

Global Biometric Card - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

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Report description:

The Global Biometric Card Market size is estimated at USD 0.37 billion in 2024, and is expected to reach USD 18.40 billion by 2029, growing at a CAGR of 117.76% during the forecast period (2024-2029).

Increasing demand for biometric authentication systems across various end-users, including banking, retail, gaming, and security, is expected to support the growth of the studied market during the forecast period.

Key Highlights

- -Biometric cards combine the embedded chip technology with biometric authentication technologies such as fingerprints, eye retina, iris scanning, facial patterns, voice recognition, etc., to verify the cardholder's identity for in-store purchases. Biometric cards also comprise smart cards with various security features, such as an optical strip or barcode, a holographic security image, and an embedded chip.
- -Biometric cards are forms of identification that analyze and recognize individuals based on their physical and behavioral traits. These include fingerprints, eye retina, iris scanning, facial patterns, voice recognition, and body movement. Biometric cards also comprise smart cards with various security features, such as an optical strip or barcode, a holographic security image, and an embedded chip.
- -A smart card is an identity card that uses biometric analysis to identify an individual. Smart cards are available in several forms, but the most common and popular are those with a processor with internal memory or those that function with a memory chip. The cards are connected via direct physical contact with a scanner or a remote electromagnetic interface. The cards can store large amounts of data, carry out their encryption and digital signatures, and connect this information to a remote, a contactless system like an electromagnetic card reader. By using this technology, biometric cards offer more security than conventional contactless payment methods. During the transaction processing, the card compares the user's fingerprint on the scanner with

the reference data stored in the card's secure chip before authorizing the payment. No personal data is held on a bank's servers or sent to the centralized database. Hence, in case of theft, the customers will not have to worry about fraudulent activity on their accounts. It adds an extra layer of protection and ensures that the user's account details are kept secure. This added protection by the biometric cards does not have a payment threshold, allowing its consumers to make high or low-value transactions.

-Biometric ID cards apply to several solutions, especially for companies and individuals requiring greater security. Moreover, companies in highly competitive fields may choose biometric cards as an added security against illegal duplication and theft.

Advanced ID cards serve government sectors, research institutions, and some universities and schools.

- -The technology required for biometric authentication in cards involves a higher expense than the technology used in the payment cards that are being used currently. Although consumers may be willing to pay a small fee for a more secure payment card, the current cost of the biometric card, which is expected to be around USD 20 per card, restricts its adoption among users.
- -The COVID-19 pandemic has been a catalyst when it comes to contactless payments. Following the pandemic, the tech sector has developed contactless solutions, indirectly resulting in higher transaction levels being processed without a second authentication factor. With no payment limits, biometric payment cards meet the need for all contactless transactions while addressing security concerns.

Biometric Card Market Trends

Payments Segment to Show Significant Growth

Biometric technology is gaining ground in financial services as a secure and convenient alternative to passwords and PINs. This technology is increasingly being considered to have the potential to make the consumers' lives more manageable and provide them with more significant choices to confirm their identity.

According to Fingerprint Cards AB, around 6 billion payment devices are expected to be shipped annually by 2026. Also, almost all these devices are anticipated to be contactless. Moreover, the company depicts the potential Total Addressable Market (TAM) to be around 3 billion units per year for biometric sensor modules and software in the payment domain.

Considering the potential the payment sector holds for the growth of the studied market, vendors are increasingly focusing on new product launches and collaborating to facilitate the commercialization of biometric cards. For instance, in April 2022, IDEX Biometrics ASA announced its collaboration with E-Kart, one of the prominent card manufacturers in Europe, to commercialize biometric payment solutions in Eastern Europe.

Similarly, in April 2022, Fingerprint Cards AB, a global biometrics company, announced that its technology would be used as part of at least two new commercial biometric payment card launches in Morocco. Such trends are expected to support the growth of the studied market during the forecast period.

Asia Pacific to Exhibit the Highest Growth Rate

Biometric payment cards are a way to the future in the region, and there is a robust market for payment cards in the fast-paced Asia-Pacific region, even in the face of rising smartphone use. According to the People's Bank of China, the total number of bank cards in China will increase to 9,247 million in 2021, from 8,954 million in 2020.

Similarly, according to Japan Consumer Credit Association, the number of credit cards issued in Japan amounted to 295.31 million as of March 2021. It was an increase of about 0.8 percent compared to the previous year.

Various market vendors are currently working to integrate biometric technology. They will have a truly disruptive offering that will

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significantly expand the banking customer base in the region and integrate it with various end-users. For instance, in June 2021, IDEX Biometrics ASA, one of the prominent providers of advanced fingerprint identification and authentication solutions, announced that China Construction Bank (CCB) expanded certain "digital renminbi" trials to include the issuance of smart cards that are secured by IDEX Biometrics fingerprint sensors and biometric software.

Similarly, in July 2021, Zwipe, a biometric fintech company, announced its collaboration with the international card payment processor and card personalization bureau ICPS to bring Zwipe Pay ONE-enabled biometric payment cards to banks across Asia and Africa.

Biometric Card Industry Overview

The Global Biometric Card Market is seeing intense competition among prominent vendors, who are increasingly expanding their business capabilities. As such, huge investments are being witnessed in the market, increasing competition. The market is marked by several large-scale players actively working to increase their customer base and subsequently increase their market share. Therefore, the degree of competition is considered high in the market. Some of the major players operating in the market include Zwipe AS, Thales Group, IDEX Biometrics, and STMicroelectronics, among others.

June 2022 - Zwipe and Fidor Bank announced plans to pilot biometric payment cards in Germany during the second half of 2022. The Zwipe Pay technology platform will power this. The launch of biometric cards is in line with Fidor's strategy to provide its consumers with access to digital banking and pay services in the most secure way possible.

May 2022 - Fingerprint Cards AB and Mswipe, an independent mobile POS merchant acquirer & network provider, announced their collaboration to bring biometric debit and credit cards to India. According to the company, the partnership will feature Fingerprints' T-Shape module and software platform.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

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