



REIMAGINING COLOMBO THROUGH TECHNOLOGY

Digital Disruption Changing the Way We Live, Work, Play and Learn

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Presentation Flow

- *Digital Disruption : Changing the business dynamics*
- *Smart Cities : Impacting the way we Live, Play and Work*
- *Sri Lanka Perspective : Colombo as a Model*
- *Way Forward*



Digital Disruption

Changing the Business Dynamics

The pace of change is accelerating and disruptions are creating new opportunities.

Interesting Trends

Uber

The world's largest
taxi company, owns
no vehicles.

The world's most
popular media owner,
creates no content.

Facebook

Alibaba

The most valuable
retailer, has no inventory.

The world's largest
accommodation provider,
owns no real estate.

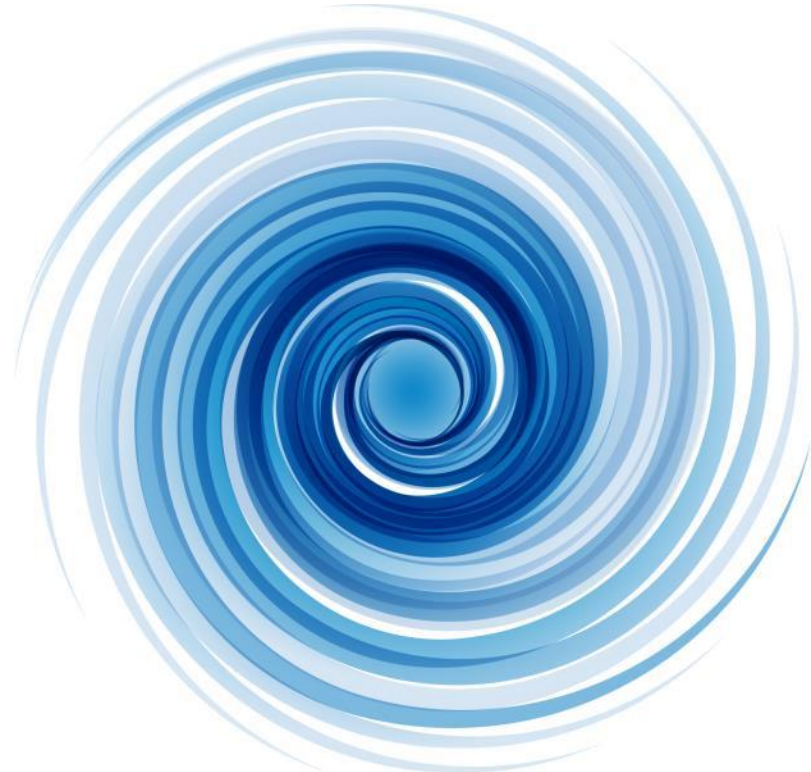
Airbnb

Something interesting is happening.

TOM GOODWIN

Digital Disruption Resembles a Vortex: A Relentless, Chaotic Force Pulling Industries Toward a Digital Center

- A vortex **pulls everything toward the center**
- **Chaotic**: objects drawn to the center with exponentially **increasing velocity**
- Objects may **break apart and recombine**
- The center is the “**new digital normal,**” and its constant change can be a threat or an opportunity



Top 5 Implications of Digital Disruption

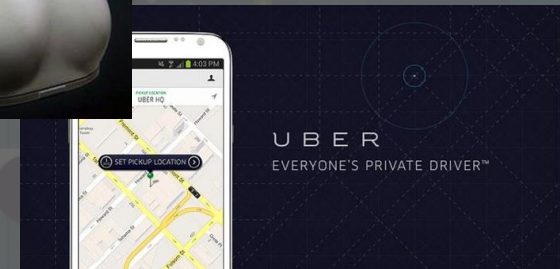
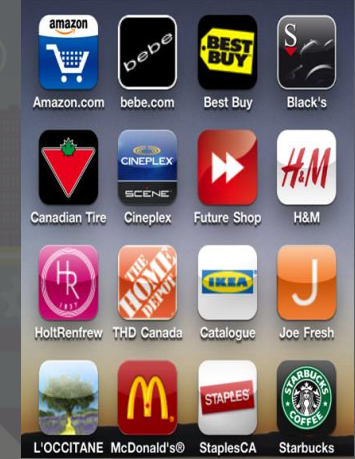
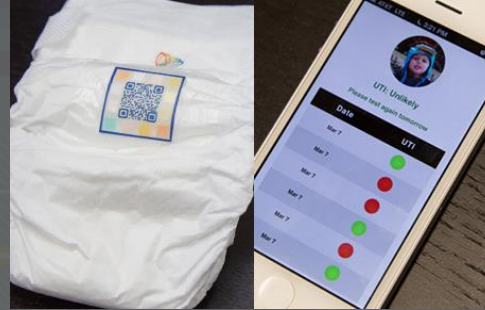
1. Ideation is not innovation

2. Context is king

3. If it doesn't work on mobile, it doesn't work

4. Real time is too late

5. Data is everywhere, insights are scarce



Smart Cities

Creating Opportunity from Digital Disruption



A large, dense crowd of people, likely at a festival or concert, filling the background of the slide. The text is overlaid on a semi-transparent dark grey rectangle.

