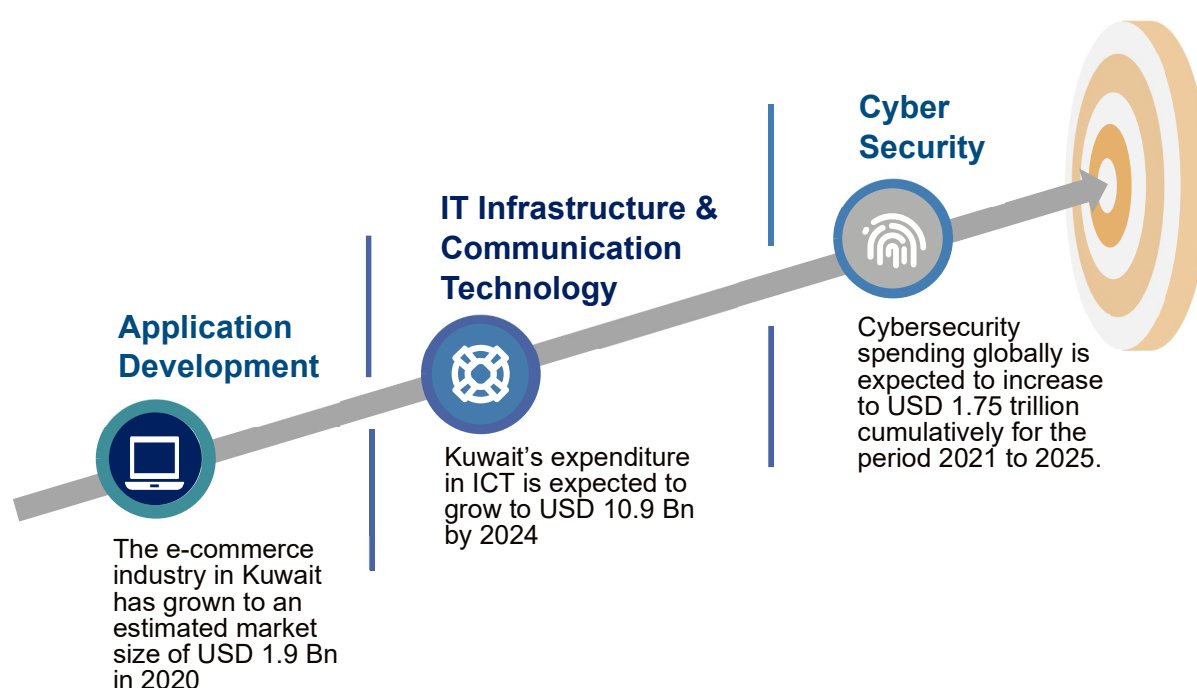


3.11 IT and Software Development and Technology Sector

Sector Overview

Technology has seen a major uptake in the Kuwaiti market. While Cyber Security and ICT have been readily adopted by organizations, it is Application Development that has gained the maximum interest presently. Locally founded FinTech and FoodTech companies have been successfully launched in Kuwait and in the region. Their success has been a catalyst for the launch of several other companies in Kuwait in many domains. The government support to the public in funding new technology companies through its SME Fund is an added incentive for young Kuwaiti entrepreneurs.

SUBSECTORS



The e-commerce market in the MENA region is expected to reach USD 28.5 Bn by 2022. This makes the region very attractive for investment by seed investors and venture capitalists seeking returns through attractive valuations. The government has prioritized cybersecurity to safeguard its electronic data and is actively monitoring and launching new projects in this regard.

3.11.1 Application Development

Application development is the process of developing software applications for mobile devices such as mobile phones, tablets, and other devices. The application development lifecycle typically involves design, development, testing, deployment, maintenance, and support.

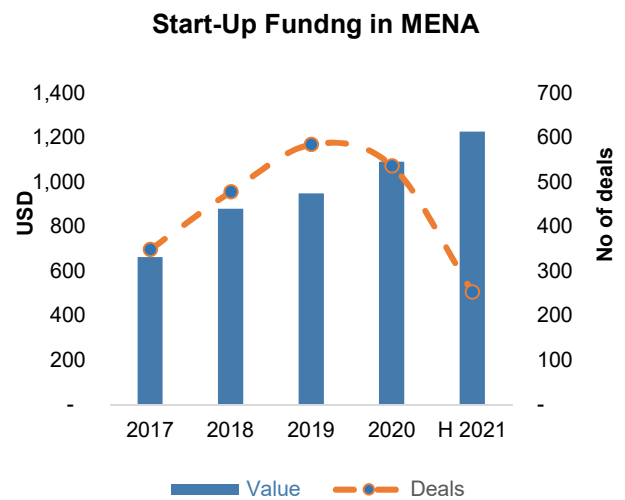
OVERVIEW AND FACTORS INFLUENCING THE MARKET

