

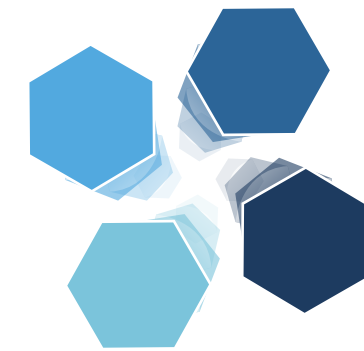


شركة وادي الرياض
Riyadh Valley Co

Transportation and Logistics: On The Move With Renewed Momentum



November 2022



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Introduction



Transportation and Logistics sector (T&L) is one of the key industries that has been in the limelight since COVID-19. Logistics refers to the flow of things between the initial point and the end-user, and includes aspects such as storage and warehousing and transportation. With the advent of globalisation and e-commerce, the sector has become the nerve centre of today's economy. Global logistics industry is estimated to be USD 9.6tn, translating to 12% of the GDP.¹

The industry's complex and interconnected nature offers much potential for technological disruption. Different parts of the value chain from freight management to shipment tracking are being disrupted by technology. Some emerging trends in logistics include digital twin, distributed ledger technology, cloud-based transportation management systems and digital freight matching. Digital solutions have the potential to reduce operating costs by 10 to 30% and reduce operational risk and breakdowns by up to 75%.²

COVID-19 related lockdown restrictions had disrupted supply chains with port and factory closures, congestions at ports, container shortages etc. This had highlighted both the importance and vulnerability of the logistics and transportation sector. In this backdrop, venture capital (VC) investments in logistics had almost doubled in 2021. M&A deal value in transportation and logistics sector for 12 months ending May 2022 has increased by 6% over FY2021.³

¹ Forbes

² Strategy&

³ PwC

Given their strategic location, GCC countries are positioned to serve as logistics hubs with some already established hubs like Dubai leading the way. However, logistics market in the region is fragmented. Freight transportation and last-mile delivery have been identified as major sources of inefficiencies in the GCC logistics market. Hence, logistics service providers would have to focus on improving operational efficiency and optimizing assets' performance and digitization definitely has a role to play.

Digitalization opens up medium-term growth prospects. Warehousing automation, digital freight platforms, and innovations in last-mile delivery are expected to remain focus areas. Customs clearance, port infrastructure upgradation, and e-commerce hubs are a few other segments that will benefit from digitalization.⁴

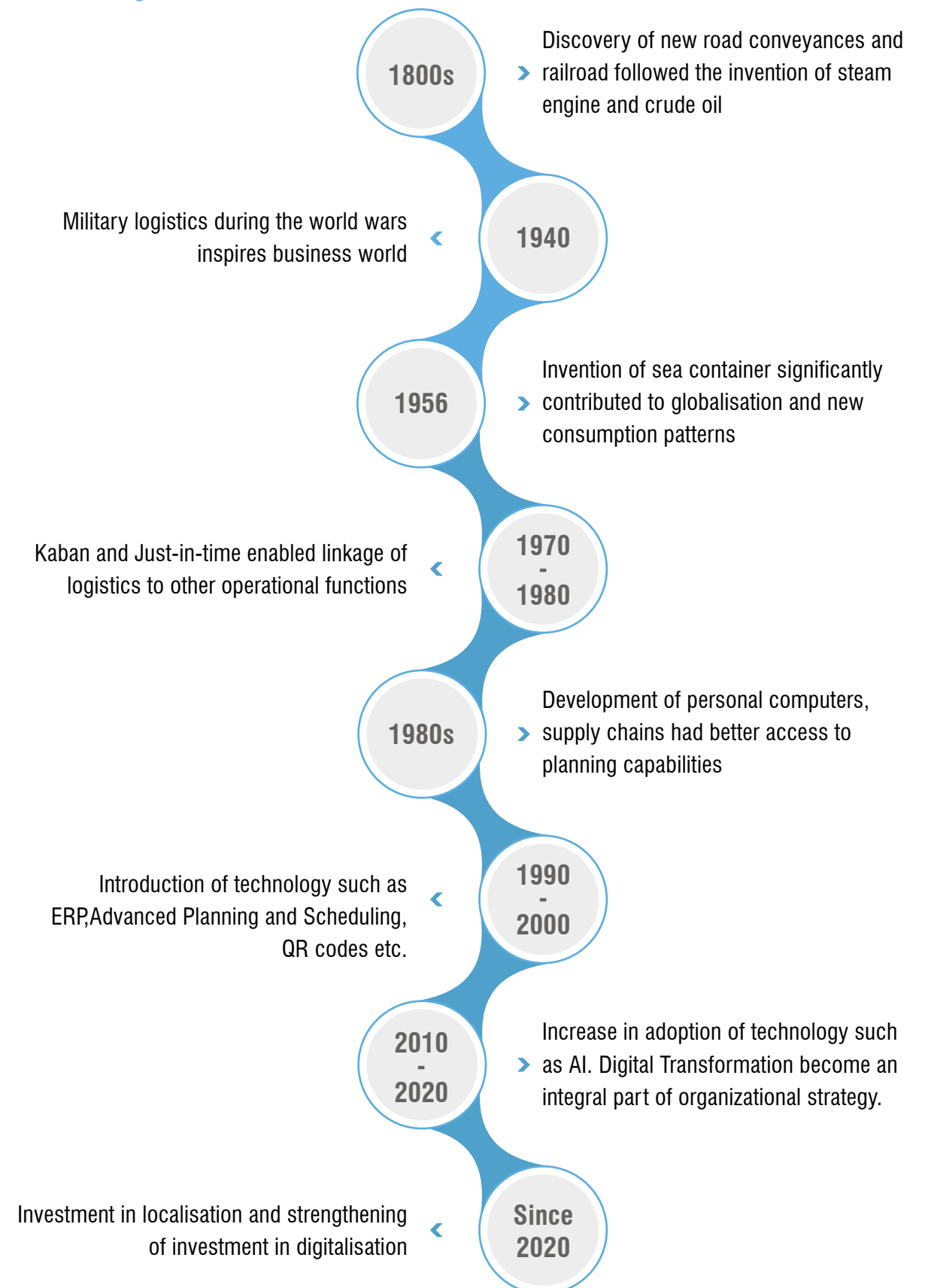
⁴ Frost and Sullivan, Construction Business New

Overview of Technology in Transportation and Logistics

Transportation and logistics industry is an important part of today's global economy. While transportation refers to the movement of goods from one location to another, logistics is a broader term that includes storage, handling, inventory, packaging etc., in addition to transportation.



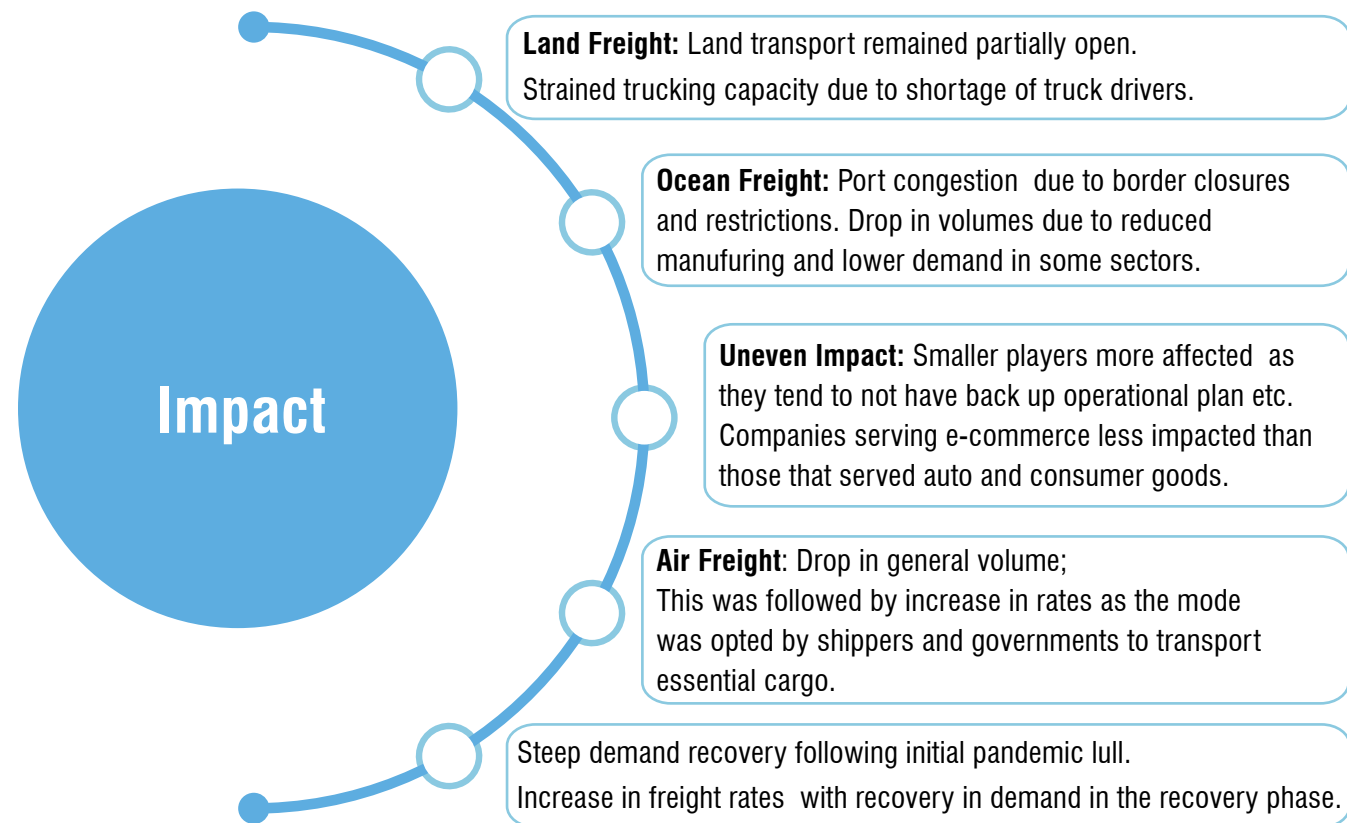
Evolution of Logistics



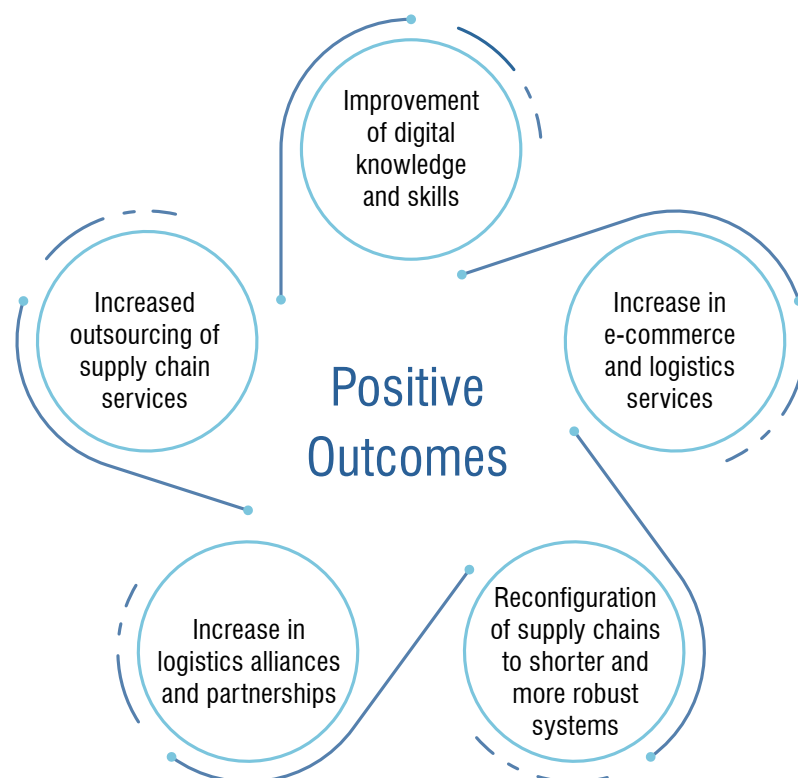
Source: Futurelearn, Logmore, SupplyChainDigital

Given the interconnected, complex and global nature of the industry, T&L has been quite affected by COVID-19.

