



Automation in Public Sector

Given the prevalent economic conditions in South Africa, automation is expected to help reduce costs and transform the public service delivery landscape.



Automation in the public sector is expected to be the new normal owing to its huge potential to improve service delivery and revenue realisation and cost savings. South Africa, although progressing well on this front, still has a long way to go. There is evidence from industries such as banking, finance and insurance, transportation and healthcare that have started adopting automation for better results. Automation is also growing in the public sector as governments are focused on efficient and improved service delivery.

Introduction

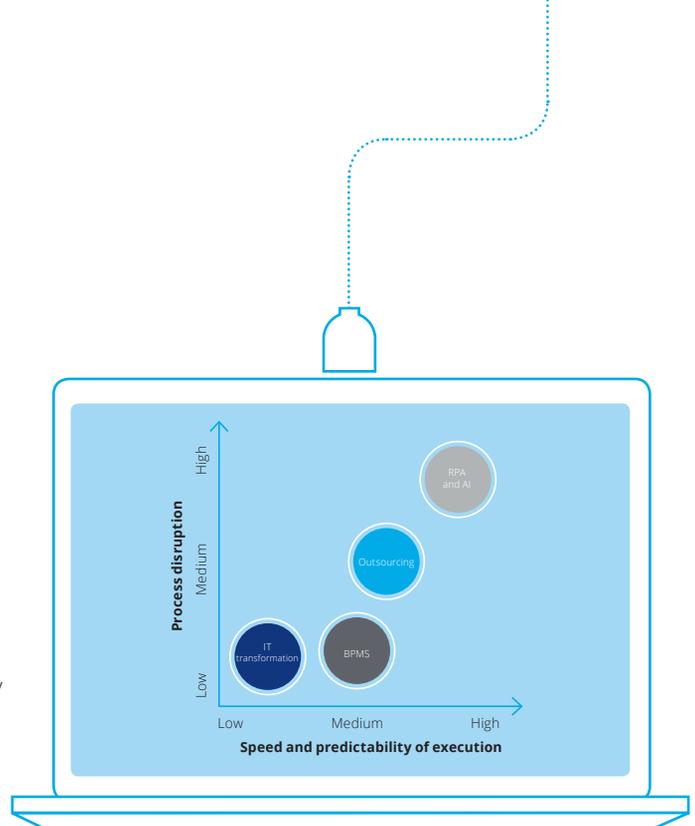
Service delivery in South Africa has been one of the most critically distressing things for government. A number of departments have not been able to meet targets defined in major policies such as AsGISA and Millennium Goals of South Africa. According to the Public Service Commission (PSC) some government agencies are taking up to 10 years to process service termination and pension payouts against the prescribed timeline of 60 days. As per PSC, the impact “is huge and severe to the retirees, their dependents and/or beneficiaries, especially the beneficiaries of deceased pension members”. Public service delays can be tackled by using technologies such as automation that helps government deliver services in an effective and efficient manner.

Technology has always been at the forefront when it comes to gaining efficiencies and enhancing accuracy. Automation is one of the critical steps driving cost savings in the current economic landscape across industries including the public sector, manufacturing, financial services, etc. These industries are reaping benefits by automating their rule-based processes to free resources from routine work to far more value generating work.

The benefits of automation also include the ability to accurately predict public sector infrastructure breakdowns and other related changes in the service delivery environment. Technological developments are crafting a new automation age that is increasingly smarter and complementary to existing processes.

In simple terms, Service Delivery Automation (SDA) may be defined as the use of technology to complement human actions and augment value. It has the ability to support legacy systems and minimise disruptions. SDA is primarily driven by efficiency, cost requirements, and disruptive pricing models.

