

Today's top most international concerns will be resolved within cities ... the opportunity for commercial partnership is endless.

David Miller World Bank Advisor on Urban Issues Former Mayor of Toronto

### The Megatrends Driving Change



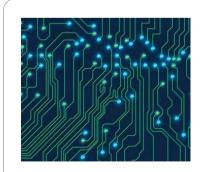
#### **Globalization.**

- Business big or small -- is conducted across borders with the help of new technology structures.
- Consumers have multinational ambitions eg. international students, world travellers, the pursuit of medical care abroad.
- We have unprecedented access to people, news, ideas and opportunities.



#### Urbanization.

- Rapid population growth will require significant infrastructure investment; fiscal constraints in developed markets will require more efficient administration
- Explosive economic growth in the developing countries owing to new sources of economic productivity will see the creation of a new affluent middle class.



#### Digitization.

- We can obtain capital, make purchases and find investments in a record number of ways through new business models, technology platforms and funding solutions.
- We can fulfil our needs more accurately, quickly and cost-effectively via client experiences delivered through new platforms and channels, eg. online, mobile.

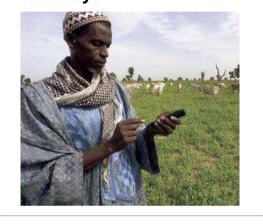


### Socio-economic mega-trends are shaping our future ...

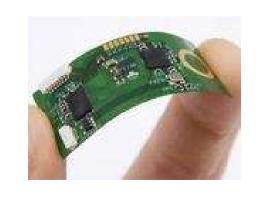
Power is shifting to consumers as social media gains influence



The un-/ under-banked are becoming banked in new ways



Technology and infrastructure are increasingly flexible



Public Sector is reforming regulation and pressing for electronification





## Urbanisation: 21st Century; the Urban Age

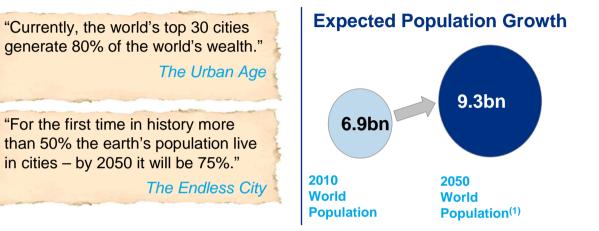
### The world is no longer a network of countries – it is a network of cities.

#### Why Do Cities Matter?

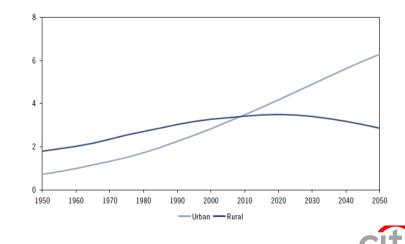
- Technology is interconnecting economies
- The complexity of cities require integrated yet dynamic solutions
- Power is Shifting to Consumers as Social Media Gains Influence



- A tipping point The percentage of the world's population in urban locations now exceeds that in rural areas.
- Urban residents are generally better educated, more productive and have higher incomes compared to their rural counterparts.
- Many developed economy cities have comparative advantages in certain sectors. Urbanization will result in a larger global market for these services.



#### **Urban and Rural Populations (Billions) Evolution**



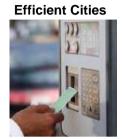
### The demand of cities today ...





### The Urban Ecosystems

#### **Cities Vision**





**Connected Cities** 



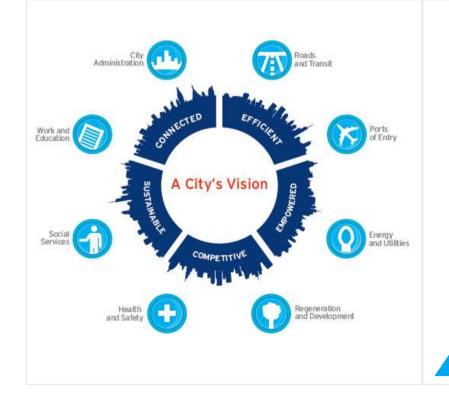
**Competitive Cities** 



**Sustainable Cities** 



#### Delivering Services across the ecosystem that work for Citizens





**CITY ADMINISTRATION** 

- Mayor's Office
- Municipal Council CEO
- Citv Treasurer
- Dept of Finance
- Dept of Operations
- Procurement
- Regeneration & Development

