# ACCENTURE PUBLIC SERVICE
# PROCESS REIMAGINED

Together, people and AI are reinventing business processes from the ground up.

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# PEOPLE POWER

**Why public service AI strategies need to focus on people not just machines.**

How work gets done is changing dramatically. The driver? Smart machines that use artificial intelligence (AI) and machine learning algorithms to sense, comprehend and act. But that's only part of the story. Most organisations, including those in public service, are using these technologies largely to automate existing processes. But this limited focus risks missing a far greater prize: the opportunity to unlock entirely new roles and new ways for humans and machines to work together.

Organisations can do this by using AI to create self-adapting and self-optimising 'living' processes that use machine learning algorithms and real-time data to continuously improve.[1] Reinventing and reimagining processes in this way also transforms the work people do. Rather than simply automating existing processes to make them faster and cheaper, true reimagination of processes forges new alliances between people and machines that focus on new ways to work and enables them to achieve more together. That's particularly salient for organisations in the public sector that need to find ways to reduce the risks they face.

# HUMANS AND MACHINES: THE MISSING MIDDLE

## Machines helping humans

These new relationships, in which machines help humans and humans help machines, are what Accenture calls the 'missing middle'. Where machines help humans, there are three key dimensions. The first is where machines amplify or augment human capabilities with new insights. Policing is a good example. We're seeing one force in the UK, for instance, achieving a step-change in their ability to detect and prevent crime. The reason? Analytics and machine learning, applied to huge quantities of data, delivering unprecedented situational awareness to officers on the beat.

The second dimension is machines giving user interfaces a personality. We're seeing this in public service contact centres, where chatbots and virtual assistants interact with citizens to help them get the services they need in faster, more intuitive and human-centric ways. It's what one large European employment agency is doing with its transformation of 50 standalone internet portals into one unified and easy-to-use digital experience, including a virtual job market. Employees also see the benefits from more effective support and being freed up to focus their time and talent on delivering higher-value work.

Finally, machines help humans by extending physical capabilities such as front-line troops being supported by drones or police and border forces using advanced video analytics to spot criminal threats.

## Humans helping machines

What about the ways in which humans can help machines? Again, we identify three main dimensions: training machines to perform, making what machines do explainable and making machine learning and AI sustainable. The first, training machines to perform, is where we see most effort today in public service organisations.

Training involves manual tagging and course correcting the outputs from a specific AI application. Once the AI has learned all the variables and derivatives of a process—for example, an instruction to change an address in a citizen's records—it can be reapplied across other systems. What's more, for public service organisations facing talent scarcity and an aging workforce, machine learning and AI offer ways to capture institutional knowledge and use this to replicate top performers' skillsets. But instead of replacing people, machines are augmenting their capacity to deliver more and focus their efforts on higher value tasks rather than processing transactions. In other words, as well as doing things differently, agencies and their workforces are empowered by AI to do different things to improve citizen services.

Along with training smart machines, the second critical task is making what machines do explainable. This is not a technical exercise to unpack an algorithm's code line by line, but rather aims to overcome scepticism about the outcomes generated by machine learning. That means making it clear that while smart machines will never be 100 percent reliable, they will still be more consistently accurate than human beings performing the same tasks. This is essential to engendering trust in the machines with which people will work ever more closely in future.

Trust is also fundamental to the third way in which humans need to help machines: making machine learning and AI sustainable. For public service, this has particular resonance. Public service organisations are necessarily focused on 'responsible AI'. By that, we mean an approach to using smart machines that's rooted in key principles like accountability, fairness, human-centricity and transparency.

New roles will be needed, with people providing oversight to align the work of smart machines with the ethics and values of the organisation, particularly as these change over time in response to new policy priorities. These concepts are more fully detailed in the book <u>Human+Machine: Reimagining Work in the Age of AI</u>, published in March 2018 by Harvard Business Review Press and co-authored by Accenture's Paul Daugherty and Jim Wilson.

# THE CASE FOR CHANGE AND MOVING AHEAD

**Public service organisations deploying machine learning and AI are achieving some significant gains in terms of process improvement. Ninety-five percent report at least a doubling of KPIs across some processes and 40 percent record improvements between five and ten times.[2]**

But others are achieving even more. Through the interplay of people and machines, encapsulated in the concept of the missing middle, they're achieving breakthrough improvements through AI and seeing huge gains in productivity to meet increasing citizen demands.
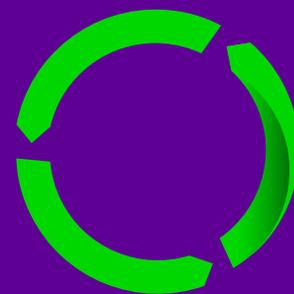
## We identify three main dimensions:

**1** ————

**Training machines to perform**

**2** ————

**Making what machines do explainable**

**3** ————

**Making machine learning and AI sustainable**

However, as our research shows, these organisations are today very much the minority, with only nine percent claiming to be realising all the benefits of AI.

Why should other public service organisations follow their lead? After all, agencies are not subject to the same competitive pressures as private sector businesses. But they are under pressure to meet citizens' digital expectations and growing demands, which increasingly do not differentiate between their consumer and public service experiences.

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**As public service organisations strive to satisfy those expectations, reimagined processes will play a key role. Here are two things they should bear in mind to move ahead:**

**1.** **Don't try to reinvent the wheel:**
There are numerous inspiring examples already out there. Being a fast-follower in this space is not a bad thing. Organisations should take advantage of proven approaches that are often openly available at low cost from the leaders in this field.

**2.** **Be selective and don't be over-ambitious with AI deployments:**
Instead of trying to automate for every eventuality that may arise in a call-centre, identify the most common queries and automate for those. It's likely that just one question will account for at least half of all queries.

**Above all, remember that automation is just the beginning, not the final outcome. Public service pioneers in AI go a few steps further. They are replacing traditional steps and sequences from an earlier process era with real-time feedback and redesign to automate process change management. And they are continuously reskilling their workforces and putting the best tools to work to get maximum value out of data. As they do so, they are achieving breakthrough results, with exponential gains in performance.[3] Other public service organisations must follow their lead.**

# References

1   Daugherty, Paul and James Wilson. "Process Reimagined: Together people and AI are reinventing business process from the ground up," Accenture, 2017.

2   To understand where and how public service organisations are applying AI to manage and change business processes, Accenture surveyed 1,075 process professionals from large global companies and public service organisations in late 2016 and early 2017. See Daugherty, Paul and James Wilson. "Process Reimagined: Together people and AI are reinventing business process from the ground up."

3   In research conducted in support of the writing of the book Human+Machine: Reimagining Work in the Age of AI, published in March 2018 by Harvard Business Review Press and co-authored by Accenture's Paul Daugherty and Jim Wilson.

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