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Modernizing logistics through digitization

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EXECUTIVE SUMMARY

The Gulf Cooperation Council (GCC)[1] countries are growing in importance in the realm of global trade and logistics. These countries now have the opportunity to address their logistics challenges and gain a competitive edge over peers that are disrupting the logistics sector and claiming market share through digitization-first policies and practices.

Although GCC countries either have reviewed or are reviewing their strategies and processes, and have set aggressive digitization targets, digital applications are not yet the norm in the sector. Manual processes still dominate. Similarly, important transport infrastructure upgrades, the development of logistics parks, the creation of special economic zones, and national logistics champions have not had sufficient impact, as these plans are often piecemeal, rather than an integrated part of policy planning.

Most GCC countries need to catch up with, and overtake, their peers. Digitization is crucial in this effort, spanning policy, the replacement of legacy systems, and innovation. By creating a digital-first mindset, GCC governments can reclaim their positions as significant logistics players and improve their competitive edge. This can be done through giving digitization an integral role in policy; using digitization to replace legacy processes; streamlining logistics with digitization; and enabling digitization for gateway ports. The digitization of logistics would also contribute to national digital ambitions, helping move GCC countries from being digital technology adopters to becoming disruptors.[2]

GCC COUNTRIES ARE BEHIND THE LOGISTICS CURVE

The development of an efficient and capable logistics sector is vital for the economic diversification agenda of GCC governments. The logistics sector is critical to local, regional, and global economies, as it supports supply chains and facilitates international trade flows. It is essential to businesses and individuals in all industries. GCC governments are engaged in ambitious plans to change the economic base, move toward sustainability, and capitalize on the region's strategic location as a hub for international trade, and are seeking to increase localization in such areas as pharmaceuticals, aluminum, and consumer goods. These goals are attainable only if the logistics sector undertakes concerted modernization and digitization efforts.

GCC countries have an opportunity to capture an important share of the value created by logistics. In early 2020, the transport and logistics sector accounted for 11 percent of GDP globally.[3] The sector is often linked closely to the economic cycle. Despite the recent slowdown caused by the COVID-19 pandemic, the global transport and logistics sector market is set to grow robustly from around US$8 trillion in 2020 to around $12.8 trillion in 2025.[4] Several factors will lead to growth: an increase in global trade activities and commodity exports from developing economies, more global and regional trade-related agreements, the expansion of e-commerce, investments in logistics infrastructure around the world, technological advances, and the enabling and efficiency effects of digitization on logistics.

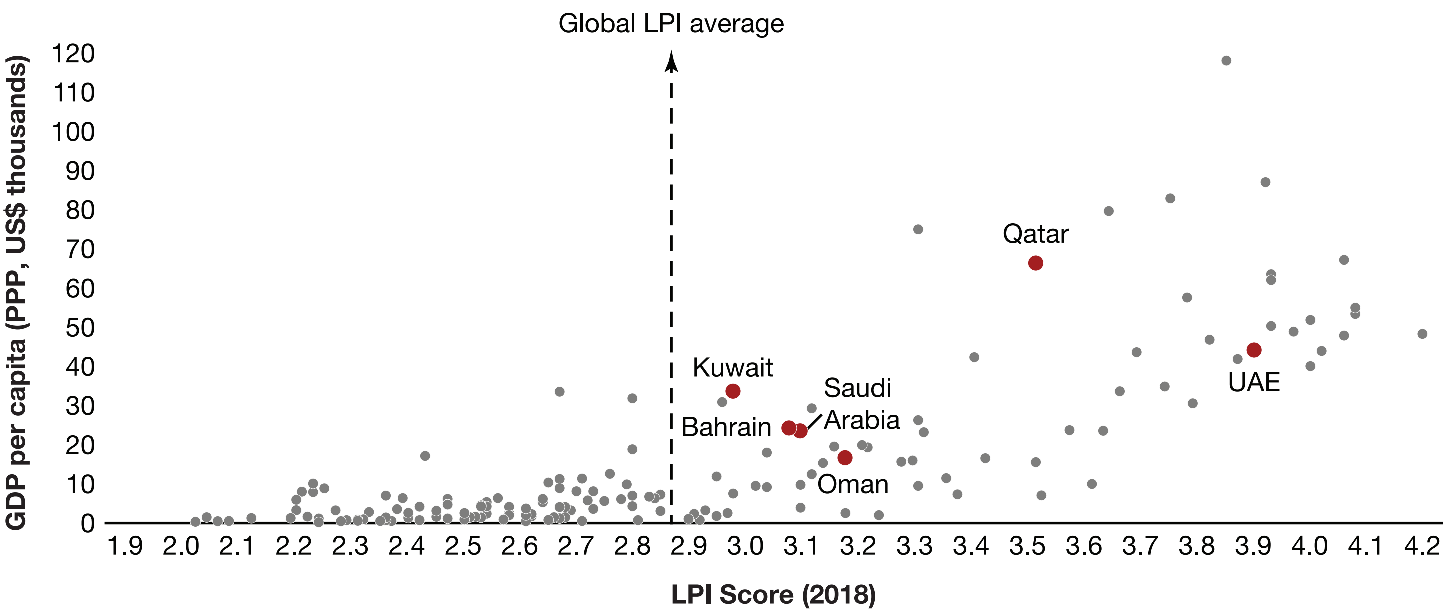
> GCC countries have an opportunity to capture an important share of the value created by logistics