Safety

Pension administration

#### **URBAN ECOSYSTEMS**

Social Services

• Energy & Utilities

Roads & Transit

• Healthcare

- Regeneration & Development Workplace and Education
  - Ports of Entry

### Cities are facing profound challenges

### What is driving change?

# 'Old' cities in the developed world

- Crippling pension
  obligations
- Budget deficits
- Decentralized financial processes; limited automation
- Limited ability to cut costs
- Supply chains at risk

# 'New' cities in the developing world

- Explosive population growth and urban migration
- Rapid urbanization
- Need to establish or modernize infrastructure
- Quality of life
- Entrepreneurship

#### **Fiscal Crunch**

Driving the search for cost and operating efficiency

#### **Population Growth**

Driving the modernization and extension of public services and infrastructure

#### Labour and pension costs

Driving the quest for process centralization and automation

#### Technology advances changing lifestyles

Citizens are demanding greater empowerment and convenience

#### The competition for human capital

Providing the impetus to modernize and provide lifestyle and business incentives to attract talent to key cities, and to promote a culture of innovation that is self-sustaining

#### Private sector participation

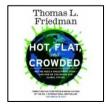
Public-private partnerships are key to driving progress and ensuring the transfer of competitive best practice to the public sector



## Additional Challenge – Implementing Sustainable Solutions

At a time of fiscal restrictions, local governments are being tasked to implement sustainable solutions.





"The task of creating the tools, systems, energy sources and ethics that will allow the planet to grow in cleaner, more sustainable ways, is going to be the biggest challenge of our lifetime"



### Citi For Cities ...

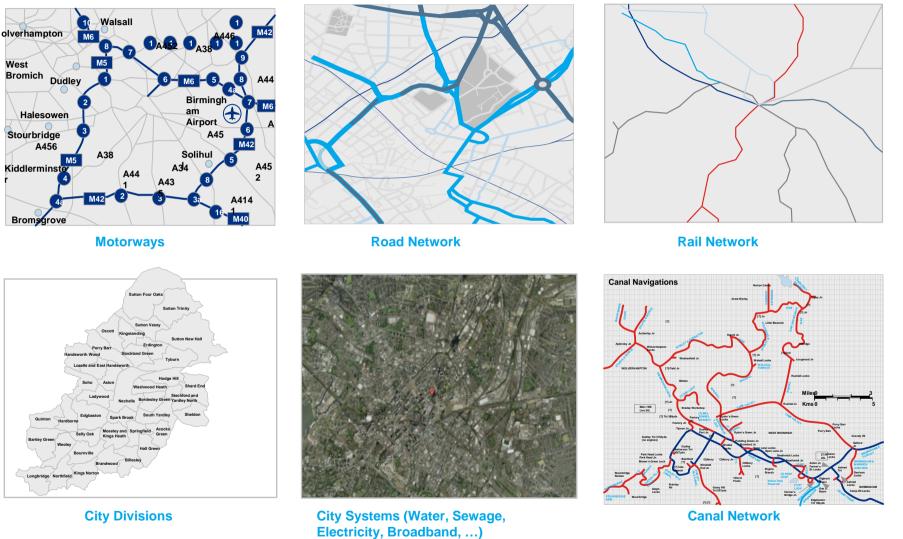


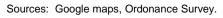
**Powering the cities** of the future, today. Delivering solutions that enhance public services, facilitate commerce and empower citizens living in the world's great cities.



### Efficiency Analysis: How Does a City Function?

### City Administrators understand the physical flows within their cities



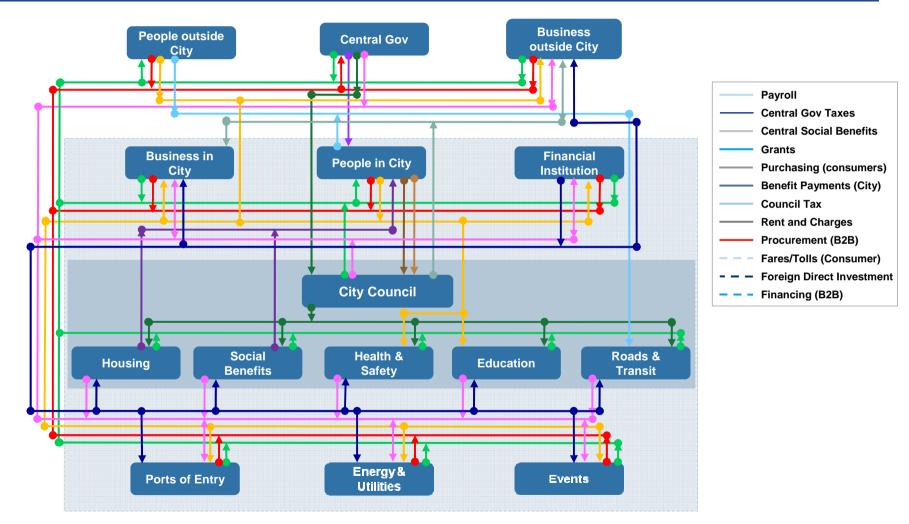


oand, ...)



