

WORLD CITIES SUMMIT

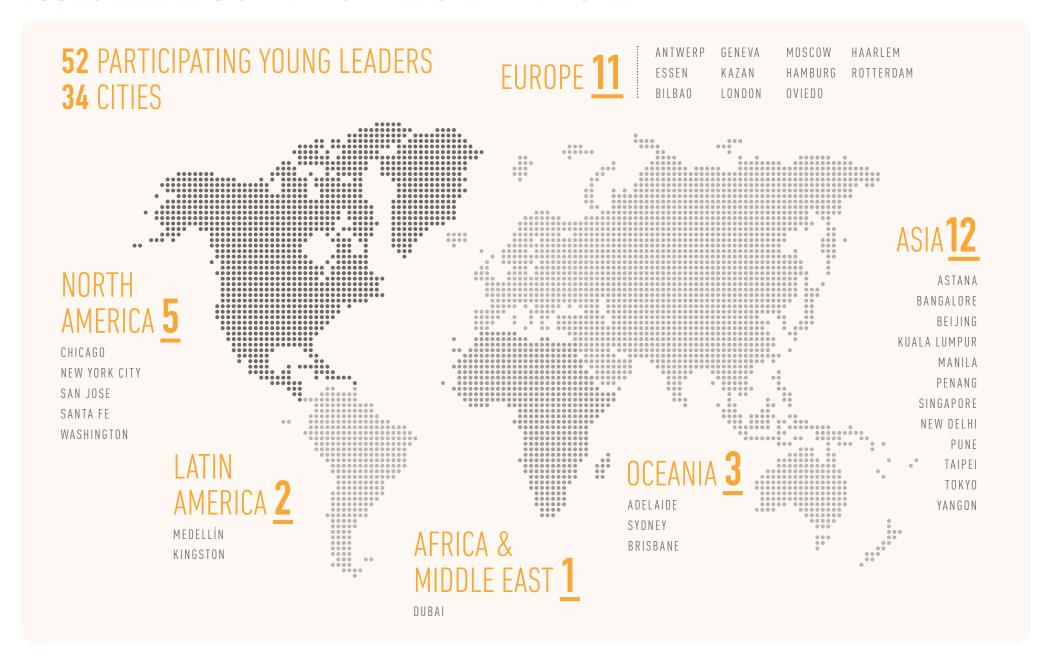
3rd YOUNG LEADERS SYMPOSIUM REPORT



Liveable & Sustainable Cities: Innovative Cities of Opportunity

10 JULY 2016 SANDS EXPO & CONVENTION CENTRE, MARINA BAY SANDS, SINGAPORE

YOUNG LEADERS CAME FROM ALL OVER THE WORLD



EXECUTIVE SUMMARY







52 World Cities Summit Young Leaders from 34 cities met in Singapore to provide fresh insights to Mayors discussing the world's perennial "wicked problems" (those that are exceptionally complicated and difficult to solve) in order to suggest how the "toolbox" of options for solutions could be reinvented. The discussions shadowed those taking place at the World Cities Summit Mayors Forum 2016, so that

these young leaders could give their perspectives on the same issues being debated by the Mayors. The discussions focused on environmental concerns, data and technology, partnerships and values.

The young leaders engaged in dialogue with the Chairman of Nestlé, Mr Peter Brabeck-Letmathe, in which they discussed issues of sustainability and multi-stakeholder collaboration. Mr Brabeck-Letmathe's sharing touched on environmental concerns in cities, focusing on water, waste and the role corporations could play in mitigating these. This was followed by thought-provoking comments by the young leaders and Singapore's Senior Minister of State for National Development, Mr Desmond Lee.

The young leaders considered wicked problems that plagued cities, asking which problems were receiving too much (or too little) attention, assessed existing approaches and asked which methods warranted rethinking.





INNOVATIVE CITIES OF OPPORTUNITY

Share some of the wickedest problems in your cities.

problems receive too much / too little

Are our approaches getting tired? Do they deserve a re-look?

