Market review

In our constantly evolving economies, **stc** strives to keep moving forwards in line with the new and transformational technologies that are shaping people's life, global communication, and corporate activities. Hence, for **stc** to maintain its market position as a leader in the telecommunication, IT and ICT industries, it became necessary or even mandatory to acclimate, adapt, and seize the most recent technological digital advances that shall influence the areas in which our customers operate. A recent research by IDC (International Data Corporation) indicates the forecasted global annual spending on technologies and services to hit about $2.3 trillion.

Since inception and following the COVID-19's impact on the global economy, **stc** has always been proactive to identify the key trends influencing its operations. Accordingly, this section of the annual report gives an insight into the latest market and technological developments that have thrived over the last few years and became a global inevitability post the COVID-19 crisis.

Industry trends

Remote working

The past two years witnessed a global shift towards remote working throughout the full and partial lockdown in the corporate, business, educational and industrial trends since the onset of COVID-19 crisis. The increasing demand on the digital and online platforms opened the door for telecom and ICT operators to realize new streams of revenue capitalizing on the fixed high-speed broadband and mobile networks. With the use of efficient technologies, online cloud computing, digital security and digital solutions became an integral part of not only the individuals' and corporates' daily operations but also the business continuity planning. This has opened the door for many industries to obtain the benefits of cost optimization, such as rent, utilities, building maintenance, cleaning, and equipment.

Intense competition

With the global direction for digitization and ICT services, Kuwait telecom market is currently facing a significant stiff competition that led telecom operators to capture business opportunities in deploying new as well as more advanced

connectivity technologies and solutions that create more value in the enterprise, governmental and consumer sectors.

Digital transformation and the digital ecosystem

A new era of transformation has begun where corporates and governments are more focused than ever before on adopting sophisticated technologies and new business strategies with the aim of maintaining their competitive position in a world that is always evolving rapidly. Accordingly, COVID-19 crisis has accelerated the need for telecom operators and ICT services providers to integrate the ESG and climate factors into their corporate strategy. This hurdle represented a wake-up call for the telecom and ICT providers to find the most effective plans and corporate strategies that insure business continuity with a main focus on digitization, high-tech advances, energy reduction and carbon emissions that would contribute to the public health, preservice of natural resources, alleviation of the environmental impacts and value adding services.

Virtual reality (VR)

Virtual reality has gone above and beyond entertainment to the extent of being included in the healthcare, tourism, education, institutions industries. In this regard, employees can use virtual reality when executing their tasks to experience life-like circumstances that improves business operations. On the contrary, the technology is still in its early stages of development as many organizations around the globe are hesitant to completely commit to the virtual reality technology due to various concerns related to costs, accessibility, and safety.

Economic uncertainty

With the current economic instability post the COVID-19 crisis, different sectors around the globe has been doing their utmost to enhance their operating margins through focusing on digitization and adhering to the digitalization process. As a result, telecom operators leveraged on their digital platforms and communication channels to serve the consumer, private and public sector with the very best possible efficiency.

ICT integration

In the recent years, mobile operators have been shifting from providing solely traditional telecom products and services into offering a wide range of end-to-end hardware as well as software integrated solutions to the B2B and B2C sectors. Where the demand for Data, Cloud, IoT and Cyber security services is steadily growing, Telecom operators found new opportunities arising from extending their services to include ICT solutions and enhance their ICT infrastructure to obtain an easier access to data in addition to enriching customer satisfaction.

Technology trends

Internet of things (IoT)

The internet of things markets are witnessing an upward trend in the consumer and enterprise sectors. The artificial intelligence (AI) employed in the IoT to collect and share data would increase the corporate efficiency, raise the level of automation and help to deliver better customer service. The global direction towards the use of IoT technology and AI-based solutions is attributed to their potential of being applied in almost all the daily operations leading to an operational cost reduction. Not to mention that these technologies are developing in complexity and intelligence in every way especially when combined with digitization.

Following are examples of the innovative IoT applications in various domains:

- **Consumer**
  IoT and connected devices are increasingly finding their way into consumer applications such as smart watches, home automation, connected health, connected transportations and other wearable devices.
- **Manufacturing**
  IoT opens up a completely new world of possibilities for the manufacturing industry with the ability to integrate seamlessly with various devices and processes in the industry domain.
- **Transport and Logistics**
  IoT applications touch a variety of aspects of this rapidly expanding business like vehicle tracking, driver information system, navigation, safety and roadside support,... etc.
- **Healthcare**
  IoT offers a wide range of medical and healthcare applications as it enables hospitals and medical institutions to run more efficiently. It also simplifies the way in which patients can receive better treatment. Hence, the IoT has been recently integrated with a variety of medical devices, resulting in a higher quality and more effective medical services.

Cloud technology

The benefits of adopting cloud technology go far beyond the ease of accessing data and the flexibility of connecting to the business anytime and anywhere. The following represent the key areas where cloud technology and data storage play a vital role in the success of major telecom and ICT solutions providers:

- **Diminished IT costs**
  - Cost of managing and maintaining IT systems
  - Reduce the need of purchasing expensive systems and equipment.
  - Reduce operating costs (cost of system upgrades, eliminate wages for additional staff and reduce energy consumption costs).

- **Business continuity and disaster recovery:**
  - Having the data stored in a secure and safe location helps organizations to manage businesses more effectively in case of power failure, natural disaster, security issues or other crises. Cloud technology also enables consumers and enterprises to leverage on the shared hardware through the use of fast as well as secure connectivity with lower latency.
- **Participation efficiency and increased collaboration**
  - Communication and shared services is executed with the use of modern and faster methods instead of the old and traditional methods.
- Additional benefits including, but not limited to, automatically access updates, scalability and loss prevention.

Connectivity and digitalization

The telecom sector is witnessing drastic changes in terms of enhancing the digital services and business solutions for the consumer and enterprise sectors; embodied with creating partnerships with mobile virtual network operators (MVNO's). Digitization has become an essential part of our daily activities and business operations where it has been taking into many shapes to reach digital payments throughout the use of IoT, Cloud solutions and connected devices. On the other hand, MVNO's are designed to cater customers' needs via customized plans designed for the consumer and enterprise sectors with lower than usual prices.

5G network

Telecom operators are heavily relying on 5G networks to build their infrastructure with the purpose of supporting their services to handle the accelerating demand on more connected devices, higher speed and data usage, Cloud solutions as well as ICT and IoT services. This would also enable telecom operators to better execute their business continuity plans to survive and reach effectiveness and efficiency in terms of operations, resiliency, agility as well as performance throughout the most critical economic and operational conditions.

Cyber security

With the increased reliance on connectivity and the new technologies here comes a need for stronger and more dependable cyber security that allows high-tech operators to open up for new growth opportunities. Thereafter, the growing demand on digitization, Cloud services and IoT creates a vital need for Cyber security to provide consumers with solutions in cyber security and protection 'Shield' services.