COVID-19 Impact on Transport and Logistics



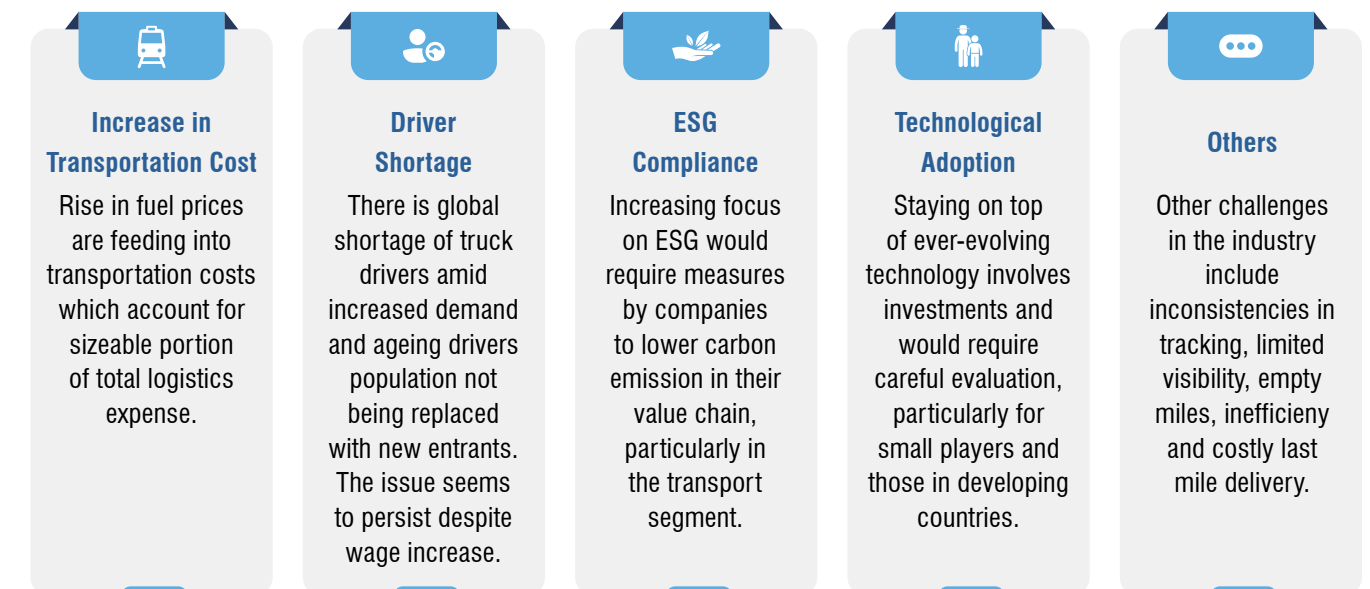
Source: IFC



Source: Business Perspectives, IFC

As the industry adapts to changes in the COVID-19 recovery phase, it faces some key challenges such as increased transportation costs and driver shortage.

Current Challenges for the Logistics Industry



Source: IRU, Logistics Brew, HCLTech

The industry is seeing changes on multiple fronts driven by changing customer behaviour and expectations.

Logistics Trends

Supply Chain Agility

- Importance of maintaining agile and nimble supply chain reinforced by the pandemic.
- On demand delivery increasingly becoming a customer expectation.

Real Time Visibility

- Customers, trading partners and logistics companies are keen on having real time visibility into the supply chain and track the status of the shipments and trucks.

Less Than Truck Load Demand

- With the rise in eCommerce popularity and the demand for faster shipping, logistics companies are being asked to make smaller shipments more frequently, rising demand for less than truckload solution.

Last Mile Delivery Solutions

- Customers want their orders to be processed swiftly and transparently. The technology available throughout the final mile provides logistics companies with the capacity and opportunity to make this aspect of the supply chain transparent to all parties involved.

Digitalisation and Automation

- Companies are increasingly adopting technology solutions to increase efficiency and lower cost. real-time warning systems predict bottlenecks and provide actionable solutions.

Source: Lotus-Containers, Cleo

The industry has grown rapidly in the recent past powered by globalization, the evolution of sophisticated just-in-time supply chains, and the rise of e-commerce. The application of disruptive technology to increase transparency and efficiency in the logistics industry is termed as FreightTech, Log-Tech etc.

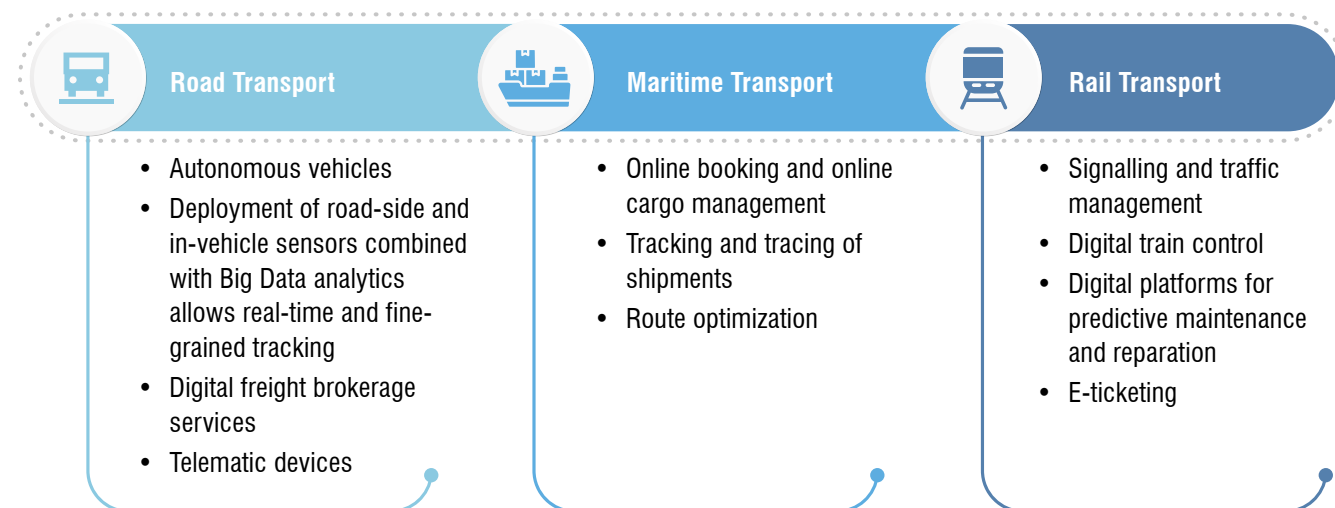
Avenues for Applications of Technology in Logistics

Application	Description
Intelligence	The complex and network-based nature of logistics provides many opportunities for data-driven decision making and optimization. Applications under this include tools to create, transfer and better analyze data.
Automation	Increasing productivity combined with the falling price and longer lifespans of robots are driving the growing use of robotic systems in logistics, thereby reducing manual intervention.
Integration	Tech applications under this aspect focus on increasing transparency and communication between market players by digitizing processes.

Source: Roland Berger, Legacy Supply Chain

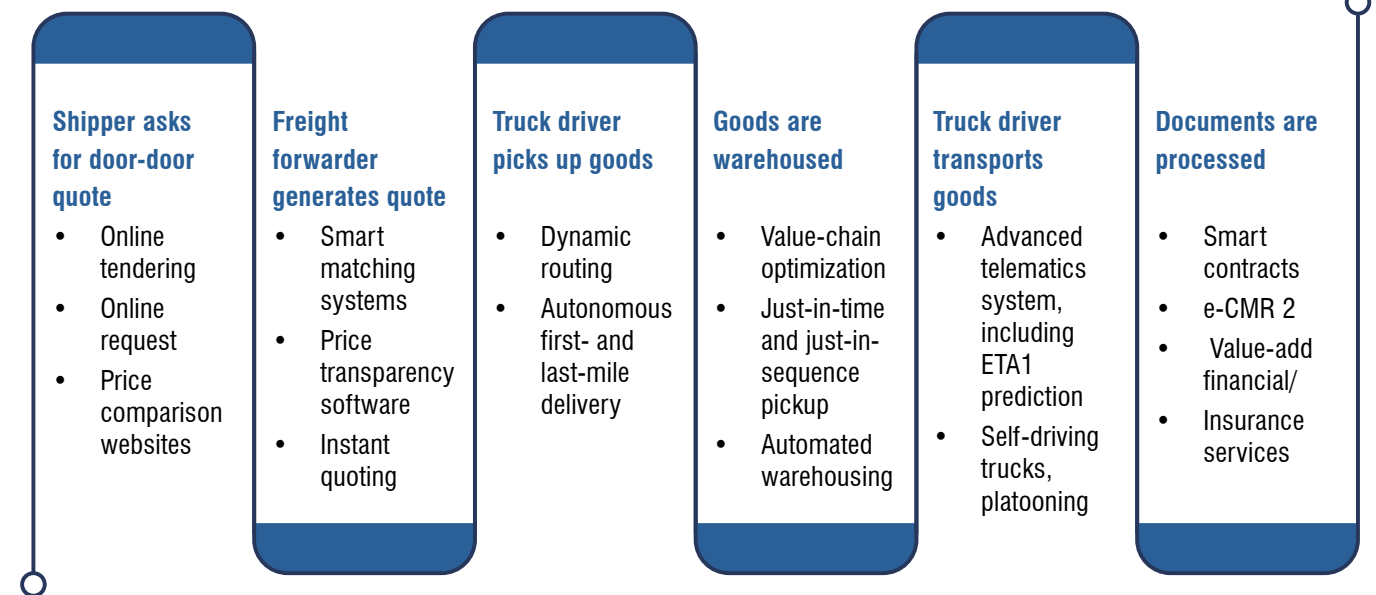
Technology has a potential to transform every step of the logistics value chain across different modes of transport.

