



The seaside council replacing an infatuation for technology in favour of a pragmatic approach to engage residents, tourists and beachgoers with geo-innovation.

Digital disruption is often more about disruption than actual delivery. New apps may be well received and add convenience, however all too often core operations gain little from digital investments.

Not so at Waverley Council on Sydney's beautiful eastern beaches, the local government for the iconic Bondi Beach. Two years ago, Waverley made a strategic decision to name its technology operations 'Digital Waverley' and appoint personnel with a pragmatic, measurable and deliverable focus, rather than an infatuation with new technologies.

Key to Digital Waverley's mandate is the backing Waverley's Mayor, Sally Betts and Waverley's councillors, who contend that rate payers expect the same if not more from their local government than that offered by commercial interests.

"Businesses talk about customer experience but at Waverley, we believe our community—ratepayers, local business and visitors—should all enjoy a positive experience when using council provided facilities, seeking information or advice, planning or building and transacting payments for services," said Mayor Sally Betts.

"Digital Waverley was instituted to deliver such positive experiences using technology to accelerate delivery, share

information when users want it and where they need it," Betts explained. "Digital technologies can play a critical role in these areas, as well as alleviating staff frustrations – as all employees need access to real time accurate information to perform their jobs."

Wi-Fi on the beach

Key to citizen centric digital capabilities, is the underlying infrastructure needed to support it. For example, Waverley recently installed free public Wi-Fi across Bondi,

Bronte and Tamarama beach as well as two of their major buildings – Margaret Whitlam Recreation Centre and Waverley Library. It has enjoyed a spectacular uptake with over 175,000 visitors and locals (450,000 sessions) logging in over the past 12 months. While the free service may seem simple, a tremendous amount of work was required behind the scenes to deliver this high quality service.

Given the demand for 24/7 functionality, Waverley Council has deployed its new technologies in AWS

(Amazon Web Services), a mission critical cloud infrastructure that harnesses capacity at a secure data centre in Sydney.

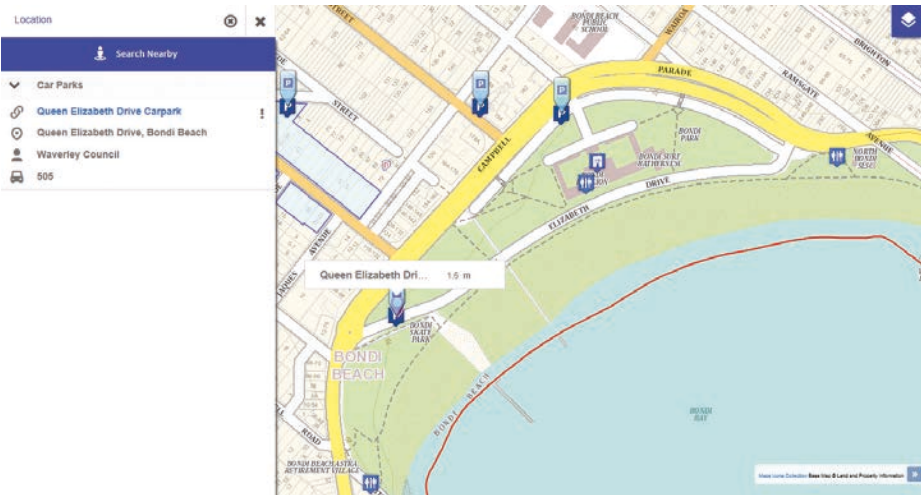
Besides physical infrastructure, the council's GIS team has focused on creating and maintaining a highly accurate spatial mapping system with the ability to serve web-maps in relevant formats to meet specific application and user needs.

"Council uses spatial information to provide tailored location specific information to the public," said David Edwards, Waverley Council's eSolutions Manager.

This includes the launch last year of the 'Development Enquirer', an online interactive tool for residents to evaluate the scope of development allowed on their nominated property.

"This is just one of the many ePlanning projects the Council has implemented, utilising technology to offer streamlined solutions for planning services," Edwards added.

Waverley Council's Discover portal (based on Pitney Bowes Spectrum Spatial Analyst mapping application) provides spatial information to field staff and the community via a user friendly, interactive map that is compatible on all mobile devices. This portal allows residents and visitors to search for Council information regarding its facilities and services, such as waste collection, at any time of day from



Waverley Council's Discover portal provides spatial information to field staff and the community, including parking facilities as shown here.

any location. The new application has the potential to reduce the number of enquiries to the council's customer service centre.

