Christchurch City Council

Briefing - Council
NOTES

Date:	**Tuesday 21 November 2023**
Time:	**9.30-10.00 am**
Venue:	**Council Chambers and Mayor's Lounge, Civic Offices, 53 Hereford Street, Christchurch**

2. LTP 2024-34 Joint development briefing - Activity Plan

Council Briefing, Seminar or Workshop Recommendation

Cllr Yani Johanson, Cllr Celeste Donovan, Cllr Mark Peters, Cllr Tyla Harrison-Hunt, Cllr Tyrone Fields, Cllr Melanie Coker, Cllr Sam MacDonald; Cllr Pauline Cotter, Cllr Victoria Henstock, Cllr Tim Scandrett, Cllr Kelly Barber, Cllr Andrei Moore,
Online: Cllr Aaron Keown, Cllr James Gough
Chair: Mayor Phil Mauger
Principal adviser: GM Lynn McLelland

Digital Activity Plan

Presenter: Anurag Madan, Head of Digital/CIO

Look, it's an absolute pleasure for me to come and present the Digital Activity Plan and the long term plan to you this morning. I am the new incoming CIO, Head of Digital. I joined the Council in June this year and you know, as you would expect, coming into a new role and a new organisation I've spent the last few months, really just looking at various aspects of digital from all angles, financial delivery wise, capability wise, etc.

The way I thought I will run the session taking maybe 10 minutes at the max is probably just take you through a bit of perspective from my end around looking at the overall context and how I can link that to what digital does for the Council. But prior to that, I'll just give. you a brief overview of my background because this is the first interaction I'm having with you. So I can sort of help you understand where I've from. So name is Anurag Madan. I have 30 plus years of experience in the technology industry. I worked in big consulting shops; I have spent time in banking but the highlight of my career is the 20 odd years I've spent in public service and that is a combination of work that I did when I was in Australia and about 16 to 17 years that I've spent as a chief technology officer at Ministry of Social Development, which was the highlight of my career. And sort of coming

into this role, I have been quite impressed in some ways in terms of the Digital unit and what it does on a day-to-day basis to support the Council, you know, in terms of achieving its mission.

So let's take a bit of a 40,000 foot view, right. So when we look at the world we are operating in today, there are four or five themes that I would like to talk about and then link into what digital does.

The very first one that we are all sort of experiencing on a day-to-day basis in our personal lives is the pace of change. So when I talk about the pace of change, I'll use an example here, you know, if you look at likes of Facebook. Facebook took, you know, close to 6-7 years before it hit 100 million users. When you look at something like ChatGPT that is out today, it has taken only three months for that to hit 100 million users. In fact, when I talk about ChatGPT, my son, who's 14 year old, was playing with ChatGPT before even I could think about what it could do for, you know, the business, operating environment we are in. And what I'm trying to say about the pace of change is digital unit has a role to play there and Smart Christchurch, which is a component of the overall activity plan, deals in some of those aspects. Is how it is looking at the fringe of technology and looking at the things that can be relevant and doing some pilots etc. That's one part of it.

The second thing that I'm going to talk about is what we call technical debt, and I'll explain that with another example. You know, do you have, for example, at home, any laptop desktop that is running Windows 2000? I'm talking Windows 2000, this is before even Windows XP came on. Guess what, we have some of those servers supporting our critical systems. That is not on, right? We need to do something about it. And we haven't been sitting on our hands. We are working actively to try and deal with that technical debt. And that constitutes, for example, in our capital plan, the replace and renewable capital programme that is giving us the ability to chip away and retire with this technical debt. Linking it to pace of change, as the pace of change increases, the obsolescence of your infrastructure becomes faster. So what was first supported for 15 years by the vendors now gets supported for six years and then it goes out of life. So we need to be not just retiring technical debt, but keeping pace for that.

The next one I'll sort of touch on is and this is in no order is cyber security. Now the world we are in, whereas we are embracing the digital ways of working, it is exposing us, our citizens, countries to a whole lot of cyber risks and they are not just individuals. They could be even very well coordinated businesses including state sponsored attacks etc.

The next one would be, you know, talking about cloud. And you've heard about cloud, you know, I'm sure in a number of contexts, and not just for the first time, but it's been a journey that the industry is talking for over a decade now and it is maturing day by day. But what that has meant is technology is getting commoditized. It is easy for someone to swipe a credit card and buy a service from the cloud and get on with what they need to do. You know, just as an example, a startup, you know, probably a decade or so back would have to find seed funding order of magnitude $50-100,000 to get off the ground for technology, today, all they need is maybe a couple of $1000 sign up to a few services and they are away. So you know that is the step change that we are seeing now. That has two I guess things to work.