The list of wicked problems was long. These ranged from ageing societies to ageing infrastructure, and included dilemmas between localisation and globalisation; access to, use of and management of data; the rapid densification of cities; increased and unmanaged growth; ensuring equity; misalignment of assets and resources; and long-term planning, environmental and sustainability challenges.

The young leaders opined that these issues could never get talked about enough, while some other topics, such as driverless cars, could do with less attention. Some approaches to these wicked problems were getting tired, as young leaders suggested that this could be due to a biased media, stronger lobby groups, shorter-term marketing, and longer investment cycles. Hence, there certainly was a need for a systemic rethink across the board.

At the Symposium, there was a strong awareness that a city is ultimately about the people who live in it, and this reality came with its own set of wicked problems. This perhaps, was the mega wicked problem – how can governments know what everyone wants and how can they meet those wants? Continuity was the next wicked problem - objectives and desired outcomes had to outlive political cycles.

Data management was suggested as one possible solution, and on that note, the game had changed. Data and technology were taking off faster than cities could react, much less catch up with. Yet, this lag was not necessarily a bad thing, for cities were functioning as a "check and balance" by taking time to consider the longer-term consequences of the adoption of new technologies, for example, displacing workers along the way. Lack of trust in handling data was another issue that was thrown up.

Looming in the background of all the digital and smart talk, and lacking attention, was innovation in deep technology which was rewriting how industries were operating. Automation could cause citizens to lose their livelihoods, and city economies to suffer, if they happened to be heavily reliant on industries that were undergoing rapid automation. Smaller companies were more agile and also reinventing the processes adopted by bigger corporations. Were these threats or opportunities?

In summary, the young leaders raised many thoughtful questions about the role of the private sector in governance. Businesses were thinking bigger than merely seeking profits, and were also interfacing more with processes of governance and even adding to the development of the world's sustainable development goals.

In an apt summary, Mr Desmond Lee remarked that this century is not just the century of the city, but of the city and the corporation playing a part in not just profit-and-loss issues, but also in sustainability, liveability and pointing the way to the future.

Do they come as a standard package across all cities?

What factors play out in your cities?

What about the proliferation of data & information technology?

FIVE KEY INSIGHTS FROM THE SYMPOSIUM









Sustaining a city requires good planning, environmental management and the right priorities. The real issue may not be a lack of resources but poor management.

City planners have to plan for land to supply water and food to cities. Singapore was challenged as the city-state had no hinterland. Mr Peter Brabeck-Letmathe mentioned that some cities were depleting their aguifers to supply water to their city centres, and some were watering golf courses, for example. Out of necessity, Singapore had innovated through a higher recycling rate of used water. Another issue was also poorly developed infrastructure and supply chain systems, which could cause substantial food wastage on the journey from farm to table. Packaging was both a by-product and an opportunity. The advent of technology such as available data, online grocery shopping and shorter supply chains could help modify shopping behaviours and alleviate waste, with the help of doorstop deliveries and more accurate projections of needs.

Paradigm shifts are needed across the board.

There seemed to be a positive correlation between improved environmental quality and the prosperity of nations. Yet, there is a need to rethink the dominant, Western, rich country model of urbanisation which is being exported to poorer cities. It is too energy- and resource-intensive, hence, neither environmentally nor economically sustainable. City planning, usually taught as an art, is becoming increasingly scientific. Planners need to consider what types of outcomes they would like to enable, instead of control. Cars, just as harmful as cigarettes, are perceived as desirable status symbols. Arvind Satyam, who works on smart cities for Cisco in the USA, questioned if, perhaps, a city like Delhi with massive traffic congestion issues should re-channel efforts from tackling traffic to building a satellite city to ease the problem. San Francisco was cited as an example. The tech economy had made the city prosperous, and also raised the cost of living such that teachers, social workers and other service professionals were finding it tough to live in the city, possibly affecting the "soul" of the city.

You have to ensure an equilibrium between what you are saving and what you are creating and have a recycling system to diminish the impact of packaging. All packaging can be recycled.

- PETER BRABECK-LETMATHE Chairman, Nestlé

What's not discussed enough? Digital tech versus deep tech. We talked about digital, but what are the really deep technology changes that are happening? Artificial intelligence (AI) is going to rewrite the operating systems of our cities, and I have not found anyone talking about artificial intelligence and cities. But cities are not machines and we need to think about how we empower people in a post-Al society.

