

Architecting future SCs - Rebecca Marson

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SUMMARY KEYWORDS

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Hi, everyone.

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Thank you

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to the public sector network for the opportunity to speak here today as part of the smart and sustainable community series.

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My name is Rebecca Mohsen.

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And I'm the team leader of smart city strategy and city of Melbourne. I think myself and my fellow speakers have a really fascinating topic to explore today architecting, the future city. I'm sure there'll be plenty of diversity of thought and perspective on this. Firstly, I am joining you from Melbourne, the lands of the coolest people, and I wish to acknowledge them as the traditional owners of this land, where innovation has played a part for 10s of thousands of years. And when building a future city I think the first place to start is to learn from the past and our Aboriginal community have a wealth of knowledge that can enrich our future city. I'd also like to pay my respects to elders past and present and Aboriginal elders of other communities who may be joining us today. My job at Steve Belbin is to lead our Smart City approach which includes a number of products from IoT including pedestrian and parking sensors to city analytics

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and data tools.

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Our Open Data Platform, our Melbourne innovation district partnership with the University of Melbourne and RMIT, and local government leading 5g and IoT testbed. Today I'd like to share insights on how and why we adopt Human Centered Design Thinking when deploying us to approach how we work and partner with community and business to build our future city. And why we think this is so important.

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disruptive technologies and emerging Data Tools present both opportunities and risks for helping us manage our city now and in future. The City of Melbourne has long embrace new knowledge, engagement, technology and data solutions. And we've built a global recognition record nation as a leading smart city by listening people, smart things and smart data.

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Over 100 people

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from right across our organization and the community are engaged participate in designing our Smart City approach. And the result connects and builds on smart activities, while enhancing community literacy, data security and compliance with industry standards, which are all laying strong foundations to building a smart future city.

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So when I was thinking about the topic for this presentation addressing citizen needs for building the future city, I was interested to see what people's predictions for a future city were 100 years ago. I found some examples. From an American publication called the ladies home journal from December 1900. I just wanted to share one of my favorite predictions with you today, which was that the American woman taller by from one to two inches his increase of stature will result from better health

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due to vast reforms

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in medicine, sanitation, food and athletics. He will leave to 50 years instead of the 35 as a present for him will reside in the suburbs. The city house will practically be no more building in blocks will be illegal. And the trip from suburban home to office will require a few minutes only a penny will pay the fit. So this prediction resonated really strongly for me as

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certainly city of Loveland were really pondering the

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role of our future city.

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A different rethinking about what a commute to the city looks like. Work thing we've all experienced a return to the suburbs. And the credit outbreak in our community housing here in Melbourne has certainly made a scrutinize what safe affordable sustainable housing looks like. Clear that people 100

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years ago were concerned and interested

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about similar things that we have today, transportation, education, well being and economy and technology was evident in many of the predictions. So you can see in the images on the slide

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how the predictions around

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personal air travel and technology in education are playing out today with Uber elevating our skies and AR and VR schools. To building the future city is a fascinating topic. It's everyone's job. There isn't one entity, government organization, or group of people who can or should decide this for all of us. And there are many possible futures For us cities, some of which we might find it difficult to win that I mentioned, which I think COVID has just shown all of us, my preferred future city is likely different from your preferred future city. So how can we co create our cities together to make sure we build a desirable future for the many? These are hard questions. There's no easy way. But employing a people that approach that is considered from the start can help set us up on a path that invites a collective imagining about future city and provides the best possible chance of creating that feature desirable to many.

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So why haven't people led approach

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we believe at calm that people are at the center at City of Melbourne? Sorry, but people are at the center of everything. Why do we do these people that approach helps us discover things we might not. We don't have all the answers, often when thinking about building a future city. And certainly in the context of a smart city, the focus is on the hardware and software components. However, the ultimate goal for future cities should be improved livability and sustainability standards for citizens, sensors and automated lighting smart parking, driverless cars, they're exciting and interesting to some, but what is their value if they don't might make life better for our society. The Smart functionality and capability and capacity is only going to grow. We want to be transparent with our community about how we could use technology to run a more efficient city. But also we need to understand what does the community want from us?

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What problems do they need to

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solve? At mobile? We look beyond the technologies being deployed, and focus on how that will benefit people. The first ask themselves, what is the problem to solve? We're working with the community to design develop and test the best ways for people to live, work and play.

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approach to new technologies is that it must demonstrate

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Li and have lived experience about people. So Human Centered Design is an approach to problem solving that developed solutions to problems by involving the human perspective in all steps of the problem solving process. We use this approach in many of our Smart City projects at City of Melbourne.

