REPORT 3
(1215/52/IM)

REPORT BACK ON FUTUREGOV SUMMIT ATTENDANCE - PUTRAJAYA, MALAYSIA, 12-14 OCTOBER 2011

1. Purpose of Report

To report back on the Mayor's attendance at the FutureGov Summit in Putrajaya, Malaysia.

2. Recommendations

It is recommended that the Committee:

1. Receive the information.

3. Background

Mayor Wade-Brown was invited by the organisers to attend this invitation-only summit in October 2011 at their cost. The FutureGov Summit is an annual three-day executive summit. This was the seventh FutureGov Summit. Hosted by FutureGov magazine, and backed by FutureGov Research, the Summit brings together elected politicians and senior officials from across the Asia Pacific region as well as guest speakers from North America and Europe for intensive knowledge exchange and debate. Over 135 organisations from thirty countries, including Australia, China, the USA and India were represented. The Summit was held in Putrajaya – the administrative capital city of Malaysia.

The Mayor took brochures and presentations on USB about Wellington and distributed them amongst the participants but the key focus was to learn about developments in ICT that would be useful for Council and for Wellington.

4. Discussion

4.1 Speakers

Keynote speakers for the 2011 Summit included:

Tam Sri Mohd Sidek Hassan, Chief Secretary to the Government, Malaysia
Inspirational address about the opportunities ICT offers to raise people from poverty without damaging our planet's environment further. It's seen as a priority to reduce poverty, increase education and promote economic independence.

Hjh Siti Mariam, Deputy Permanent Secretary, Admin & Finance, Ministry of Health, Brunei

Mr Awadesh Kumar Pandey, Asst Director General, Unique ID Authority of India

Cy Smith, GIS Officer, Dept of Admin Services State of Oregon, USA

Adaire Fox-Martin, SAP Asia Pacific

4.2 Themes

Public sector modernisation

Cloud computing delivers applications via the internet, which are accessed from web browsers and desktop and mobile apps, while the main software and data are stored on servers at a remote location. Strong growth in mobile connectivity, geospatial coordinates easily captured on smartphones, cheaper storage of huge amounts f data are changing the landscape for private and public sectors and rapidly raising citizen/ client/ customer expectations. Mexico City, the third largest in the world, has moved most of its applications to the cloud and is finding the time to delivery of systems is very fast. They also have 170km of fibre, and claim a big commitment to social equity.

Citizen engagement

The explosion of available data has become a two-way process.
An obvious starting point is the reporting of problems – example apps include Fix My Street. However the reporting is not useful if the complaint or suggestion then appears to go into a black hole. Tracking progress is vital. A highly engaged public feeding in geospatial data is great but it must be integrated into existing systems. There are opportunities to tackle vandalism like graffiti with pictures and coordinates. With geospatial analysis of graffiti complaints, Denver Colorado determined that a majority was in one area. In LA 80% was within a mile of a freeway. Our current Fixit system is not able to take coordinates or pictures which is limiting.

Warning systems and emergency support

Local officials can use GIS-tagged data to warn people in a particular area of a dangerous incident, while those further away could receive a different message. I was able to share a couple of New Zealand examples – the use of Facebook by the Student Army after the Christchurch earthquake and the local example - a Wellington company, Abletech in NZ already have an iPhone app to locate the nearest defibrillator so while someone provides immediate CPR, and rings 111, available lifesaving technology can be employed.

Collaboration across organisations

The need for interoperability and standards was emphasised – between departments as much as between organisations and countries. Cloud computing offers sharing of data between organisations - for example, geographic data between Councils and Emergency services. Organisations must decide how much data to share with each other and the public, for example we share boundary information via the web but not overdue rates . Why should citizens know the structure of government in order to access services? A simplistic "centralize and save" model may not be the best approach. The Ministry of Defence has very different security requirements to a library service. Again the emphasis is on sharing data that is appropriate to share, not creating a monolithic organisation. A network of organisations is nimbler than one centralised agency. Even within organisations, it's hard to say where the centre is.