- Number one is it increases shadow IT. That is, people who are finding some challenges that work with the right intent, go and embrace solutions without thinking about the overall organisation. And that shadow IT can hurt us, because where it sort of really comes to a head for us is when we need to integrate that information within our wider ecosystem. So I guess that's one strand.

- The 2nd strand of it is we now need to be in lockstep with the rest of the world in embracing cloud services. We need to work with the vendor partners like SAP and make sure that if they are putting their services on the cloud that we are consuming it. Today when you talk to them, they don't come and say we will sell your licence to run it on Prem. They are always selling service models, all to be consumed, you know and it actually has value proposition for us. That means we need to reorient our staff in terms of what we do, so that is quite, you know, current and sort of initiative which is looking at under the continuous improvement bucket how we are slowly trying to move more and more services to the cloud. And it is not an easy shift. Right. Some things are easier compared to others when it comes to legacy applications. They are not actually designed for the cloud, so you can't just lift and shift them. The price shock on that will be humongous. So we need to very carefully plan how we move those services to the cloud.

And the last one that I'll touch on is customer expectations, as in citizen expectations. So today we walk around with our phones and I've met many people who say their life runs based on that little gadget and device they have on their hands. And that is how they want to interact with us, right? So how do we make the right moves, take the right decisions, use and leverage technology to bring Council services for them to use from their phones at their convenience at their time. And that presents challenges for us. You know, we need to look at human centred approach of doing things. We need to think about 24/7 support models so that we can support any of the things that can go wrong and any time of the day to help the citizens and make sure that their job or whatever transaction they're trying to do gets completed in a seamless fashion. So when you look at all of those 4-5 themes that really touches on the things that you have seen here around technology enablement, that's one of the things we do.

Information records management. Now all the data and information that we collect and that is terabytes and terabytes of it and it is just going to compound and increase year on year. How do we protect that? How do we make sure we are compliant? There's a lot of work and controls and thinking that goes into it.

Asset and infrastructure management. You know, we as it is manage a lot of the technology infrastructure on behalf of the Council, but there is also a component on how do we help the Council manage the 18.2 billion dollars' worth of assets that we have, you know maintaining and managing on behalf of the citizens in the city.

Technology support this is around making sure that our staff elected members, everyone gets technology support. Now we do try to do our best and great job and trying to make sure that we can, you know, keep it as seamless. But that's the thing with technology because of so many moving parts. There are things that will sometimes not hit the mark. You know the teams are pretty committed to making sure that we are keeping things as seamless and easy for consumption by everyone as possible.

Cyber security attached on that. Again, it's a constant evolution that we need to keep in step with the rest of the world and our spoke about Smart Christchurch. So that's in a nutshell the digital activity plan that I wanted to present in front of you.

The other two things that I would like to highlight if I may. One would be sort of looking at the capital plan and just talking a little bit about what it means for us. So I think you know one of the things that we've got on our plans, as you can see up there is we have got a number of transformation initiatives that were started a few years back underway and we need to make sure

we can conclude them. And the plan that you see here, my apologies, I think this is slightly older version, but maybe we can get the right version in front of you, but we have got funding that is required to complete these programmes loaded into our long term plan which you know is one thing that I just want to bring your attention to.

The second thing which I would like to just mention is as I was talking about the cloud-based services, it is going to put some challenges and we are not unique in there, every organisation is going through how to move from a capex heavy model to an operational funded model because you are consuming them. You know you're not going to have to buy tin anymore and install it and maintain it. Third party is doing it for you. It comes as an operational cost, from an accounting principal perspective that it cannot be treated as capital. So there is a shift in our operating budgets that we have asked for to accommodate for some of those things. So as we retire technical debt, we move to the cloud, we will need more opex to run and support it. So that's those are the two key things I wanted to just bring to your attention and I'll open it for questions.

