



Impact on Infrastructure Decision Making Mechanism using Advanced 3D Visualisation with PTV VISSIM

Rishi Ahuja

Managing Director & Founder, SUNOVATECH

rishi.ahuja@sunovatech.com

Introduction



Sunovatech Group at a Glance

- Incorporated in 2000
- Locations: India, UAE, Qatar
- Experience: +450 Projects across 6 continents
- Specialisation:
 - Infrastructure 3D Visualisation
 - Augmented & Virtual Reality
 - Traffic Simulation Modelling
 - Public Art Design (Artscape Design)
 - B2G: Big Data Management Apps.
 - CSR: Road Safety Education



YouTube Video Link:

<https://youtu.be/8MHn4JTFzM8>



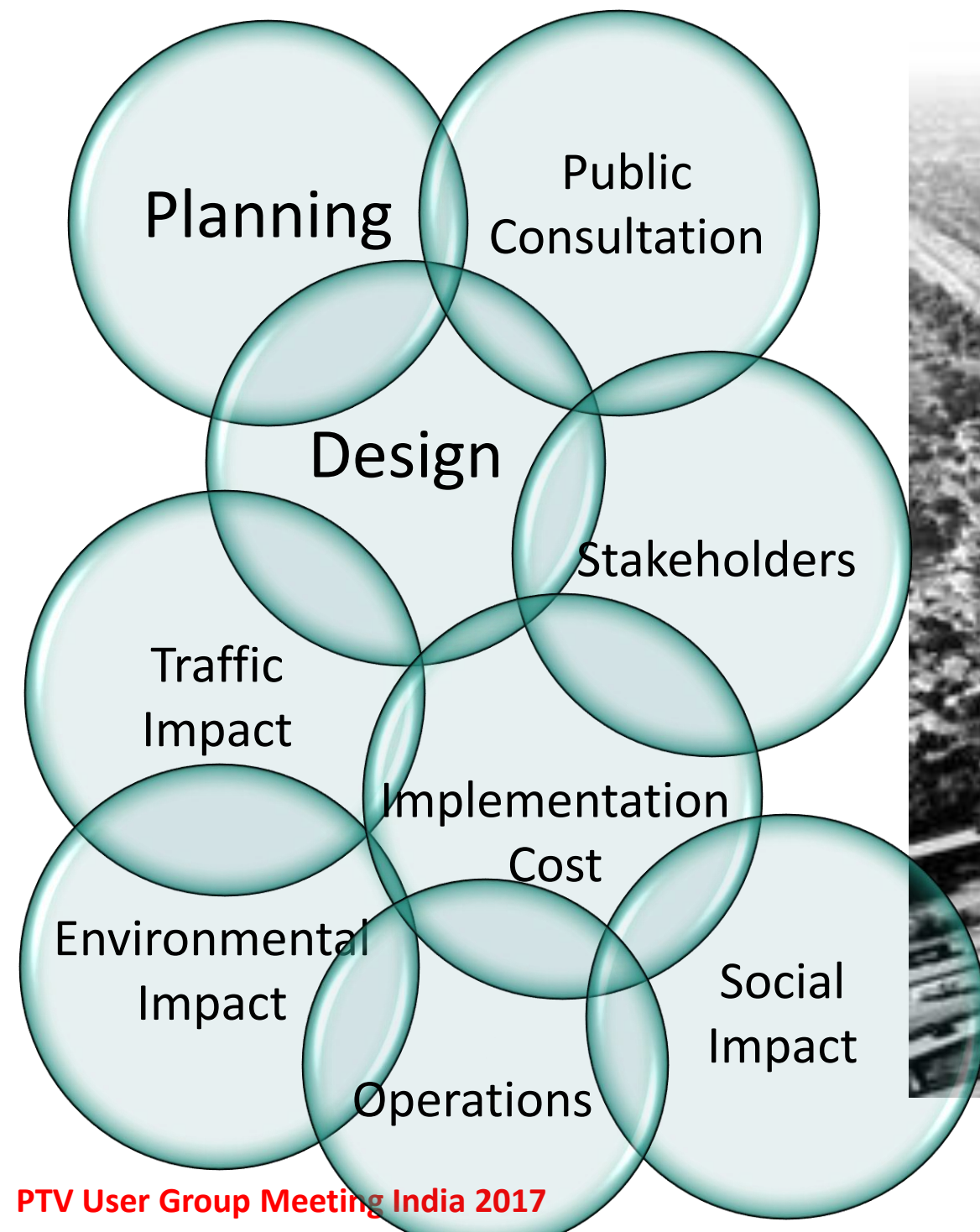
Decision Making Challenges



- 
- Most infrastructure project developments are complex in nature.
 - Difference in Judgements from Stakeholders.
 - Lack of Technical Understanding.
 - Collaboration between Critical Design Components.
 - Environmental Impact
 - Operational and Economical Forecast
 - Public Health and Safety

