT-enabled Smart Home Markets

The global IoT-enabled smart home market is vast and multifaceted, with regional dynamics playing a critical role in shaping trends and growth trajectories. Among the leading players in this arena, the United States and China stand out as the two primary powerhouses, shaped by divergent market architectures, consumer behaviours, and supply chain efficiencies. While the U.S. model thrives on open IoT ecosystems promoted by internet and technology giants, China capitalizes on a more integrated approach. This section delves into these differing architectures, highlighting the unique opportunities and challenges in each market.

Key Aspects	United States	China
Market Structure	Open IoT operating system led by tech giants through smart speakers or kits.	Vertically and horizontally integrated ecosystem.
Supply Chain	Relies on outsourcing for hardware manufacturing	Established hardware manufacturing value chain enhances efficiency.
Consumer Behaviour	Adoption led by tech-savvy early adopters; slower market penetration.	Rapid adoption rates; smart white goods penetration increased to 55.8% by 2022.
Infrastructure	Strong in technology; less focus on integrated logistics and mobile payments.	Highly efficient logistics and mobile payment infrastructure.
Industry Trends	Driven by tech innovation and specialized services.	Influenced by economic growth, higher disposable incomes, and a tech-receptive middle class.
Consumer Preferences	Values customization and array of choices; looks for ecosystem compatibility.	Seeks holistic experiences; prefers multi-interfaced and adaptable platforms.
Limitations & Challenges	Fragmented ecosystems lead to isolated experiences; management of multiple products.	High integration can pose entry barriers for new entrants; requires significant capital for R&D.
Investment Implications	Opportunities in niche verticals offering unique functionalities.	Integrated market offers investment in comprehensive smart home solutions.

Exhibit 11: Comparison of US and China's IoT-enabled Smart Home Markets. Source: Diamond Equity Research

Limitations of Existing Legacy Products in the Smart Home Sector

Legacy smart home products face several significant limitations in the current technological landscape. A major issue is their isolated functionality. Many such devices operate efficiently within their specific roles but falter when it comes to inter-device communication. This results in users dealing with fragmented systems, detracting from the envisioned cohesive smart home environment.

Furthermore, these products often display a conspicuous lack of intelligence. They're designed to follow direct commands without the capability to adapt or anticipate user behaviour. This non-adaptive nature is exacerbated by the absence of inter-device communication, preventing the system from leveraging potential AI benefits for a personalized user experience. Another notable shortcoming is the lack of future-proofing. The majority of these traditional devices lack cloud connectivity, rendering them incapable of receiving software updates. As the tech world rapidly evolves, users with these devices are left with obsolete technology that can't be updated, often leading to costly and inconvenient replacements. Other challenges include infrastructural dependencies, where these systems are tethered to specific setups, limiting their adaptability. Moreover, older products may not align with current security standards, posing potential risks to data and user privacy.

Viomi's Operational Categories

The consumer goods landscape has witnessed a dynamic evolution, influenced by changing consumer preferences, technological innovations, and global economic shifts. As a pivotal participant in this arena, Viomi has strategically positioned itself across a spectrum of categories. Evaluating the market size, anticipated growth, and the factors driving this growth in each category lends a clearer perspective to Viomi's potential trajectory and its alignment with market trends.

Category	Description	Market Size	7-Year CAGR	Growth Factors
White Goods	Major household appliances like refrigerators, washing machines, and air conditioners.	\$700 Billion	8.2%	Energy-efficiency demands, Technological advancements
Brown Goods	Consumer electronics like TVs, water purifiers, and personal computers.	\$750 Billion	5.2%	Evolution of home entertainment, Enhanced connectivity
Small Appliances	Portable or semi-portable items like vacuum cleaners, air purifiers, and heaters.	\$250 Billion	4.7%	Emphasis on convenience, Urban lifestyle trends
Other Smart Products	IoT-enabled devices and smart home technologies not covered in the above categories.	\$80 Billion	27.1%	IoT adoption rate, Home automation innovations

