







Dubai Multimodal Transportation and Logistics Cluster Platform

Collaboration in Intermodal Transportation

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The Winner of the Ideas UK 2015 Award for Customer Focus



Planning and the Execution: From Concept to Changing the Rules of the Game



Official Assignment Policy
Development

Policy Proposal

Legislation

Policy Implementation

6

Transportation and logistics research and study. Surveys, Interviews

Global ranking on Logistics and trade Benchmarked. Diamond model and SWOT established

The idea was born that a stakeholder collaboration platform is needed to address the multidimensional challenges Dubai industries and businesses face in global markets

Focus group discussions with public and private stakeholders

Cluster assessment methodology is selected due to multimodal transportation and log. Hub nature

DED Cluster
Platform for
Stakeholder
Collaboration is
Launched after
discussions with all
stakeholders and
their challenges

Solutions to the challenges are defined vis a vis Competitors in Dubai and globally

Technical committees with RTA, Customs, FZ Council are established to study the challenges and Solutions

Stakeholder consultations on the scope of the Challenges and solutions conducted.

Policies, Strategy and action proposal to the stakeholder collaboration Platform

Approval of the policies by cluster Platform

Project plan and timeline
Developed

KPIs, project ownership and implementation mechanisms Established Policies by the Cluster Platform approved by The Executive Council

Comprehensive, Integrated, Multimodal And Logistics Strategy

Virtual Freight and Logistics Corridors

Physical Freight and Logistics Corridors

Green Logistics: The Last Mile

Joint
Implementation of
the policies by the
Cluster Platform:

working with stakeholders to implement pilot project o Virtual Freight and Logistics Corridors

Launch of the Virtual Freight and Logistics Corridors

Work on other approved policies

Sector Committee of Executive Council HH Ruler , TEC Chairman





Global Challenges and Dubai Strategic Plan 2021 Achieving the Goals

Dubai is a Pivotal Hub in the Global Economy



Targets

- Enhance Dubai's Global
 Competitiveness as Multimodal
 Transportation and Logistics Hub
- Create Synergies between relevant government departments' policies and actions
- Create synergies between companies and relevant government departments expansion strategies
- Create coordinated and integrated approach to infrastructure, policy, regulatory and operational issues

Cluster Definition and Role in Dubai's Strategic Directions

The purpose of this initiative is to:

- Enhance Dubai's competitiveness as regional and global **Multimodal Transportation** and Logistics Hub.
- Create seamless movements of goods and services between air, sea, road modes of transport, logistics services and Free Zones in Dubai and enhance their growth strategies.

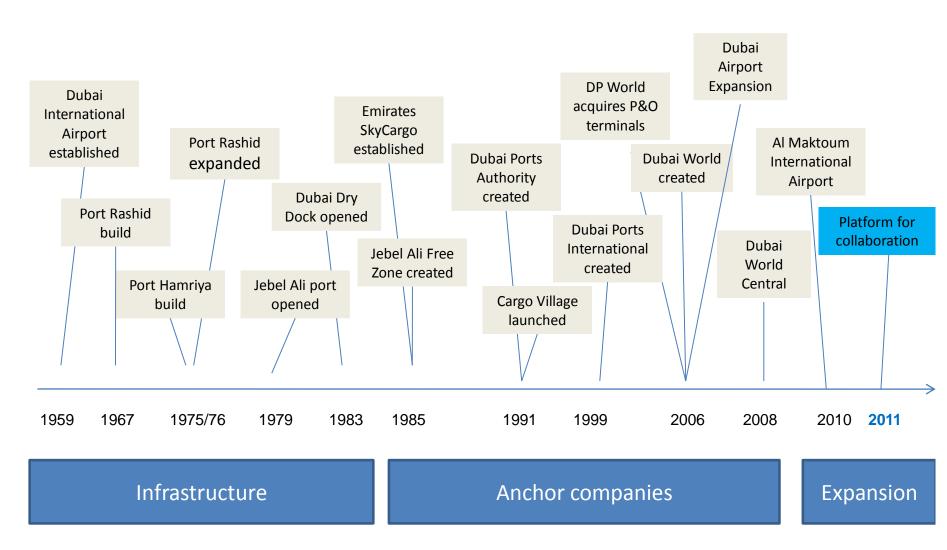
Methodology: Why Cluster assessment approach for Dubai's Multimodal Transportation and Logistics?

Cluster assessment is a microeconomic approach, enables assessing cross-cutting issues vertically and horizontally within the industry and activities' linkages.

There are **two main sectors** defined by Dubai Statistical Centre that cover the core and supporting activities of Dubai's **Multimodal Transportation and Logistics** activities

- 1. Transport, storage and communication sector with 13.9 percent of GDP and
- 2. Wholesale, retail, trade and repairing services sector with 30.7 percent of GDP

History of the Dubai Multimodal Transportation and Logistics Cluster: Key Developments and Institutions



Dubai Multimodal Transportation and Logistics Cluster Map

Maintenance and engineering services

Shipbuilding, repair, engineering

Container

Aircraft

Industry specific education and training programs

Rail

UAE, Dubai customs, RTA, DMCA, DCAA, FZ Council, other gov. agencies

Integrated road network, airports, ports, FZs, communication infrastructure, upcoming Rail

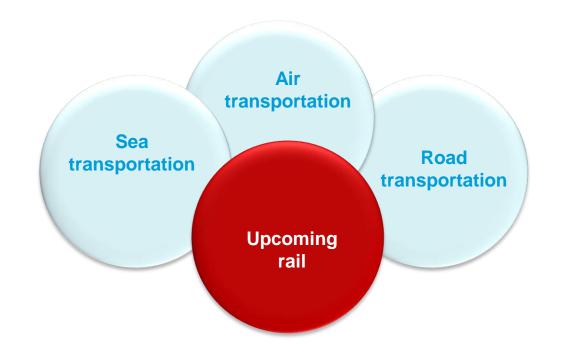


Related and **Supporting Clusters Tourism Finance** Manufacturing (Free Zones) Construction **Cluster Associations: Emirates Freight** Forwarders Assoc..

