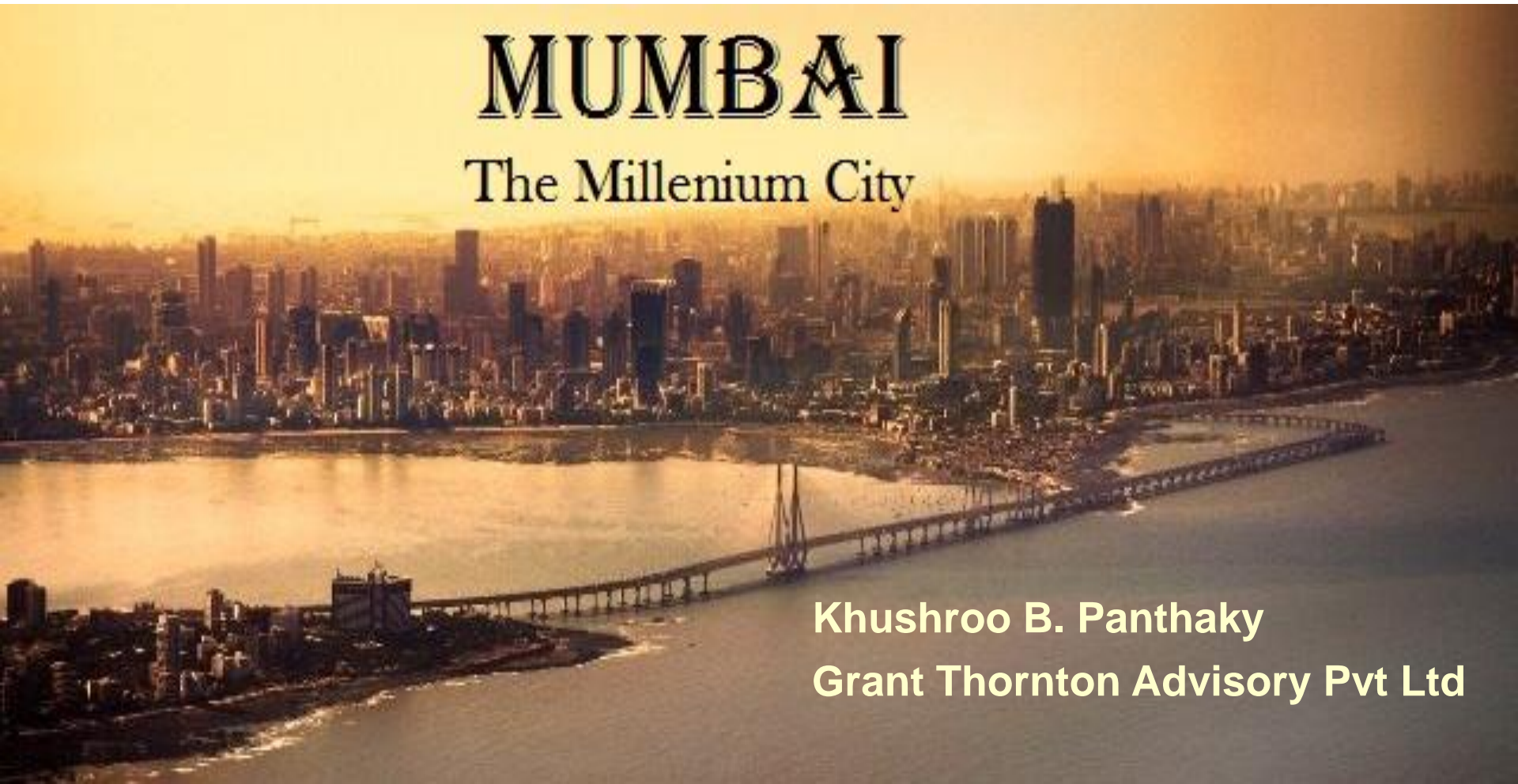


Urban Infrastructure related challenges and opportunities in Mumbai

MUMBAI

The Millenium City



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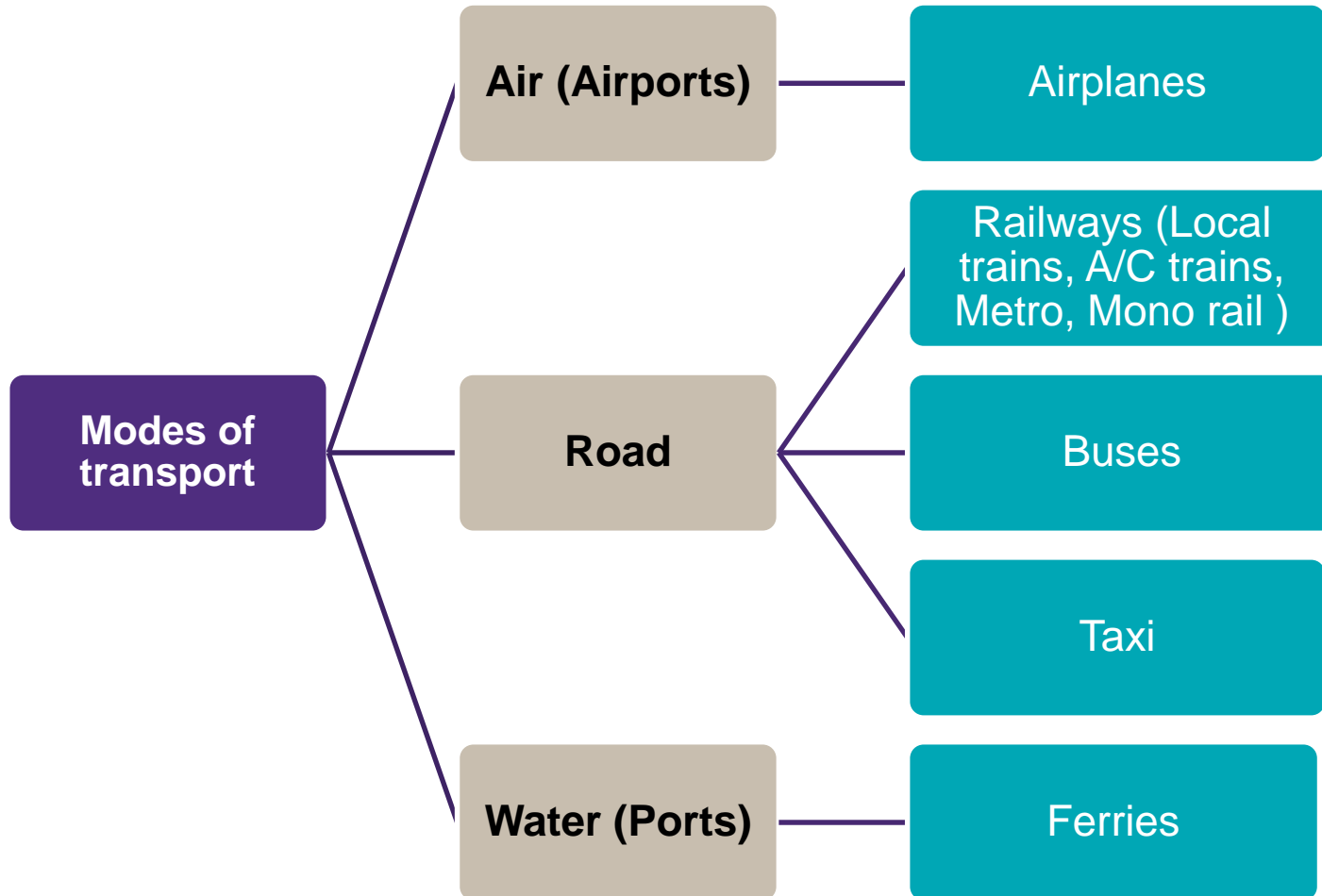
Brief introduction about Mumbai

- **Mumbai** is the **capital city** of the Indian state of Maharashtra.
- Mumbai has been a **constantly evolving** and **globally engaged city** over the past 150 years and has made a **rapid economic transition** from **trade focused** to **services focused**.
- It is the **second most populous metropolitan area** in India, with a population of 21.3 million as of 2016
- Mumbai lies on the Konkan coast on the west coast of India and has a **deep natural harbour**.
- Mumbai is the **financial, commercial and entertainment capital** of India.
- It is also one of the world's **top ten** centres of commerce in terms of global financial flow, generating **6.16% of India's GDP** and accounting for **25% of industrial output**, **70% of maritime trade** in India and **70% of capital transactions** to India's economy

Brief introduction about Mumbai (contd.)

