

Baringa's Public Sector Productivity Podcast

What will increasing automation mean for civil service leaders of the future?

Matt Jones [00:00:02] Welcome to today's episode of the Baringa's Government podcast. I'm your host, Matt Jones, and I'm going to be joined by two fantastic guests to explore the topic of productivity in the public sector. Since the pandemic, the private sector has seen a 1.3% uplift in productivity, but public services are currently 5.7% less productive. There is increasing pressure to deliver immediate turnaround in productivity. But such pressure doesn't always lead to sustained operational improvement. Making good use of technology is vital to the future of public service delivery. Looking at much of today's tech enabled society, you're likely to argue that the potential might seem obvious, but the public sector has not kept pace with the technological progress we have seen in other parts of life. Government departments and agencies are struggling to harness the benefits of tech driven ways of working and, as a result, are unable to deliver the service that citizens expect. In my view, for government to meet these challenges, well managed deliberate investment in technology is of course needed. But there must also be investment in people so they're ready to embrace the change and take on new roles. Let's get into it and meet our guests. Alex, Jeegar. Welcome. Thank you for coming. Let's start with you Jeegar. Do you want to tell us a little bit about yourself and why you're particularly interested in this topic?

Jeegar Kakkad [00:01:12] Hi, I'm Director of Government Innovation at the Tony Blair Institute. We see government innovation as how the state can adopt technology to transform itself, to meet the challenges of the 21st century, whether that's fueling economic growth, modernising public services, navigating geopolitics, we think technology is the solution to how government can adapt and deliver for their citizens.

Matt Jones [00:01:37] Lovely. Alex?

Alex Thomas [00:01:38] Hi. Thanks for having me. I'm Alex. I'm a Program Director at the Institute for Government. So we're a bipartisan think tank founded about 15 years ago to look at how to make government more effective. I lead our work on the civil service and policymaking, so I spend most of my time thinking about civil service reform, how the civil service is going. So I come at this, not as a technical or technological expert, but as someone who thinks about, the civil service and the state, from that kind of perspective.

Matt Jones [00:02:05] Perfect. Sounds like we've got the right people to discuss the topic. Jeegar, I'll come to you first. We've seen a lot of buzz recently around the topic of AI - the prime minister meeting and interviewing Elon Musk, for example, the launch of the incubator out of Number 10. Do you think this is laying the foundation for a lot more automation in government?

Jeegar Kakkad [00:02:26] Absolutely. We see this as the start of increased rollout of AI and automation across government, with cost mounting, backlogs growing and outcomes getting worse. We see technology as the key to unlocking reform of the public sector. The old solutions of throwing more money and more people at the public sector and trying to drive supply and address the problems that way, just aren't going to work when you've got a funding crisis and a workforce problem. So we see automation as the way through that. And at TBI, we've recently published a report with faculty looking at how you can use AI to drive automation across a range of public sector work, whether it's decision making at the ministerial level, whether it's operations at the civil service caseworker level, or whether it's

the way in which the state engages with citizens and citizens engage with the state. We can see a lot of these tasks are beginning to be automated.

Matt Jones [00:03:26] Nice. So tell us a bit more about that report then. It sounds like there's lots in there. Is there cause for optimism in your view?

Jeegar Kakkad [00:03:32] We're incredibly optimistic about what AI can do. In the short run, what we're seeing is off the shelf AI solutions being used to forecast demand, for example in hospitals, it's being used to predict bed capacity and A&E peak times. That allows resources to be more accurately matched against when they think demand is going to be. And simple AI tools without any legacy overhaul of IT systems has increased effective bed occupancy by 4 to 5%. And we see AI being used to reduce admin burdens, allowing frontline workers to focus on what they're best at. So, for example, teachers spend around 12 hours every week on unpaid overtime. AI that's used to do marking or to do lesson planning is actually saving them about 25 to 50% of that time so they can get time back and spend that doing what they want to do most over the long run. We're really optimistic because we see three areas where AI can change the way in which government departments and Whitehall work. First is the way it engages with citizens through, a digital public assistant that helps a citizen navigate, complex, public sector services, understand what data the public sector has about them and what services they're eligible for. We can see AI shadows and agents working with civil servants to help them do their job, triage casework. So that it's not just a first in first out. You can understand what's the lowest risk, planning applications or benefit claims. Let's get those done dealt with quickly. And the more complex cases can be done by humans. And at the decision making level, we see, national policy twin, complex computational twins drawing together data sets and rules and regulations and, allowing policymakers to run complex scenarios and say, okay, is this policy solution better? Or, you know, option A or option B, which one's better? And they can actually run scenarios in roughly real world simulations. And so therefore improving, policy making. So we feel really optimistic that, both in the short run with off the shelf technology, AI can make a difference in addressing some of the problems in the public sector, but also over the long run, really addressing some of the public sector productivity problems.