Cluster Associations:
Emirates Freight
Forwarders Assoc.,
Dubai Shipping Assoc,
Green Aviation Logistics
Group, Chartered
Institute of Logistics and
transportation,
Dubai Supply Chain
Logistics Group,
National Association of
Freight and Logistics

Value Chain- Multimodal Transportation and Logistics Market Segments

Core segments of the cluster



Geographic Scope

Multi-modal global trade hub

Regional sea & road

Asia-Europe sea & air

Supporting activities

Storage, ICT, wholesale, retail trade, repair/engineering services, specialized educational and training institutions

Related activities

The cluster also has externality impact on:

- Tourism
- Manufacturing
- Finance
- Construction

Challenges or New Opportunities?

- Dubai is a Multimodal Transportation and Logistics Hub for transshipment between Asia, Europe and Africa.
- The state of the art infrastructure of the Air, Sea and Road modes of transportations, upcoming rail and the vast number of free and industrial zones require new and innovative approach to connectedness. Often, the approaches must be unorthodox.
- The expansion of Dubai Airports the Aerotropolis in Dubai South has increased Dubai's air cargo capacity to unmatched levels globally.
- Jebel Ali Port is ranked as number one in the world in terms of Berth Productivity, based on average move per ship per hour.
- DP World kick started the construction of the US\$1.6 billion on a new terminal 4 at the Jebel Ali Port. The new terminal will increase the overall capacity to 22.1 million TEUs by 2018.

Unprecedented Global Reality Challenge the Conventional Policy Making

- The rapidly changing global economic conditions are challenging the markets and profitability of companies. The traditional policy making process in a fast changing global markets is not sufficient.
- Customers and corporates all the way through the entire value chain of air, sea, road segments, 3rd party logistics and end users have been impacted by the Global crisis and slow down in the global markets.
- The new global realities require a speedy adaptation and a collaboration of competitors on the ground for expansion of market shares of Dubai based companies.
- A Quick adaptation of strategies and policies to address the needs and challenges in a rapidly changing regional and global realities is a prerequisite for sustaining growth and capturing new trade routes and market shares for Dubai's global trade and logistics.

The Solution: The Cluster Platform for Stakeholder Collaboration

DED has Set New Rules of the Game: Competing while Collaborating

DED's Cluster Platform has three Pillars of Stakeholders to address the cross cutting and multidimensional challenges. Policies adopted by the Cluster Platform have multidimensional impact on the economy.

It also achieves coordinated and integrated approach to infrastructure, policy, regulatory and operational issues for enhancing Dubai's competitiveness as Global Multimodal Transportation and Logistics hub.

Government departments and Authorities (the list is not limited)

DED

Dubai Customs, UAE Customs

RTA, NTA, Ethihad Rail,

Dubai FZ Council,

Dubai Airports, DAFZA,

DWC - Dubai Logistics City

DCAA, DCMA

Dubai Trade

EZW - Jafza

Dubai Chamber

Dubai Industrial City

Dubai Maritime City authority

TECOM Investments

GCAA

Ministry of Economy

Ministry of Foreign Trade

Core businesses, related and supporting industries (the list is not limited)

Emirates, Dnata, DP World,

Agility, MAERSK, Panalpina,

Al Tayer, Al Futtaim Logistics

Aramex, FedEx, DHL, TNT, UPS,

DANZAS, GAC, Expediters, GSL,

Unilever, Landmark Group,

KUEHNE+NAGEL.

Airbus, Lufthansa Cargo,

Sony Gulf FZE, Siemens, SCHENKER,

Johnson-Johnson, Nestle Middle East

FZE,

Volkswagen AG, iMan,

CEVA Logistics Middle East,

SMEs in warehousing, freight forwarding, related and supporting businesses end users, manufacturing companies

Associations and interest groups (the list is not limited)

Emirates freight forwarders assoc.
Dubai Shipping Assoc.
Green Aviation Logistics Group
Intl Chamber of Commerce
Chartered Institute of Logistics and
Transportation International, CILT
Dubai Supply Chain Logistics Group
Chartered Institute of Purchasing &
Supply Chain

The Collaboration Platform: Can this be Replicated? Yes, Absolutely at all levels!

- The CORE of this approach is that every single problem at the company or country level is multidimensional in its' nature in the modern world.
- Solutions to these problems require INFORMATION from all dimensions and competing forces (of the Cluster). Obtaining the information requires COLLABORATION between competitors.
- Department of Economic Development had developed a convincing case for the competing businesses and government departments to collaborate. They could see VERY CLEARLY the benefit in it for their company or organization.
- The **KEY** in the implementation of this Idea is that it addresses multidimensional challenges in a concerted manner.
- Finally, the implementation of the Idea gave a rise to a more enhanced competition and more improved client services.
- In this conceptual approach all stakeholders government and private are customers!