Digitalization Scope Across Different Modes of Transport



Source: WTO

Example of Tech Disruption in Road-Freight Value Chain



Source: Roland Berger

Evolving technologies such as AI, blockchain etc. have scope for application in the logistics industry. Other tech driven changes like autonomous vehicles also have potential to change the industry.

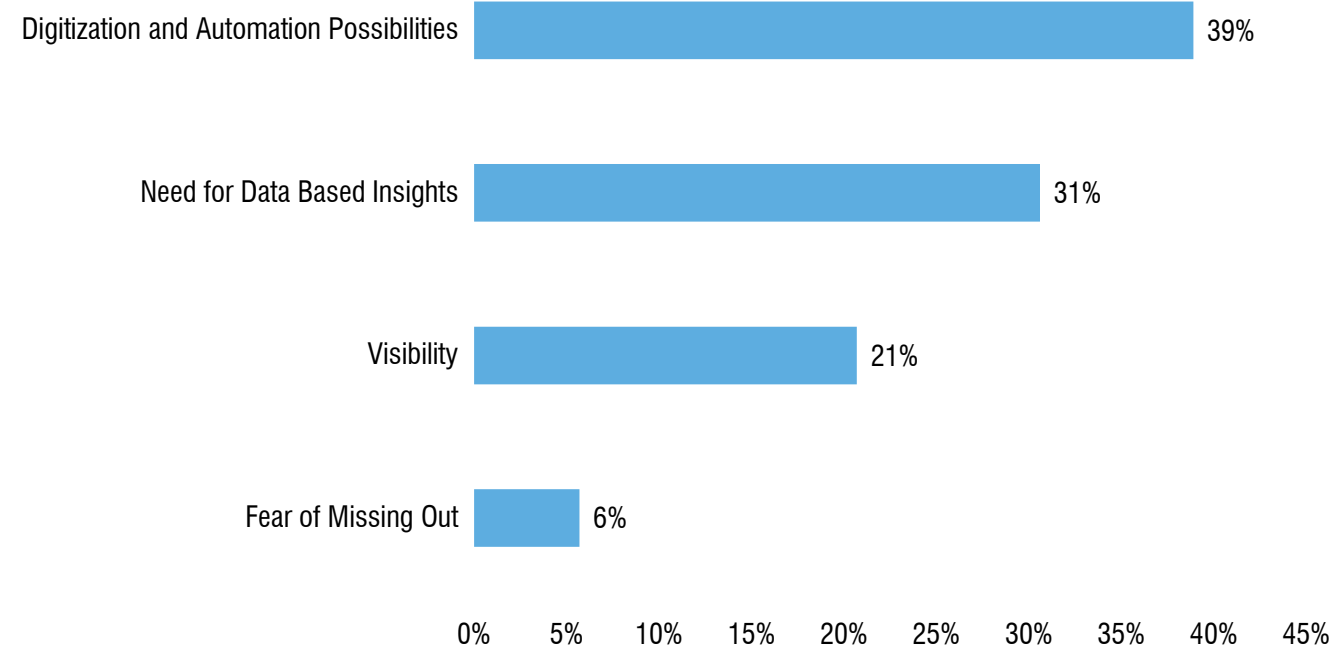
Scope for Application of Technology in Logistics

Technologies	Scope for Application
Cloud-based systems and integrations	Streamline logistics companies' workflows allowing them to store and transfer information quickly and more securely.
Autonomous vehicles and drones	Autonomous vehicles have the potential to be safer, less expensive, and easier to manage than manually driven vehicles. Autonomous trucks are already beginning to run under "supervised autonomy".
Internet of Things (IoT)	Shipment tracking through connected IoT devices on parcels allow and container management powered by IoT.
Blockchain	Enable carriers and shippers to share sensitive data. Improve efficiency in global trade by greatly reducing bureaucracy and paperwork. Usage of smart contracts to automate commercial processes.
Artificial Intelligence	Intelligent transportation, route planning, and demand planning in their operations.

Source: Forbes, DHL, Transmetrics

Adoption of technology seems to be on the back of efforts to reap benefit of automation, need for data-based insights and visibility. About 30% of respondents had identified sourcing capacity/volume as primary area that need incorporation of technology, reflecting the growth of freight-matching platforms and digital freight marketplaces in recent years.

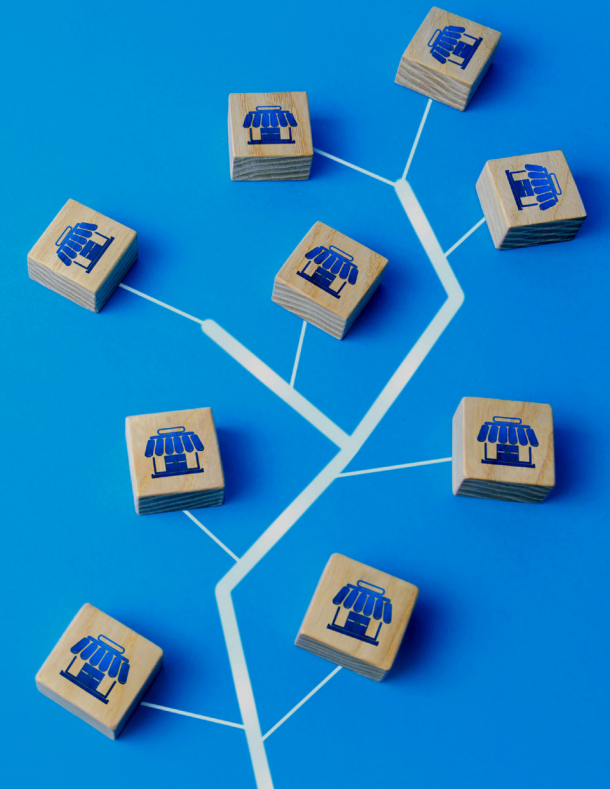
Reasons for Tech Adoption in Logistics (% of Respondents)



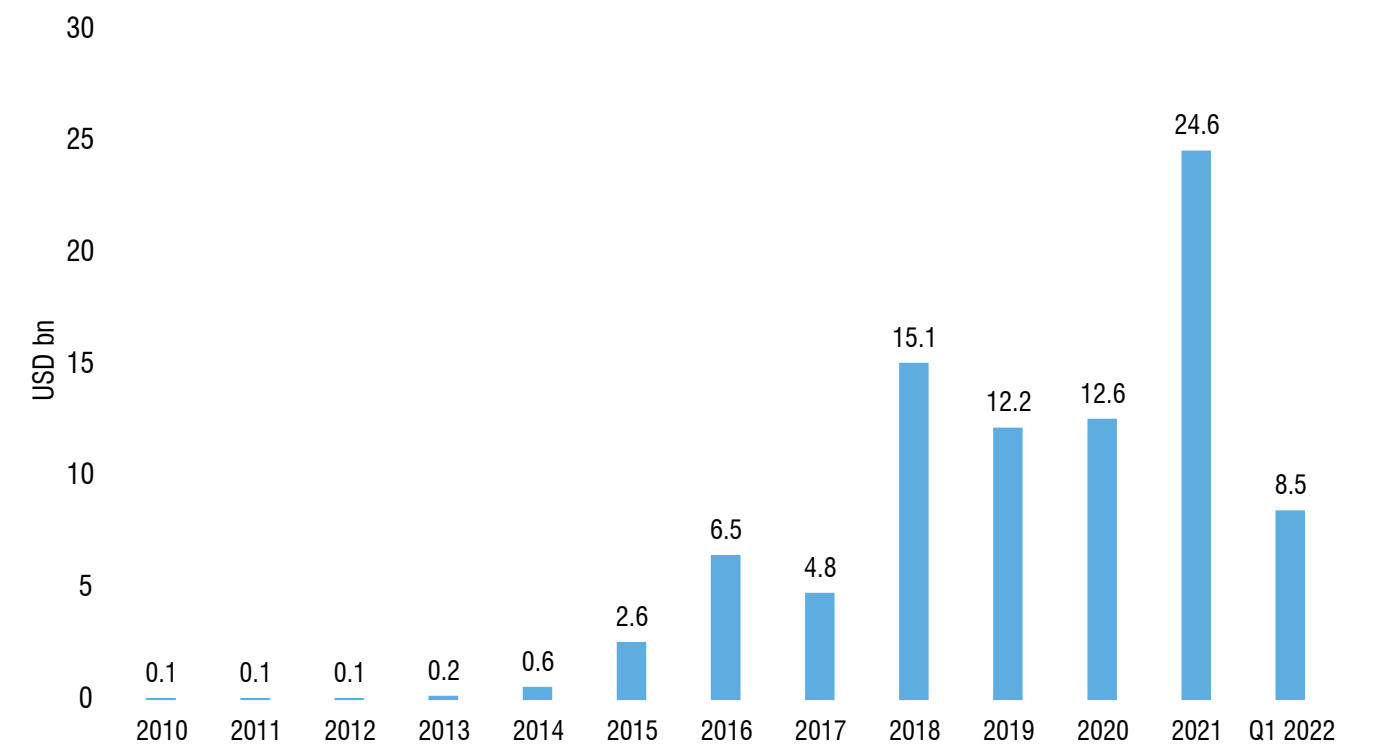
Source: CenterSource; Survey of 300 companies with a mix of importers, exporters, and freight forwarders (2021)

VC Funding in Logistics

VC investments in logistics has grown rapidly in recent years, marking a 70% annual funding growth from 2014-2021. Investments had almost doubled in 2021 compared to the previous year with the COVID-19 pandemic highlighting the vulnerability of global logistics and supply chains and the need for additional investment.