Politics, social media and technology

Rules of engagement in e-engagement should be similar to other methods – honesty, respectfulness, timeliness. Separate rules for e-mails compared to letters or written papers are not necessary helpful. Hurdles in implementation of methods that will deliver to the citizen and also reduce transaction costs still need investment up front and often politicians (local, state or national) don't understand technology.

Spatial data

Almost all data that is relevant to local government has a spatial component – from traffic generators to boundaries, bird corridors to sewer locations, sea level storm surge vulnerability to building "high wind" zones. Adding data from different agencies such as central government school deciles, ethnic populations, iwi boundaries, social spending, deprivation, child poverty, biodiversity hot spots, earthquake liquefaction zones and so forth can all be displayed at different scales. Rather than one agency collecting all the data to share, to have the same standards in coordinate use, symbols are important. Information on how recent the data is, who collected it and who to contact if it's wrong are also important. Agencies need to realise that their data is not perfect and to share it with the intention of the public improving the information . In

some cases, there may need to be clear waivers about whether the data is up to date or to what level of accuracy.

Use of spatial modelling for future planning is definitely advantageous – we have done some work for example with the location and walkability of libraries in the community. It would be very useful to be able to overlay this data on the District Plan too. It is not necessary to amalgamate into one entity to have a regional spatial plan given that data such as crime and income, school location and employment statistics are not owned by local government. After discussing with participants it became clear that "a spatial plan" means many different things to different people. We need to specify what data we need to plan future infrastructure for social economic and environmental wellbeing.

Leadership from "developing countries"

I saw a number of cost-effective solutions from countries with low average per capita income. The reduction of cost per transaction and the issues of remote access have generated innovative approaches. They also often have the advantage of no legacy systems to replace or integrate with.

4.3 Mobile workforces

There are now more than a billion worldwide in the mobile workforce, including building inspectors, police, nurses and entrepreneurs. Consumer adoption of smartphones plus new technology plus cloud offers opportunities to drive innovation and integration. The lines between business and personal communications are blurring. This is true regarding time, provision and use of smartphones for example. It raises issues of security and privacy. The average person in the UK now has four computing devices, in the US, more than six. Do companies provide separate devices or encourage workers to choose their own and reimburse them from work costs?

The currency of data (whether it's up to date) and whether it should be held on the website or on the mobile device are real issues – possibly solved by ensuring the mobile portal is designed so the data is always up to date.
Patient monitoring in some hospitals has been pushed to blackberry phones so nurses are not tied to the monitors. The UK Police saved $112 million by being able to instantly access licensing and other data while out on patrol.
Glasgow City Council uses mobile phone access for care change requests.
Security systems are increasingly based on identifying the user rather than the device.

4.4 Government services online

Many overseas Government's have far more services available online than in New Zealand. Arkansas.gov is a great example of many online services and ability to apply and pay for a range of services e.g. a barber license. Note that this is a central point for all sorts of different government services from diverse agencies – Arkansas Fish and Game, Arkansas Health Department, Office of

Secretary of State, Carroll County, Arkansas Judiciary and many more. This reinforces the point that citizens don't necessarily know or care what level or department of government provides a service – they just want to access it. A Wellington portal for Wellington citizens could be interesting. There are opportunities to share IT services across all NZ Councils, not just region by region or by large amalgamations.

4.5 Mobile identification and currency

If Mrs X asks for services, is it really Mrs X? As mobile banking, working and cloud applications increase, it's essential to be able to identify the user. There are also issues of whether someone is compelled to identify themselves under duress. We heard from Mr Pandey, the Asst. Director General of the Unique ID Authority of India. His agency is separate from any agencies handling tax or enforcement or benefits. It is based on a combination of iris and fingerprints and purely assesses whether the ID offered matches the biometrics, returning a yes/no answer. This means that there's no reliance on smart cards which could be stolen or duplicated. It is optional not compulsory but is very attractive where mobile banking is the first way of retaining control over earnings. The saddest thing was hearing that 1% of the population have worn-out fingerprints, so it doesn't work for everyone. The cost of a mobile transaction is a tenth of the cost of an ATM transaction so when sums are small, it's particularly useful. Mobiles are also penetrating rural poverty-stricken areas in a way that landlines were never going to. The potential for empowerment of rural women is considerable and the technology complements micro-credit schemes. The scale for India is of course astounding – with a population of around 1.2 billion, they have "only" created unique IDs for 100 million so far.