Situational Analysis

Some of the major challenges raised by air, sea, road companies The competitors share common challenges

Business Environment

- Lack of 24/7 operations provision by Gov. processing services for cargo and logistics operations
- Cargo movement delays in/out of FZs
- Lack of coordination between regulating agencies
- Lack of unified customs rules in UAE
- Bill of entry and exit across sea to air should be one document.
- Lack of enforcement of rules, regulations

Company growth and market shares

- Separation of locations in Dubai between airports, ports, FZs
- Road ban timing, bottlenecks
- GCC border crossing issues
- Lack of incentives for UAE nationals to work in logistic companies
- Impact of leasing cost in FZs
- Lack of specialized training programs
- Duplicative paperwork

Stakeholder collaboration

- New regulations need feedback from companies
- Many Gov. bodies competing for revenue collection
- Need more collaboration between FZs
- Lack of a single dedicated authority for border crossing and other multimodal issues
- Not sufficient communication of new rules and regulations
- Gov.-s in other GCC countries are offering incentives to logistics companies

Joint Stakeholder Policies Approved by the Executive Council

	Policy/initiative	Tangible and intangible Outcome
1	Comprehensive Integrated and Unified Multimodal and Logistics Strategy	 Further integration of air, sea, road and upcoming Etihad rail Position Dubai as global maritime and aviation city Enhance "E" enablers Higher value added creation Capture new trade routes, market shares
2	Virtual freight and logistics corridors between airports, ports and selected FZs	 Seamless movement of goods between airports, ports and selected FZs. "E" Enablers and optimized use of physical infrastructure
3	Physical freight and logistics corridors between airports, ports, selected FZs	 Reduced freight traffic in the metropolitan areas Optimized use of physical infrastructure, further integration of all modes, including upcoming rail
4	Introduce "Green Logistics: Last Mile Delivery"	 Reduction of carbon foot print Reduced time, cost, env. impact

The Initial Results of the Cluster Stakeholder Collaboration Platform

Joint Policy on Virtual Freight and Logistics Corridor is globally unprecedented initiative

•	John Chang and The Green and Logistics Contract to Broading amprecedent and intractive			
	BENEFITS the Virtual Corridors between Dubai airports, ports and free zones for cargo and freight movement	Preliminary calculations on savings per month per company		
1	ELIMINATES THE DELAY IN THE ATA BACKEND PROCESS	Approx 5-10, 000 AED per company with current volumes (the savings will increase with the increased volumes)		
2	ALLOWS THE MOVEMENT OF DECONSOLIDATION CARGO TO A DIFFERENT LOCATION	Approx 30 hours per month per company with current volumes (the savings will increase with the increased volumes)		
3	ELIMINATES THE MANUAL PROCESS AND THE DELAY	Approx 60 hours per month per company with current volumes (the savings will increase with the increased volumes)		
4	ALLOWS THE MOVEMENT OF DECONSOLIDATION CARGO TO A DIFFERENT LOCATION	Approx 250,000-500,000 dirham per month per company		
5	Total <u>TIME AND COST REDUCTION</u> . Eliminates all the manual processes and physical presence of the responsible person. Virtual guarantee is done by default and online.	Approx 500,000 – 800,000 AED per company per month (with current volumes) 80 hours per company per month		
		80 nours per company per month 15		

Dubai Multimodal Transportation and Logistics Cluster Stakeholders Map

Maintenance and engineering services

Shipbuilding, repair, engineering

Container

Aircraft

Rail

Industry specific education and training programs

UAE, Dubai customs, RTA, DMCA, DCAA, FZ Council, other gov. agencies

Integrated road network, airports, ports, FZs, communication infrastructure, upcoming Rail



Related and **Supporting Clusters Tourism Finance** Manufacturing (Free Zones) Construction **Cluster Associations: Emirates Freight** Forwarders Assoc..

Annex

The Enablers of Competitive Advantages

Diamond Model analysis

Factor (Input) Conditions

- +Beneficial geographic location
- +World-class air, seaport & road infrastructure
- +Competitive rules, regulations for foreign companies in FZs
- Lack of mutual recognition of FZ licenses in Dubai
- +Open labor market policies, attractive living conditions.
- Bottlenecks for local road transport despite high investment
- Bottleneck for seamless movement of freight
- Living costs, high office rent and visa rules are a challenge

Context for Firm Strategy and Rivalry

- +Open market for domestic and foreign providers of transport services
- +SOEs are highly growth oriented
- + Major infrastructure and port operation providers are SOEs but there is no sufficient evidence of negative monopoly
- Attractive conditions for logistical value-added service providers especially in the FZs
- SMEs are under operational cost pressure

Demand Conditions

- Increased import demand driven by growing local and regional economy
- +Free Zone provides demand for import and export services
- The slowdown in global markets, changing trade routes, direct sourcing from Asia
- Lack of conditions and incentives for higher value added manufacturing, especially in Free Zones

Related and Supporting Industries

- +Solid presence of global companies in related and supporting areas
- + Platforms for cluster stakeholder collaboration has been launched
- Specialized educational programs remain weak

Comprehensive, Integrated and Unified Multimodal and Logistics Strategy: the mechanism

The purpose is to create synergies and links between key stakeholders' strategies
To enhance the competitiveness, growth strategies and further integration of all modes of transportation

Dubai Customs'
Strategy

RTA Long Term
Freight
Forwarders
Strategy

DWC, JAFZA, DAFZA, FZ Council strategies DMCA, DCAA, DP World, major SOEs strategies

Dubai Municipality Master Plan

Key imperatives for synergies between stakeholders' strategies

Seamless connectivity

Simplified regulations, processes, procedures

"E" enablers: E-freight/Ecommerce Time, cost and environmental impact reduction

Exploiting geographic advantages

Vision, Mission and Strategic Objectives

Vision

 To become leading global integrated multimodal transportation and logistics hub with global centres for aviation, maritime, logistics services and R&D.