How many **people** are
moving into cities around
the globe...daily?



Cities worldwide are
urbanizing at the rate of...
180,000 people per day!

Equivalent to one new
LONDON every month!

590 million people will live
in Indian cities by
2030, nearly twice the
population of the
United States today

Rapid urbanization breeds similar problems around the world...



**Traffic
Parking
Lighting**

**Urban decay,
poverty, crime**

**Do more
with less**

**Need for
Clean water
Clean air
Clean streets**

**Quality
education and
healthcare**

Cities Have Traditionally Addressed These Issues in Silos

Every city department makes investments independently resulting in:

- No sharing of infrastructure costs and IT resources
- No sharing of intelligence/information, e.g., video feeds, data from sensors, etc.
- Waste and duplication of investment and effort
- Difficulty in scaling infrastructure management

**Traffic
management**



**Public
safety**



**City
lighting**



**Pollution/
environment**



**Waste
management**

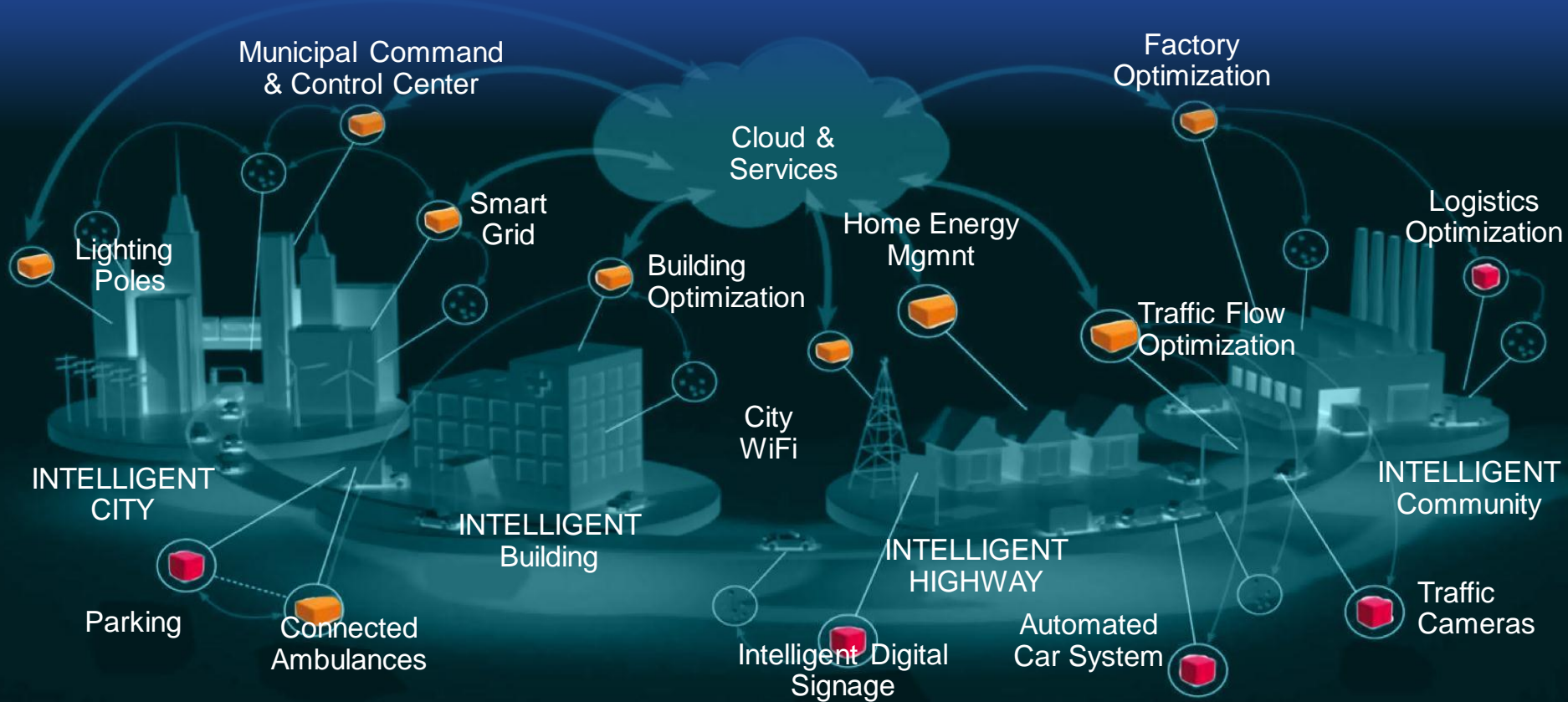