Open for questions
Cllr Tyla Harrison-Hunt: I've got a heavy interest in the digital space, particularly with Smart Cities, and I did put a question in the long term planning questions a wee while back, but I'll ask it now. I wanted to talk about this on demand culture we have with our consumers and ratepayers, particularly with the reliance on these. I personally have downloaded all of the apps, of our family apps such as the Bin Good app, Snap Send Solve, all of those things. And one thing I realised was it's hard to navigate between apps, first of all. And I'm wondering what your thoughts were on a consolidated Christchurch City Council app that has everything including CSR's, how much rates they need to pay, notifications for events like what's on, for example, what are your thoughts on having a consolidated Christchurch City Council app, that is easy to use.
Response: So thank you, very good question and it's a good segway to talk about the digital Citizen Experience programme that's up there. So one of the things that we have done there and we are just in the process of implementing is a digital citizen identity piece, which is a foundation piece. So that sort of concludes and goes live, you know before Christmas or early in the New Year depending on you know the brownout period that we need to take care of. The digital citizen experience is precisely doing what you've just asked. It is looking at all of these disparate apps that you've got there and how we can then bring it within the context of the digital citizen who logs in. So [a person] is logged in; he can see his property rates. So we have got a programme of work that is going to iteratively bring some of these things to life and we've got an approach that is looking at leveraging and harnessing our current technology platforms like SAP and how we can do that. We are also looking at some of the human centred approaches to make sure that the experience that we deliver through those is going to be, you know, if not the best thing to try and be Google or Microsoft, but as close as we can get to it. But it is intended to really try and bring all of those things together. It is the door to your digital interaction with Christchurch City Council.
Cllr Tyla Harrison-Hunt: Of course. So if you say, for example, if we were to utilise our centralised app that's consolidated but you're using all of these different softwares and platforms across different units. You have the ability to branch out to those?
Response: Yep. So there are mechanisms and technologies available that can make it quite seamless and without making them feel as if they have to jump out of it and go somewhere. So there may be some limitations if it is a third party product and if they are not up, you know, in terms of technologies to that front, we'll have to just cross the bridge on those as we sort of delve into those. But in the main we should be able to accomplish that, you know the kind of 1 facade for the citizens so they get in and they can do all the things through that.
Cllr Tyla Harrison-Hunt: So essentially there won't be any double handling?

Response: Yes, that's the intent. We can do the handshakes between these behind the scenes. Remove that complexity from the citizens so they can just get on and do what they need to do.
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Cllr Tyla Harrison-Hunt: There's around AI. Probably got interest for everyone here. With my multicultural portfolio head on, I've noticed that there's a particular inequity with funding applications. Those that are paid 40 hours a week to actually do funding applications as a job tend to usually get the money a lot easier than what someone in the community would get, particularly around language barriers, et cetera,. Would the Digital group, even working alongside the Community Department, be open and interested into providing ChatGPT workshops to help, one the community groups work through with the community on that and also utilise the ChatGPT app?
Response: There is certainly a possibility. It's not just us, but we have got good partners, relationship with Microsoft and other place so we can bring some of that to the table to try and help the community groups, no trouble. And I think when it comes in terms of enabling something, I think we just need to think a little bit from a Council perspective because all of these things are great but they come with security risks. So as long as we can balance offering something which is a Council service to cover ChatGPT in any way, shape or form, we just need to make sure that we are comfortable with the risk posture and risk profile of it. Because today, if you were looking at any open ChatGPT options, anything that you talk to, it sits in the public domain and we just need to sort of think about is that OK for us or not? But technically yes, it's all possible, but we just need to go through that.
Action 2.1

Cllr Mark Peters: Thank you. Exciting to hear what you've got there in your digital area, I'm thinking around the Smart Cities type patch and do we have the ability to, you know, quickly develop and implement smart monitoring solutions for things like noise, dust, odours, that sort of thing to try and, you know, intelligently and remotely monitor.
Response: I think that commoditisation of some of these things does certainly lend itself to, you know, finding, you know, innovative ways to solve some of these problems. If they are quite isolated in nature, as in you are having to you know, monitor certain things and it is quite well contained, I think they are easier to achieve. Like I said, when it comes to integration is where the complexities come. So there is certainly a possibility.
Cllr Mark Peters: Certainly keen to try and make sure you're empowered to be able to move in that space as quick as we could to become intelligent.

Cllr Tyrone Fields: This is probably too high level of question for this forum, but I'll ask it anyway. I mean, we've got so many councils and you know, territorial authorities across the country, right. And to a large extent, they all do the same thing. And so to what level and to what extent do we leverage off each other? Like on digital solutions? Like the Mackenzie District for example doesn't have a ginormous digital team, so how do they do this stuff and like to what extent do we support them? Like how do we just leverage off each other just to do the same things over and over and over again, as TA's you know? It's probably too big a question.
Response: … I mean, I think I can certainly talk to the fact that I am part of some of the CIO group meetings that are touching on all of these entities coming together. You know it's a bit a little bit early in the piece for me to sort of say how we are harnessing and doing some of these things. But to your point, there's nothing stopping us from doing that. It's about basically getting the organisation world to try and look at how some of these things can be done.
Cllr Tyrone Fields: So is there anything that we can do to support that?
Response: Absolutely we can, yeah.

Cllr Yani Johanson: I guess I'm quite concerned that the shift to opex because that's going to be a massive rates increase. I was just looking at the figures like $88 million worth of software. So if we have to operationalise that, that's a massive rates impact. So is that proposed in this LTP that we do that?