Mission

- Seamless movement and enhanced connectivity of air, sea, road modes of transport, logistics services and Free Zones in Dubai.
- Increase the volume of transaction between all transportation modes, industry players, core, related and supported activities.
- Reduce bureaucratic procedures, time and cost for transshipment, export, re-export in Dubai.
- Enable and facilitate the growth strategies of DMCA, DCAA, RTA, State Owned Enterprises and private companies operating in and out of Dubai.
- Improve efficiency and reliability of supply chains.

Strategic Objectives

- Increase existing and capture new market shares
- Enhance positive spillovers on cross cutting sector
- Increase the efficiency & effectiveness
- · Optimize the use of physical infrastructure and enhance soft infrastructure
- Introduce advanced technology & innovation

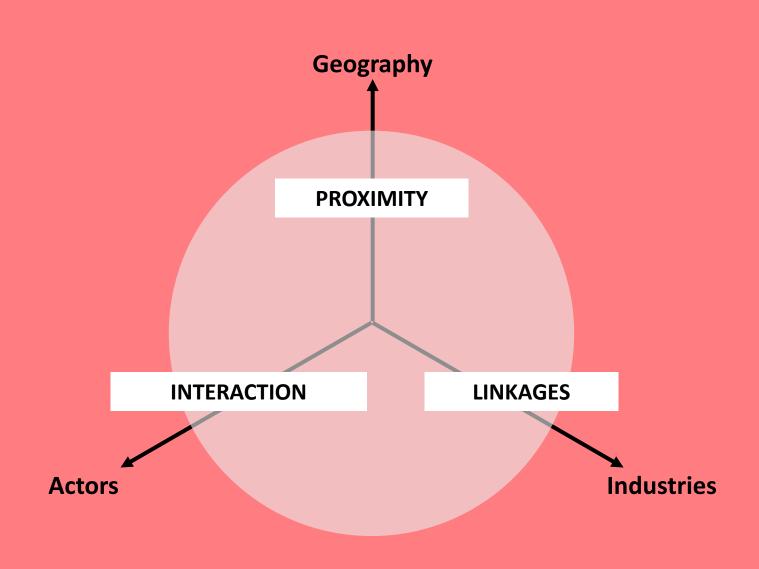
What is cluster

- Clusters are geographic concentration of interconnected companies and institutions in a particular field.
- Cluster encompass an array of linked industries and other entities important to competition
- Clusters include suppliers of specialized inputs, machinery and services and providers of specialized infrastructure
- Clusters also extend downstream to channels and customers and laterary to manufactures of complementary products and to companies in industries related by skills, technology, or common inputs.
- Clusters also include governmental and other institutions such as universities, training institutions, standard-setting and regulatory agencies, think thanks and industry groups and associations.
- A cluster's boundaries are defined by the linkages and complementarities across industries and institutions that are most important to competition.
- Although clusters often fit within political boundaries, they may cross state or even national borders

What is Cluster: Harvard Prof. Michael Porter

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Key Dimensions of Clusters



How Clusters Impact Economic Performance

Local externalities

- Access to specialized labor
- Access to specialized suppliers
- Opportunities for local outsourcing
- Knowledge spillovers
- Intense competitive pressure
- Fast market feedback





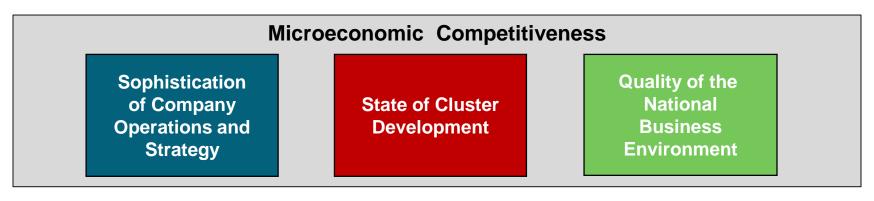


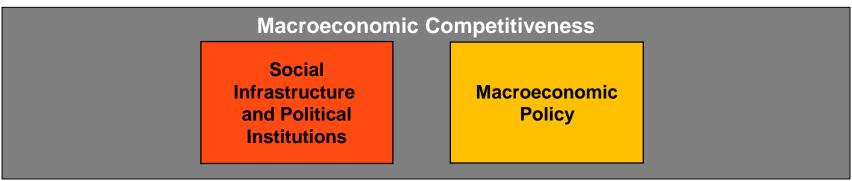
Higher innovation



 More new business formation

Clusters' Role in Competitiveness







The Diamond Model: Assessing the competitive advantages

Context for Firm Strategy and Rivalry

Factor (Input)
Conditions

Efficient access to high quality Business inputs

- ✓ Efficient utilization of natural endowments
- ✓ Human resources
- √ Capital availability
- ✓ Physical infrastructure
- ✓ Admin and Information infrastructure (e.g. registration, permitting, transparency) Scientific and technological infrastructure

Open and vigorous local competition

- ✓ Openness to foreign competition
- √ Competition laws

Local rules and incentives that encourage investment and productivity

Related and Supporting Industries

Availability of suppliers, supporting industries and institutions, and firms in related fields

Demand Conditions

Sophisticated and demanding local customers and needs e.g. strict quality, safety and environmental standards, consumer protection laws

Can this approach and concept be replicated?

Yes, Absolutely at all levels and for any location!