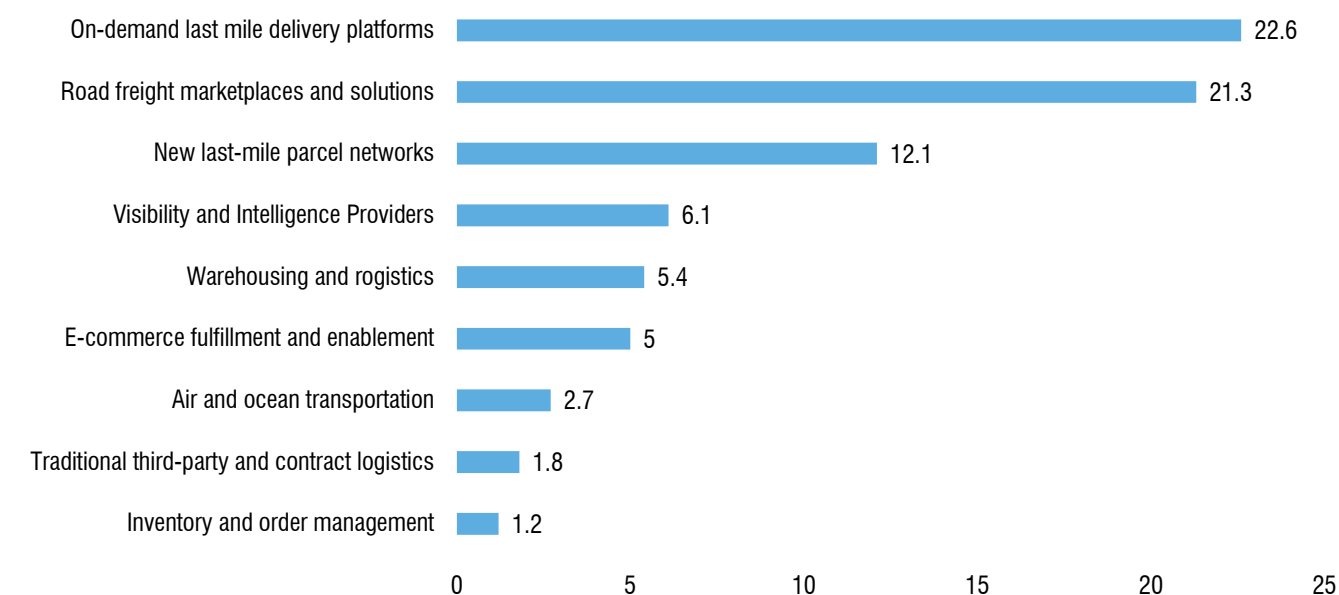
Global VC Investments in Logistics (2010-Q1 2022)



Source: McKinsey

On-demand last mile delivery platforms and road freight marketplaces have outperformed other models in terms of attracting funding. Road-freight marketplaces and solutions remain an area of interest for VC investors, where the market structure—characterized by a large number of fragmented providers, specifically trucking companies—increases the necessity for marketplaces.

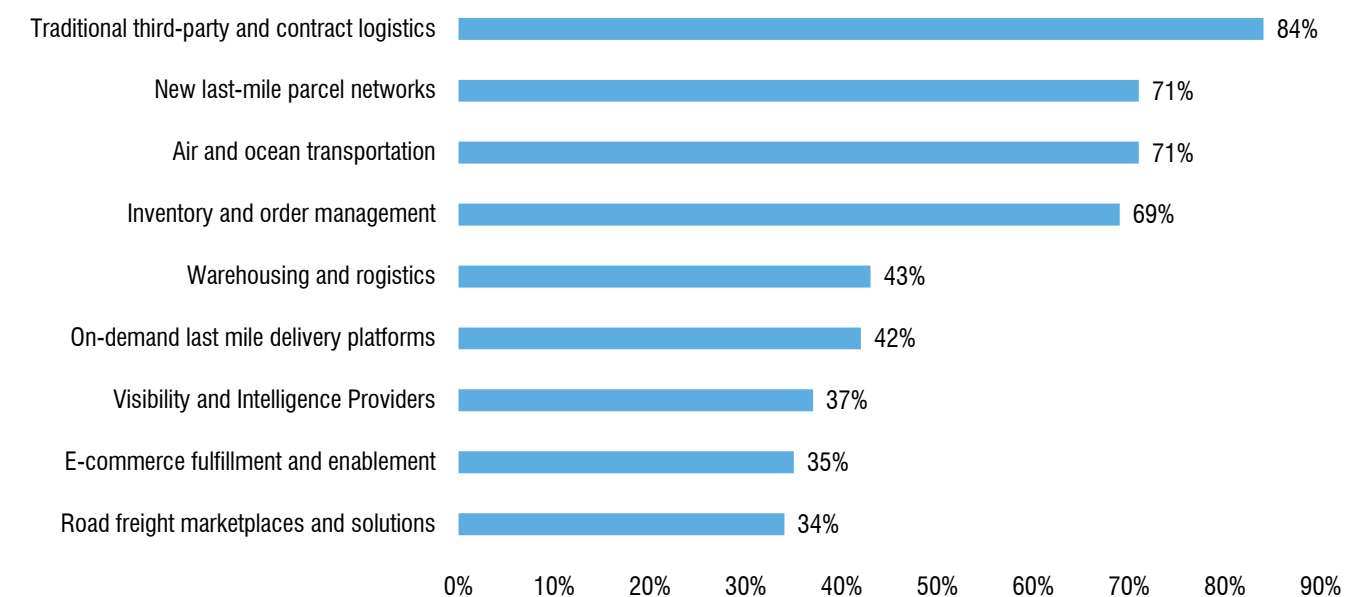
Total Funding by Business Model (2010-2021)



Source: McKinsey

VC Funding has not been evenly spread across start-ups in a business model. Top 5 start-ups in some subcategories had attracted most of the funding. Start-ups in road freight marketplace and solutions seem to have had a more even funding distribution compared to other categories.

Concentration of Funding - Portion of Funding Allocated to Top 5 Start-ups in Each Category



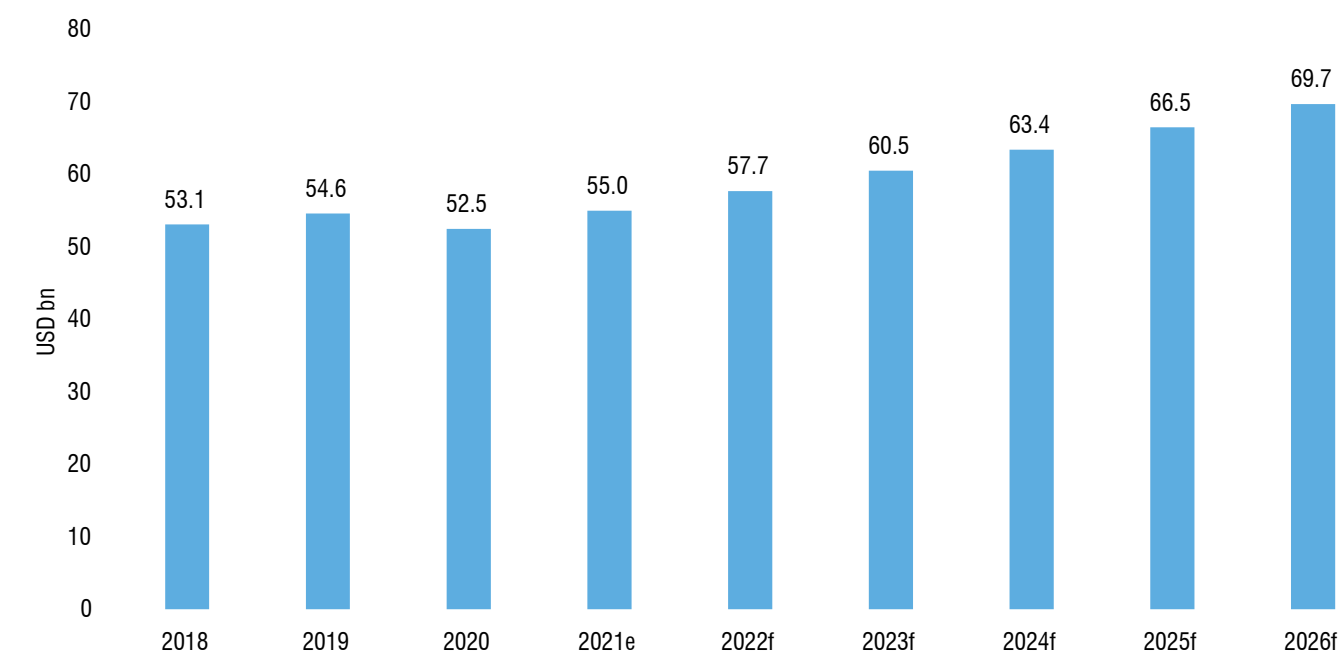
Source: McKinsey



Logistics in GCC

Given their strategic location, GCC countries' logistics industry is poised for growth. In particular, transport sector in GCC is set to grow at a CAGR of 5% and the road freight market in the Middle East and Africa region is set to grow at 3.9% annually from 2021-2025.⁵

GCC Logistics Market (2018-2026)

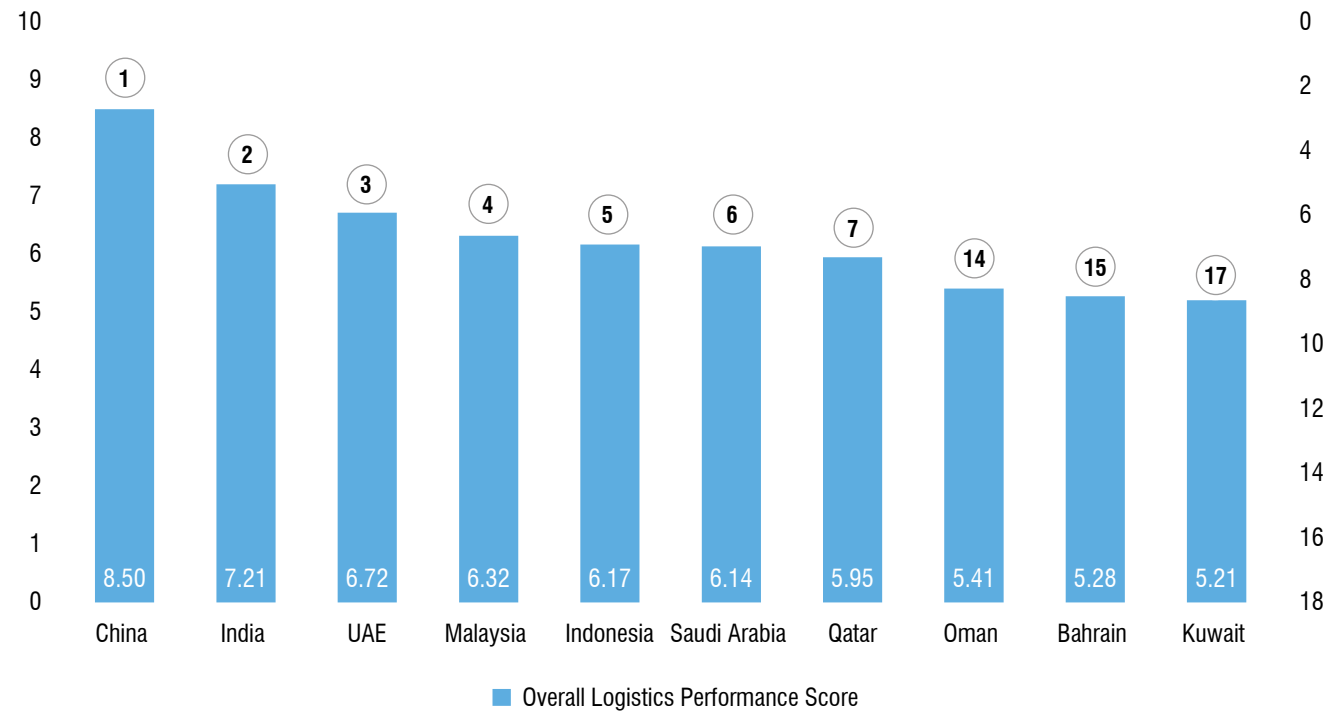


Source: YCP Solidiance

GCC countries rank in the top 20 of the 50 countries ranked in Emerging Markets Logistics Index. In the digital readiness aspect of the index, which covers digital skills, training, Internet access, e-commerce growth, investment climate, ability to nurture start-ups etc., UAE and Saudi Arabia had been placed in first and fourth rank respectively.

