Mobile Edge Computing Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 131 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00

- Team License (1-7 Users) $5250.00

- Site License $6500.00

- Corporate License $8750.00

Report description:

The mobile edge computing market is expected to register a CAGR of 30.64% during the forecast period. Multi-access edge computing (MEC), popularly known as mobile edge computing, is a form of edge computing that brings cloud computing to the network's edge to increase its functionality. MEC is a result of the European Telecommunications Standards Institute (ETSI) program that was first intended to place edge nodes on mobile networks but has since expanded to include the fixed (or eventually integrated) network. MEC permits operations in base stations, central offices, and other aggregation sites on the network, as opposed to traditional cloud computing, which takes place on distant servers, far from the user and device.

Key Highlights
The demand for digital media services is increasing as the number of wireless subscriptions grows exponentially. Mobile wireless networks have advanced tremendously to meet this growing need. Enterprises across industries are beginning to drive new levels of performance and productivity by deploying different technological innovations, like sensors and other data-producing and collecting devices, along with analysis tools. Traditionally, data management and analysis are performed in the cloud or data centers. However, the scenario seems to be changing with the increasing penetration of network-related technologies and initiatives, such as smart manufacturing and smart cities.
Furthermore, with the current 4G networks reaching their maximum limit, 5G will have to manage online traffic far more intelligently, in which mobile edge computing will play a major role. In addition to managing the data load, MEC is expected to significantly reduce the latency in 5G networks.
In the telecom industry, edge computing, also known as mobile edge computing, MEC, or multi-access edge computing, offers execution resources (compute and storage) for applications with networking close to end users, often within or at the boundary of operator networks. Edge solutions offer key advantages: low latency, high bandwidth, device processing, data offloading, and reliable computing and storage.

As with any network technology/ architecture, MEC is prone to various threats and hardware that lay in wait owing to its lack of security framework. A wide variety of threats and hazards could potentially occur in the MEC network. However, the most common attacks that hinder the market's growth can be narrowed down to compromised protocols, falsified information and logs, loss of policy enforcement, man-in-the-middle, and data loss.

The COVID-19 pandemic boosted 5G penetration significantly. For instance, GSMA Intelligence's consumer survey found that most market respondents in Europe had limited interest in upgrading to 5G. However, amid the pandemic, the increasing demand for high-speed networks for video conferencing and content streaming, the requirement for higher bandwidth, and zero-latency data transfer, boosted the adoption of 5G.

Mobile Edge Computing Market Trends

Rising Application of 5G and Industrial IoT Services Among End-user Industries

Industry 4.0, powered by the Internet of Things (IoT) movement, involves interconnecting various technological platforms and presents the ability to interface with manufacturing equipment located anywhere in the world, from anywhere in the world. With Industry 4.0 transforming industries, from legacy systems to smart components and machines to facilitating digital factories and developing an ecosystem of connected plants and enterprises, MEC platforms find exciting opportunities for deployment.

IoT in industrial automation is expected to derive maximum benefit from 5G services. The functionality to support this segment is currently being defined in 3GPP, influenced by Industry 4.0 initiatives and industry bodies, such as 5G-ACIA. It will be a 5G-specific segment for local area use cases and private network deployments.

In the healthcare industry, IoT enables providers to monitor patient health remotely through connected medical solutions, along with real-time data collection and extended access to real-time monitoring and analysis. The healthcare sector is witnessing an increase in the deployment of 5G services. For instance, Samsung Medical Center and Korea's largest telecommunications company, KT Corporation, announced that they have partnered to develop smart patient care, 5G-powered innovative medical practices, and improve hospital operational efficiency.

Energy and utility companies are driving the pack in actively improving business cases, services, and partnerships around 5G. According to Infosys, 56% of the energy and utility companies are defining use cases for 5G, and 20% have already established their 5G service portfolios along with the ecosystem partners. The company further anticipates that smart cities will create USD 100 billion in utility revenue. As electricity distributors manage poles and wires to all parts of the cities and neighborhoods, they could leverage their assets to offer smart surveillance solutions or smart lighting solutions to communities, law enforcement agencies, and enterprises.

North America is Expected to Hold Major Share

North America is home to three major cloud service providers: Amazon Web Services, Microsoft Azure, and Google Cloud. In addition, the region is home to major mobile edge computing market vendors such as Verizon Communications Inc., AT&T Inc., etc., which positively impacts the mobile edge computing market in the region. This region is also considered to be the hub for all major technological innovations, such as 5G, autonomous driving, IoT, blockchain, gaming, and AI, among others.

Countries like the United States and Canada are known to be early adopters of new technologies. Most new technologies at present are data intensive. They create, process, and transfer large amounts of data, due to which the current infrastructure, consisting of data centers and the cloud, is inching toward its maximum capacity. With the amount of new data generated and used presently, these infrastructures would not be able to support their customers' needs. Of all the parameters involved, latency is going to be the most crucial factor for business.

Since most companies rely on real-time data access and processing, low latency can disrupt their entire process. This is where edge computing has helped infrastructure developers address the issue. With new technologies maturing, edge computing is expected to have a significant impact.

Further, mobile edge computing allows consumers and businesses from various sectors to capitalize on the power of a data center in near real-time, unlocking the further potential for fast, low-latency mobile networks to empower transformative technologies for everything from home entertainment and gaming to healthcare and agriculture.

Various end-users in the region are indulging in partnerships with edge computing providers to develop innovative platforms coupled with advanced technologies such as 5G, IoT, and mobile edge computing. For instance, in January 2022, Vodafone announced a partnership with Proximie, the health technology platform that digitizes operating rooms worldwide to save lives by sharing the world's best clinical practices. Combining technologies such as 5G, IoT, and Edge Computing with Proximie's world-class connected surgical care software, healthcare experts will be able to virtually' scrub in,' record, and interact with operating rooms across the world to help accelerate and improve workforce training and more efficient delivery of high-quality surgical care, at scale.

Mobile Edge Computing Market Competitor Analysis

The MEC market comprises several global and regional players vying for attention in a fairly contested market space. However, the market is dominated by major vendors that cover a significant share of the market and compete to gain a foothold and become pioneers in different regional markets. Overall, the competitive rivalry among the vendors is expected to be high and remain the same during the forecast period.

In September 2022, Nokia introduced new platform capabilities and applications for its on-premise Mission Critical Industrial Edge (MXIE) compute solution that would enable to host of applications from different ecosystems to advance enterprise digital transformation. It also developed vertical-specific blueprints that guide industrial enterprises to simplify their digital transformation.

In September 2022, Verizon partnered with US Armed Forces to construct a private 5G network inside an aircraft maintenance hangar on Joint Base Pearl Harbor Hickam (JBPHH). With this design, it would be easy for military leaders to leverage the high-speed, high-bandwidth, and low latency of Verizon 5G.

In August 2022, AT&T partnered with WNBA, offering WNBA fans a way to customize content and interact with the game with the upgraded AT&T 5G game view. Fans can view game and player stats during live games, watch customizable clips, and access real-time 3D stats using augmented reality.

Additional Benefits:

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

Table of Contents:

1 INTRODUCTION
1.1 Study Assumptions and Market Definition
1.2 Scope of the Study

2 RESEARCH METHODOLOGY

Mobile Edge Computing Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 131 pages | Mordor Intelligence

To place an Order with Scotts International:

 - Print this form

 - Complete the relevant blank fields and sign

 - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-03-01
		Signature	