Other sessions highlighted a rapid move from paper currency to digital currency. It's more available whether it's funds on deposit or a line of credit; it's less subject to theft from "under the mattress" and can reduce fraud. Digital currency also enables more taxable income or reducing lost revenue. It also really provides opportunities for financial transactions tax – at a national or global level.

4.6 Security and privacy

Sharing of data across agencies, personal data from social media, data mining, physical security of devices are already concerns. One recommendation would be to ensure that a citizen or company can always ask to see what data a held about them – the response might well differ from country to country.

4.7 Digital inclusion

Access to ICT, understanding the ramifications of sharing data, literacy and numeracy are all bound up in the ICT evolution the world's seeing. Ten years ago access to mobile telephones, email or cameras was essential in even Western countries.

In Romania, central government mandated local government to provide Internet access points – and funded them for three years. Education in Sri Lanka is free – free meals, materials and lunches. Not printing textbooks will make it cheaper and more up to date plus all the family will be able to access mobile services.

There are still real issues with accessibility – visual impairment for example. However, as services are more standardised, accessibility could be more effectively delivered. In the Philippines, e-payment is the method of choice and is easier than physically getting to a bank. Deaf people have access to emergency warnings by text in Singapore.
Mobile banking liberates people from the local moneylender. Mobile e-payments mean people can manage their own money. If we seek bigger objectives of financial inclusion and wellbeing, if there is a respected village elder or community leader, ensuring their understanding and support is vital

We were offered the statistic that two thirds of world's population now has mobile access. Mobile phone penetration in Samoa is 200%. For every 10 additional phones in Africa per 100 people, GDP rises between 0.6 and 1.2% according to the World Bank.

4.8 Big data

New storage devices mean that large amounts of data can be kept and searched or analysed. There is always the issue whether we are just answering the wrong questions faster! With the increasing computing power, new ways of modelling can be devised, rather than being based on simple land use and historic data to predict and provide. An agent-based model simulates the actions and interactions of individuals or groups with a view to assessing their effects on the system as a whole. It combines elements of game theory, complex systems, emergence, computational sociology, multi-agent systems, and evolutionary programming.

The models simulate the simultaneous operations and interactions of multiple agents, in an attempt to re-create and predict the appearance of complex phenomena. The process is one of emergence from the lower (micro) level of systems to a higher (macro) level. As such, a key notion is that simple behavioral rules generate complex behavior.

The ability to store huge amounts of data may mean that searches in situ are more cost effective than filing and archiving and agreeing on metadata. This could mean items are rarely lost or deleted.

4.9 Innovative organisation of Summit

While there were some sessions where a speaker addressed the whole group, there were a number of innovative ways to encourage participation and conversation. Three examples that could be useful were the Interactive

Discussion Table (IDT), the contacts “passport” and the use of a handheld remote.

The IDT system was based on participants being assigned to small groups of a dozen or so. The groups sat at a table together, a brief introduction of the topic was made and we were encouraged to ask questions and ask each other about different experiences and use of technologies. The groups changed each day so it was a great opportunity to meet many new people and hear different perspectives – and of course, promote Wellington.

The passport system was a little booklet (paper!) that if you collected fifty contacts details and signatures you went in for the prize of an iPad. It really encouraged participants to move beyond the groups they already knew.

Finally we all had a handheld remote to rate sessions immediately, to comment on which issue was most important and to vote on alternatives. Tweeting was also actively encouraged.

4.10 Awards ceremony and prizes

A great range of projects were put forward for awards and more from New Zealand, especially Wellington, should be encouraged to enter. When Dale Stephens from Ministry of Fisheries received the winning award for Project IKA it was a pleasure to follow his mihi with a waiata from the NZ contingent. That was a memorable moment for participants at the conference and people were really interested in New Zealand’s situation regarding tangata whenua. Project IKA gives fishermen guidelines are what fishes can be caught, and at what sizes so that fish stock remains sustainable and fishermen do not break fishing legislations and includes a phone app.
The winners of the FutureGov awards ranged from the high-tech Seoul Metropolitan Government GIS portal for citizens to the Hong Kong Police Force unified communications to the Housing Development Board of Singapore.

