MOBILITY AND YOU: SO APPY TOGETHER

A GTR INDUSTRY ROUNDTABLE

IF ASKED TO NAME ONE TREND RESHAPING THE WAY GOVERNMENT AGENCIES THINK ABOUT THEIR EMPLOYEES AND CITIZENS, YOU'D BE HARD PRESSED TO GO PAST MOBILITY. WITH AUSTRALIANS EXPECTING TO ACCESS GOVERNMENT USING THE SMARTPHONE IN THEIR HAND, THIS ONCE-ESOTERIC CAPABILITY HAS RAPIDLY BECOME THE DRIVING FORCE FOR THE REINVENTION OF GOVERNMENT.

Despite its appeal, however, mobility continues to throw up new obstacles for change-minded government bodies. The complexities of device management and user support, as well as the security and governance risks introduced by bring your own device (BYOD) programs, and the sheer expense and effort of diving into mobile application development have all crowded the already-busy plates of government CIOs tied up in the throes of corporate reinvention.

Easy or not, however, the shift to mobility is on – so it's important to be on top of what it means for your organisation. Thankfully, vendors and consultants are starting to rack up the mobility success stories, which means it is getting easier and easier to make the shift.

For this issue's roundtable, we spoke with three mobility-industry leaders – enterprise mobility platform vendor BlinkMobile Interactive director Darren Besgrove; Tait Communications global solutions manager Bruce Mazza and Tait mobility partner Mobile Mentor CEO Denis O'Shea; and Telstra's general manager for enterprise mobility solutions, Amardeep Toor – about the evolution of corporate mobility and its disruptive implications for all levels of government.

GTR: WHAT ARE YOUR GOVERNMENT CUSTOMERS ASKING ABOUT MOBILITY AND BYOD?

MAZZA: Many organisations are still early on in that journey, and they're ranging from totally supporting BYOD to rejecting it. There is a lot of thinking going on and a lot of clear investment in trying to understand what the decision should be at this moment.

TOOR: BYOD is absolutely the buzzword today. A lot of government customers are asking for it, but right now many of them are not very clear on what's the driver for it. End users are pushing them, saying "I've got my own device that's better than what you're offering" – but a lot of customers aren't clear on the objective and think it's about lowering costs.

Others have moved away from that thinking, because it's not just about lowering costs; it's more about keeping your employees happy, and giving them tools they want to use – and being able to leverage that to improve productivity, and to drive extra benefits that way rather than just being purely cost driven. They're starting to think that they need a clear strategy that may start with HR, and setting responsibilities around data, usage policy and so on.

O'SHEA: The BYOD paradigm is particularly interesting in the emergency communications space: staff still need to have their critical communications, and when the organisations are thinking about where to spend money they're considering whether to buy 1,000 Apple devices instead. But for as long as they don't make a decision, they're in a situation where by default staff are using some sort of personal mobile to do communications on the job. The question is whether they admit that it's happening and manage it, or whether they just turn a blind eye to it.

GTR: HOW CAN GOVERNMENT ORGANISATIONS MANAGE BYOD'S RISK, PARTICULARLY IN THE CONTEXT OF THEIR STRICT GOVERNANCE REQUIREMENTS?

O'SHEA: They need to take a deliberate approach to BYOD. We've used a framework in a number of organisations that includes policy, security, support, spend and governance. If an organisation goes through those building blocks, and puts them in place in the right order, you'll get a good result from a BYOD program. But it has to happen in a structured fashion and be

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a deliberate, conscious thing rather than just reacting to demand or responding to situations in an ad hoc way.

GTR: HOW WELL ARE MOBILE DEVICE MANAGEMENT (MDM) PLATFORMS HELPING MANAGE THE INFLUX OF MOBILE DEVICES?

O'SHEA: MDM is absolutely necessary, and most organisations are making decisions around their first, second or third investment in MDM. Those who are serious about BYOD are using MDM as a way of enabling it to happen, and putting in at least two of the layers of security that are required.

Depending on which MDM platform you choose, you can go far – but potentially not all the way. We see MDM as being an enabling technology that can assist with BYOD, but there are other issues. For example, some of the intangibles around policy, defining the rules of engagement between the organisation and employee who's bringing in devices, and protecting employee's privacy to make sure MDM is not going too far.

The other area that really cannot be addressed with MDM is cost control. Particularly with new services, they can make the old copper connection look a bit slow, and [4G] just facilitates way more use. People are not aware of the amount of traffic that's flowing, which just makes it easier for us to spend a lot of money, very quickly.

TOOR: We are offering an MDM capability as part of the overall mobile proposition. We have partnered with [MDM vendor] Airwatch, and have hosted the solution in our infrastructure

so we can offer it as a service, customers pay a monthly fee based on the number of devices they're managing. While some customers are deploying MDM solutions behind their firewalls, the SaaS model is getting increasingly popular as customers need not invest upfront in infrastructure and software licenses.