Consumer goods have evolved due to changing preferences, technology, and economic shifts. Viomi has adeptly positioned itself within this dynamic landscape

Exhibit 12: Viomi's Operational Categories - Market Dimensions and Growth Dynamics. Source: Diamond Equity Research

Competitive Overview

The Consumer IoT market stands as a highly fragmented sector, characterized by its vast potential and diverse ecosystem. As technology evolves, there is a marked shift towards integrating AI, machine learning, big data, and 5G technology. This progression is driven by consumers' desire for devices that simplify and enhance their daily lives. In this evolving market, Viomi has made a presence with its IoT @ Home platform. This platform offers a range of interconnected solutions that cater to modern consumer needs. However, the market is also home to prominent players like Samsung, Microsoft Corporation, Apple Inc., Sony Corporation, IBM, and Intel. These companies, known for their continuous innovation, expand their reach through product developments and collaborations across various sectors and regions. While these names represent a broad spectrum of consumer electronics, the Chinese domain of the smart home appliance market boasts its own set of key players, including Midea, Gree, Haier, and Supor, each making significant strides in this competitive landscape. On the other hand, disruptors like Viomi, with its IoT @ Home Platform, signify a fresh consumer-centric approach to smart home solutions. The competitive landscape also includes firms like Xiaomi and Huawei, diversifying into smart home products, thereby infusing a blend of novel technologies and consumer-focused solutions.

The China's Smart Home Appliance Market is highly fragmented, with the presence of many players ranging from traditional companies like Midea and Haier to emerging players like Viomi and Startups like Aqara and Orvibo

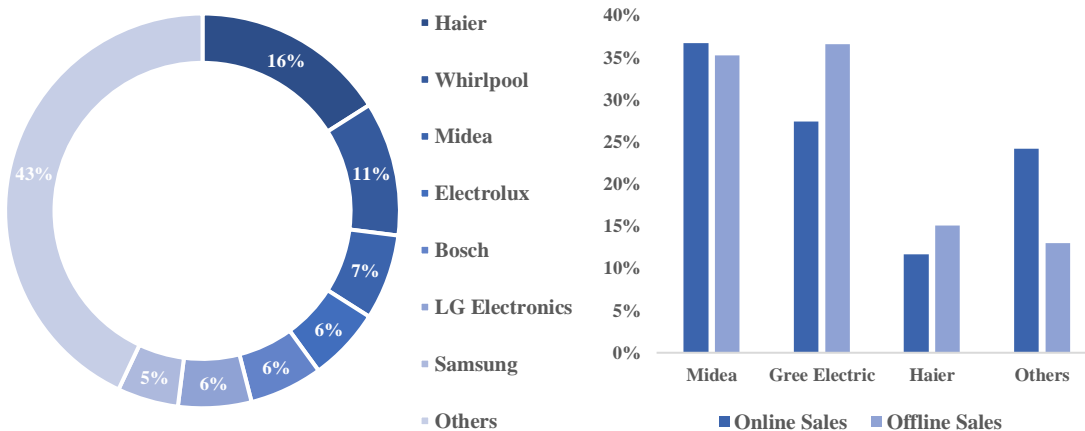


Exhibit 13: Global Market Share of Home Appliance Industry (2019) and Domestic Market Share of China's Smart Home Appliance Market. (2020). Source: Equal Ocean, Statista

Brands such as Haier, Midea, Gree, and Hisense have significantly advanced in the white goods segment, extending their reach from Chinese markets to international territories, contributed by multiple global acquisitions. Haier, for instance, has broadened its global presence through strategic acquisitions, including Sanyo Electric, Fisher & Paykel, General Electric's home appliances division, and the Italian brand Candy. Similarly, Midea has ventured globally, initially through OEM manufacturing and later through strategic acquisitions like that of German robot maker Kuka and Toshiba's home appliance business in Japan, expanding its business map effectively worldwide. These companies have a diversified product offering range that includes refrigerators/freezers, washing machines, air-conditioners, water heaters, kitchen appliance products, and other smart home solutions. While these firms derive a substantial portion of their revenue from white goods, others such as Robam, Donlim, Bear Electric, and Flyco have positioned themselves within the smart small appliances and kitchen appliances segment. With the advent of IoT and 5G, there has also been a rise in the number of startups coming up with