Tangible Results Statistical Data and Global Benchmarking

Key principles in Measuring the Key Performance Indicators

1. Simplification of Rules and Regulations:

- Company growth, increase in inward and outward investment
- Seamless movement within the Emirate,
- Reduced time, cost, environmental impact for companies and the government.
- Gains in productivity, increase in GDP shares, creation of new sectors (overall GDP expansion)

2. System-based assessment of Dubai's transportation and logistics performance:

- Improved efficiency and reliability of supply chains
- –Ports, Airports, (upcoming railway), Free Zones performance improvement (Performance Tables)

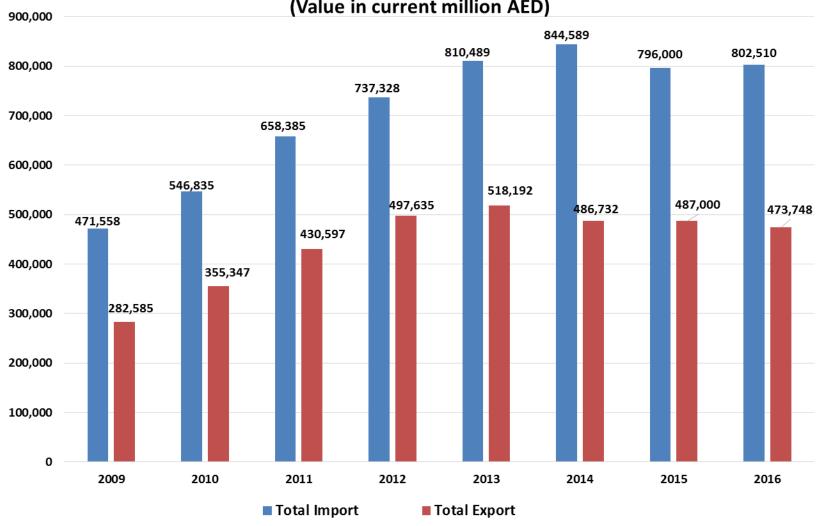
3. Skills and productivity:

- New technologies, company growth, increase in market shares
- Productivity gains vis-à-vis peers and competitors

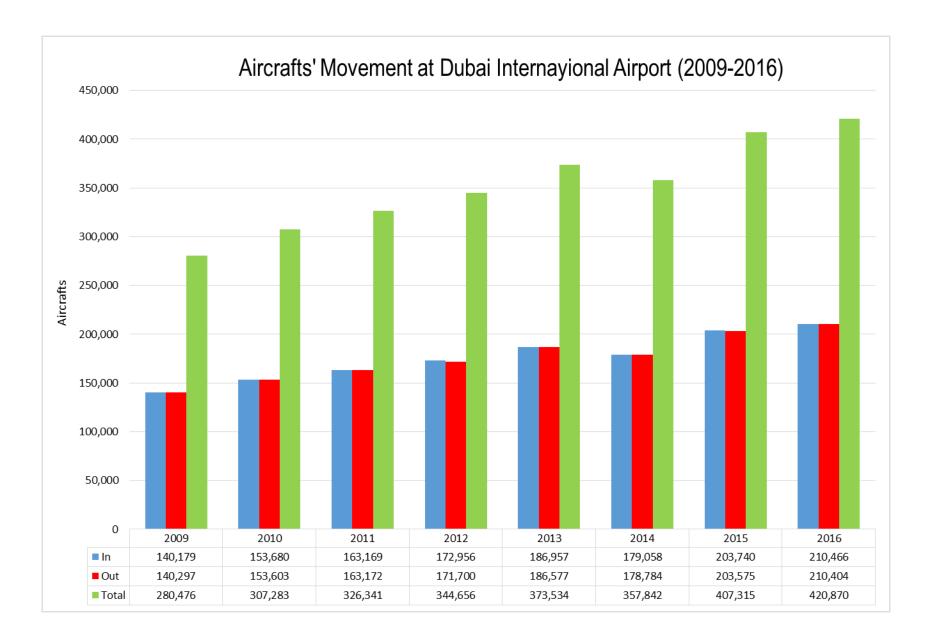
4. Technology and innovation

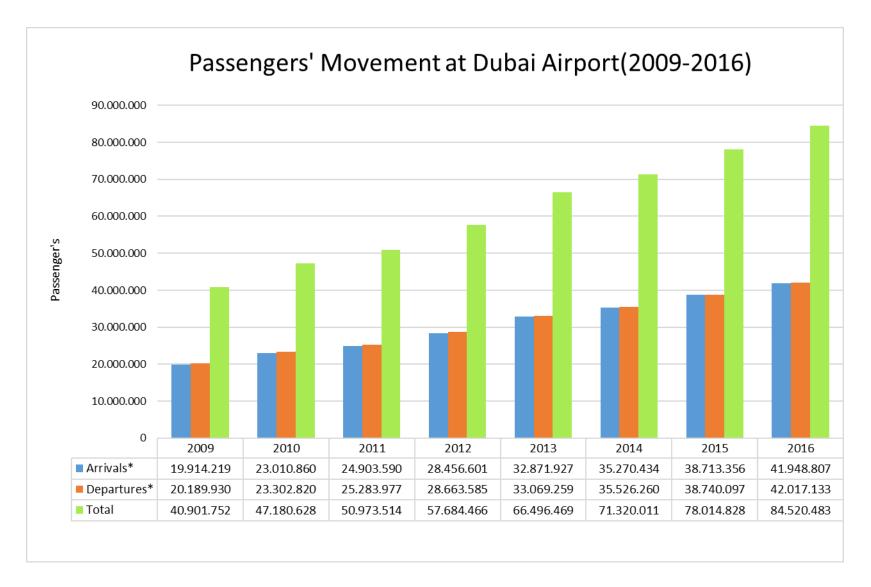
-Virtual corridors, e-freight, e-commerce resulting in higher technology driven processes and innovation

Exports and Imports Comparison (Value in current million AED)