- STEPHEN YARWOOD Urban Futurist, City2050

FIVE KEY INSIGHTS FROM THE SYMPOSIUM

Cities are diverse and solutions need to come in all shapes and sizes.

Chris Isles, a planner from Brisbane, Australia, observed that a lot of smart city technology was being developed for big cities, and pointed out that there was a need to look at how this technology could be scaled down for cities with resident populations between 1 and 5 million. A lot of emphasis is placed on the megacities of the world with populations of more than 10 million. Yet, small cities with lesser populations collectively outnumber these megacities. Size aside, many urban environments are actually slums where technology also needs to be adapted. Michael Jansen reminded all of the need to figure out implementation from pilot to scale. This was spoken about both in the context of technology and city planning. As cities increasingly interfaced with one another, they could gravitate to solutions that destroy their identity and end up resembling each other through similar street plans, flavours or service delivery. This was described by Yao Chingyu, who works on international affairs for the Taipei city government in Taiwan, as a "me too" city. If an entire city was to become overly reliant on one type of industry, that might spell danger too. Cities need to keep their diversity, heritage and culture in mind.

If cities want to go further, they need to work together with businesses, and with other cities as partners.

The engagement between governments and corporations works best if they are institutionalised within a framework of collaboration. For a corporation to be a part of such a structure is a privilege, yet, with great power, comes great responsibility as corporations then have to be a part of the solution. There is a mutual dependency between governments and businesses. Businesses can get involved in projects that are both for the public good and commercially viable. At the same time, governments recognise that it is not sensible for the private sector to invest where it is impractical. Cities from different countries could have more in common with each other than with rural areas within their own countries, so it is important that regular exchanges take place between cities. It is also important to engage with data scientists and engineers in the business of cities so that cities can be more in the know, and not merely guessing.

5. Accountability and leadership rest with governments, but good decision-making needs strong partnerships.

Mr Brabeck-Letmathe opined that the prime responsibility of water and resource management needed to stay with governments and cities. Businesses will invest where they are allowed to and it is not always in the hands of businesses to choose where they can operate or, for example, change the farming policy of a country. No single party has all the capabilities in hand; money could be residing with the private sector, whereas the governments have high debts. Resource allocation across the world is determined by each individual country's practices. Such engagements can be enhanced if there is mutual trust, transparency and sharing of data between governments, citizens and businesses. Luis Bettencourt, a professor of complex systems at Santa Fe Institute, USA, said that development is not about meeting any specific standard, but was over and above all about the capacity to solve problems, and this is always an ongoing process.

There were interesting conversations around test beds and chartered cities and how to start small, a bit like what China did with special economic zones. They did not try to develop China all at once, but they started very specifically with, in the late 80s or 90s with five special economic zones... where specific test beds, concentrated activities can be analysed in smaller bite-size chunks and can be scaled.

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- MICHAEL JANSEN CEO. Citvzenith

Mayors want to take some leadership and commitment but they really need some leadership as well and it strikes me that organisations with strong footprints within city boundaries may be good matchmakers.

- SETH SCHULZ

Director of Research, Measurement & Planning, C40

Each and every one of our committees that looks at how the economy has changed and will change is co-chaired with the private sector. I've had the privilege of participating in some of these committees. And behind closed doors, the discussions are vibrant, the richness of the details that are discussed... you see the role the private sector plays in warning us and telling us the road ahead is critical. And then the government needs to make sure we play our part.

- DESMOND LEE

Senior Minister of State for National Development, Singapore

When the network was launched in 2014, the WCS Young Leaders (WCSYL) who attended had suggested then that the WCSYL network could be a form of "Google of cities", offering advice and networking opportunities for members to enhance the liveability of cities. An open mic session was launched for the Young Leaders this year to share some of their interesting projects and make calls for collaborations for future projects.