cutting-edge technologies and innovative designs competing with these well-established brand names. The past year marked a number of startup financing events in China’s smart household sector, with several companies making a mark with notable funding. The intelligent home tech firm ORVIBO raised RMB 1 billion, Smart stereo maker Rokid raised RMB 700 million in a Series C financing round, while Geek Technology, a growing global smart home appliances brand, secured multi-million-dollar funding in their Series A round.⁵ On the investor front, renowned venture capital firm Sequoia China, IDG Capital, BAI Capital, and 5Y Capital have invested in Speedfox, a new entrant in the smart cleaning service domain.

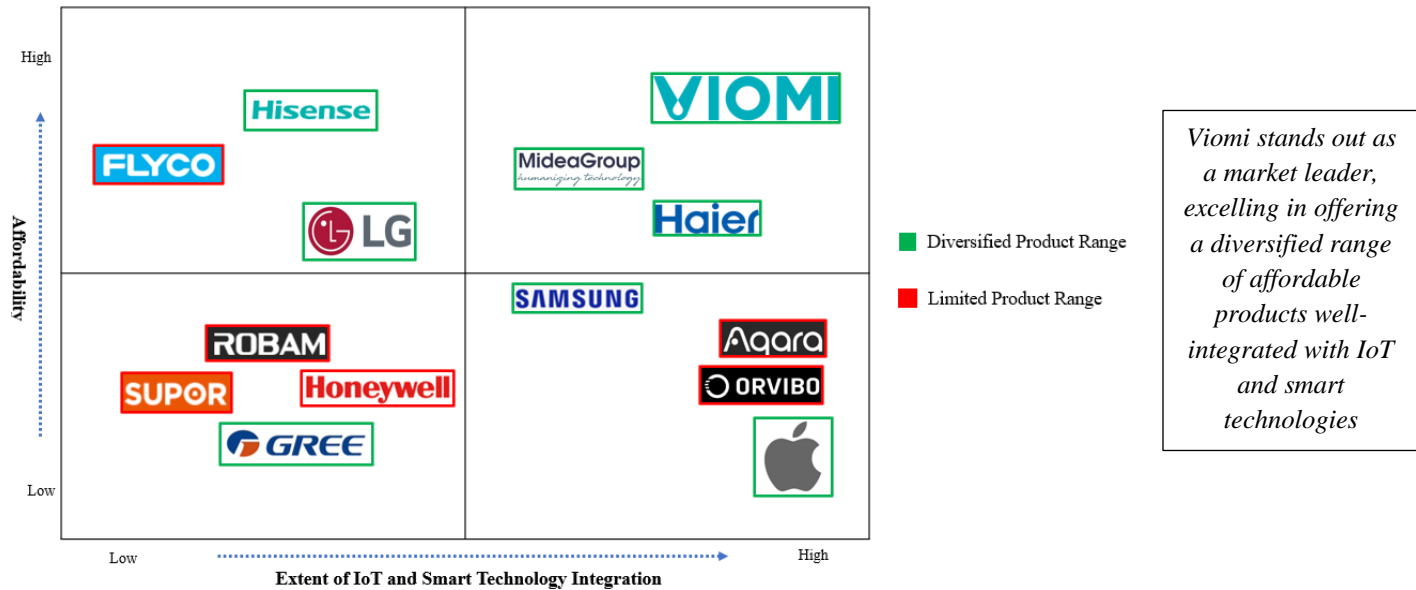


Exhibit 14: Relative Comparison of Select Home Appliances Brand Based on Affordability and Extent of IoT and Smart Technology Integration. Source: Diamond Equity Research