Unfortunately, most countries in the GCC region have not done enough to win their fair share of global logistics business and to lay out the foundations that enable economic growth. Except for the United Arab Emirates (UAE), which ranks 11th in the world, these countries are behind their peers on all indicators of the World Bank's Logistics Performance Index (LPI). For instance, Qatar ranks 30th overall whereas Singapore and Switzerland, with similar GDP per capita, rank seventh and 13th, respectively. Similarly, Saudi Arabia ranks 55th, compared with the U.K.'s ninth-place ranking and France's 16th place *(see Exhibit 1)*.[5]

EXHIBIT 1

GCC countries perform above average, but behind their peers, on logistics

GDP per Capita (PPP) vs. Logistics Performance Index (LPI) score (2018)



Note: PPP = purchasing power parity. UAE = United Arab Emirates. Source: World Bank, Logistics Performance Index; Strategy& analysis

MINDING THE PERFORMANCE GAP

GCC countries underperform in the logistics sector for three main reasons: the lack of modern and integrated infrastructure, insufficient service quality, and legacy processes.

Lack of modern and integrated infrastructure

Logistics services are only as effective as their supporting infrastructure. The best modern infrastructure is integrated, as in many of the GCC's peer economies, which have invested in multimodal transport networks that connect roads with ports, sea lanes, airports, flight routes, and railways. By contrast, much of the GCC region lacks integrated modern infrastructure, a necessary feature to allow items to move swiftly and efficiently. Except for the UAE, the region is behind its peers in the LPI's infrastructure ranking despite recent large-scale projects. Saudi Arabia, Kuwait, and Bahrain, respectively, rank 43rd, 45th, and 68th, whereas Turkey is ranked 33rd and South Africa is ranked 36th.

Insufficient service quality

Logistics services contribute to the economy when they are of high quality, as they facilitate and encourage trade. GCC logistics providers tend to be small and therefore unable to build the scale and capabilities to offer quality services. The current landscape of the logistics sector within the region does not encourage innovation, as providers largely offer basic services and compete on the basis of price. Countries with strong economies have more advanced logistics and supply chain needs, serviced by companies that offer the consultative solutions that their customers increasingly seek. The GCC's small-scale providers have no incentive to invest and innovate, which restrains sector development.

Legacy processes

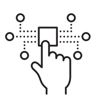
Logistics services work best when rules and regulations safeguard government concerns while facilitating trade operations. GCC countries maintain outdated processes that prevent efficiency, that make them unappealing for global trade, and that hold back sector improvement. According to the World Bank's customs clearance efficiency index, GCC countries underperform compared with peers. The UAE is the only country in the top 20, while Bahrain ranks in the low 70s.[6] By contrast, in peer countries, disruptive technological tools and solutions as well as data and analytics are enabling new business models. Outside the region, digital freight forwarders such as Forto, cloud logistics platforms such as Transporeon, and e-marketplaces are commonplace and are changing how public and private logistics players operate.

MAKING GCC LOGISTICS COMPETITIVE THROUGH DIGITIZATION WITHIN ENABLING ECOSYSTEMS

The region needs to do more than catch up if it wants to lead in global trade logistics. Governments will have to give digitization an integral role in policy, use digitization to replace legacy processes, streamline logistics with digitization within enabling ecosystems, and enable digitization for gateway ports.

Give digitization an integral role in policy

For a “digital-first” approach in logistics, GCC governments need to integrate digitization with policymaking. Some other governments have adopted data-driven policymaking by developing a “single source of truth,” which integrates data and process points by funneling them into one system. The Spanish government, for example, recently pioneered a single-window system, which collates information to ensure interoperability between modes of local transport and logistics nodes, and which can be integrated with global data. Abu Dhabi is also introducing this model. Such practices enable the aggregation of trade flow data, which can be used in predictive and prescriptive analytics. With enough trade data, GCC countries could identify new business opportunities, such as by detecting logistics flows that currently bypass them and that would typically flow through emerging logistics hubs. GCC countries could also take proactive measures to identify and mitigate any supply chain and trade dependencies on particular economies or regions.