**Parking
optimisation**



This fragmented approach is inefficient, has limited effectiveness, and is not economical

Future Vision – Smart Services delivered to Buildings, Communities and Cities over a Cloud based Infrastructure



Smart+Connected City Infrastructure Management: Leverage Investment Across Citywide Issues

Smart+Connected City Operations Center

1 Smart+Connected City Parking



Give citizens live parking availability information to reduce circling and congestion

2 Smart+Connected City Traffic



Monitor and manage traffic incidents to reduce congestion and improve livability

3 Smart+Connected City Safety & Security



Automatically detect security incidents, shorten response time, and analyze data to reduce crime

4 Smart+Connected City Location Services



Provide view of people flow data to aid planning and leverage location data for contextual content and advertising

5 Smart+Connected City Street Lighting



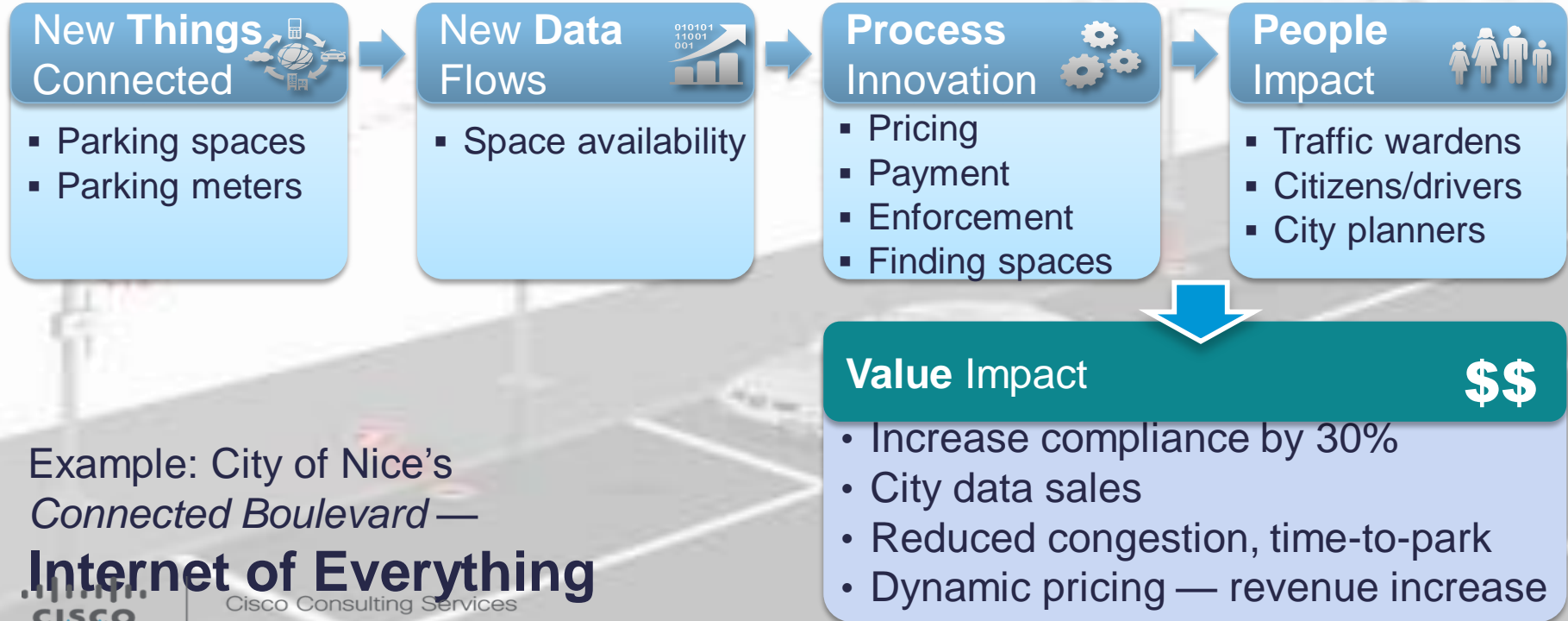
Manage street lighting to reduce energy and maintenance costs