Viomi's approach in this competitive landscape is defined by its expertise in the Chinese market, data analytics, research & development, and brand positioning. While challenges from competitors are ever-present, Viomi differentiates itself by emphasizing specialization, innovation, and customer satisfaction. The company has a diversified product range emanating characteristics such as value for money, affordability, and a high extent of IoT and smart technology integration compared to its counterparts. While the known names within the industry have a strong presence either in white goods, kitchen appliances, or smart small home appliances, Viomi boasts a product portfolio that positions it as a holistic smart home appliance developer. Furthermore, with products spanning across all these categories, Viomi has managed to secure a robust position in the smart home water solutions segment compared to seasoned market players. Viomi's water purifier strategy is designed to create a snowball effect in sales through a growing cumulative household user base, regenerating revenue streams across the product's lifespan. This strategy is set against the backdrop of a domestic water purification market in China with only 18% penetration, contrasting sharply with higher penetration rates (80%+) in developed regions such as South Korea, Japan, the USA, and Europe. The global market size for water purification is valued at over \$30 billion, with significant potential for Viomi's expansion both domestically and worldwide.

⁵ <https://equalocean.com/analysis/2022062318323>

Management Overview

Viomi Technology is guided by a team with a broad range of experiences and backgrounds. Their collective knowledge has been foundational in the company's operations and strategic decisions. In the subsequent section, we will provide a closer look at the key members who play a pivotal role in the day-to-day and long-term direction of Viomi Technology.

Mr. Xiaoping Chen - Founder and CEO

Mr. Xiaoping Chen is the founder of Viomi Technology Co. and has consistently held the positions of Chairman and Chief Executive Officer since the company's establishment in May 2014. Before his venture with Viomi, Mr. Chen was associated with Midea Group Co., Ltd from 1999 to 2014. During his time there, he served as the Vice President of the Development Department and led the Research & Development center from 2013 to 2014. Educationally, Mr. Chen has an MBA from Sun Yat-sen University and dual bachelor's degrees in Engineering and Finance from Huazhong University of Science & Technology, which he completed in 1998.

Mr. De Liu - Director

Mr. De Liu has been a director at Viomi Technology Co. since June 2018. He co-founded Xiaomi and currently serves as its Senior Vice President, overseeing the organization department. Additionally, he sits on the board of Huami Corporation (NYSE: HMI). Recognized for his impactful work in China's industrial design sector, Mr. Liu and his team have garnered various awards. He is the Vice-Chairman of the China Industrial Design Association and a member of the National Manufacturing Strategy Advisory Committee. His educational background includes a bachelor's in industrial design and a master's in mechanical design from Beijing Institute of Technology, complemented by a master's in industrial design from the Art Center College of Design.

Ms. Jinling Zhang - Independent Director

Ms. Jinling Zhang joined Viomi Technology Co. as an independent director in September 2018. Since November 2020, she has been the managing partner and CFO of Baidu Venture, and has held the CFO position at Baidu Capital since 2018. Previously, she was the Vice President of Baidu Group in 2017 and the Vice President of Finance and Investment at Xiaomi from 2013 to 2016. Her earlier roles include financial controller at Cisco Networks Asia Pacific from 2010 to 2013, and financial and operational controller at Seagate Technology from 2006 to 2010. Ms. Zhang earned her bachelor's in accounting from Capital University of Economics and Business in 1994 and an MBA from the University of Rochester's Simon Business School in 2001. She holds certifications as a Chinese CPA (Certified Public Accountant), Chinese Certified Tax Adviser, and American CPA.

Mr. Weijiang Wu - Independent Director

Mr. Weijiang Wu became an independent director at Viomi Technology Co. in September 2018. Since March 2010, he has held the position of Vice President at Zhejiang Youpon Integrated Ceiling Co., Ltd., a company listed on the Shenzhen Stock Exchange. Between 2005 and 2009, he undertook various senior roles overseeing marketing and strategy at the same company. Before that, Mr. Wu was an assistant to the marketing manager at Guangdong Oppl Lighting Co., Ltd. from 2003 to 2004 and led the franchising department at Guangdong Vatti Group from 2001 to 2002. He obtained his bachelor's degree in engineering from Huazhong University of Science & Technology in 1998.