GTR: HOW WELL DOES MDM HELP ORGANISATIONS CONTROL WHICH APPS THEIR EMPLOYEES LOAD AND USE?

O'SHEA: The tools are getting better at managing the inventory of apps on a device. Most have app wrapping capabilities, which let you wrap a few lines of code around a standard commercially available app before you deploy it. That will allow you to control how it behaves and interacts with other apps, whether you can open an attachment, and so on. Those security controls are now quite configurable using the app wrapper technology, and the ability to wrap apps and securely deploy them as part of a profile, is a very valuable layer of security in the stack.

TOOR: Telstra recently made an $18.3m investment in [US mobile apps management startup] Kony, which will help us put out solutions around applications management and applications development. This will allow organisations to distribute apps to their employees and also enforce security and access policies across those apps. For example, a user may be accessing a corporate SharePoint server, and the app will stop you copying data into another external storage environment. When

deployed in conjunction with MDM, this provides an extra level of security and comfort.

GTR: GIVEN THE SPREAD OF BYOD, DO ORGANISATIONS STILL NEED TO MAKE DECISIONS ABOUT ACCEPTABLE MOBILE DEVICES?

BESGROVE: We're finding that whole device-led conversation is not as common anymore. Devices are part of the strategy but they're not the entire strategy, and we like to detune it and keep things in perspective. For us and all of our 40 government clients the process begins with "what's now possible?" or "what business process can be transformed on the back of this disruptive technology?" Clearly identifying desired outcomes and working through a business case naturally takes in all the factors you need to deal with.

TOOR: We're finding that organisations are thinking more about publishing a list of devices that are allowed to connect, rather than having a pure "bring any type of device" policy that is almost impossible to manage. These devices have to meet minimum criteria to be able to managed through an MDM and only then allowed access to the corporate systems. That seems to be the norm now.

O'SHEA: We're seeing the market both converge and diverge in a very bizarre set of ways. It's easy to make device decisions at the top end of the market, but it is becoming extraordinarily difficult to make device decisions at the middle tier. Many organisations simply cannot afford the

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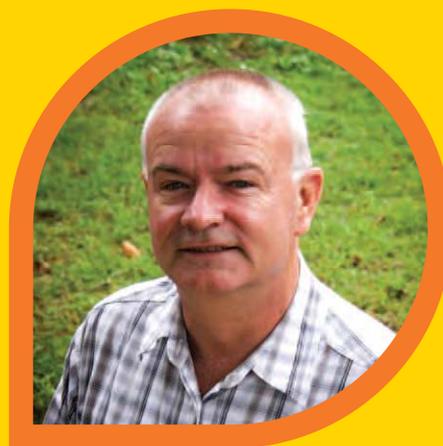
> **"THERE'S DEFINITELY A DESIRE TO BE SEEN AS INNOVATIVE, AND TO PROVIDE BETTER CUSTOMER SERVICE – WHETHER IT'S AS SIMPLE AS BEING ABLE TO ASK "WHERE CAN I FIND THE CLOSEST CARPARK?" OR THE RTA PROVIDING APPS TO THEIR USERS. THE CHALLENGE IS THAT THEY HAVE TO THINK ABOUT MANAGING APPS IN A WAY SO THEY'RE NOT REPLICATING THEIR EFFORTS AGAIN AND AGAIN AS THEY LAUNCH MORE APPS FOR THEIR CUSTOMERS."**
> **AMARDEEP TOOR**

latest and greatest devices, and there is a shortage of reliable and secure devices with a good level of functionality in the midmarket.

To do anything in that midmarket price range – say, $300 to $500 per device – you're probably working with Android, and dealing with a bunch of malware, viruses and other threats that are beyond the ability of most organisations to manage. Windows Mobile doesn't have the maturity, and Apple is too expensive for that mid-market. It is an extraordinarily challenging decision for most organisations we interact with.

GTR: WITH ALL THE FOCUS ON BYOD, IT'S EASY TO FORGET ABOUT APPS. HOW DOES THE APP BUSINESS CASE STACK UP FOR GOVERNMENT AGENCIES – AND IS IT STILL A GOOD IDEA TO BUILD FULL MOBILE APPS?

BESGROVE: The learning curve for and against full mobile apps is definitely still on the rise. We're finding that there are more tenders being called for, more projects being scoped, and that the government audience is a lot wiser about what they're trying to do. Full mobile apps still have their place but the appreciation and understanding of what's now possible with web and hybrid mobile apps is much more refined, and the projects we get brought into are much more specific in what they're trying to achieve.