- Kuwait has a high mobile penetration rate (mobile cellular subscription was 178.5% per 100 inhabitants).¹
- The Kuwaiti population is highly educated, technologically inclined with a strong leaning towards entrepreneurship. Considering this, the e-commerce industry has grown to an estimated market size of approximately USD 1.9 Bn in 2020.²
- The sector is strongly supported by the government, which announced a USD 7 Bn Kuwait National Fund for SMEs in 2013 to support similar ventures.³
- The sector is also supported by a large number of incubators, accelerators and regional venture capitalists who see immense potential in business models.
- Today, a number of local business investors and Kuwait family businesses are also venturing into this domain.
- The sector initially saw huge success with FoodTech with the launch of successful ventures such as Talabat and Carriage. Talabat was eventually sold to an international investor with an attractive valuation of USD 564.8 Mn and Carriage was acquired by the same investor through Talabat.⁴
- Today the sector also consists of business models related to groceries, payment solutions, electronics, real estate, home cleaning services, mobile saloons, and cosmetics.
- Further, as part of the Kuwait Vision 2035 Development Plan, the government is keen on the digital transformation of government services provided by the Public Sector through the launching of several applications. The main objectives behind the digital transformation include:
 - Enhancing transparency in government transactions and reducing corruption.
 - Facilitate and expedite the services of citizens and residents and raise the level of satisfaction.
 - Reducing human interference in transactions to ensure justice and equality.
 - Enhancing the efficiency of government performance and raising the level of technical awareness and work culture.⁵

Some of the governments initiatives in this regard include applications such as Shlonak, Musafir, Kuwait Mobile ID, Immune, Meta, Sahel and Hafez. Others will also be included as part of the digitalization of ministries.

OPPORTUNITIES AND INVESTMENT CONSIDERATIONS

- The e-commerce market in the MENA region is expected to reach USD 28.5 Bn by 2022 from a base of USD 8.3 Bn in 2017 a growth of nearly 3.3. times.⁶
- Kuwait is expected to occupy a decent size of the market considering the high amount of disposable income and high mobile and internet penetration rates.
- Venture capital funding for the MENA region in the first half of 2021 stood at USD 1.2 Bn, higher than the entire amount of USD 1.09 Bn raised in the year 2020. The most attractive sectors in the region for venture capital were FoodTech and FinTech.⁷



Source: ¹CITRA, ²Statista, ³The National News, ⁴Arabnet, ⁵Supreme Council for Planning and Development, ⁶Bain & Co, ⁷Magnitt

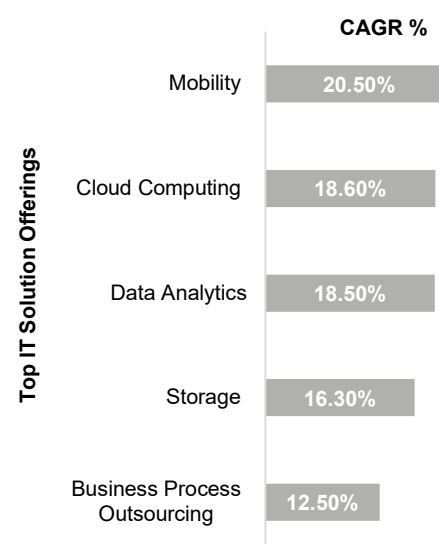


3.11.2 IT Infrastructure and Communication Technology

Information and Communication technology is an extension of the term Information Technology, which includes integration of communication, hardware and software that enable users to access and use information seamlessly.

OVERVIEW AND FACTORS INFLUENCING THE MARKET

- The Kuwaiti government has a strong emphasis on the digital transformation of both public and private sectors in Kuwait.
- Kuwait's expenditure in ICT is expected to grow to USD 10.9 Bn by 2024, at a CAGR of 10.2% (base 2019) by adopting various technologies such as Artificial intelligence (AI), Big Data, Cloud Computing, and Internet of Things (IoT).¹
- The main expected growth drivers for the country's digital transformation are Mobility at 20.5% CAGR, followed by Cloud Computing at 18.6% CAGR and Data Analytics at 18.5% CAGR.¹
- Kuwait Vision 2035 Development Plan also prioritizes a large number of ICT projects to be undertaken in its vision of transforming Kuwait into a diversified and sustainable economy². They include:



Project Name	Cost (USD)	% of GDP
Broadcasting and digital archiving network	59.4 Mn	0.05%
Fiber optic network between switches	13.3 Mn	0.01%
FTTH Optical Network (Phase III)	347.2 Mn	0.29%

- Banks are increasingly focusing on tech-based solutions for providing e-wallet and digital payment facilities.