Mr. Jun Li - Independent Director

Mr. Jun Li has been an independent director at Viomi Technology Co. since September 2019. He currently holds the titles of Professor, Ph.D. supervisor, and Deputy Dean at the College of Engineering in South China Agricultural University. Before joining the university in July 2007, he worked as the sales and services manager at Wuyang-Honda Motors (Guangzhou) Co., Ltd from July 1998 to August 2002. Mr. Li earned his master's in mechatronic engineering in 2004 and a doctorate in vehicle engineering in 2007, both from the South China University of Technology.

Financial Performance Overview

Evolving Product Mix Amidst Evolving Consumer Sentiments - In light of the subdued consumer outlook and supply chain disruptions following the COVID-19 pandemic, which has adversely impacted its revenue, the company has recently chosen to implement a product optimization approach to strengthen its position in the home water solutions segment while making strategic adjustments across its business operations. The revenue share from the Home Water Solutions segment increased in the first half of 2023, accounting for 22% of the total revenue compared to 17% in the corresponding period of the previous year. Moreover, it remains the only segment of the four reportable segments to register revenue growth in the first half of 2023. The pre-covid period from 2016 to 2020 was characterized by significant growth in user base, robust product demand, and the resulting accelerated increase in revenues. The company's topline grew from RMB 312 million in 2016 to RMB 5,825 million in 2020, representing a remarkable CAGR of 107.8%. The post-COVID period from 2021 marked a reduction in revenues, majorly due to macroeconomic headwinds and partially due to fierce competition in a few sub-categories in which the company operates, such as home sweeper robots. We model the revenue de-growth to likely bottom out by the end of 2023, as the company reprioritizes and enhances its standing in the water purification sector, refines its product portfolio, widens its geographic presence, and reduces its dependence on third-party channels coinciding with the broader economy showing signs of recovery momentum amidst easy monetary policy.

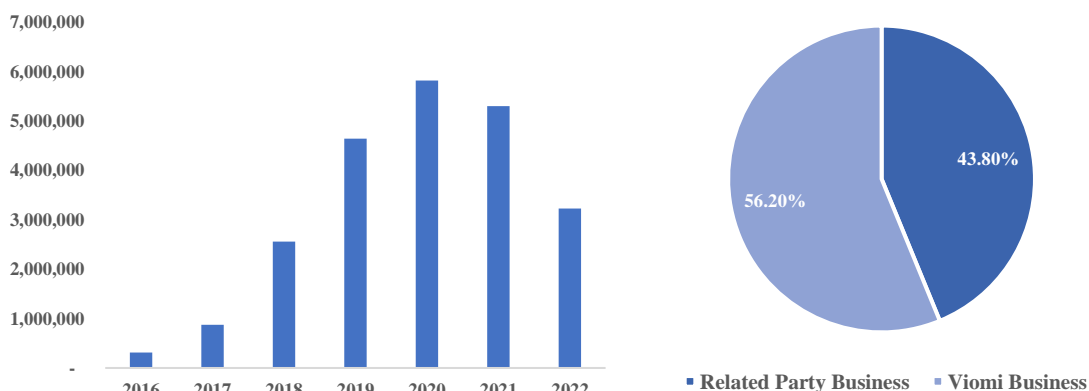


Exhibit 15: Revenue Trend (Left) and Revenue Distribution by Sales Channels (Right). Source: Company Filings, Diamond Equity Research
(Revenue data is in thousands of RMB)

Margin Profile and Profitability - With the evolving and volatile product mix in the past three years, the company's gross margin have fluctuated, with operating profitability also being affected. The underlying volatility has also been the result of the company's continued efforts toward product portfolio adjustments, concentrating on high-margin product categories. Pre-COVID, the company's margins declined from 28.0% in 2018 to 18.6% in 2020 but recovered significantly post-COVID i.e., in 2021 and 2022, to over 22.0%. For the first half of 2023, the gross margins were 22.0%. The company's operating margins also followed a similar trend but with a lag in recovery, which was observed in the first half of 2023. With the implementation of heightened cost controls and increased operational efficiency, the company's operating margins

expanded from (9.4) % in the second half of 2022 and (7.4) % in the first half of 2022 to (5.2) % in the 1H 2023.