SCOTT DUNN Vice President Strategy & Growth, SEA, AECOM



STEPHEN YARWOOD Urban Futurist, City2050



HAZEM GALAL Cities and Local Government Sector Global Leader. **PricewaterhouseCoopers**

Hazem Galal, a partner at PwC in Qatar, and Stephen Yarwood, former mayor of Adelaide, opened the session by sharing about how they collaborated on a project in the Middle East. Hazem observed a transformation in the region. He collaborated with Stephen on a diagnostics project in Yanbu, Medina, where a handful of non Muslims had entered. The conversation began when they met at the WCS Young Leaders Symposium in 2015 which was held in New York City.

Scott Dunn, who works on urban landscapes globally for AECOM, shared a recent project he had been involved with in Kuala Lumpur, Malaysia, where water was used as a catalyst for urban regeneration. Riverbanks were beautified, private development opportunities created on the riverfront and streets enhanced to be more walkable. These improvements strengthened connections in public transport and enlivened public spaces.

Pages 8-10 are the calls for collaborations that were broadcast at the open mic session at this year's Symposium for interest.



RAPHAEL SCHOENTGEN **ENGIE, France: Energy Efficiency Projects** with City Leaders

Raphael shared a project he had embarked on with the National University of Singapore, in which he asked students to play games such as taking the stairs instead of elevators, and using fans instead of air-conditioning, to see how much energy they would save. This resulted in a 10 per cent energy reduction, and these findings were shared with the university management to enable better decision-making and energy use practices on campus. The future will be connected by objects drawing data from sensors. Raphael's company has invested in a digital and network company and he invites ideas and discussions with city leaders on how to reduce energy consumption and increase efficiency.



TAN SZUE HANN Surbana Jurong, Singapore: **Environmental and Food Sustainability**

As an eco-architect, Szue Hann is interested in making buildings and cities more sustainable and energy-efficient, by implementing new and smart technologies in good passive design and energy management. He wants to look at food resilience as his next interest - how does a first world economy like Singapore sustain its food production and supply, or even produce and package for a third world economy? How can these be implemented in Singapore's built environment?



ARVIND SATYAM Cisco, USA: How to Manage Data Better, and Give Your **Citizens What They Want?**

Smart cities are about connecting technology to improve the lives of citizens and help leaders manage their cities better, says Arvind. Cisco's approach to smart cities is to securely connect any sensor and application across a common network and platform to improve the efficiency of city operations and enhancing the lives of citizens. While smart cities have been around for some time, the adoption rate of projects has lagged. New approaches are needed, including the involvement of the finance world. In his experience, regulation and visionary leadership are the keys to success in smart city projects.



YOUNUS AL NASSER **Smart Dubai Office, UAE:** Pioneering a New Data Economy in Dubai

Data can help Dubai become the smartest and happiest city on earth, says Younus. Collaborations are invited for a feasibility study to simulate a city-wide data exchange for public and private sector data. The results could be presented in the form of a simulated model of a data exchange and presented to a broad international audience of industry specialists, city leaders, city data officers, data scientists and public innovators. Suggested areas for investigation are:

- 1. How to determine the commercial value of data sets (possible metrics include the readiness and richness of data as defined by the Dubai Data Framework).
- 2. How to ensure the protection of privacy and security (individual, organisation and state) during the exchange of data.
- 3. Governance structures to regulate the exchange of data with commercial value.



SANJAY SRIDHAR C40 Cities Climate Leadership Group, India: How to Manage Data in a Diverse **Governance Structure**

As the Regional Director for South and West Asia in the global C40 Cities network, Sanjay sees varying levels of data availability and transparency across cities. He is issuing a collaborative call to learn from various regions about their approaches to decision-making within diverse governance systems. He hopes to identify a group of experts from across domains who can collectively share best practices and lessons learnt of how they went about influencing the decision-making that re-orients cities on a path that is environmentally sustainable, economically viable and socially equitable. The call to collaborate should focus on actions that cities from regions across the world have taken to overcome barriers to climate change mitigation.



CHRIS ISLES Place Design Group, Australia: How do we Scale Down the Smart City Learnings and Investments to Cities under 10,000 people?