Matt Jones [00:05:59] Excellent. Yeah, lots of cause for positivity. And as a primary school teacher, my brother will be thrilled with all the automated lesson planning that's coming his way. Alex, let's talk a little bit about the civil and public servants themselves. I was at a recent IfG event where you launched your series on productivity and I sat in the audience and listened to Cat Little, who was then the Second Perm Sec at the Treasury, talk about how important AI is for the agenda from Central Government to improve productivity. She's gone on to become the COO for the civil service. We have someone in that role who these opportunities are going to make a big difference. How do you think that's going to impact or feel for the civil servants and public servants themselves?

Alex Thomas [00:06:41] I should get in a quick plug first. She's done a subsequent event to that as well, just very recently, in her new role as COO for the civil service. And in that, we were talking with two other Permanent Secretaries, about the skills and talent in the civil service. And how could this subject not come up when you're, talking about the sorts of, skills that the civil servants of the future will need? I'll come on to the management in the civil service in a second, but it is interesting listening to Jeegar. There's a sense in which the civil service government as a whole is really at the forefront of some of these developments. And you might argue they should or they shouldn't, or there's kind of a place for risk taking and there's a place for more caution. But the thing that really struck

me listening to that was how much of this now seems quite straightforward and basic and is already here and can be applied in a relatively straightforward way to public services. That beds example, I'm assuming that's not some sort of 'out there' technology that is stuff that is here and now.

Jeegar Kakkad ID systems, taking the data that's available and plugging it into the system and empowering nurses to say, okay, we know this patient's come in with these issues, they're likely to be in this bed for 16 days and they can plan the services. And then if they need social care, begin to plan that before they have to discharge them from the bed. So it just completely changes the way in which you do forecasting and managing public service. Rather than blunt supply, it's actual intelligent, matching demand where it is.

Alex Thomas [00:08:18] Which seems to me to hit the sweet spot of not being too risky or 'out there', while also very clearly to those public servants who are on the front line demonstrating the benefits of the new technology. But you asked about the workforce. And I do think there are obviously really profound workforce questions here. I mean, from the work that we've done and what you, read about this, the sense does seem to be augmentation rather than replacement, and therefore, I don't think civil servants should be sitting kind of quaking in their boots about their jobs suddenly disappearing. That said, I do think there will be some workforce dislocations. So there is a leadership challenge there for any public sector leader, there will just be some jobs that don't exist anymore. Mostly, I think the opportunities outweigh the costs. I think it is hard to predict. The civil service has got with the program a bit more very recently. One of the recommendations we made about five years ago is the civil service really needs a workforce plan that properly addresses, tech and digital skills. The previous plan that ran up to a year or two ago was very, very light on this. The new one definitely has more on the aspiration. I think it's kind of case still to be proven on how far that will actually be developed, but the civil service is alive to this. The question is whether it can be actually implemented.

Matt Jones [00:09:39] And beyond those skills points, what else do you think the Civil service need to bring in in order to be ready for the change?

Alex Thomas [00:09:45] I think they need organisational structures, in order to be able to manage it and get ahead of it. I think the Government Digital Service, having been in its pomp from 2010 to 2015, went through a tough period. I think that has stabilised more recently. And so I think the structures are kind of coming together. The data and digital office is finding its feet. Although I do think there's a real question about consistency of leadership in that space. And it has been hard to find the right people to lead those organisational structures. I just think the civil service needs to get its head around certain core things, some really basic stuff like information management. I know from my experience, the introduction of emails and electronic filing was an absolute catastrophe for government data and information management. And all the files ended up being scattered to the four winds. I know that there are all sorts of opportunities for better search functions and things to use data information better. But government needs to be on that. I also think there's a role (and this gets into policymaking) for the civil service to understand and be able to advise ministers effectively around the ethics of this and the proper oversight and accountability arrangements. There are all sorts of questions around AI on that. But then to be open minded to the benefits. The bureaucrat in me gets most excited about some of the things that Jeegar was talking about around how can you target inspections more effectively so you really can get much more out of the system. So this is less about people worrying about losing their jobs or being worried about the risks. But you know, the restaurant inspectorates or the MOT inspections and being able to make all our lives safer,

better, more productive by, you know, by having open mindedness in the civil service and working with ministers to apply those tools in the right context.