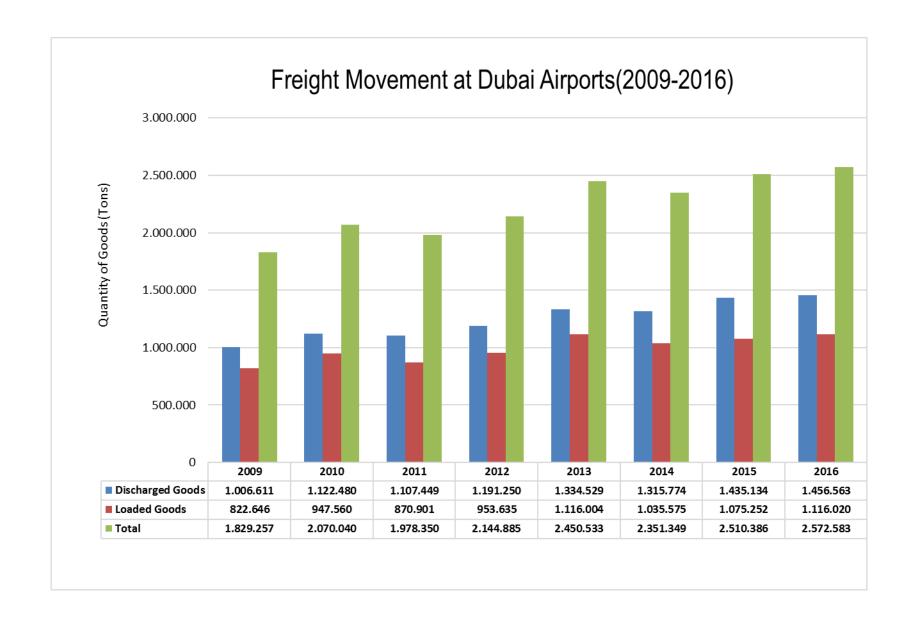


^{*} Preliminary [Source] Dubai Statistics Center

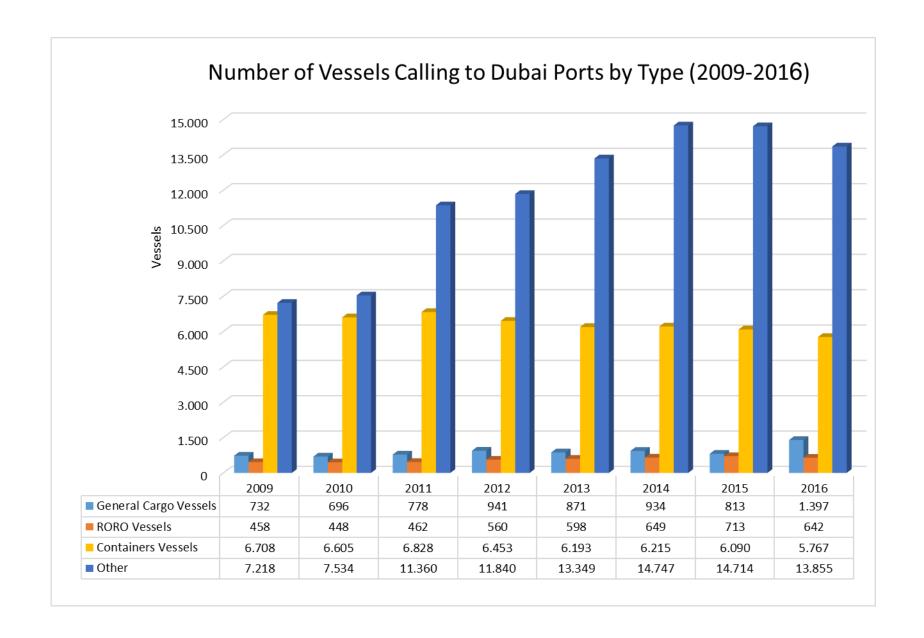


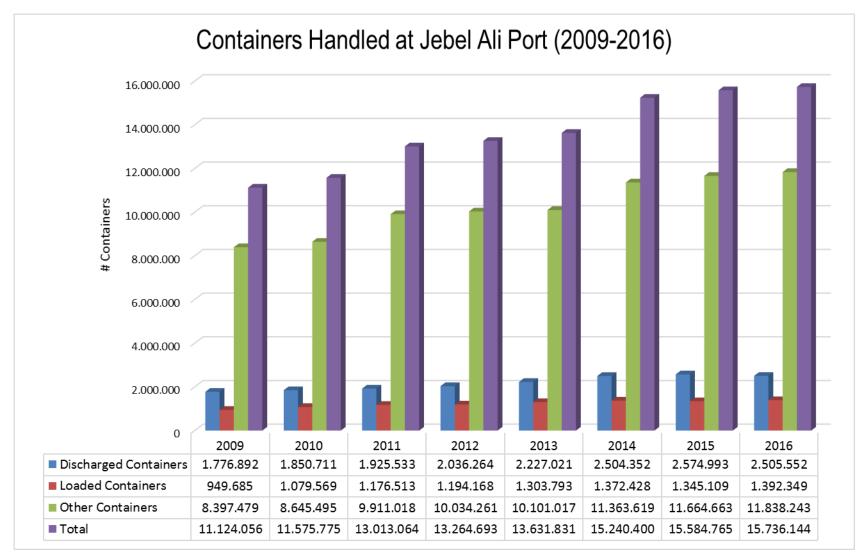


^{*}lincluding transfer passengers : passengers arriving or departing from one destination and going to



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^{*}Including additional containers shifting on shipboard that may occur during normal operations

[Source] Dubai Statistics Center

Even though the Global Economic Slow Down

The tangible results of the Collaboration

Dubai Trade has picked up after a short period of slow down

- Import to Dubai grew by 79 percent in 2014 compared to 2009 and totaled 845 Billion AED
- Export from Dubai grew by 72 percent in 2014 compared to 2009 and totaled 487 billion AED