Based in Brisbane, Chris faces an interesting challenge of adapting smart city technologies and strategies for smaller cities and towns. He says: "How do we take smart city learning and investments possible in large-scale cities down to cities of 5.000. 10.000 or a few million?" He is most interested in this discussion around smart city scaling.







DORJEE SUN Carbon Conservation, Singapore: Trillions of Steps, Billions in Healthcare Savings - World Cities Steps Challenge?

Dorjee is passionate about climate change and walkability. Intrigued by how Singapore was ranked the no. 1 healthiest country in the world according to Bloomberg since 2012, he took notice of Singapore's Health Promotion Board's National Steps Challenge in which 150,000 Singaporeans have clocked 56 billion steps since November 2015. He is looking for partners in cities across the globe to organise a global Steps City Challenge, aiming for trillions of steps and billions of dollars of savings in health cost.

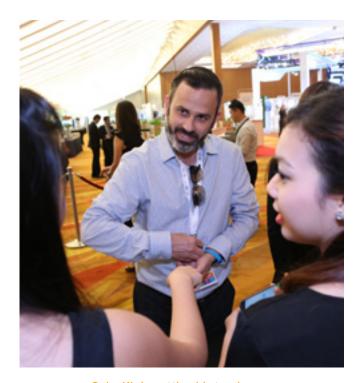
DR WEI YANG Wei Yang & Partners, UK: A Proposed Publication Discussing the **Balancing of Local and Global Agendas**

Based in London, and observing the ramifications of the recent Brexit vote, Dr Yang invited young leaders to share their views about where globalisation is headed, and how it can be balanced with localisation and the aspirations of locals who live in global cities like London. She is a member of the Royal Town Planning Institute, and these inputs could result in a publication.

SAURAV BHATTACHARYA Quantum Inventions, Singapore: Offering Innovations in Connected **Automotive Navigation and Telematics**

Saurav wants to realise a vision in which the rich ride public transportation, and the poor do not view the attainment of a car as a status symbol. There are impediments, still, such as availability, convenience, weather, timeliness and social stigma. His company specialises in innovation for connected automotive navigation and telematics platforms in Southeast Asia. He is looking for collaborations in contributing QI's technology and platforms, or working with complementary service providers.

WORLD CITIES STEPS CHALLENGE



Gabe Klein putting his tracker on



Tom Verbelen registering for his tracker and eventually clocked the highest number of steps!



Young Leaders showing off their trackers

At WCS 2016, based on the idea from WCS Young Leader Dorjee Sun, the Health Promotion Board of Singapore was approached to collaborate on the launch of World Cities Steps Challenge. Mayors and Young Leaders at WCS 2016 received health trackers to put on during the event. At the end of the Challenge, it was WCS Young Leader Tom Verbelen, Managing Director of Government Affairs from Antwerp, Belgium, who emerged as the champion, after having clocked a total of 68,105 steps!

WE THANK EVERYONE FOR THEIR VALUABLE CONTRIBUTION TO THE SUCCESS OF THE WORLD CITIES SUMMIT YOUNG LEADERS SYMPOSIUM 2016

Guillaume Barrazone

Mayor Geneva

Michael Berkowitz

President 100 Resilient Cities

Luis Bettencourt

Professor Santa Fe Institute

Saurav Bhattacharya

CEO Quantum Inventions

Professor Asit K. Biswas

Distinguished Visiting Professor Lee Kuan Yew School of Public Policy Founder Third World Centre for Water Management

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Yap Kwong Weng

CFO Leap Group

Stephen Yarwood

Urban Futurist City2050



The biennial World Cities Summit is an exclusive platform for government leaders and industry experts to address liveable and sustainable city challenges, share integrated urban solutions and forge new partnerships. Jointly organised by Singapore's Centre for Liveable Cities, and the Urban Redevelopment Authority, key highlights of the summit include the World Cities Summit Mayors Forum, the Lee Kuan Yew World City Prize, and the World Cities Summit Young Leaders Symposium.

The next edition of the World Cities Summit Mayors Forum and Young Leaders Symposium will be held from 25-28 May 2017 in Suzhou city, Jiangsu Province, China.

For more information, please visit: www.worldcitiessummit.com.sg

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