Adopt digital and technological tools in the decision-making process
GCC governments have never had access to more data than they do today. They should be able to exploit these data to establish a single source of truth that would inform both nationwide economic and sector-specific policies. For instance, by adopting innovative technologies such as blockchain (a digital ledger that records, duplicates, and distributes financial transactions across the entire global computer system network) as part of their economic policies, governments can monitor cross-border trade effectively (including its dependence and reliance on other countries, regions, and suppliers). It also allows them to define their supply-side risk tolerance level when formulating economic and localization policies. From a business development standpoint, this data would allow them to detect all trade and logistics flows in the broader region and channel these toward their own emerging hubs.

Use digitization to replace legacy processes

GCC governments need to digitize and automate processes throughout the logistics sector to increase efficiency. Best-in-class ports and customs authorities elsewhere have used digital capabilities to offer end-to-end online services. For example, the Singapore customs authority has implemented a wide spectrum of digital services, which include customs forms, certificate of origin verification, and e-payments. Other authorities, such as the Port of Rotterdam, are experimenting with process automation using blockchain to make container handling more efficient and more secure by replacing PIN codes with unique digital signals. Governments are also integrating robotics into labor-intensive activities, making terminals more automated. On a regional level, governments are integrating logistics through interoperable systems and unified customs systems.

Streamline logistics with digitization within enabling ecosystems

GCC governments need to learn from other countries, which are streamlining logistics with digitization. New entrants are introducing innovative, fully digitized, and sometimes disruptive business models. Incumbents are also innovating and overhauling existing models by automating facilities (such as the Deutsche Post DHL Group, which has introduced the Internet of Things [IOT], the network of connected devices, into its warehouses through smart devices as well as automated processes such as sorting), using blockchain, or experimenting with new technologies through incubators and research and development labs. GCC countries should mobilize innovation rapidly across the value chain by establishing and increasing support for logistics startups. Governments must provide access to capital, establish incubators with the private sector, and invest strategically in research and development.

Enable digitization for gateway ports

There is also a need for gateway port authorities and operators to digitize processes in order to reduce inefficiencies, improve transparency, lower logistics costs, and enhance their global competitiveness.

Introduce “smart ports” solutions
GCC port authorities need to fully define how to raise their gateway ports’ regulatory conditions to world-class standards. This move to world-class provision can include technology solutions such as IOT, telematics devices, and remote monitoring, which allow for real-time information, improved control of transport conditions, and risk-based inspection regimes. Such changes would also lead to security and efficiency benefits. Part of the effort to improve gateway ports could involve autonomous vehicles that allow for more efficient movement of people and goods. GCC countries must also confront issues that will arise if they are left behind on digitization, including the next wave of cross-border processes that will be built on artificial intelligence-supported supply chain transparency, and the de facto elimination of the physical border.

Modify local processes
GCC countries need to use digitization to modify local processes. This includes single-window solutions that allow for a single point of data submission, and the shift to fully paperless processes. Authorities can also consider the development of common facilities or advanced trade and logistics platform solutions that link all trade stakeholders, to make trade workflows more efficient. Digitization would also allow parties to use standardized documents to fulfill all import, export, and transit-related regulatory requirements. Although some countries in the region have implemented these solutions, others have yet to explore their full potential.

Encourage regional and global cooperation
GCC authorities need to ensure the interoperability of systems by integrating national logistics solutions to foster regional cooperation. An example of this is Customs Cross Border Interoperability (CCBI), an industry standard that allows for easier customs clearance. CCBI enables any customs authority to digitally access documentation and issue permits, licenses, and other certificates. Such a solution is a step toward the elimination of paper-based transactions and processes and can help trade grow. However, CCBI is effective only if trading partners adopt a similar suite of tools.

In addition to regional cooperation, governments can extend their reach beyond the region to establish effective (and potentially privileged) cross-border trade processes such as forward clearance and trusted trader schemes with global trade partners. These draw upon the region's governance; large aid budgets that can assist partners in adopting new technology; and strong intergovernmental relations with existing and emerging trade partners, for example, newer partners in Asia, Africa, and Latin America.

CONCLUSION

GCC governments have a central role to play in articulating and implementing top-down logistics transformation. They need to embed digitization into policymaking to ensure a "digital-first" approach that can address logistics challenges and ensure that they are competitive globally. GCC countries are at a turning point. To make real efforts to transform and modernize their economies, they will need first to create high-efficiency, digitized logistics to enable growth and competitiveness.

ENDNOTES

1. The GCC countries are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

2. Bahjat El-Darwiche, Tarek El Zein, Dima Sayess, and Melissa Rizk, “Energizing the digital economy in the Gulf countries: From digital adopters to digital disruptors,” Strategy&, 2021 (https://www.strategyand.pwc.com/m1/en/ideation-center/research/2021/energizing-the-digital-economy-in-the-gulf-countries/energizing-the-digital-economy-in-the-gulf-countries-spread.pdf).

3. Source: IHS.

4. Source: IHS.

5. World Bank, International LPI (https://lpi.worldbank.org/international/global).

6. World Bank, Logistics performance index: Efficiency of customs clearance process, 2019 (https://data.worldbank.org/indicator/LP.LPI.CUST.XQ).

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