⁵ RSA Global, Shell

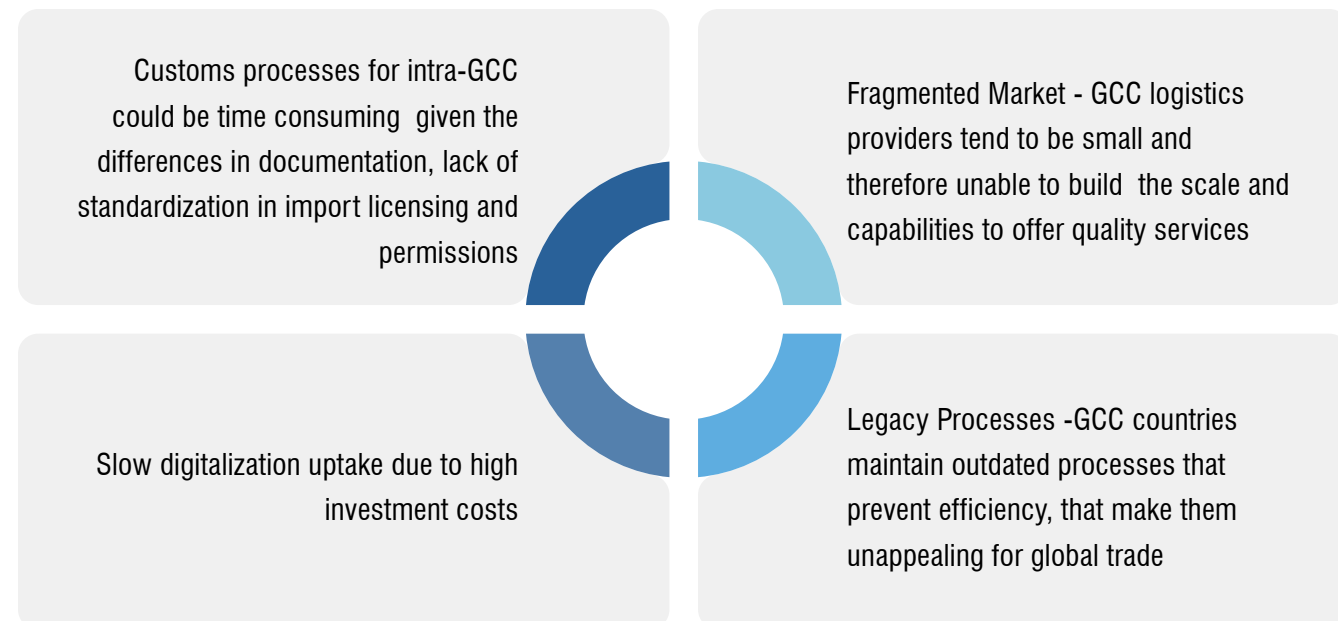
Emerging Markets Logistics Index (2022)



Source: Agility; Note: Index ranks 50 emerging market countries; Numbers in circles indicate country's ranking in the index.

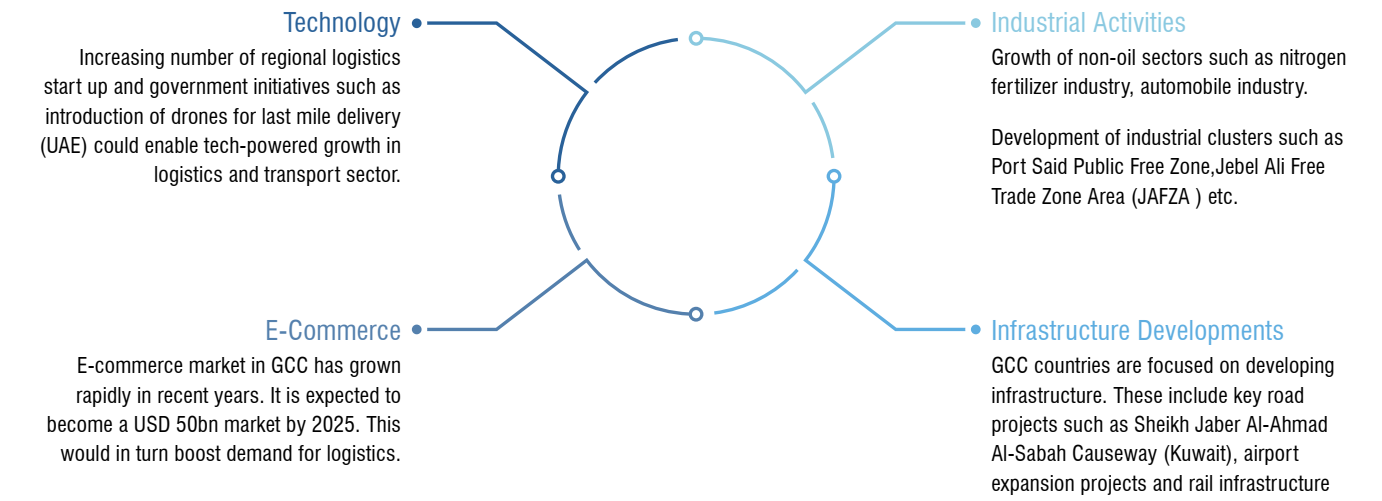
While the transportation and logistics industry faces certain challenges in the region, factors such as government initiatives and rising number of tech start-ups bode well for the sector's growth in the region.

Challenges for Transportation and Logistics in GCC



Source: Strategy&, RSA Global

Growth Drivers for Transportation and Logistics in GCC



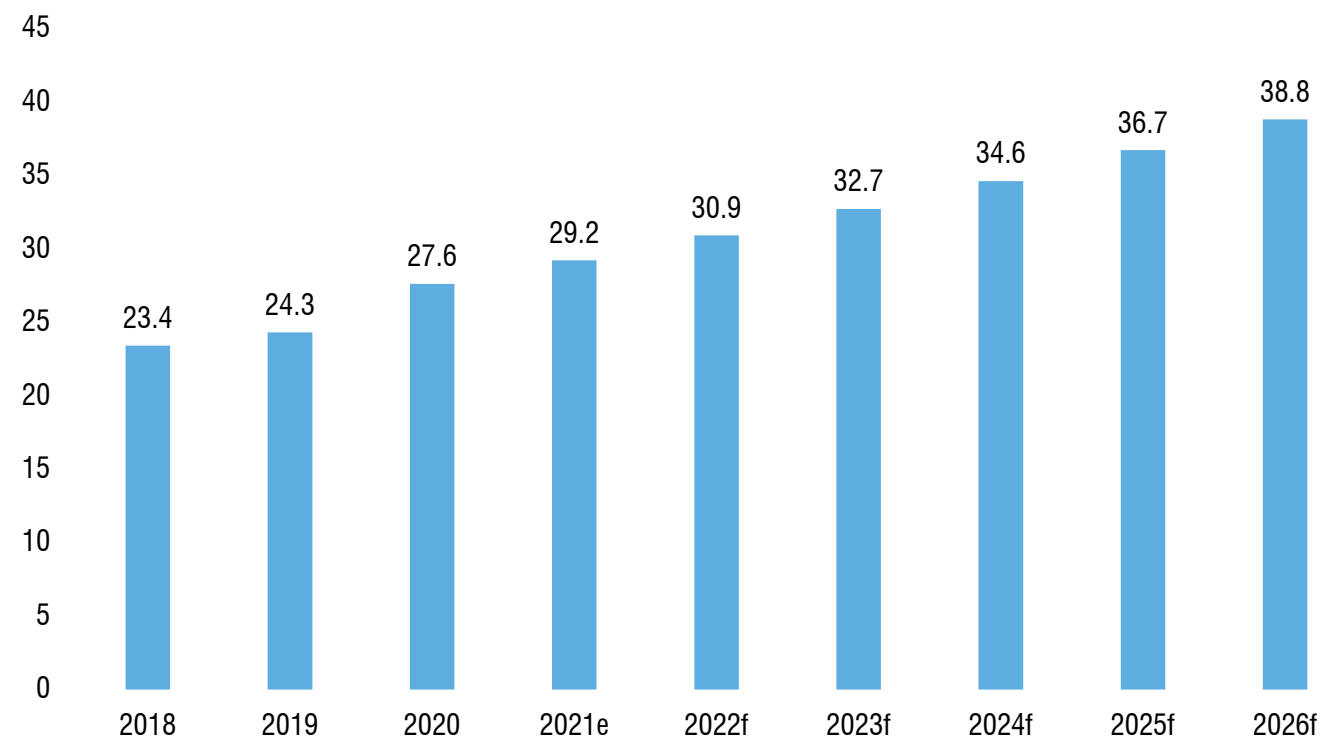
Source: Kearney, AscelAdvisors

Logistics in Saudi Arabia

Saudi Arabia's logistics market was valued at USD 27.6bn in 2020, the most extensive one in the MENA region⁶. The market is expected to grow given the country's strategic location, size of economy and improving infrastructure.