Response: So in this LTP what we have proposed is what we think is going to be the shift we will achieve from on-prem to cloud-based implementations and proportional increase in operational money for that. So that is, you know just to sort of give you a sense, we are looking at, at least for the next three years, we are looking at a one and a half million uplift in opex to support some of that shift from capex. You know from on-prem to cloud, it's about four and a half million dollars over three years.

Cllr Yani Johanson: Just, I mean, I guess the concern is and I still don't really get a sense of - for those of us who've been here for a while, what we've found is that we get told the contractors have this technology; it's great; we give them the contract; we can get all this data and then we seem to be forever having to invest in new software and new IT because we don't have the data from the contractors and we've got huge gaps in terms of asset management, asset condition, contractor performance etcetera. So I guess I'm just a little bit concerned that we've sort of heard a lot of the stuff around needing to improve, but we still seem to be in quite a bad place and I don't know if that's a fair comment, but I know at the last I think LTP or annual plan we invested considering some sort of more mobile based solutions. But are we seeing a sweet spot of where our investment is paying off and how do we articulate that to the community?

Response: Yeah, I can certainly say that you know some of the things that we have been able to achieve even when it comes to technical debt by virtualising all our old kit is certainly helping. Otherwise we would be running on really old tin, which is even more risky for the organisation. Look, I can't 100% talk to, you know, the plan that was put forth, but I do certainly see that you know again the amount of technical debt that we're talking about, 1000 plus servers and you know you know close to close to 2000 applications. That will take some time for us to really do the shift from them running on-prem to the cloud. But we are definitely, based on what I have seen in the last few months, making the shift and moving things in a systematic way to the cloud.

Cllr Yani Johanson: Just to say I strongly support looking at what other Councils and Australia and New Zealand are doing and also the whole human centred approach.

Cllr Tim Scandrett: Just following up with regards to that, but I think it's essential for your team to work with our call centre because we've gotta keep that human side of it. But I don't know if you've ever rung lately Air New Zealand. It's a waste of time and I think they got voted the worst in New Zealand. And if you go to a bank, you always go to a new customer, cause they'll actually answer the phone, so it's actually crucial for us.

Cllr Tim Scandrett: I was talking to a CE recently in Canada. They, with AI, they now, their entire company, no one answers with their name because the AI ability to get your name and then the criminal activity to try… They said it's the move is so fast as you kind of outlined, it's insane.

Cllr Tim Scandrett: And the last one is probably for smart cities, but something to think about. Again, New Zealand is so far behind. I went to Sydney recently: tap on and tap off with your credit card or whatever it is on any transport, it's all the same. And so we've really got to hopefully talk with ECan and other councils and one card to rule them all would be it's amazing.

Cllr Victoria Henstock: Thank you. Can I say thank you for taking the time to introduce yourself and tell us a little bit about your professional background. Thank you for that. I was interested in the matters that Tyrone and Yani have raised. The follow up question for me is how do we sit? Where do we sit comparatively to other local trading authorities, you know, territorial authorities in New Zealand and perhaps globally on our digital journey?

Response: So I think that we are certainly, at least we are having a plan. I think we have not nailed some of the digital self-service approaches 100%. I think that is currently something that's on the radar and we are actively working to try and bring that to life. All the thinking is there. It's about now turning that into a product and a service model that can, you know, be implemented. So I would say in comparison, look, I wouldn't have any metrics up my sleeve, but I certainly think that we need to do more work in trying, in terms of speeding up on some of these things.

Question

Cllr Sam MacDonald: … Do we do? So I noticed in there we've got fees and chargers, and it, look, it's pretty small amount. Do we do anything across the group in terms of IT support? So I'm thinking VO, ChristchurchNZ, CCHL and the companies, do we look at any economies of scale? Given we have such a decent size IT team, and if not, why not?

Response: Well, I can certainly say that I've had some conversations around it with, for example, Leah and even you know with Dawn. But I think right now our focus is supporting the Council, Banks Peninsula and I'm not sure about the CCHL linkage, but I believe there was once some, and I think we now kind of reduced our services that we provide to them, but I totally agree. I mean there is from a shared services perspective an opportunity we have as a big IT shop to support a wider sort of range of stakeholders, but nothing that has sort of hit my radar based on what I have done in the last few months to really be able to comment on it from a knowledge point of view.

Cllr Sam MacDonald: It would be quite good to take that away because I think right across the group we should be using our in-house teams. I mean and while we're at it, payroll and the like, should all be the same. We're employing people, we've got the overhead here, it makes sense to do it across the group when we're trying to find and save every.

Response: Totally agree.

Action 2.2

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Briefing concludes