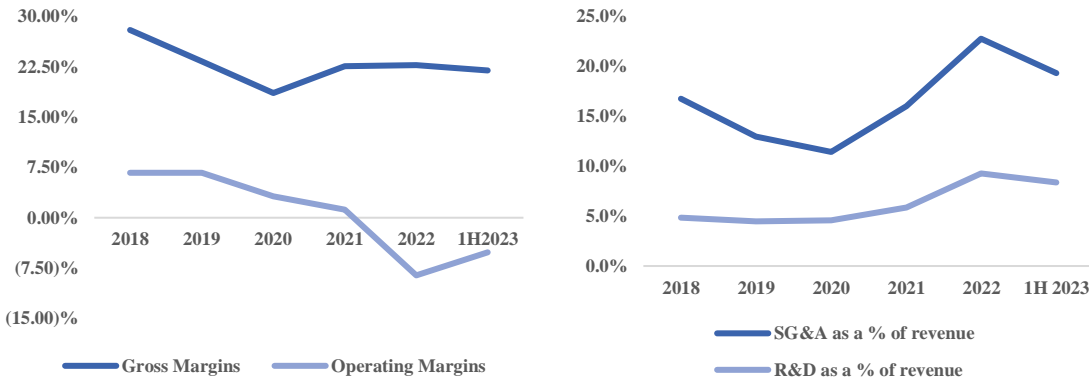


Exhibit 16: Margin Profile. Source: Company Filings, Diamond Equity Research

Solid Financial Standing with Significant Net Cash Balance - The company concluded 1H FY2023 with liquid assets amounting to 1,016 million RMB or \$140 million. This comprises cash and cash equivalents, short-term deposits, and short-term investments. In contrast, the total debt amounted to 260 million RMB or \$36 million. Moreover, the company has showcased a history of positive cash flow from operations and free cash flow generation in each of the past five years, barring the recently concluded year of 2022. With a notable rebound in operating margins and profitability observed in the first half of 2023, alongside an anticipated recovery in top-line growth from 2024, we expect cash flow from operations and free cash flow to turn positive by the years 2023 and 2024, respectively. This substantial net cash position, paired with a history of positive cash flow, underscores the company's strong financial footing, potentially providing a buffer against the current short-term challenges and providing the flexibility to capitalize on strategic opportunities aimed at revenue growth and business expansion. Moreover, with significant cash reserves the company had also previously announced a buyback amounting to \$10 million and has now extended this initiative for another twelve months.

Year-end 31 Dec. (in RMB'000s)	2021A	2022A	2023E	2024E	2025E
INCOME STATEMENT					
Revenue	5,303,835	3,232,731	2,827,489	3,223,022	3,848,734
Cost of Sales	(4,105,767)	(2,495,638)	(2,205,441)	(2,513,957)	(3,002,012)
Gross Profit	1,198,068	737,093	622,047	709,065	846,721
Total Operating Expenses	(1,160,527)	(1,036,539)	(763,422)	(870,216)	(962,183)
EBIT	37,541	(299,446)	(141,374)	(161,151)	(115,462)
Interest & Other Income/Exp.	57,089	34,990	36,246	37,727	38,422
Profit Before Tax (PBT)	94,630	(264,456)	(105,129)	(123,424)	(77,040)
Profit After Tax (PAT)	88,891	(282,630)	(105,129)	(123,424)	(77,040)
Basic Shares Outstanding (M)	209,552	208,341	204,174	191,924	193,843
EPS - basic	0.42	(1.32)	(0.51)	(0.64)	(0.40)
BALANCE SHEET					
Cash and cash equivalents	586,955	737,139	866,820	917,714	1,010,575
Other current assets	2,358,818	1,757,838	1,403,609	1,444,654	1,553,878
Total current assets	2,945,773	2,494,977	2,270,429	2,362,368	2,564,453
Non-current assets	330,941	390,717	336,639	284,909	228,348
Total Assets	3,276,714	2,885,694	2,607,069	2,647,278	2,792,801
Short-term borrowing	-	20,215	120,215	120,215	120,215
Other current liabilities	1,594,528	1,306,727	1,010,939	1,147,398	1,340,176
Total current liabilities	1,594,528	1,326,942	1,131,154	1,267,613	1,460,391
Long-term borrowing	16,105	114,552	114,552	114,552	114,552
Other non-current liabilities	15,154	15,037	14,426	15,494	16,414
Total liabilities	1,625,787	1,456,531	1,260,132	1,397,659	1,591,357
Total Equity	1,650,927	1,429,163	1,346,937	1,249,619	1,201,444
Total Liabilities & Equity	3,276,714	2,885,694	2,607,069	2,647,278	2,792,801