Common Information Layer

Shared Infrastructure Layer: City Wi-Fi /Field Area Network

Technology Is Providing New Opportunities To Address These Challenges

Example: Smart Parking



Example: City of Nice's
Connected Boulevard —
Internet of Everything



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Sri Lanka Perspective

Time to get into action

Some key factors



Smart Sri Lanka; Phase Two of National ICT Strategy
Jan 25, 2014



- Network Index by World Economic Forum 2014 report shows Sri Lanka at 75th place (among 144) so this provides a bigger opportunity to enable more connectivity and bring Sri Lanka to top 50 countries
- Sri Lanka is at 104 position among countries for Internet user population which means there is a great opportunity to roll out new IoT enabled services for Mobile users
- Sri Lanka ranks high on ICT Usage for Govt services (4.9 out of 6.1 index per WEF report). This implies a vast opportunity to roll out new ICT services for Citizens, Infrastructure and allied areas

TOP NEWS: Revamping of the Websites of Government Organizations

06 APRIL 2015

ICTA to over-deliver President's pledge of free Wi-Fi

Read more...

NEW EGOV STRATEGY

OneGov 2020

Government of Sri Lanka's strong push for creating the legal, policy, institutional and strategic background necessary for the rapid socio-economic development through information and communication technology have decisively determined the central role of Information and Communication Technologies (ICTs) as an instrument of national development in this island nation. In particular, the objective is to use ICT to foster social integration, peace, economic growth and poverty reduction. A key anticipated outcome is a more effective, citizen-centered, and transparent government through ICT-enabled...

Government ready to offer more 'free Wi-Fi' to its citizens

CATEGORY: LATEST HITS: 12852

Kandy City's Future: A "Smart City" with Top Down Planning or Bottom Up Consultation?

The page 01 lead news in this edition of The Kandy News is on the proposed Rs 12,200 million four-year development project for the Kandy city and the Greater Kandy area under what is called the Strategic Cities Development Project. The other city chosen for assistance in the initial phase is Galle. Barring some totally unforeseen mishap the money from the World Bank (WB) and the matching funds from the Government of Sri Lanka (GOSL) will be made available to launch the project later this year.

Alongside this leader we have published a brief account of the 2014 budget of the Kandy Municipal Council (KMC). It amounts to Rs 1,909 or about 15% of the proposed expenditure in the Strategic Cities (Kandy) budget. If KMC total spending is maintained at the 2014 level adjusted for inflation it will take over six years for the KMC to spend Rs 12,200 million. More importantly the latter sum is largely for capital works and some capacity building. KMC will spend only Rs 411 million this year on capital works. For four years, adjusted for inflation, it would be Rs 1,644 million or a mere 13.5% of the Strategic Cities (Kandy) budget. This sharply underlines the potentially huge impact that this project would have on Kandy. It also clearly demonstrates the abject dependence of Sri Lanka's local government institutions (and for that matter the provincial councils) on central government funding and donor funding especially for capital investment. Financial devolution is largely an illusion in Sri Lanka.

Sri Lanka Smart Cities Landscape

SLT' step towards achieving SMART Sri Lanka in 2020

Sri Lanka Telecom PLC. (SLT) – The country's ICT giant – proudly announced that the new South East Asia-Middle East-Western Europe (SEA-ME-WE 5) submarine cable system, a multi-regional superhighway enters the operational implementation phase after the “coming into force” fulfilments that have totally been met. The contractors, Alcatel Submarine Networks and NEC have started all operational activities in order to achieve the ready-for-service stage for the 20,000 kilometre international submarine system by the second half of 2016.

Working towards achieving the 'Smart City Status' is vital - Secretary Defence

"Urban Resilience is becoming an increasingly important concept in the present era". It entails the ability of cities to prepare for, respond to and recover from natural and manmade crises with minimum damage to public safety and health, the economy and security", said Secretary, Ministry of Defence and Urban Development Mr. Gotabaya Rajapaksa addressing a workshop on 'Urban Resilience' at the Waters Edge Hotel in Battaramulla today (16th September). Mr. Rajapaksa was the chief guest of the event.

A first for Sri Lanka's grid

Sri Lanka is about to get its first electrical grid management system and Council Lead Partner Alstom Grid was selected to provide the platform and do the work as part of a multi-million dollar contract.