This helps us to quite specifically add value and respond – and it helps us because we're not burning as many cycles on the education side of things, as we would have done four years ago. It's also good for the clients, who aren't just putting

expressions of interest into the market and sitting on them for 18 months while they pondered where to go. They now know what they can get from both native and hybrid mobility, and they know what they are asking for – and it's much better all around.

TOOR: There's definitely a desire by organisations to be seen as innovative, and to provide better customer service – whether it's as simple as being able to ask "where can I find the closest carpark?" or "how do I complete some work processes without having to go back to my desk?"

Whether it's increasing customer satisfaction, streamlining business processes, deploying new revenue streams, or increasing productivity, the challenge for organisations is that they have to think about managing apps in a way so they're not replicating their efforts again and again across different parts of the organisations as they launch more apps for their customers and employees.

The way to do this is to have a standard framework that covers requirements gathering, business case, security criteria, etc. and allows the organisation to reuse these modules. If not managed properly, the cost of catering for new devices, operating system updates and rich user experiences can be quite resource hungry and expensive to maintain. This is where Telstra Kony solutions can help empower customers to quickly build apps that run on the broadest set of operating systems and devices – all from a single code base.

O'SHEA: Development strategies are important. Those taking a classic waterfall approach to deployment of mobile strategies are often

struggling and their development program is behind where they want to be, and sometimes off the mark. Where we are seeing successes is those with an Agile approach, where devices, services, security tools, adapters and connectors are changing simultaneously. The Agile framework tends to make an organisation more comfortable in dealing with ambiguity and realising there are a lot of things changing at the same time.

It's about adjusting what they're trying to achieve and doing it on the fly. That shift, we think, is essential to being successful with a mobile strategy: the more flexible the approach the better, and not to have expectations that go over 12 to 18 months – but rather iterate over short periods by collaborating with customers, and learning and repeating with incremental improvements over time.

GTR: HOW CAN GOVERNMENT AGENCIES AVOID REINVENTING THE WHEEL WHEN IT COMES TO MOBILITY?

BESGROVE: There's some commonality in terms of what people are getting up to, but we tend to find that nearly every opportunity is different enough that it requires a fairly customisable approach. We don't see a situation where someone could roll out a customer-facing app for local government, for example, and think that one lot of development is going to be used and useful by 100 different councils. They all have different needs and motivators.

Even with organisations that are fundamentally similar, it is very much a custom solution. They want to make sure that their

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BRUCE MAZZA

ratepayer-facing service engages the camera, scanning and location capabilities of the device, for example, but some councils will want to go heavily down that path and others less so.

In order to streamline the development process and avoid reinventing the wheel we use what we call an Interaction Oriented Architecture to model common user interactions. Once you model that, it doesn't really matter what the back end system is, since you're just calling on the data. Once you have the user outcomes and interactions understood, you can roll out a very customised solution for people very quickly. It's a very different view of the world than the old view saying "I have a core system and want to shove it down to this device"; we instead look at it as "how do we serve that function best?"

GTR: CAN VIRTUAL DESKTOP INFRASTRUCTURE (VDI) AND MOBILE-SANDBOXING TECHNOLOGIES IMPROVE THE SECURITY OF MOBILE DEVICES?

TOOR: Sandboxing works, but I'm not fully convinced about it yet because it creates some user interface issues. If you think about why people want to use their own devices, the primary reason is that they want access to what they know and love. They believe what they have is better – so if sandboxing limits that capability in some way or shape, it impacts the user's adoption. Security profile-based tools can be more effective.

It is still early days for VDI technology on mobile devices, with the key challenge again, not being able to support the native device user experience. While VDI on desktop definitely has some compelling use cases, I am yet to see how that translates to small screen mobile devices.

O'SHEA: We've seen sandboxing to be quite successful in the high-value segments of the market – the financial services segment, and federal government. For example, many agencies in Canberra use a sandboxing solution from Good Technology. However, that technology has its downsides and one of those is the user experience: [with VDI] you have to go into applications that are not native to the device, and can't use email addresses and contacts on the device, so some users may push back.

GTR: IS IT BETTER TO BUILD A FULL APP OR FOCUS ON HTML5 AS A COMMON, CROSS-PLATFORM STANDARD FOR APP DELIVERY?

BESGROVE: Customers are becoming more open to what HTML5 can do. The feedback we're getting is that the support and takeup of HTML5 as a cornerstone piece of technology is growing quite dramatically. Confusion still reigns with some people – and some people find it hard to distinguish between the two – but while they refer to it as an app, the technology actually used to deliver these solutions is more of a hybrid.

We're very committed to the HTML5 path, and will try to deliver as much HTML5 as possible for any given solution. We also employ hybrid app shells or app wrappers to deliver those functions that HTML5 isn't capable of – and as a particular feature or function becomes available in HTML5, we'll decommission it from the app shell.