The demand for SDA has led to the emergence of providers who are solely focused on automated business process delivery. In the early 1990s, Enterprise Resource Planning (ERP) was the go-to technology. It was later overtaken by the emergence of labour arbitrage through the offshoring model in the year 2000. As cost became a crucial factor due to pressures on bottom lines, companies started to look for regions such as India and China where cost arbitrage was available. In recent years, SDA has become a growing trend as automation helps to deliver the same services more efficiently with significant potential for further growth.



Automation technologies can be classified under IT transformation, Business Process Management Services (BPMS), Outsourcing and Robotic Process Automation (RPA) and Artificial Intelligence (AI). All these technologies enjoy varied levels of maturity, along with specific limitations. For instance, IT transformation is highly mature, although it can be less effective in application production. BPMS is highly mature but can become very costly depending on the scale. Robotics and AI are new technologies with relatively low resilience to changing operating environments .

Due to the numerous benefits such as higher efficiency, reduced errors associated with automation technologies, their adoption is on the rise. Globally, the private sector was the pioneer in adopting these technologies, their application ranging widely from contact centres, insurance enrolment and billing, claims processing, accounts payable, to invoicing and medical coding. Of late, the public sector is also adopting these technologies to gain efficiencies and effectiveness, albeit gradually. The global IT robotic market was valued at \$183.1 million in 2013, and is expected to grow at a CAGR of 60.5% to reach \$4.98 billion by 2020 .