Sri Lanka to embrace SMART vision

Sri Lanka has already drawn up the next phase of the e-Development Master Plan - SMART Sri Lanka, to take the country to the new level of ICT development, reflecting the national goals of accelerated economic growth and the elimination of poverty

Country on path to 'Smart Sri Lanka'– ICTA CEO

'Sri Lanka is now journeying from version 1.0 to version 2.0 of Development Agenda, 'Smart Sri Lanka' moving from pure technology and focusing more on innovation, transformation, entrepreneurship and inclusion'. This was stated by ICT Agency of Sri Lanka (ICTA) CEO Reshan Dewapura Tuesday (19) while participating as Chief Guest at the inauguration of IBMSoftwareUniverse2013 in Colombo

Colombo Smart City Overview

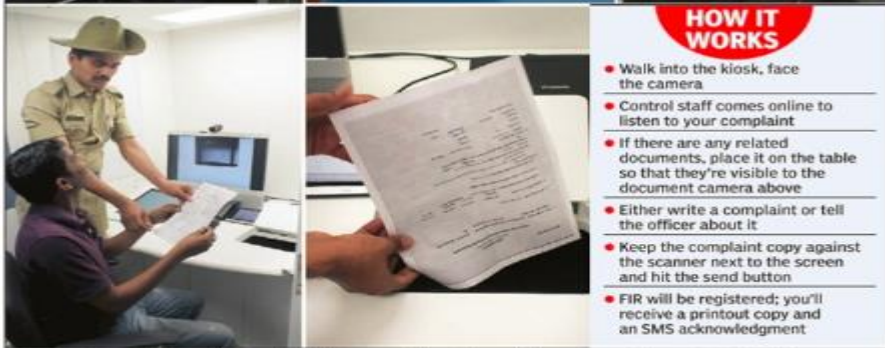


Key Smart City Projects

Successful Pilots across the globe

Bangalore Police's first remote FIR centre

SILICON CITY LEVERAGES TECHNOLOGY TO TRACK CRIMES



FOR THE COMMON MAN: A policeman handholds a complainant through the process of filing an FIR using this new mechanism on Friday. This kiosk allows citizens to file a complaint without going to a police station



You can file an FIR in a mall

Special Correspondent

BENGALURU: In order to ease the process of filing complaint, the city police on Friday launched a Remote FIR registration centre, a first of its kind in the country.

Chief Minister Siddaramaiah, who inaugurated the centre at Mantri Mall, said that the new system empowers people who hesitated to go to a police station.

He hoped that the initiative would help weed out problems like refusal to file complaints, inordinate delay and corruption. It would be of great help



Chief Minister Siddaramaiah inaugurating the first Remote FIR registration centre at Mantri Mall in Bengaluru on Friday.

Barcelona: Smart City... \$3.6B Value Creation



European
Commission
iCapital Award

Smart Lighting

Smart Buses

Smart Water

Smart Bus Stop

Smart Parking

Smart Waste

“We are obsessed with building quality of life for our citizens. We needed to break through organizational siloes and Cisco became our IoE backbone. “

“That is our present and the future of our city.”

Antoni Vives

Deputy Vice Mayor
City of Barcelona, Spain

- 1,500 New Companies
- 44,000 New Jobs
- Mobile Collaboration: \$1.6B
- Telework: \$199M
- Smart Parking: \$67M
- Smart Water: \$58M
- Smart Lighting: \$47M

Revenue

Citizen Experiences

Jobs

Productivity

Cost Avoidance

Smart Cities are already delivering results in the public sector

Increased Revenue

Recover **\$96 revenue leakage per customer** per year due to inadequate gas meters (USA)

Increased Productivity

\$4000 gain per knowledge worker from mobile collaboration (USA)

Increased Revenue

\$35/year/citizen from road pricing (London)

Increased Productivity

10 video cameras can free up one policeman (UK)

Reduced Cost

30% saving on waste collection via sensors (USA)

Reduced Cost

15% travel saving with immersive video (USA)

Citizen Experience

50% better bus occupancy smart scheduling (USA)

Reduced Cost

\$950 saving per court appearance via video (USA)

Citizen Experience

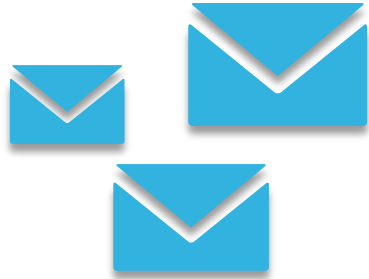
Telework perceived as **10% salary upside** (USA)

Citizen Experience

7% reduced crime from smart lighting (UK)



“Colombo is at a crux of Change, Lets make this one better and future proof”



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