Matt Jones [00:11:37] Very good. I want to come back to something you said previously Jeegar, we talked a lot about the impact of these kind of technologies on things we can see and interact with on a daily basis of citizens, the impact on nurses, impact on teachers, etc. We also talked about the impact on managing these services, on forecasting against these services. And it leads me to a question around leadership. I think we sometimes miss the fact that the roles which might change most are the people that used to run a service which is entirely manually delivered and that is now a combination of a human workforce, a machine-based workforce and something augmented and hybrid in the middle. What do you think are the key things that are going to impact the leaders of public services?

Jeegar Kakkad [00:12:19] For the leaders of public services, our paper with faculty set out three things they need to focus on; processes, people and procurement. Processes are a lot of what Alex has actually just touched on. So how do you make sure you have the right data in the right systems to manage the data? And your information flows because it's only as good for a civil servant if they're using intelligent search features and if the information behind it is as structured and organised as possible. As Alex said, there are questions around ethics and safety. Whatever data is sat behind these systems – is it secure? Is it safe? It is algorithms that are being used to assess them etc. Are we being as transparent as possible about how are they operating? Can we explain it? Are they operating in a predictable capacity? Is there someone accountable? If it makes a decision, is it reversible? Is it being sensitive to sensitive cases? Call that a PARIHS framework: Predictable, explainable, accountable, reversible and sensitive. So it's all of those processes that go around the implementation of these systems that leaders need to think about. Not just a people in a service, but actually rethink the way in which they organise the work to make it as effective, but also as safe and secure as possible. Absolutely agree with everything Alex said about civil service careers. It's really important that civil servants are kind of brought along this, but also that the whole career path is potentially rethought to look at what it means to be a civil servant in the future could potentially be different. So how are we bringing in the right skills? How are we promoting people with the right expertise to be able to deploy these systems and be leaders in these systems effectively so that it's not just something that's being done to the civil service, but something that they're leading the charge with. And look, in the private sector, we're all having to learn how to do this as we go as well. So, it's not like the private and public sector are on different journeys here or are on different kind of paths. We've got to do this together. Last bit is around procurement. How do you make sure you have the right tools? You're not getting, locked into, certain AI systems and algorithms or ways of managing your data that means you can't adapt with the times as new technology comes in or that certain providers are profiting off commercially sensitive data. But also, how are you piloting and allowing new solutions to come in and trialling those so that, the public services get the best of what's possible? In radiology, in the NHS, they used to have two radiologists looking over a test now they've got one and a platform where the results are fed into the platform, and they have 3 or 4 different AIs analysing it. So what they can do is evaluate the effectiveness of different tools so they can procure the right ones, assess them, but then that is supporting the doctors. So there are different ways in which we have to think about procurement, trialling and evaluation. So we're not just blindly going in and saying 'we think this one works, we've read the brochure and let's buy it!' So for us, it's those processes thinking about the people and then making sure you're bringing the right tools through new ways of procurement.

Alex Thomas [00:15:45] Just on the leadership point in the middle bit of what we're talking about there. I think thinking about the civil service, there is a bit of a tendency in the civil service to go 'digital, data, skills, war on talent' and there absolutely is a really important aspect of that. And, you know, I'd be the first person to say that I think some pay in the public sector, particularly the civil service, hasn't, kept pace to be credible in this sector. But I'm a little bit sceptical with this impulse that sometimes comes in to kind of bureaucratize the thing. I was unsure about what the civil service calls 'One Big Thing' which is a sort of big sheep dip style - you know, every civil servant must do one day's data training but that's not really going to change the dial. But it does speak to me that this is as much a question about leadership and about the skills of leadership that are not necessarily the traditional policy generalist/civil service administrator skills. But is a different set of skills that is about bringing together multidisciplinary teams and then disbanding those teams, having people with the right skills, thinking about this lesson as a continuum of policy or policy development, but in a more disparate way of adapting technology to services.