GTR: WILL INCREASING USE OF MOBILE DEVICES PROMOTE THE USE OF CLOUD-BASED SERVICES?

TOOR: Absolutely; mobility and the cloud are increasingly coming together. Organisations are realising that sometimes it is very expensive to mobilise complex back-end legacy systems, so if there is an opportunity to improve a business process by utilising a stand-alone cloud-based mobility solution, they are willing to use that as a proof-of-concept. It also helps overcome capital expense requirements and lengthy project deployment timeframes.

Once you have identified the key business processes that you want to mobilise, you can pretty much get it going in weeks with a cloud-based solution, rather than months and sometimes years.

GTR: HOW CAN GOVERNMENT AGENCIES DEVELOP BUSINESS CASES AROUND MOBILITY INITIATIVES, PARTICULARLY IN A TIME OF BUDGET AUSTERITY?

TOOR: Mobility Solutions can deliver very compelling business cases whether these are focussed on improving customer satisfaction, support employee productivity and/or enable better business processes. Cloud-based solutions definitely help do proofs-of-concept at a low cost, while organisations can work out longer-term solutions in parallel.

For example, almost every organisation has a paper-forms based solutions today, if you are able to replace that with a mobile-forms based

solution that costs only $25/user/month, and it enables your staff to do one extra job in a week, the ROI is quite compelling. And let's not forget the elimination of errors in transcribing paper based information into systems.

For consumer B2C type apps, the goal is to improve customer service. More and more organisations are focused on that, and from a government point of view it's about serving your citizens better – and giving them better access to communicate with the government.

For example, one council in the US has given an app to people using its cycleways. The app tracks every time there is a bump in the cycleway, then picks up the GPS coordinates and feeds that back to the council. Imagine the power of getting that data in real time, from multiple users, and using that to send out road crews. This would let you get roadworks allocated in a much more efficient way, and also make your citizens feel more involved.

BESGROVE: Building a business case is all around identifying desired outcomes and the flow on from improved business processes, and they don't all have to be significant goals. Being able to identify time savings and efficiencies of 30 minutes a day across only 25 people can still show a $200,000 return, so look for the 'low hanging fruit' as your early projects.

For example, Logan City Council found that they covered our entire platform cost with their first two forms projects. They have since moved on to deliver many more internal projects for no additional platform cost.

Adopting an agile approach also helps get that business case through the approval process. We find being able to develop a complete citizen focused mobile solution in under a month is massive, particularly in government who we're finding to be at the more dominant end of things at the moment. They're dealing with so many legislations, rules and regulations and issues. And they're not flush with funds, so if there's a way an agency can do eight inspections in a day instead of five, they're up for that.

MAZZA: There are two key factors for the front-line part of government. One is strategic, and this idea that the budgets to hire front-line workers are not there and probably won't materialise. Because of that, people are looking at the productivity case in mobility. For example, many police forces have been very public about their desire to drive significant workforce efficiency, so they can gain more time for police officers to be

in the field dealing with crime rather than dealing with paperwork at the police station.

There's also an element of increasing the safety and effectiveness of the workers and the public they're serving, by providing better information. I'm sure there are other strategic reasons for mobility, but these continue to come up when we work with customers.

O'SHEA: For some police, one of the biggest benefits has been that they can now put a mobile number on the business card of a police officer. In the past, citizens had to call the local police station –but the fact that officers have one identity through a mobile number has vastly improved accessibility to the police. It's so simple you wouldn't think about it, but it's a major improvement for an organisation that is operating with collective mass and had not had that unique, identifiable access number.

TOOR: Our strategy is to partner with leading solution providers and offer our customers cloud-based mobility solutions that are easy to deploy and offer fast business benefits. At the same time, we're cognisant that customers do have a huge investments in their back end systems, and that's where solutions like Kony will come to help mobilise those. In addition,

we are partnering with a number of professional services organisations to be able to offer our customers end-to-end solutions – from discovery consulting of where mobility can deliver benefits, to complete custom app development.

BESGROVE: One important point is to encourage any government agency to start by doing… something. It doesn't need to be an extensive activity, or a complex project to get people going. I think the thing that fazes most government departments is that they look at the size and complexity, and immediately start to think they're going to have to boil the ocean to roll mobility through the organisation as an enabling layer.

But it doesn't have to be that way: some of the best projects we've done have started with no more than 8 to 10 people that have a very specific and identifiable need. Finding a starting point – which has clear business value in terms of a return, has clear business processes that can easily be streamlined, and not trying to turn it into the all-encompassing project that's going to get bogged down in meetings for a year and a half – that's probably the best piece of advice we could give government at the moment. Once you find a nice, easy start point you find that you start to build a groundswell quite quickly.