Exhibit 17: Income Statement Snapshot. Source: Diamond Equity Research

Valuation

Viomi Technology represents a blend of advanced and modern technological capabilities, a well-known brand within the smart home appliance market, a deep distribution network, solid financial health, and a track record of generating free cash flow, underscoring its ability to capitalize on its strengths and bolster its standing in a competitive landscape. Despite these strengths, we believe there exists a significant gap between the company's fundamental value and the market's perception of Viomi, as indicated by its current valuation. The company currently trades at a significant discount to its net cash position – at approximately \$63 million vis a vis \$104 million, signalling a pronounced valuation discrepancy. Moreover, even on a relative valuation basis, the company trades at a significant discount to its industry peers. This divergence suggests that the market may be undervaluing Viomi's intrinsic worth, potentially due to oversight or disproportionate risk perceptions. Such a significant valuation gap presents a potential opportunity for investors to tap into what we believe is an undervalued asset that possesses robust fundamentals. As the company implements its strategy to further innovate in water purification, elevate its IoT home solution, and streamline its operation for greater efficiency, we anticipate an improvement in top-line growth and profitability, possibly leading to a shift in market perception and narrowing of the valuation gap.

As our standard valuation approach, we have used a blend of DCF and comparable company analysis to value Viomi Technology. We have discounted the free cash flows, assuming a discount rate or weighted average cost of capital at 12.00% and a terminal growth rate of 1.5%. Additionally, we have assumed a TTM EV/S of 1.2x based on our peer company analysis. Using the blended approach and the stated assumption resulted in a valuation of \$4.93 per share, contingent on successful execution by the company.

		Approaches (in \$ mm)	Value (USD)	Weight	Wtd. Value
Calculated Equity Value (\$ mm)		DCF	\$313.49	90%	\$282.14
Enterprise Value	\$209.47	GPCM	\$583.56	10%	\$58.35
- Debt and Preferred Stock	\$36.08	GTM	-	0%	\$0.00
+ Cash	\$140.10	Wtd. Avg. Equity Value (USD)			\$340.50
Net Debt	\$104.02	No of Diluted Shares Outstanding			69.10
Equity Value	\$313.49	Intrinsic Value Per Share			\$4.93