4.11 Observations of Malaysia

Malaysia became an independent country with its current borders in 1957. Three ethnic groups make up the country: the Malays, the Chinese and the Indians. These three culturally distinct groups seem to live side by side harmoniously, each speaking their own language and practising their own religions. Malaysians I met were very proud of this peaceful coexistence. Limited time and the international nature of the summit offered little opportunity to test this perception.

The people we saw looked healthy and the housing we passed all seemed in reasonable order. There is great pride that Malaysia’s economy has moved from being at the whim of international commodity prices to more economically valuable products. For example, instead of exporting tin, there’s a big focus on high quality pewter goods, instead of exporting cocoa beans, quality chocolate is made. The country has also considerable income from oil and gas deposits.

The infrastructure worked efficiently. Kuala Lumpur was an attractive airport without queues or crowds. One evening we took the train into KL and it was fast and very cheap.

As a planned city, Putrajaya had far more capacity on its roads, rail, housing and open space than is was utilised as yet, however the conference facilities were good and some of the city infrastructure was hugely impressive in its design and scale.

4.12 Materials provided

Several of these items have already been shared with staff and will be available from the Council Corporate Library.
Book - GIS for Decision Support and Public Policy-Making
Booklets – Improving Citizen Engagement, The citizen as sensor

Follow up
Meetings with staff on matters of detail have happened. I've already been able to refer to some of the issues in presentations to conferences (e.g. Surveying and Spatial Sciences Institute). John Hamilton, Director of the Ministry of Civil Defence and Emergency Management, and Bruce Pepperell, Manager of the Regional CDEM Group, have joined WCC staff and visiting GIS experts to follow up on shared data for emergency management.

4.13 Consultation and Engagement

Attending the conference was a great opportunity to engage with knowledge experts from a range of countries. ICT offers opportunities to enhance citizen engagement, community involvement and partnership as discussed above.

4.14 Financial Considerations

FutureGov paid for the Mayor's return fare, accommodation and all meals.

4.15 Climate Change Impacts and Considerations

Council purchases carbon offsets against travel. The use of ICT has the potential to reduce some travel. Energy generation for data centres is significant and NZ offers considerable advantages from our high renewables for companies locating their data centres here.

4.16 Long-Term Plan Considerations

This conference confirmed the importance of connectedness in our future vision as being a foundation for government becoming more people-centred. It also validated our focus on using technology for openness, engagement and transparency as well as driving down organisational transaction costs.

Implementation of organisational improvements, Smart Capital and Digital Strategy initiatives will be via the current Long Term Plan process.

5. Conclusion

The conference was well worth attending and the Mayor will keep in touch with FutureGov and contacts established. The summit presented a valuable opportunity to network with other organisations and individuals working in this area. The importance of these relationships to New Zealand's overall standing at an international level was reinforced, and a range of new ideas gleaned on how to generate continuous improvement in our internal and external systems and the communication between citizens and their Council and Council and other organisations. Becoming a truly Smart Capital where we make use of these opportunities will require investment but has the opportunity to connect us far better locally and globally.

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Supporting Information

1) Strategic Fit / Strategic Outcome
Attendance at the Future Gov Summit was consistent with Council Policy, and in particular Wellington 2040, the Economic Development Strategy and Digital Strategy.

2) LTCCP/Annual Plan reference and long term financial impact
Summit attendance had no long term financial impact. All costs associated with the Mayor's attendance were met by the organisers.

3) Treaty of Waitangi considerations
Attendance at the Summit had no Treaty of Waitangi considerations.

4) Decision-Making
Summit attendance did not involve any significant decisions.

5) Consultation
a)General Consultation
Not required.

b) Consultation with Maori
Not Required.

6) Legal Implications
There were no legal implications of attending the Summit.

7) Consistency with existing policy
Attendance at the Summit was consistent with Council Policy.