How It feels to be a Decision Maker

- To Untie the Complex Infrastructure Quest





Impact of 3D Visualisation

Impact of 3D Visualisation

Implementing Proposals Before Reality

- **Technical Impact Analysis**
- **Social and Economical Impact Analysis**

Impact of 3D Visualisation - Technical

- Evaluation of Options



Impact of 3D Visualisation - Technical

- Evaluation of Options
- **Feasibility of Operations**



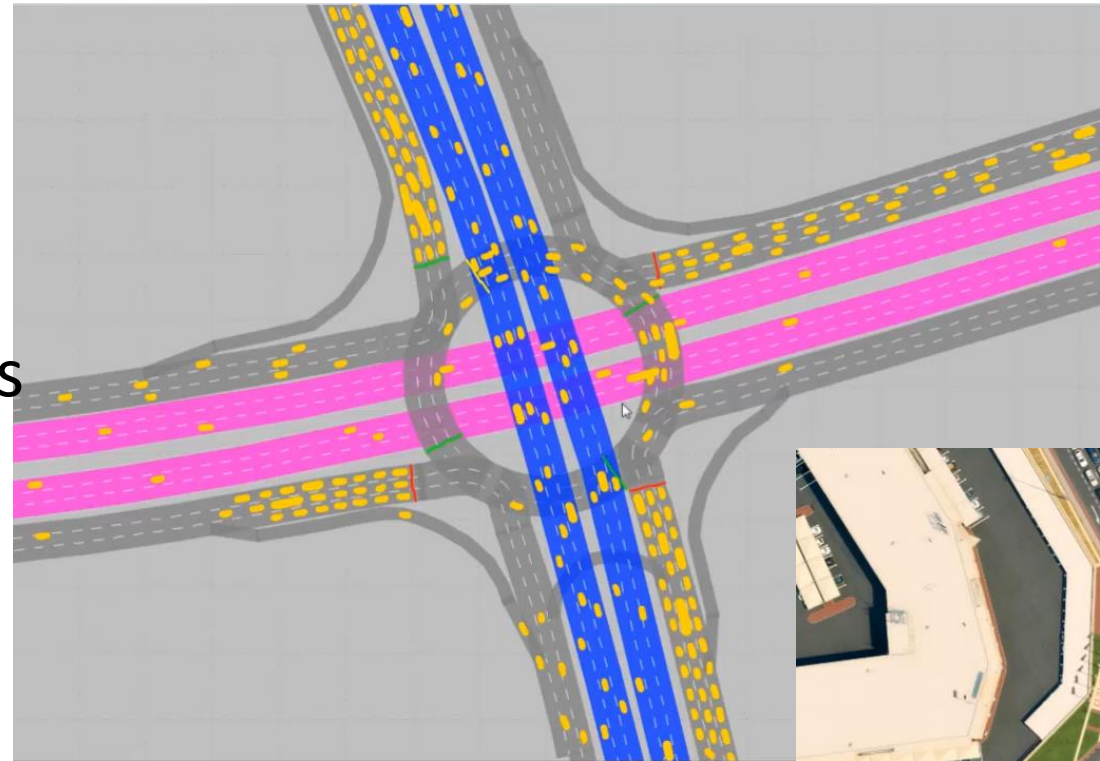
Impact of 3D Visualisation - Technical

- Evaluation of Options
- Feasibility of Operations
- **Collaboration of Design Components**



Impact of 3D Visualisation - Technical

- Evaluation of Options
- Feasibility of Operations
- Collaboration of Design Components
- **Mathematical Adaptation of Engineering Analysis**



Traffic Microsimulation



Sunovatech VR Bridge – 3DS Max

Impact of 3D Visualisation - Technical

- Evaluation of Options
- Feasibility of Operations
- Collaboration of Design Components
- Mathematical Adaptation of Engineering Analysis
- **Environmental Impact Assessment**