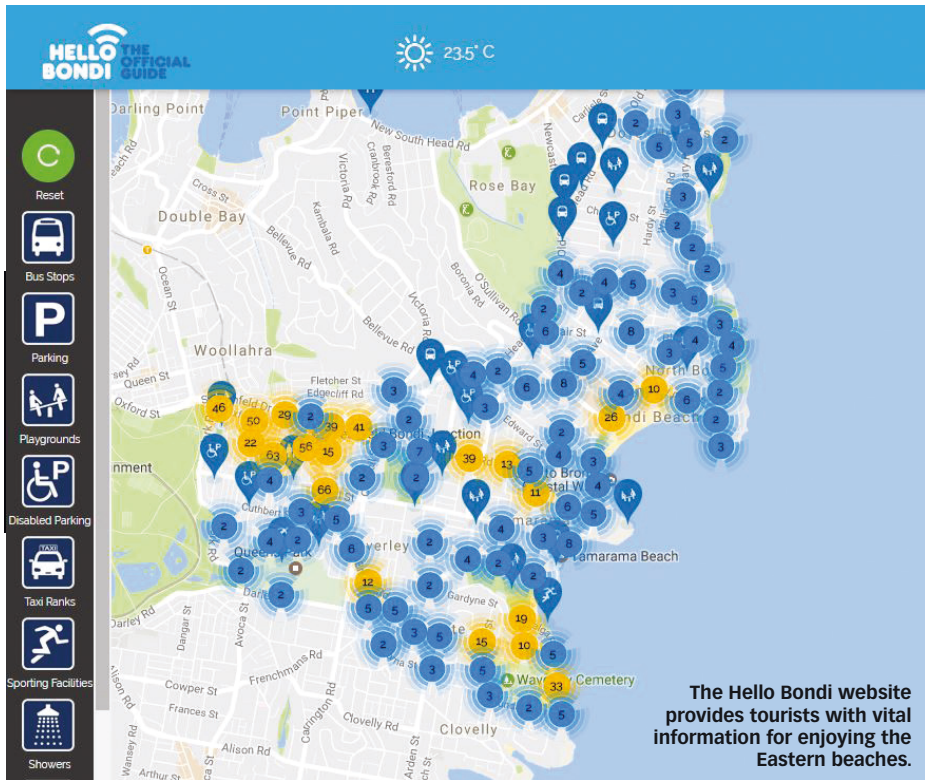
Spatial information is also being utilised as part of a new website called 'Hello Bondi' which provides visitors and tourists with the vital information and links to services they require when visiting the Eastern Suburbs.

The 'Hello Bondi' website (www.hellobondi.com.au) uses Council's spatial information to display things like bus stops, parking locations, playgrounds, taxi

ranks, toilets, accommodation, food shops, shopping and places of interest. The map layers are aimed at tourists visiting the eastern beaches or Bondi Junction.

Out of the shadows

In the background, much more is happening spatially that perhaps goes unseen. In 2014, Waverley Council was awarded a commendation in the NSW Planning Institute of Australia awards for their use of innovative 3D modelling technology for development planning.



The Hello Bondi website provides tourists with vital information for enjoying the Eastern beaches.



Waverley's 3D Model can be used for view analysis and contextual analysis and, as shown here at Bondi Junction, shadow casting.

Waverley's 3D visualisation technology was purchased using a grant provided by the Department of Planning and Infrastructure to model the development potential of Bondi Junction City Centre. All of the buildings in Bondi Junction Centre were individually modelled and digitally represented in an interactive 3D environment using K2VI software. Each building was individually modelled using a combination of LiDAR data with aerial imagery pictometry.

The model allows planning staff to insert proposed developments or controls into the existing site context. These test models can be in the form of detailed buildings with articulated facades and accurate colouring to simple block forms that represent a concept for a development. The software allows the user to perform a series of analysis including shadow casting, view analysis and contextual analysis.

The 3D model has since been extended to cover the whole Bondi Beach area, with other areas being built up over time with the requirement for applicants to submit individual 3D building models as part of any Development Application.

Spatially-enabled everything

Another digital initiative that depends on geo-enabling technology is Waverley's soon to be released Cemetery app, which will allow descendants, relatives and friends to locate their ancestors' final resting places at Waverley and South Head Cemeteries.

The Cemetery App utilises Google Maps to display the location of the deceased burial plot, and satellite positioning on mobile devices to display user's current location.

Late in 2016, Waverley Council installed Australia's second largest fleet of solar powered smart bins in Bondi Beach and Bondi Junction. The bins use an internal compactor power by solar to squash the waste, inbuilt sensors and Wi-Fi to communicate via text and email to staff when the bins are full.

The use of solar power smart technology will mean the bins can hold up to five times the amount of waste as a normal bin, ensuring the area is cleaner and more attractive to residents and tourists.

Other improvements include trialling digital solutions such as a self-serve rates

payment kiosk at Council's Customer Service Centre in Bondi Junction.

Digital Waverley's Executive Manager, Kevin Trinh, has a clear vision as to what Waverley Council can deliver. "My mission is to identify and deliver digital solutions that have a real and positive impact on the day to day life of Waverley residents, businesses, visitors and our field staff."

Waverley's futuristic yet pragmatic approach provides a solid basis for it to engage with the Federal Government's Smart Cities program and potentially gain a significant share of the \$50 million dollar for dollar grant offered to public sector agencies.

"Whether we win grant monies or not," explains Council's Economic Development Manager, John Coudounaris, "Waverley is delivering digital disruption benefits and developing the skills and know-how needed to realise its full potential in the future"

Anthony Wallace is the editor of Position Magazine and Spatial Source, and can occasionally be spotted swimming at Bondi. ■

A proposed development in Waverley's 3D Model. Development applications in Waverley must now be accompanied by 3D building models, which will be incorporated into the council's model.