Company Name	Ticker	Price	Currency	Country	Mkt Cap.	EV/S	EV/EBITDA
Samsung Electronics	A005930	66.900	KRW	KR	55,051,120	1.3	6.4
Honeywell International	HON	183.26	USD	US	120,814	3.7	14.9
Midea Group	000333	52.92	CNY	CN	363,896	0.9	8.5
Haier Smart Home	600690	22.22	CNY	CN	69,538	0.7	9.0
Gree Electric Appliances	000651	33.93	CNY	CN	191,073	0.5	3.1
Koninklijke Philips N.V.	PHIA	17.90	EUR	NL	16,394	1.3	22.4
LG Electronics	LGLG	15.40	KRW	KR	17,013,615	0.3	4.8
Zhejiang Supor	002032	50.13	CNY	CN	39,952	1.8	15.9
Hisense Home Appliances	000921	23.80	CNY	CN	10,938	0.3	4.3
Sichuan Changhong Electric.	600839	5.91	CNY	CN	27,282	0.3	11.8
Shanghai Flyco Electric Appliance	603868	53.69	CNY	CN	23,387	4.3	17.3
Hangzhou Robam Appliance	002508	23.10	CNY	CN	21,808	1.2	8.7
Guangdong Xinbao	002705	16.78	CNY	CN	13,809	0.9	7.6
Kingclean Electric	603355	22.98	CNY	CN	13,187	1.4	12.7
Joyoung Co	002242	13.35	CNY	CN	10,186	0.9	16.2
Bear Electric Appliances	002959	54.58	CNY	CN	8,465	1.3	10.4
Guangdong Hotata Technology Group	603848	14.90	CNY	CN	5,974	4.1	19.8
Median						1.20x	10.40x
Mean						1.45x	11.40x

Exhibit 18: Valuation Snapshot. Source: Diamond Equity Research
(Valuation multiples are based on LTM figures) *

Risks Profile

- **Regulatory Risks and Governmental Influence in China's Market:** Viomi Technology's primary presence in China subject it to certain legal and operational risks. The Chinese government's ability to significantly influence businesses, coupled with potential changes in the country's economic, political, or social conditions, could adversely affect the company's performance. Further, the company is domiciled in the Cayman Islands; the perception of the Cayman Islands as a tax haven may lead to reputational risk, scrutiny from international regulators, and potential changes in tax treatment.
- **Competitive Landscape and Challenges:** Viomi Technology Co. operates in a competitive market, contending with smart home solution providers, internet firms, and traditional appliance brands. The vast resources and established presence of some competitors pose threats to the company's market share and profitability, potentially leading to challenges in sustaining growth.
- **Dependency on Xiaomi:** Viomi Technology Co. maintains a significant reliance on its strategic partnership with Xiaomi, which stands as its primary customer. Many of Viomi's products are also marketed via Xiaomi's e-commerce platform, Youpin. Alterations in this partnership, whether due to contract changes, decreased promotional efforts from Xiaomi, or external challenges affecting Xiaomi's reputation, could negatively impact Viomi's operations. Additionally, as Xiaomi holds a stake in Viomi, potential conflicts of interest could arise, potentially hindering business.
- **Product Innovation and Expansion Risks:** Viomi Technology Co. hinges on its ability to innovate and adapt to consumer preferences. Key challenges include significant R&D investments, supply chain management, and maintaining quality. Delays in product development or misjudging user demand can strain resources and tarnish the brand's reputation. As Viomi delves into new product areas, it grapples with unfamiliar markets, potential product liability claims, and the need for aggressive pricing, which might impact profitability.
- **Data Privacy and Cybersecurity Concerns:** Viomi Technology Co. faces intricate Chinese and global data privacy and cybersecurity laws. Despite their protective measures, evolving regulations, especially in China, could increase costs. As they eye global expansion, diverse international regulations pose challenges. Non-compliance risks penalties and damage to their reputation and business.
- **E-Commerce and Store Reliance for Viomi Technology Co.:** Viomi Technology Co. depends on third-party e-commerce platforms, like JD.com and Tmall, for sales. Any cooperation changes or issues could impact their business. Additionally, Viomi's offline stores are operated by third-party partners. Misalignments or disputes with these partners could affect Viomi's brand and financial health. Replacing or resolving partner issues may be costly and time-consuming for the company.
- **Third-Party & Open-Source Risks for Viomi:** Viomi relies on third-party tech, including voice recognition from AISpeech and iFLYTEK. Some suppliers are on the U.S. Entity List, posing export and branding challenges. If licensing issues arise, it could delay or alter products. Additionally, Viomi's use of open-source software can lead to licensing complications, potential legal disputes, and business disruptions.

This list of risk factors is not comprehensive. For a full list, please refer to Viomi Technology's latest prospectus and/or annual filings.

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