Saudi Arabia's Transportation and Logistics Market Size (2018-2026F)



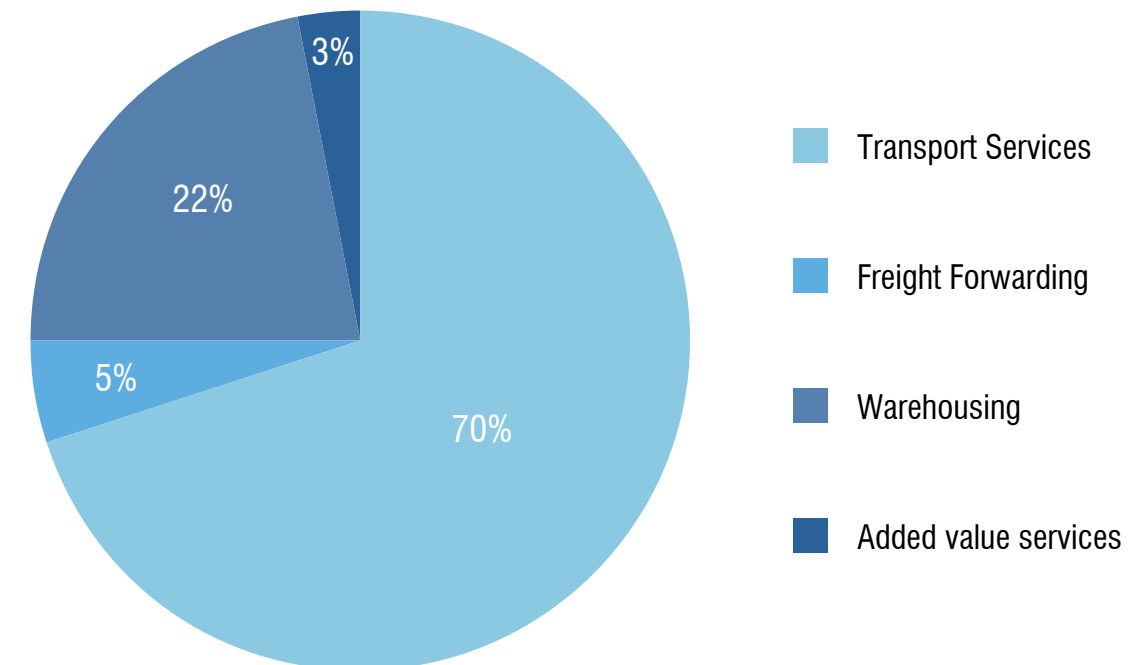
Source: YCP Solidiance

Saudi Arabia's transportation and freight forwarding markets have numerous players who provide both the services. There are about 1,600 players in the freight forwarding sector and over 15,000 companies in the road freight industry.⁷

⁶ YCP Solidiance

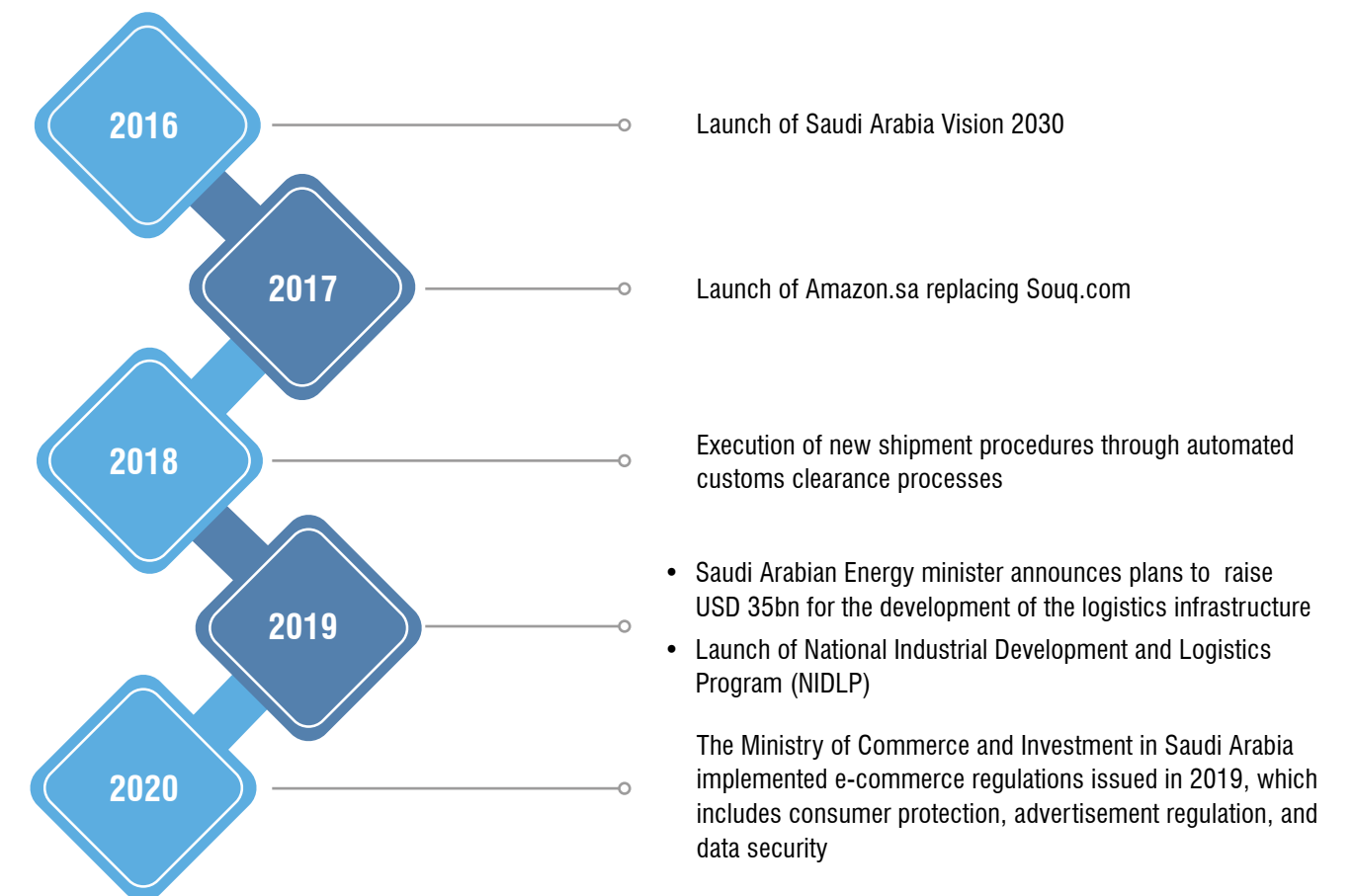
⁷ Ken Research

Saudi Arabia's Logistics Market Value Distribution by Subsector (2020)



Source: YCP Solidiance

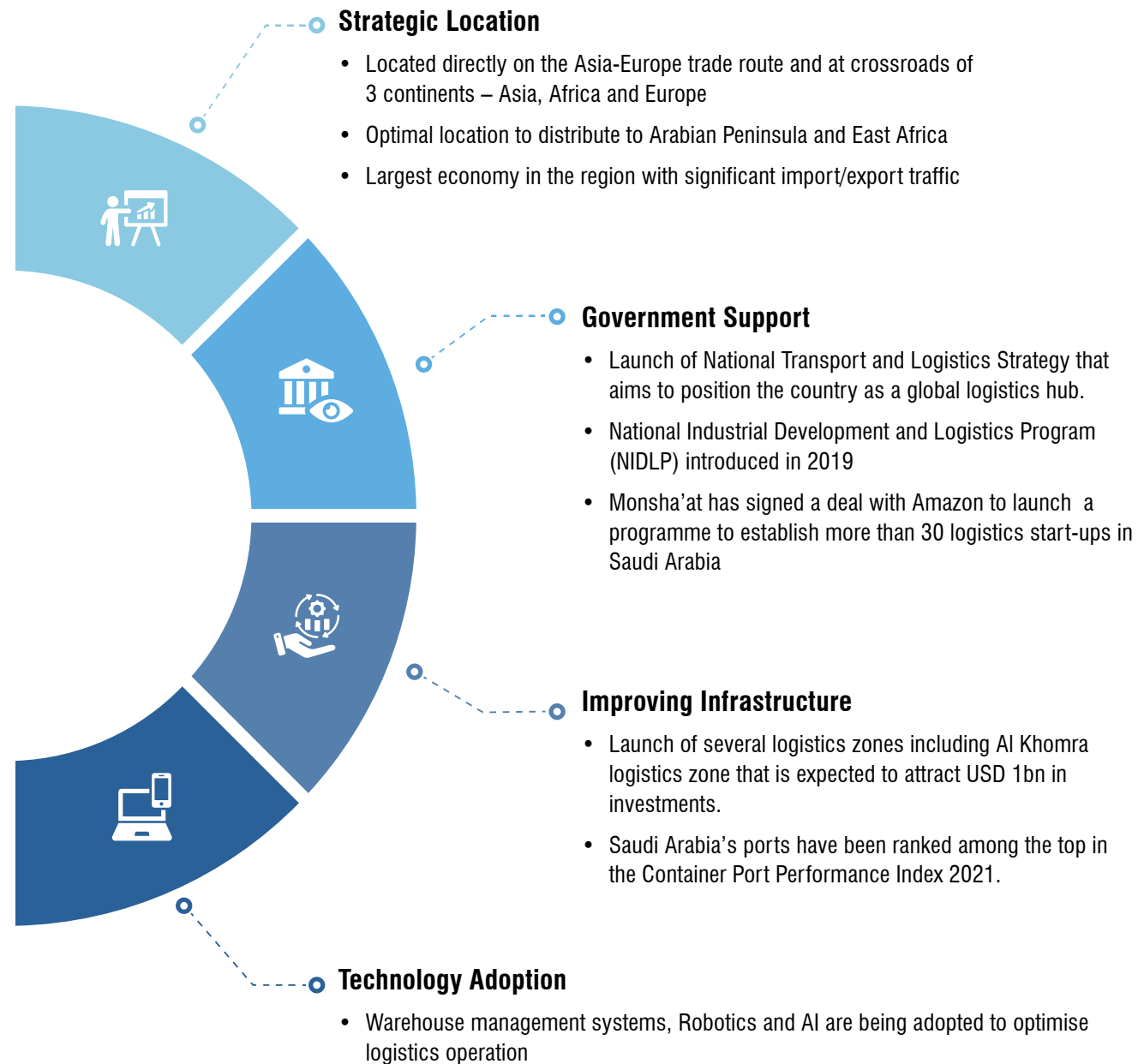
Saudi Arabia's Logistics Digitalization Milestones



Source: YCP Solidiance

Strategic location and government support among other factors are set to drive growth of the transportation and logistics industry in Saudi Arabia