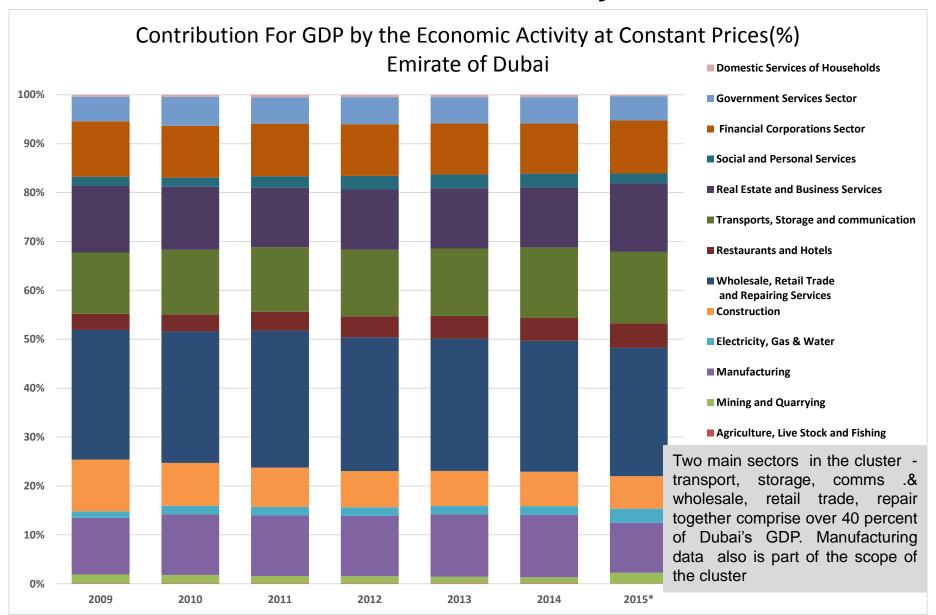
Air Freight Handled at Dubai Airports

- The Air Freight (Air Cargo) discharged in tons at Dubai Airports grew by 31 percent in 2014 compared to 2009
- The Air Freight (Air Cargo) loaded in tons at Dubai Airports grew by 26 percent in 2014 compared to 2009

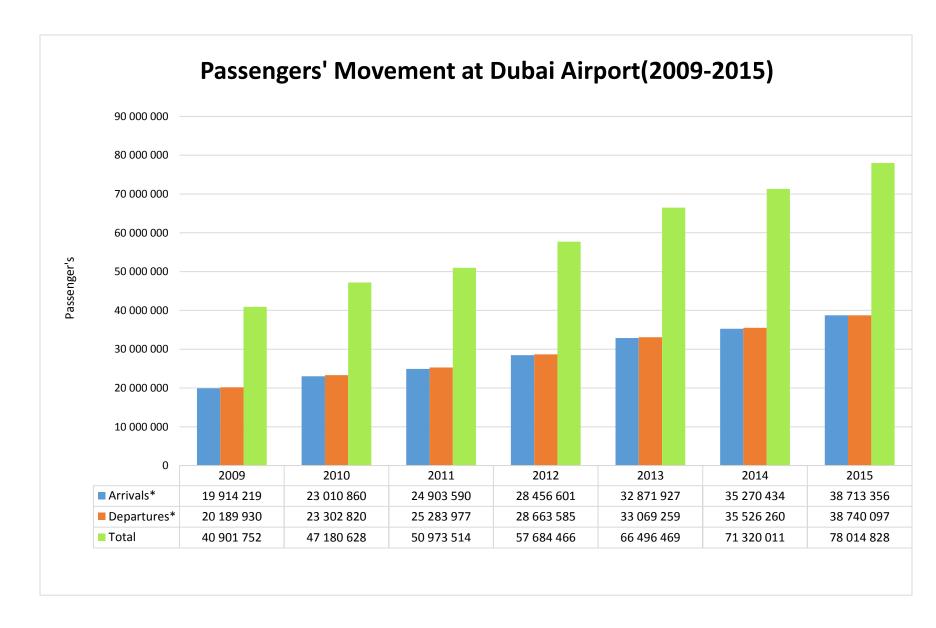
Containers handled at Jebel Ali Port

- The Containers discharged at Jebel Ali Port grew by 41 percent in 2014 compared to 2009
- The Containers Loaded at Jebel Ali Port grew by 45 percent in 2014 compared to 2009.

Macroeconomic Analysis



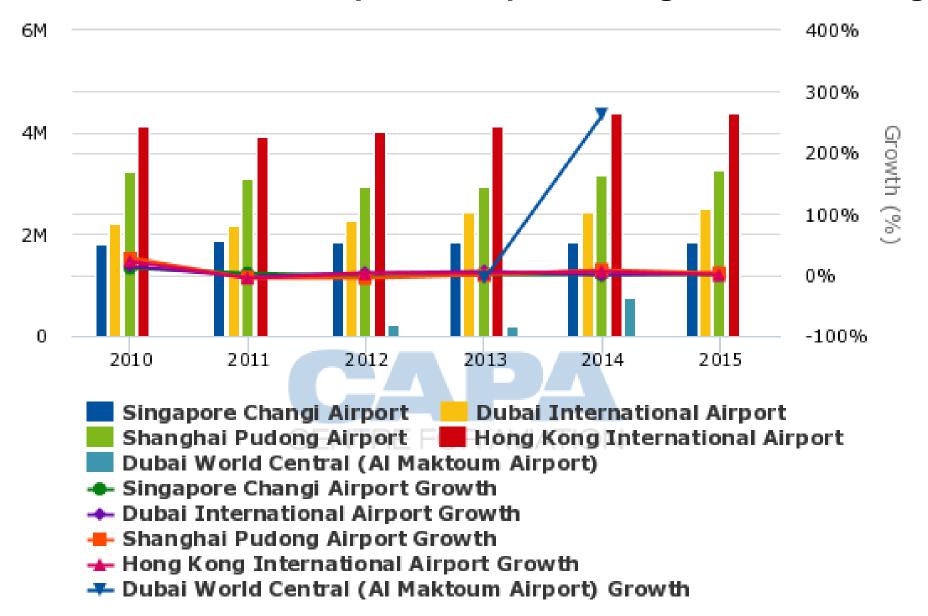
^{*} Until 3rd Quarter 2015 [Source] Dubai Statistics Center