Jeegar Kakkad [00:17:05] I would agree with the sentiment that this can't just feel like something that's additional to the job. If it's going to work Civil servants, and even the political leaders of departments have to see this as we as a department, as a collective, are facing a series of problems and how can we use technology to help solve these problems. Not as something that we have to go away and do your training. It has to be seen as core to this is how you, Alex, me, Jeegar get better at doing our jobs. And actually we can take away some of the day to day drudgery and actually get more value from our work because, we're actually slightly more empowered. And that's one of the things we're seeing with AI when it's being deployed in the private sector, is that the biggest impact is on the lowest, lower skilled, lowest effective workers. Bringing them up to the level of the expert and the best in class in their teams. For me, that's the exciting opportunity is if you're a civil servant is actually I can be better, I don't have to do all this massive training. I can just I've got a tool that helps me get more out of what I'm doing. I think it's not separate, but it's got to be core to how you see what your job is.

Matt Jones [00:18:25] The human in the loop type thinking. So lots of things for leaders across the public and private sector to consider. And you mentioned about the leaders of both political and civil servant leaders of the departments to be embracing these and tackling these challenges. With that in mind, maybe this question for you, Alex having mentioned GDS. Where do you see the balance between the centre, Cabinet Office, Treasury, to a certain extent, Department for science, innovation, technology taking more of a role. How much of the centre need to set the direction for this versus how much should it be federated out to the departments working out some of this on their own for their own context?

Alex Thomas [00:19:06] That's a great question. Thank you for that one. I do think and not everybody would say this, but I think the centre does need to have a role. I think particularly in the germination, early phase of different aspects of this. And before it's embedded in departments. I'm inclined towards a not centralised because I think a lot of this should be done in departments and actually in arm's length bodies and in other public bodies, clearly. But I'm inclined towards a more standardised approach from setting from the centre because otherwise I think not enough will change. Things will fragment. That doesn't mean having exactly the same system in a prison service that a hospital would have. Clearly you need bespoke solutions for different contexts, but setting standards and setting an expectation of delivery from the centre, I think is really important. I'm optimistic

about GDS in a way that I wasn't a few years ago. But I'm still not sure we've got that right at the centre. And that kind of authority from the centre. I think the role of DSIT is really interesting. I think it's establishing itself as a Whitehall department, but it still feels a little bit more contingent than some other, more well-established departments. How far is it reliant on the current Prime Minister's clear enthusiasm and passion for this subject? Is it getting the balance right between owning certain things, but also seeing a major part of its role being to build capability across the rest of Whitehall and the rest of the government system. So, again, one of those other permanent secretaries I mentioned, earlier, Sarah Mumby, who has that task, but I think it's case unproven. Yet I think overall, DSIT is a good innovation and it helps to have a central locus for all of this. I'm still unsure as to its longevity and whether it will really stick. And case unproven as to whether it will do all of this stuff that we're talking about.

Jeegar Kakkad [00:21:12] I agree with what Alex said. If this transformation is going to happen, it needs to be driven a little bit by the centre. In our paper with faculty, one of the recommendations we've made is for a new unit in number ten to begin to drive this. We've talked about at TBI. We need science and innovation at the heart of policymaking and a new national purpose for the UK. And called for an Office of Science and technology policy in number ten. As part of that, we've called for an AI missions unit with a kind of vaccine task force style CEO and remit that is driving a lot of this from the centre. And actually we see the most important relationship is being with Treasury. And because in the budget, the Chancellor set out that every government department needs to have a plan for how it's going to deploy AI before the next spending review. We see that as a very powerful tool to focus minds in government departments about what are the highest rated problems we've got. You know, where can AI begin to help solve these? Where's the low hanging fruit? Pull together those plans with the knowledge that if they put this to number ten in the Treasury as part of the spending review, they'll be money for it. Not that they're having to make the case for it, but that there will be money for it, because of an invest to safe type case. A few other things that we've called for about how to drive this are; One is a Bezos mandate to make sure that data is interoperable across Whitehall. We need to operate with that mentality. And second, that departments like DSIT and DESNZ -they should be AI exemplars, right? They should be out front where the way in which they operate should mirror the best example and best in class in the private sector. So it should look and feel and operate like one of the AI companies that they want to attract to investors. DESNZ should look and feel like, and have the tools and the digital twins of octopus energy. Right. We need to identify those kind of AI exemplars in Whitehall and push them to show what it looks like. This is what is possible. And as civil servants move from department to department, they're bringing that expertise, that experience of, oh, no, wait, we did something different. We can do that too here. So driven from the centre but the departments have to own this in some way.