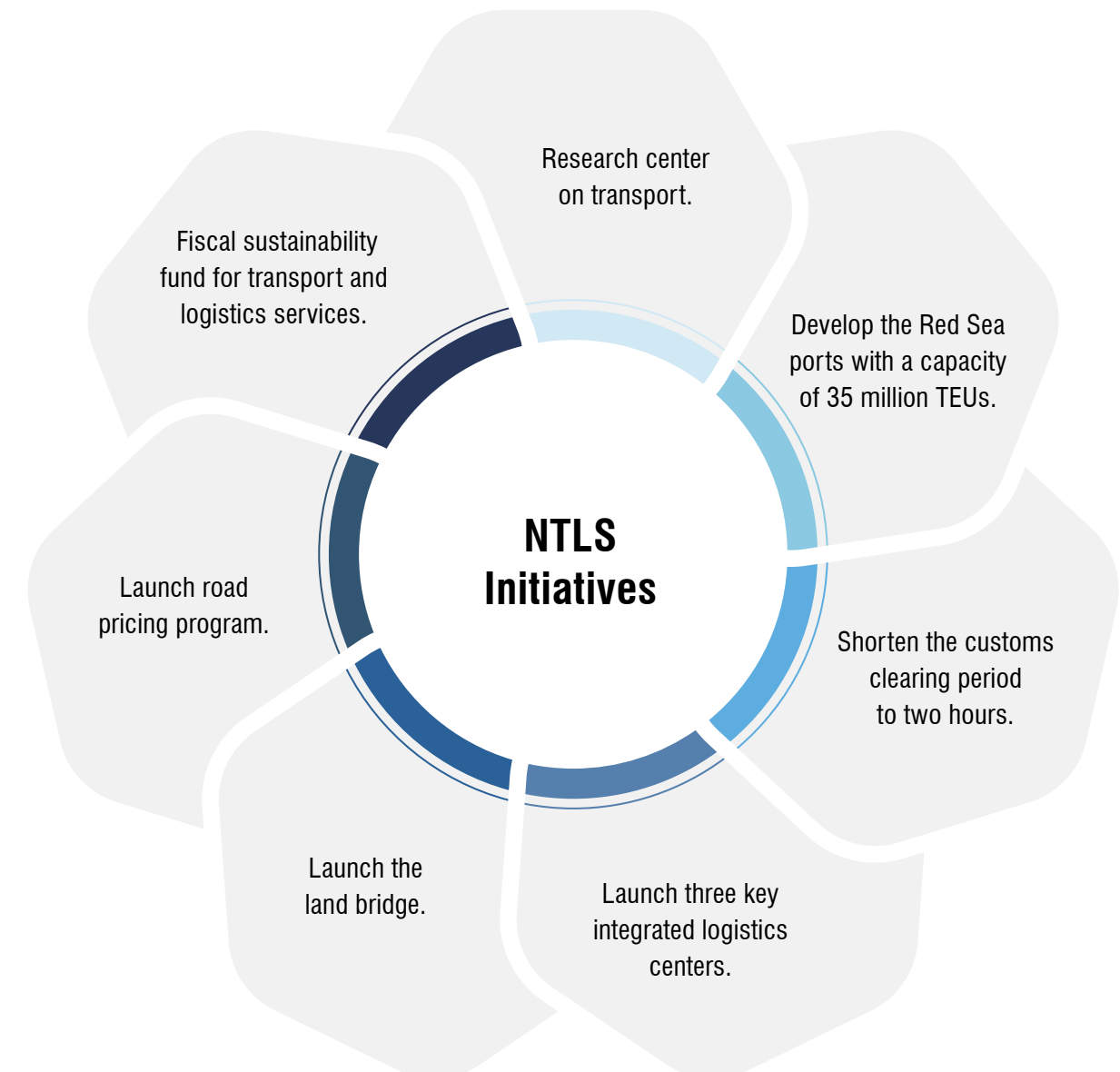
Growth Drivers for Transportation and Logistics in Saudi Arabia



Source: YCP Solldiance, NIDLP, Arab News

Saudi Arabia plans to invest USD 133bn by 2030 to expand its transport sector with the aim of making the country a global logistics centre. National Strategy for Transport and Logistics aims to boost the contribution of the transport and logistics sectors to the country's GDP to 10% by 2030, up from 6%. The country has also launched a supply chain initiative to attract USD 10.6bn of investments to the country.

Select Key Initiatives under National Strategy for Transport and Logistics



Source: Argam

National Strategy for Transport and Logistics – Responsible Entities and Planned Spending

Entity	Cost (SAR bn)	No. of Initiatives	No. of Projects
Saudi Railways	221	11	29
GACA	180	22	57
Ministry of Transport and Logistics Services	118	19	74
Saudi Ports Authority	59	9	141
Transport General Authority	3	15	24
Others (+ Logistics Services)	31	16	53
Total	613	92	378

Source: Argaam

There are many logistics start-ups in Saudi Arabia catering to various parts of logistics value chain from managing logistics and transport operations to last mile delivery. Some recent instances of funding for these start-ups include USD 1.1mn raised by Mkhdoom, USD 1.4mn by Torod, USD 1.6mn by Tachyon and USD 100mn by Trukker.

Logistics Start-ups in Saudi Arabia



Source: Traxcn, Magnitt

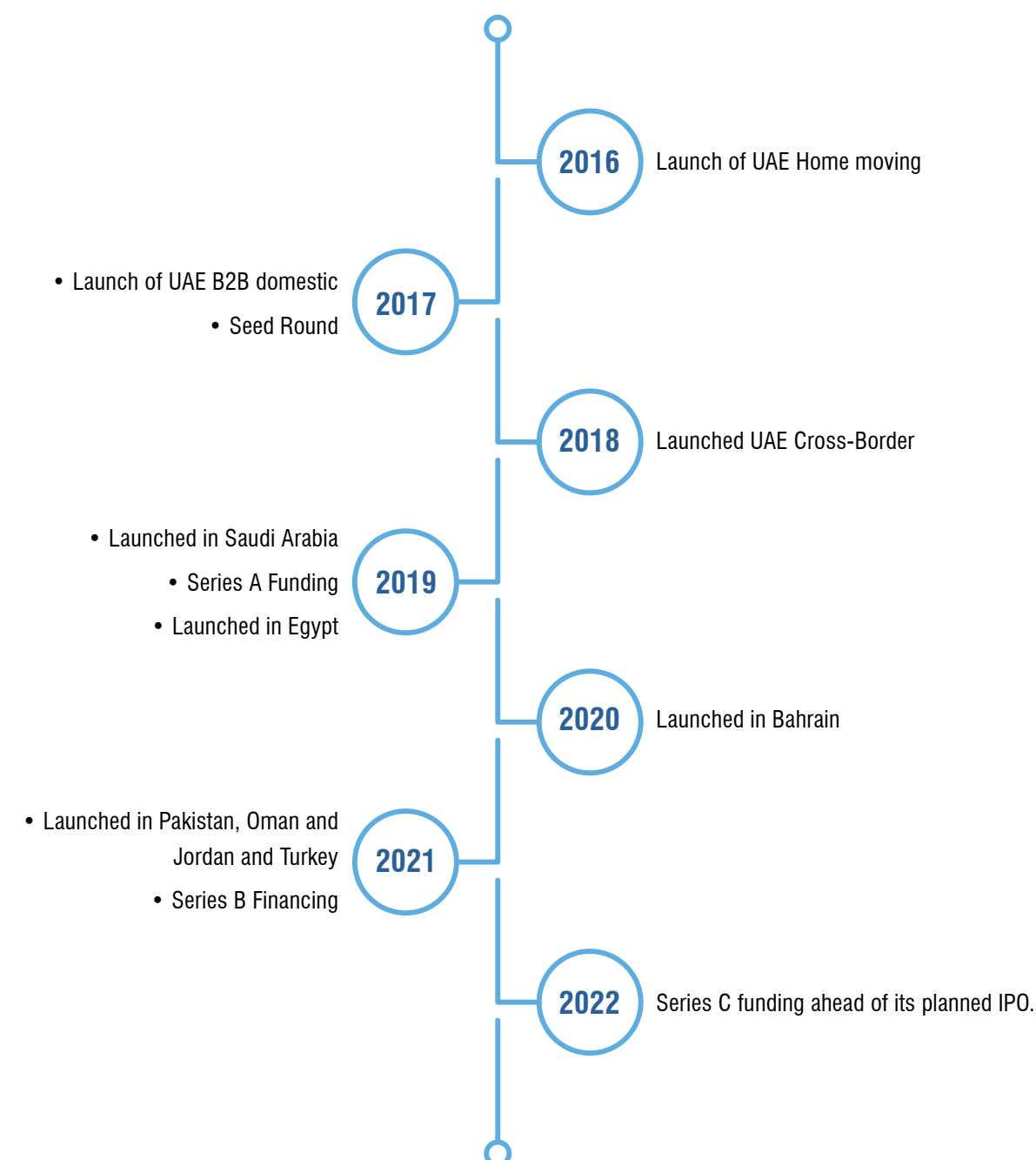
Spotlight: Trukker

Trukker is a digital freight network that provides freight matching by integrating demand and supply for land freight services. It is built on real-time data analytics. Trukker is one among Riyadh Valley Company's investment portfolio companies.