OPPORTUNITIES AND INVESTMENT CONSIDERATIONS

- The government is particularly focused on the digital transformation of the public sector. There could be ample opportunities for foreign businesses and investors to participate in tenders commissioned by the government in this regard.
- Other opportunities for international businesses/investors include:
 - A growing need for mobile content management and mobile device management among enterprises.
 - Small and Medium enterprises need for data and analytical tools, which will assist them to take precise decisions and enhance their operations and revenues.
 - Digitalization of enterprises, particularly in the government and banking sector that is expected to create a strong demand for cloud based computing solutions.
 - The availability of high-end IT infrastructure in the country coupled with 5G internet speeds provides additional opportunities for expanding the countries ICT needs.
 - The availability of Kuwaiti satellites used for different purposes including R&D, Education and Scientific Research.

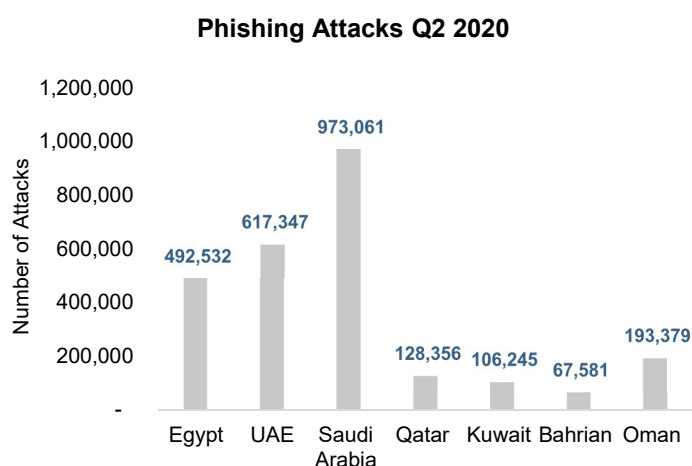
Source: ¹GlobalData, ²Kuwait Vision 2035 Development Plan

3.11.3 Cyber Security

Cyber Security also known as information technology security is securing computers, systems and networks from disruption by protecting them against damage to their hardware, software, or electronic data from malicious attacks caused by viruses, malwares, hacking and trojans.

OVERVIEW AND FACTORS INFLUENCING THE MARKET

- Cyber Security spending globally is expected to increase to USD 1.75 trillion cumulatively for the period 2021 to 2025. It was merely USD 3.5 Bn back in 2004.¹
- Cybercrime losses globally has increased exponentially from USD 3 trillion a decade ago to USD 6 trillion in 2021. It is expected to cross USD 10.5 trillion by 2025.¹
- Kuwait has faced multiple Cyber Security issues in the past years with attacks on shipping, transportation firms and financial institutions.
- In light of the above, the government of Kuwait launched the National Cyber Security Strategy for the State of Kuwait for the years 2017-2020. The Strategy has mandated the creation of a National Cyber Security Centre to undertake a risk assessment analysis of 45 critical national infrastructure stakeholders.²
- As per the latest survey conducted by the Global Cyber Security Index in 2020, Kuwait ranked 65th out of 194 countries globally and 9th regionally in the Cyber Security.³
- Kuwait continues to be exposed to cyber attacks more so following the pandemic:
 - As per Trend Micro, Kuwait witnessed 1,305 cyberattacks in the first half of 2020 from which 1,228 attacks were spam emails, 8 malwares, and 69 threats and hyperlink addresses.⁴
 - As per Kaspersky, Kuwait witnessed 106,245 phishing attacks in Q2 of 2020.⁵



OPPORTUNITIES AND INVESTMENT CONSIDERATIONS

- Several companies have taken cyber security seriously and hence conduct Vulnerability Assessment and Penetration Testing periodically as well as the Central Bank of Kuwait has mandated Cyber Security Independent Audits for all banks in Kuwait. This helps detect inherent limitations within the respective ICT systems so that corrective measures can be taken. Foreign Investors can seize opportunities within the Cyber Security solutions domain and provide optimal solutions locally that meet international standards.
- Foreign investors can also take advantage of opportunities within the training domain as employees need to be aware of Cyber Security threats and the mechanisms to avoid them.
- Providing training or workshops to employees of companies provides an attractive opportunity for foreign investors.

Source: ¹Einnews, ²OBG, ³International Telecommunication Union (ITU), ⁴Zawya, ⁵Arab Times