### But have you ever considered the financial flows?

Understanding a City's Financial Circulatory System allows administrators to identify inefficiencies and reduce costs.





Efficiency Transformation of City-wide Services

- Transform **treasury and cash practices** to manage complex payment flows, streamline and deliver scale through automation
- Release essential savings and foster business growth by leveraging a city's spending power and supplier relationships to unlock trapped cash at both ends of the value chain
- Gain greater control of spending and improve oversight and management of procurement and travel costs
- Provide convenient and flexible benefits payments to citizens with improved security and processing efficiency
- Streamline operations, clearance and processing at airports, shipping or customs with the electronification of document handling; the acceleration of trade and financial flows, collection of duties/taxes, payment of refunds, etc.



## To finance projects

# Urban Infrastructure Modernization

- Access alternative and additional financing options including debt structuring, creative bond structures, asset monetization, project finance
- Administer and execute on public/private finance initiatives to facilitate infrastructure development, urban regeneration and business development programs
- Self-fund infrastructure modernization by leveraging supply chain relationships and related long term operating expenses





### To improve services offered to your citizens

Digitization of Payment / Access Channels for Citizens &Communities

- Improve transport systems to accommodate growing demand, reduce the cost of fare collection and deliver an enhanced commuter experience
- Enable active travel management by leveraging mobile technology to deliver smart parking, enable congestion zone and bridge, tunnel toll charging
- Explore sustainable resource and waste management with integrated **metering and billing**, **recycling** incentives
- Relieve administrative burden, improve data integrity and security by digitizing forms and identity documents to accelerate benefit entitlement verification and payment
- Deliver safe, convenient and flexible access to services through **cashless communities** where ID verification, service/benefit access, payment and actionable, location-based information are integrated via cards and mobile app.





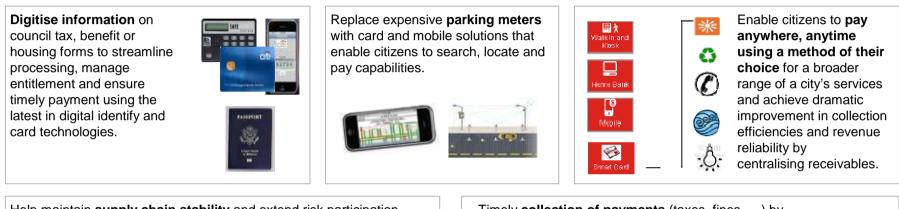
Transit partnership in Warsaw, Wrocław and Trójmiasto driving efficiency and commerce

- Transit-enabled debit & credit cards for season travel.
- Dominant in-station presence with kiosks and advertising.



## We are working with cities across the globe

Many cities around the world are using technology to extend services and make cities more livable and efficient for citizens, local businesses and government.



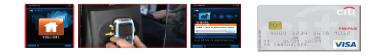
Help maintain **supply chain stability** and extend risk participation through supply chain management.



Timely **collection of payments** (taxes, fines, ...) by enabling bill presentment and payment via mobile phones.



A fully integrated, socially inclusive, **mass transit solution** across multiple channels.





Think beyond payment of incentives or benefits by **linking government spending** power to relevant offers and services to help encourage and direct spending e.g. Back to work programs, health services at reduced cost.



## Conclusions



## **Understanding Cities**

Cities comprise complex ecosystems undergoing significant change. They are diverse and different but share similar challenges and objectives.

#### **Objectives & Priorities**

- Efficiency
  - Cost optimization and efficiency reform
  - Reduce administrative burden eg. document processing
  - Modernize infrastructure
    eg. collections and payments
- Public Policy
  - Address environmental challenges
  - Inclusive citizen and community access to safe, reliable, convenient services
     eg. distribution channels
- Prosperity
  - Attract business and human capital
  - Job creation and commercial development