Founded in – 2016


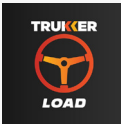

Headquarters – Saudi Arabia

Trukker's Timeline



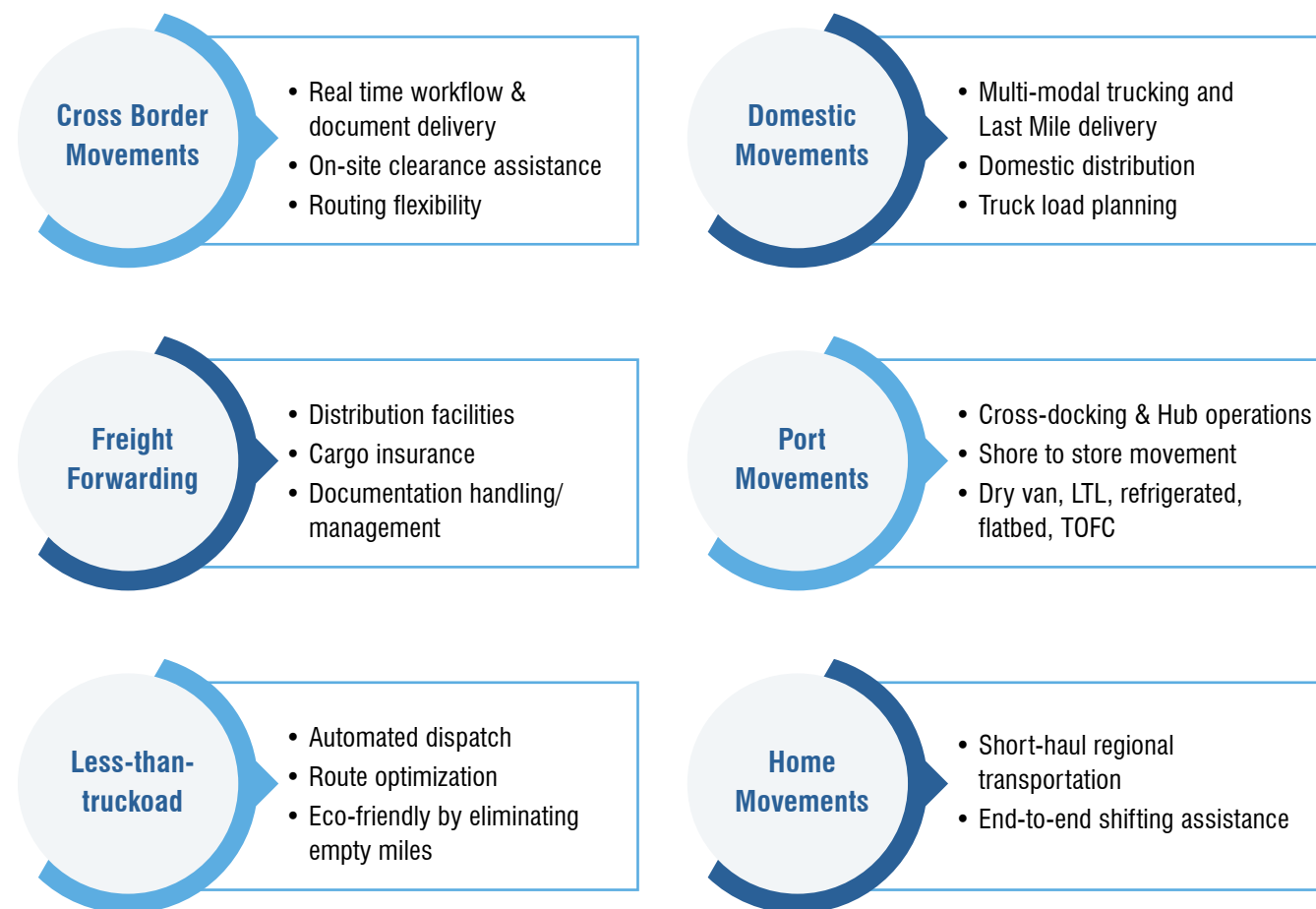
Source: Trukker

Trukker's Products

App	Description
	B2B digital freight booking platform for senders to manage their bookings and transactions.
	The app offers a fully integrated marketplace experience to help carriers, operators search and book loads instantly and manage their fleet.
	App used by drivers to store invoice, waybills etc. in standardised, accessible format.

Source: Trukker

Trukker's Services



Source: Trukker

Conclusion

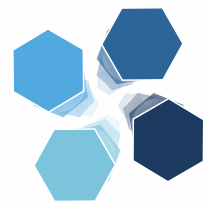
In survey of logistics leaders by Gartner, improvement of technology was stated as a top priority. Some use cases for tech in logistics are use of internet of things (IoT) for tracking and tracing freight, blockchain for improving transparency and communication among stakeholders along the supply chain and use of artificial intelligence for real time route optimization and demand prediction. In the backdrop of increasing importance of sustainability, ways of lowering carbon emissions in different modes of transport in being looked at. While semi-electric vehicles are slowly coming up, technology enabled solutions such as route optimization could aid in lowering carbon emissions.

In addition to operational and cost efficiencies, technology adoption could allow T&L companies to develop new business models and open new revenue sources. Compared to the size of the logistics industry, logistics tech is a mere USD 17.4bn market worldwide. This forms a minor 0.18% of investment in tech⁸. However, given the size and growth prospects of logistics industry and emerging trends like on-demand fulfilment and micro-fulfilment centers, investment in logistics tech is expected to grow.

Some global logistics start-ups have scaled up and achieved profitability. Start-ups are proceeding with expansion plans and M&As. Private equity (PE) funds are also entering the space and increasing the drive to successful exits. Technology backed solutions are expected to continue to play a large role in T&L deals, with investors seeking technology-driven solutions to improve efficiencies and manage costs, which is of particular relevance in today's inflationary economic environment.

Given the immense opportunities available for digital transformation in the transport and logistics sector, GCC governments' initiatives to become logistics hubs and emergence of tech start-ups in the sector, logistics tech is set to grow in the region.

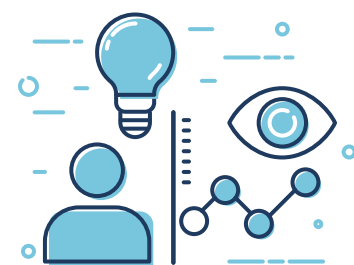
⁸ Forbes



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Riyadh Valley Company

Riyadh Valley Company established in 2010 by Royal Decree No.116 dated 13/4/1431 AH to be the investment arm of King Saud University in the fields of Knowledge Economy and the university strategic projects.



Vision

To be the regional leader in knowledge-based investment and technology.



Mission

Riyadh Valley Company is a strategic investor, focused on leveraging the local capabilities, investing locally and globally in growth - stage businesses to create financial and strategic returns that will support the future of economic development in the Kingdom.

Investment Sectors:

Venture Capital Investments



Healthcare Investment



Renewable energy & Sustainable Resources



Information & Communication Technology



FinTech



Education



Logistics and Transportation

Strategic Investments



Innovation and R&D Projects



Educational Projects



Healthcare Projects



Commercial Projects

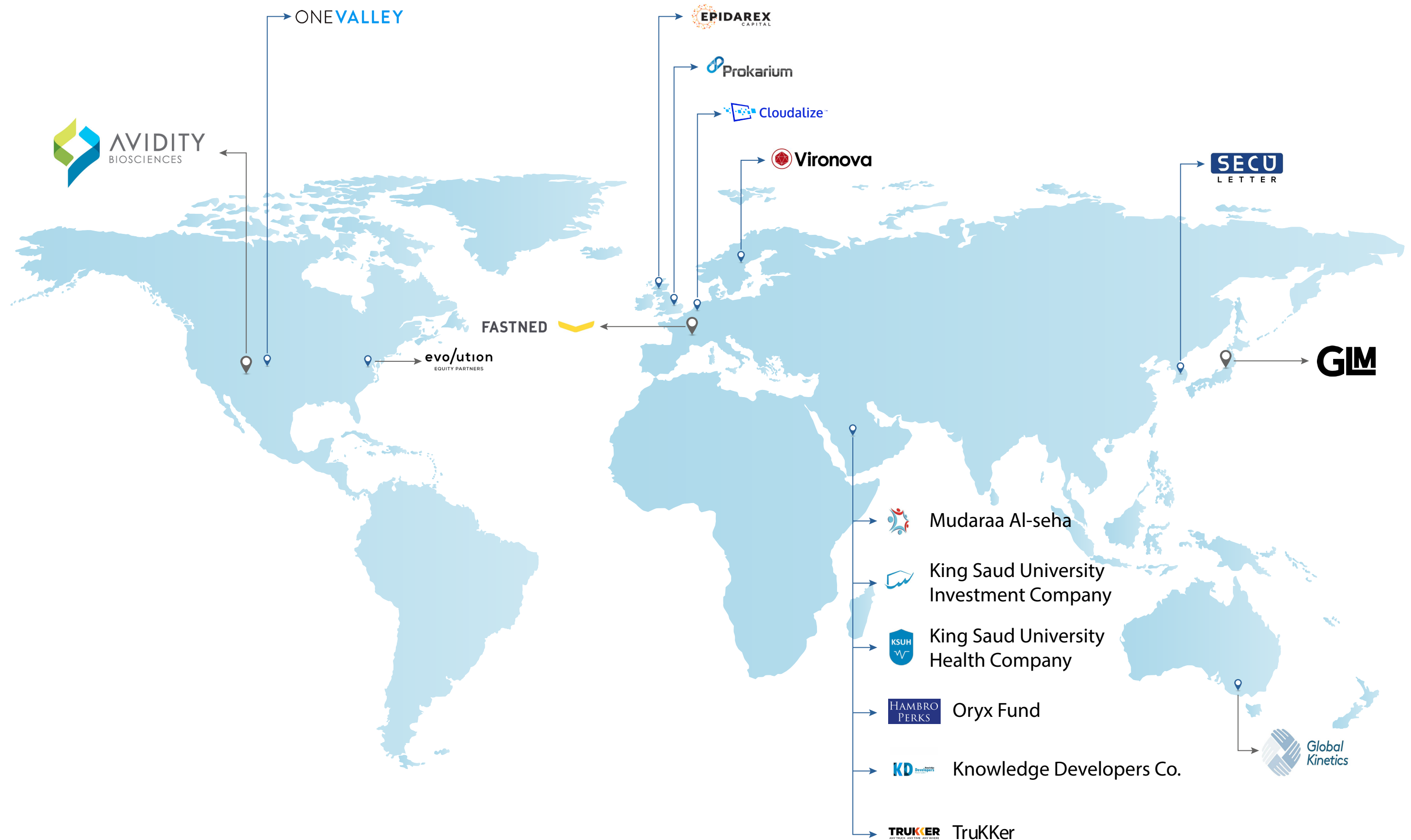


Residential Projects



Mixed-use Projects

Venture Capital Investment Portfolio



Real Estates Investment Portfolio



Sudair Pharma Company Project

Research center and company offices for Sudair Pharma Company



Four Directions Company Project

Commercial and office project contains office buildings and multi-use halls



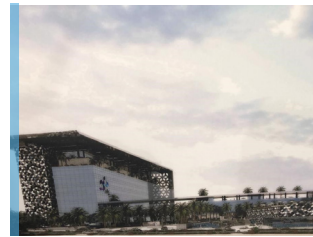
Derma Clinic Company Project (Residential)

Residential project for Derma Medical Clinics



NMR Real Estate Company Project

Mixed-use project includes a hotel, restaurants and cafes



ELM Information Security Company Project

Innovation Center project for Elm information security company



Retail Real Estate Company Project

Social-Entertaining and sports project



City Lights Real Estate Company Project

Entertainment-Commercial project contains screens on the building and architectural blocks, in addition to areas for live shows



Hamad Bin Mohammed Bin Saedan & Partners Investment Company Project

The project serves King Saud University Campus residents. It includes large areas where events that reflect Saudi culture are held



Al-soroooh Al-Mubarakah Company Project

Mixed-use project contains office complex, Mall, Restaurants, cafes, and walkway for visitors



Derma Clinic Company Project

Medical-Commercial project contains several medical clinics, medical products stores, and pharmacies



Arrowad For Higher Education Company Project

Educational complex, Arrowad colleges University campus in Riyadh



Unified Real Estate Development Project

Cultural-Entertainment project that includes Luxury restaurants, Cafes, Cinemas and green spaces



Sahat Al-Ardh Company Project

A commercial project contains various shops



Obeikan Company Project

Commercial project contains various stores near the Common First Year building



Dur Alkuttab Company Project

Educational project for Primary Schools



Omnia Real Estate Development Company Project

Commercial project contains various shops



University Boulevard

Commercial-Entertainment project gives visitors a different experience, and it includes Restaurants and cafes



Riyadh Valley Company

Kingdom of Saudi Arabia, Riyadh – King Saud University, Innovation Tower

+96611 469 3219 | **www.rvc.com.sa** | info@rvc.com.sa



@riyadhvalley



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