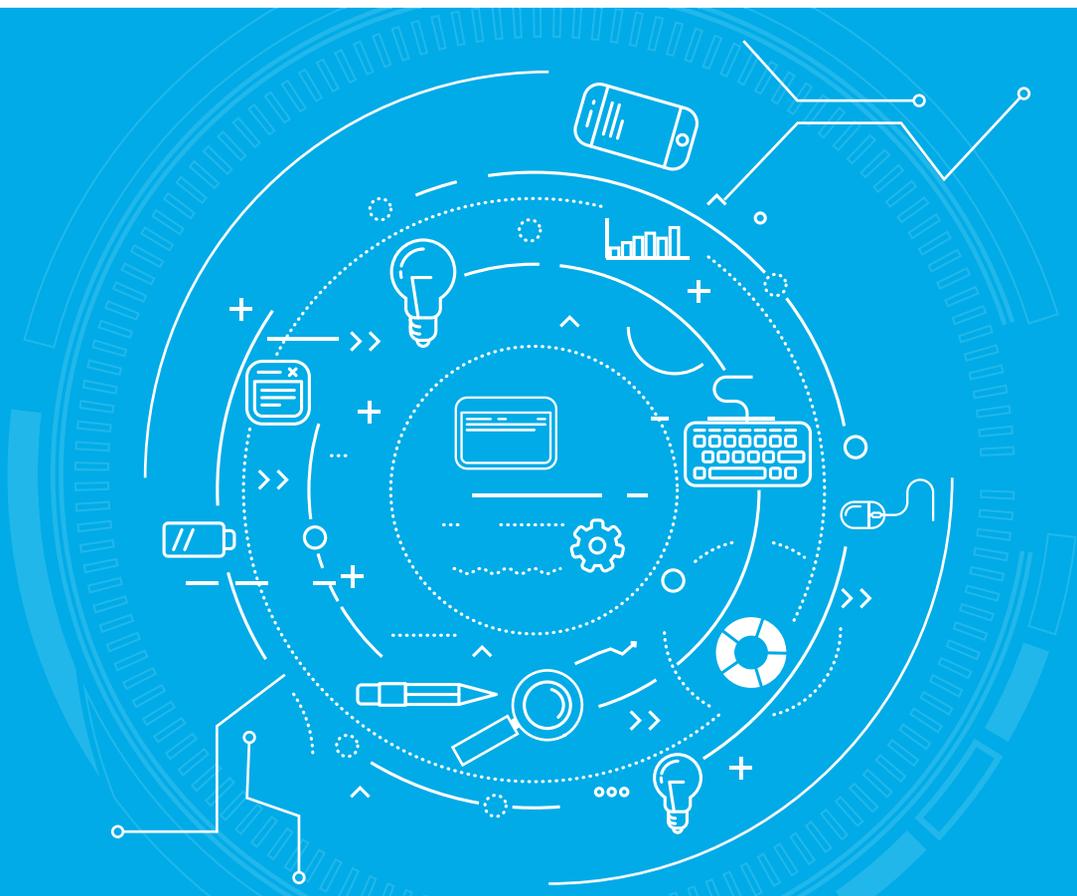
Automation in the Public Sector

Similar to other sectors, automation in the public sector is accompanied by concerns of job losses. By targeting structured, routine-bound processes, automation quickens service delivery and releases resources for higher-value work without adversely impacting job security. Indeed, according to an analysis of the UK public sector, more than 70% of existing public sector jobs require cognitive abilities and cannot be automated completely. For roles that particularly require higher degrees of cognitive skill, automation is expected to complement roles rather than replace them.

For example, senior personnel in policing, fire services and prisons could exploit technology such as data analytics to improve decision-making, helping them to better understand the demand for their services and performance. Going forward, it will become more critical for the Public Sector to attract people with higher social and cognitive skills. This is because a larger portion of the public sector will be required to perform complex, judgement-based problem-solving and deliver customer-centric services as machines take over repetitive, administrative tasks.

Automation does not necessarily result in job losses. Automation is also viewed as an enabler for business growth, hence, generation of employment. The issue with automation is finding the appropriate talent for performing the current open jobs. Colleges and universities should focus on imparting training that can make the upcoming workforce suitable for new age jobs.

Given the current economic turmoil, it is imperative for the Public Sector to deliver its services in a more effective and efficient manner. According to Charlie Bruin, Liberata UK Limited, the Public Sector can benefit immensely by using automation technologies within various departments and deliver more efficient services. Automation helps in freeing up resources that can then focus on better service delivery and front-line services.



Automation potential in the South African Public Sector

The Public Sector in South Africa is one of the areas where automation and digitisation can be leveraged to deliver services in a better way and realise higher revenue. According to the World Economic Forum's Global Competitiveness Report 2016-17, South Africa ranks lower than the majority of countries with comparable nominal GDP. Automation can help the South African government reduce the time taken and the procedural complexity to start a business. If the government is able to use automation to achieve this, there is a high possibility of improving service delivery and higher revenue recognition through new revenue streams as well as increased cost savings.

The South African Unemployment Insurance Fund (UIF) was faced with challenges in processing claims, approximately 700 000 annually. The processing time was five weeks and 18 paper forms were required. Also, due to physical forms, keeping a track on claims status was becoming very time intensive. UIF opted for an automated, intuitive PDF form driven process. Due to automating the process, the number of forms required were reduced to six from the eighteen and the average processing time also got reduced from five weeks to one week. Similar to UIF there are a number of departments

(compensation fund, SASSA) and functions (claims management, revenue assurance) where automation could be immensely useful.

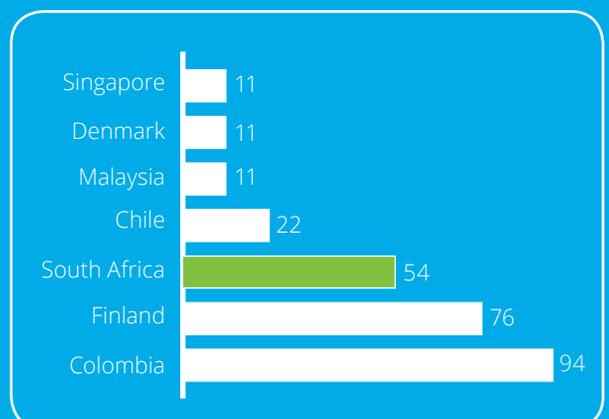
South Africa's e-Government policy framework is focused on the use of Information and Communication Technology (ICT) to improve efficiencies and effectiveness, also making it convenient for citizens to access government services. Few of the e-Government services include National Treasury's e-Tender Publication Portal, a central supplier database, e-Home Affairs and the South Africa Revenue Services' e-Filing system.