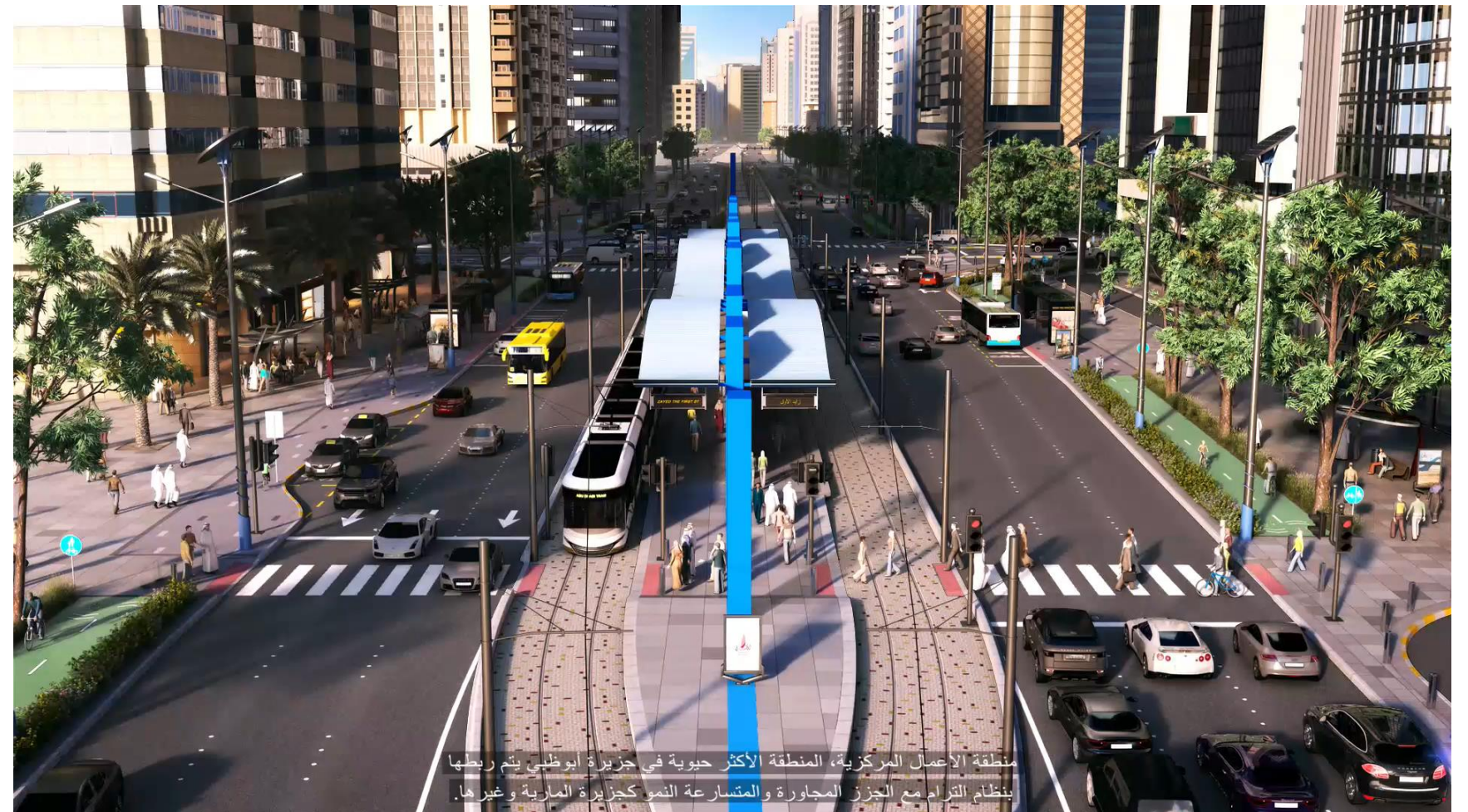
Impact of 3D Visualisation - Technical

- Evaluation of Options
- Feasibility of Operations
- Collaboration of Design Components
- Mathematical Adaptation of Engineering Analysis
- Environmental Impact Assessment
- **Impact on Urban Envelope**