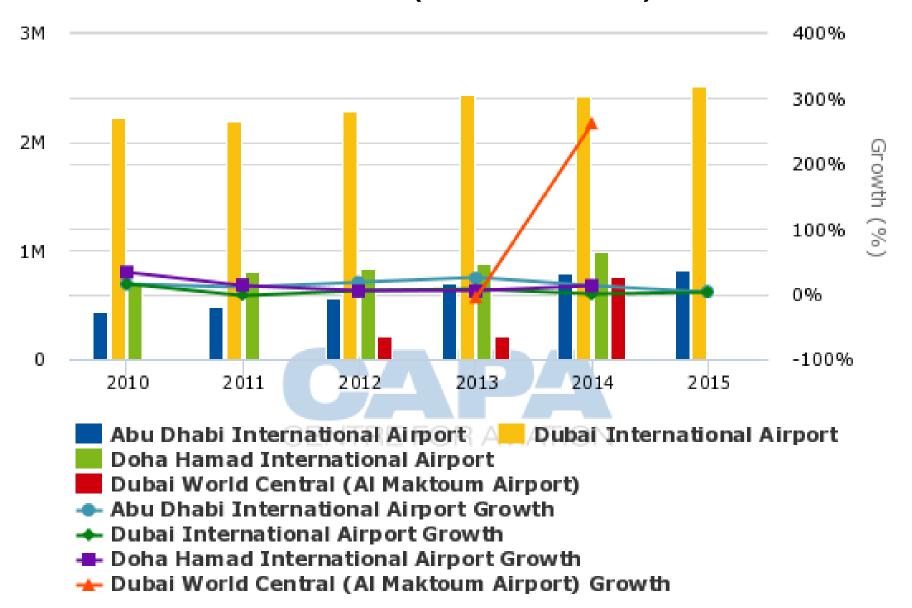
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[Source] Dubai Statistics Center

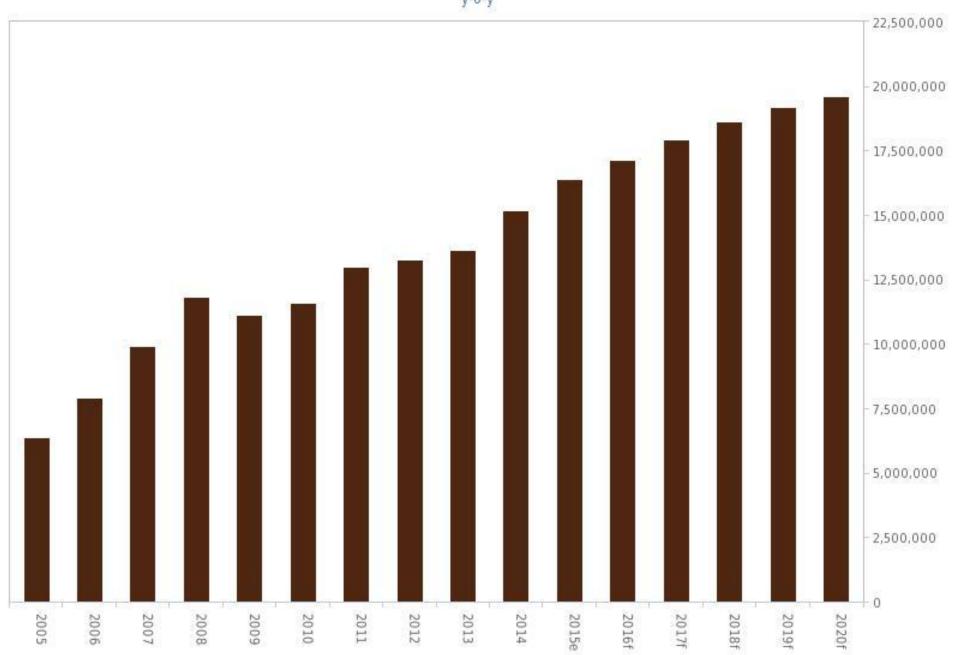
Main International Competitor Airports Cargo Benchmarking



GCC Main Airports Annual Traffic Benchmarking 2010-2015(Million Tonnes)



Jabel Ali Container throughput in TEUs



Source: BMI Research

Intangible Results

Unprecedented Collaboration of the Competitors on the Ground

The Transferability of the Idea/Concept

Intangible Results

- Synergies between competing government and private sector stakeholders' strategies and actions
- •Further integration of air, sea, road and upcoming Etihad rail
- Position Dubai as global maritime and aviation city
- Capture new trade routes, market shares
- •Seamless movement of goods between airports, ports and selected FZs.
- "E" Enablers and optimized use of physical infrastructure
- Reduced freight traffic in the metropolitan areas
- Reduction of carbon foot print (tangible)
- Reduced time, cost, environmental Impact (tangible)