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For example, a project that was initially initiated in our

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city lab studio in 2018, has grown to develop MVP this year of digital solutions that can help us gather better data and communicate city disruption to our city citizens. The project was initiated as a result of all of the major developments and infrastructure works occurring in Melbourne. We didn't have any preconceived ideas about whether a technology solution would be needed. We first asked the question about citizens what is the problem so the insights we gained during valuable example for example, traders in the city need to know accurate information about disruption that might affect their business at least a month in advance so they can plan rostering and deliveries. Whereas a mother taking a child to daycare might need to plan a trip daily so that they can account for any delays or route changes they might need to take. Interestingly, one of the insights revealed that in place lo fi non digital signage was an appropriate solution to help people understand the purpose of disruption in situ technology is not always the best answer. These insights allowed us to deeply understand the challenges and problems caused by disruption for our community. And they've led us to develop prototypes of digital and non digital solutions that we hope can help us communicate disruption in a more coordinated, purposeful and meaningful way. But without these people that approach we ran the risk of designing a digital solution that our community wanted Or that was not of any use to. So what are the risks if we don't use a PayPal that approach when building our future city? We need to approach Smart Cities projects with equity and engagement. It's no longer acceptable to simply modify and assume consent.

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For example, when walking around cities, you may

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often see signs saying you're being filmed. Who owns the data?

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Where does it

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go and how is it used? If people are involved from the start to make collaborative decisions, trust can be gained. It is possible.

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But I'm not saying it's easy.

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It can add extra time, resources and budget requirements to your projects. Maybe you'll hear something that means the project needs re-scraping or completely rethinking. Possibly there will be difficult conversations or uncomfortable feedback. These are all possibilities when employing a people-centered approach. But you can also save plenty of time at the end of the project by designing the right solution from the start, gaining by an interest and knowing that implementation will be celebrated, and not my head. I'm sure many of you have seen the problems abroad that can be faced in building future cities. If the public do not feel empowered and have trust, particularly when proposing to collect and handle data, projects can be derailed, pushing that timeframes and creating problems that need to be managed on the go. Rather than planning considering from the start.

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If we want to collect

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data in our urban environments, and about our assets to make evidence-based decisions at speed for our future cities, how can we make sure that our society trust us to do so? For one, we can't give the impression that the technology solutions we're rolling out in our cities are given the sidewalk labs project in Toronto is an example of how perceived gaps in human keishon can potentially backfire. The project was a textbook model of a smart city. Digital technology implements with sensors to capture data that were all intended to make better decisions and build better cities. rigorous data privacy and governance model was a great not to sell citizens data without consent unless it

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was aggregated and anonymized.

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But despite all of these residents and local leaders became suspicious plans for broader revenue generation and real estate development which revealed trust and take a long time to earn and a second to lose.

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So how can we continuously learn, evolve and improve our collaboration without commitment? Another tool helping us build our future city at City of Melbourne with our citizens is our city DNA project. comma city of Melbourne asked local citizens a couple of years ago. What are the priority opportunities and problems to solve in Melbourne using smart city capabilities. The number two priority was digital democracy, people really wanted to

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have a say in Council decision making.

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Our Open Data Platform plays a role in this. But static data sets aren't meaningful to most community members. Data visualization is what really brings the data and helps make sense of it for people. So the next iteration of how we could involve our citizens to build our future city was some sort of data exhibit enter Melbourne city DNA. This is a project that

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uses emerging technologies such as AR VR

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and 3d models to bring out these datasets

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to life and illustrate how Melbourne is changing in real time. This is an example of the model on the slide here. We trust politics This project at our Melbourne knowledge week, which is an annual knowledge festival we have here in Melbourne. And you can see there's a 3d printed model of the city with data projections that overlay over the top. We've got big plans for this project, it's being rolled out as a permanent feature in our town hall. COVID has disrupted the plan somewhat, but we're still pushing ahead and looking to make this a premier space for community engagement and participation.

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We're really trying to

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improve our practice even further at City of Melbourne to collectively imagine and build a future city. My team are currently working with the wonderful team at Monash emerging technologies research lab to conduct design research using ethnographic futures techniques that will help us understand how our citizens would like to communicate with them about the census. We're delighted environment. So this is I guess the next iteration about people that approach. We're testing his style of research which presents an opportunity to invite people to be very future focused and find out the things that matter most to them. It enables us to get

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a window into what people are motivated by

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the Monash projecting, will use these prompting materials that you can see on the slide, such as cartoons, which are representations of future visions of the city. Often people struggle to imagine futures particularly when directly asked So, these materials throughout imagined responses they act as prompts where we can use examples from which people can agree or disagree with the features that are presented. They also inspire more imaginative potential when participants are asked at the end to imagine their own vision for the future if

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the output of this work is To

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develop some type of visual central sensing language or communication method to communicate openly, transparently and meaningfully with citizens about sensor projects and testbed that we

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are implementing throughout the city,

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we hope to develop a prototype design that can be shared in cities across Australia

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and

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even around the world. So

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if there's anybody joining us today who would be interested in that work, we'd love to share more once it's been developed. So to conclude, today, I thought I'd leave you with a reflection, just some time to think about when a project may not have turned out as planned. Could the outcome have been improved if the project was designed

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more closely

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with the people who would use benefit from or experience the solution you implementing

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was the diversity

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of thought and perspectives that contributed to the project. Sometimes we have the most to learn from our biggest proposals. I invite you to adopt a human centered people that approach when building our future cities,

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leading with people in mind and

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creating desirable outcomes will lead to a better future for the many.

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Thank you