Matt Jones [00:23:52] And Alex I know your interest will have been piqued by Jeegar taking that down a policy route. So talk to us a little bit about how you see the impacts on policymaking through this new technology that's available and what your views on the downstream impact that then has on these services which are retained by the state.

Alex Thomas [00:24:09] I think this could be really interesting. We touched on some of it earlier when we were talking about how you might reprioritize regulation or how that applies so that the whole thing is a continuum. But I do think, you know, we're at the very early days of government departments understanding how to apply AI in particular to policy making. And I think that's right. I agree with everything you said Jeegar. So as ever, it's being reassured of the safeguards without using that to hinder innovation. The essence

of policy making will not change. Good policy making is about setting clear objectives, understanding what you want to do, achieving a change in the real world, making that change sustainable, ensuring it's affordable and properly embedding it and then evaluating it. So the classic policy cycle, however you choose to describe it though, it's really as neat as that, is the same. So the thing that the Civil service should be doing and is starting to do is understanding how, at each stage of that cycle, these tools can help you do it. I think some of the most interesting areas, although I suspect they'll be the more underexplored areas, the things that come a bit later are around how you, more meaningfully engage the population and citizens in some of these questions. How services are delivered. How do you actually inform the decisions that ministers are taking in quite radically different ways? I think that will be, you know, fairly slow to come, but is quite interesting and quite exciting. I also think that's something we haven't touched on. I mentioned it, I don't think it's the biggest thing in the world, but there's some real opportunities around communication and how you communicate back out to people through data visualisations inside and outside government. But also less AI, but more harnessing some of the tools that we know are powerful through social media to communicate on policy questions with people about the things that they really care about. Rather than the things that government cares about or that civil servants decided they care about.

Matt Jones [00:26:09] I'm going to draw to this to a conclusion with one final question that I'll put to you both. If you had one single piece of advice that you could give to the civil servants that are setting the direction for this centrally. What would that be?

Jeegar Kakkad [00:26:22] This would be the advice I would have given colleagues as well. Begin to play with it, explore it, familiarise yourself with AI and what it's capable of. And there's multiple tools that can do multiple things and be tech curious, because this is going to be something that can help you do your job better and quicker and faster and deliver higher quality public services. So I think the one thing I'd recommend is get yourself in a job where you're able to play and explore and help implement some of this, because that is what's going to help you in your career, help you drive change and deliver better public services.

Matt Jones [00:27:02] Excellent. Embrace it. Get your hands dirty. Sounds good.

Alex Thomas [00:27:05] On workforce, it's just have a plan. And I think we've seen the start of that, but they need to do more of it and not have a plan that is so set in its ways that it can't respond to these things change because you need to plan, but also things are unpredictable. Politics is unpredictable. The technology's unpredictable. So a flexible plan. On the policy, I wanted this extra one to be the entertaining counterbalance to technical optimism, which is understand the risks. But the thing that will undermine progress – the thing that will lose the confidence of ministers and lose the confidence of senior people inside government is if you have too many, ethical or practical, or technological disasters. You know, the Boris Johnson mutant algorithm around exam results and all that kind of stuff. That will put the government on the back foot and mean that people aren't playing with it in a way that is positive and constructive. So you do really need to give the risks a kind of good going over in order to have fun play.

Jeegar Kakkad [00:28:10] And the best way to understand the risks, get your hands dirty and engage with the technology because then you know what is capable of.

Matt Jones Fantastic. Thank you. I'm sorry to say that unfortunately, we have run out of time for today. It's been a pleasure having you on our podcast. It's been really insightful

and I'm sure will resonate with so many of our listeners. For all of you listening, if you're interested to learn more about this topic, then please take a look at our website Baringa.com or the excellent materials available from TBI and IFJ. Take care.