Impact of 3D Visualisation – Social & Economical

- **Economic Development**



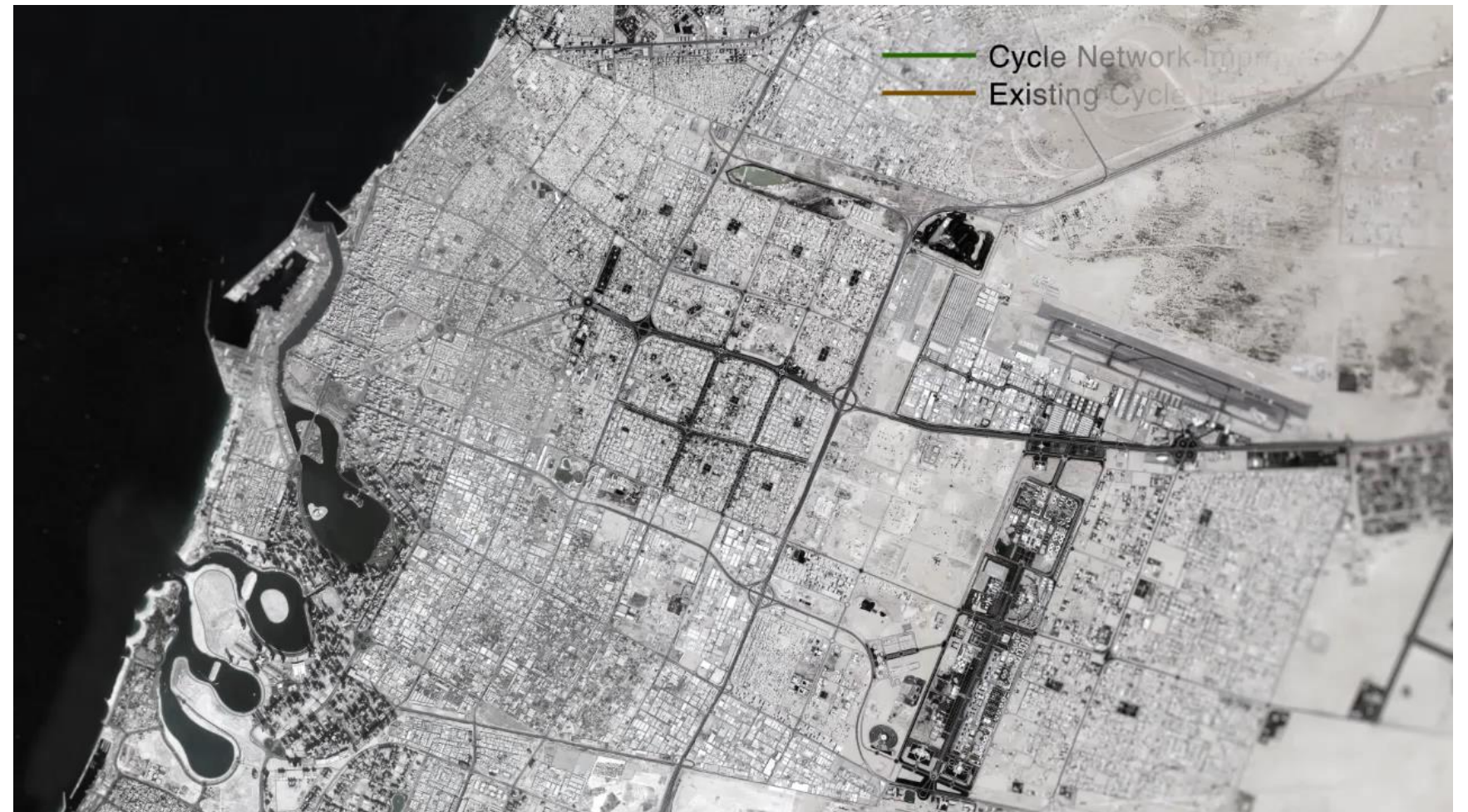
Impact of 3D Visualisation – Social & Economical

- Economic Development
- **Aesthetic Feasibility**



Impact of 3D Visualisation – Social & Economical

- Economic Development
- Aesthetic Feasibility
- Lifestyle Impact
- **Public Health & Safety**





Smarter Decision Through 3D Visualisation of Infrastructure

Rishi Ahuja

Managing Director & Founder, SUNOVATECH

rishi.ahuja@sunovatech.com

Thank You