- Mumbai is simultaneously a **successful** and **under-performing city**.
- The city houses the headquarters of over **400 business houses**
- The city houses **important financial institutions** such as the Reserve Bank of India, the Bombay Stock Exchange, the National Stock Exchange of India, the SEBI and the **corporate headquarters** of numerous Indian and multinational corporations.
- It is also home to some of India's **premier scientific and nuclear institutes** like Bhabha Atomic Research Centre, Nuclear Power Corporation of India, Indian Rare Earths, Tata Institute of Fundamental Research, Atomic Energy Regulatory Board, Atomic Energy Commission of India, and the Department of Atomic Energy.
- Mumbai's business opportunities, as well as its potential to offer a higher standard of living, **attract migrants from all over India**, making the city a **melting pot** of many communities and cultures.

Modes of public transport in Mumbai



Challenges of urban infrastructure

- Many urban governments lack a **modern planning framework**
- The multiplicity of local bodies **obstructs efficient planning and land use**
- **Rigid master plans** and **restrictive zoning regulations** limit the land available for building and constricting, thereby impacting the abilities of the city to grow.
- There is a **strong bias** towards **adding physical infrastructure** rather than providing **financially and environmentally sustainable services**
- **Urban transport planning** needs to be more holistic – there is a **focus on moving vehicles** rather than meeting the needs of the large number of people who **walk or ride bicycles**.
- Mumbai needs **stringent infra audits and more transparency** to avoid more tragedies

Challenges of urban infrastructure (contd.)

Critical issues that need to be addressed are:

- Local **governance**
- Availability of **finances** and the **financial state of affairs**
- **Inappropriate planning** that leads to high costs of housing and office space, some of which are amongst the highest in the world
- Critical **infrastructure shortages** and **major service deficiencies**, such as erratic water and power supply and not so adequate transportation systems
- Rapidly **deteriorating environment**

Mumbai's **institutional framework and political system create severe challenges** in bringing forward, infrastructure and housing investment at a sufficient scale to tackle the underperformance

Opportunities for the urban infrastructure

- **Institutional engagement with Mumbai's future** is welcome as more accountable and integrated planning will be critical.
- The **public sector** needs to improve its systems for **planning and providing infrastructure**, such as roads, sewage disposal, solid waste and water.
- An **efficient dispute redressal mechanism** is required to release funds locked in disputes
- The **tech and digital infrastructure** can enhance and not replace, the physical and civic infrastructures of a city.
 - **smart waste management** - For instance, electronically enabling garbage bins to send out signals when full is pointless unless the city's garbage collection system is adequate and fast enough to respond.
- **real-time** public transport information

Opportunities for urban infrastructure (contd.)

There are 5 strategic questions for how Mumbai moves forward in the next decade:

- What is Mumbai's future as a **financial centre**?
- What is Mumbai's future position in the **regional and South Asian urban system**?
- What opportunities are there for Mumbai to **leverage its institutional and diplomatic presence**?
- How can the **governance architecture** be strengthened to deliver more effective implementation of metropolitan initiatives?
- How can a **regional approach** be best fostered?

What have been the real obstacles?

- Mumbai's ability to develop an intentional global approach is impacted by its **governance framework**.
- The complex relationship between **government and municipal organizations** has prevented the evolution of an **effective common agenda** for city's development and sustainability
- The numerous planning authorities, state government agencies, central government, public infrastructure and renewal agencies, and urban municipal bodies across the region **overlap in their jurisdiction** and are **politically divided along party lines**.
- The absence of **citywide leadership with vision or stature** results in **co-ordination problems** when executing the big projects that Mumbai urgently needs.
- The state government's **political leadership** is split between urban and rural constituencies.

What have been the real obstacles? (contd.)

- **Regional planning initiatives** have generally lacked flexibility, civic engagement, private sector input, and pathways for implementation.
- **Administrators in local institutions** are discouraged from taking long-term sustainable systems' perspectives.
- **Economic development** is not viewed as a major task of city leadership



Best way forward – an optimal scenario

A well planned infrastructure that includes the fine lines of transportation, connectivity and accessibility of social infrastructure, and other utilities.

- What does Mumbai need?”
 - “First, it needs infrastructure that facilitates employment.
 - Second, with employment, it needs housing.
 - Third, to ensure quality of life, it needs open spaces, entertainment avenues, health friendly parks; and
 - finally, infrastructure.

The most optimal solution in the long term

Mumbai needs \$220 billion (approximately ₹14,74,000 crore or ₹14.74 trillion) of investment in hard infrastructure and smart technology over the next 20 years to be “future-proof”, according to a report by the consultancy firm, McKinsey.

Thank you

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