At municipality level, a number of initiatives have been launched, such as the Ekurhuleni Metro Municipality's (EMM) online system for paying rates, and the City of Cape Town's digitisation of government information for citizens. EMM has digitised and automated several of its processes to improve service delivery. As a result, the municipality has been able to simplify its processes, reduce costs, and offer new self-service options to citizens. Benefits to EMM include reducing application approval times from three months to less than 21 days, which is expected to improve services and reduce costs for the municipality.

Time it take to start a business (Days)



Number of procedures to start a business



What South Africa is doing?

In 2015, the Gauteng provincial government established the Department of e-Government as part of a restructuring programme to improve service delivery, streamline the public service and fuel the province's knowledge-based economy. This department is also responsible for consolidating back-end processes. The government has also initiated a self-service invoicing system (an online platform that permits service providers to submit invoices to the Gauteng Provincial Treasury directly). Furthermore, the e-Government department is overseeing the rollout of the Gauteng Broadband Network (GBN). GBN will connect all the government buildings and numerous public service access points.

According to the budget vote for the Gauteng Department of e-Government, the government has automated the supplier self-registration portal that will allow small businesses to efficiently do business with them. It has also set up an e-Recruitment system to help citizens access government job opportunities online. Under e-Government, the department has also assisted the Department of Infrastructure Development to enable contractors and infrastructure personnel to interact online through video calling, while reducing travel time and real time decision-making at the development site.

Together with the Department of Health, Department of e-Government is connecting all the healthcare facilities in the province through broadband. This will help these facilities access patient records any time, anywhere. In the 2016-17 fiscal, the department will also develop an online system for liquor licence applications and a transversal Interactive Case Management System for Treasury's Gauteng Audit Services to provide a detailed audit trail of cases and resolutions. While rolling out a number of online services, the department is also working towards skills development so that citizens can take full advantage of an e-Government.

African counterparts such as Kenya and Ghana are also using automation and digitisation technologies such as M-PESA and M-health service initiative (MOTECHE), respectively, in order to improve service delivery. Kenya is one of the leaders within Africa in adopting automation in the public sector and is way ahead of countries such as South Africa and Nigeria. For instance, South Africa's record-keeping process is still not automated or digitised; this undermines service delivery and can also result in irregularities.

Automation opportunities

Automation opportunities in South Africa are vast and span across a number of departments in the public sector. The common functions that can be targeted for automation include claims management, revenue management and Source to Pay (S2P).

- **Claims management:** Stringent compliance and government regulations along with increasing competitive pressures forced the insurance industry to work more efficiently and effectively, especially in claims management. Major modules of claims management include claims settlement and fraud detection. Long settlement time is often considered as a deterrent to the growth of the industry. Automation can help reduce the overall time taken to process claims, leading to higher customer satisfaction and lower costs to the insurer. Fraud claims is another module where automation can be very useful. Fraudulent claims, if paid, are a cost to the companies and this cost is ultimately passed on to the customer in terms of higher premiums. Examining payment history and evaluating claims payoff trends can help companies detect fraud. Automating the claim workflows can help companies reduce/eliminate paying off fraudulent claims.
- **Revenue management:** Effective revenue management is one of the keys to maximise profitability. An automated revenue management system helps bring in higher accuracy and consistency within the revenue management systems. Automated revenue management helps to manage cash flow, match billing schedules with customer expectations, improve revenue cycles, and most importantly accurately recognise revenue.
- **Source-to-Pay:** Automating Source-to-Pay processes helps procurement staff become more efficient and productive. This helps reduce costs and make employees available for other functions. According to APQC – American Productivity and Quality Center, a provider of process, performance and knowledge management benchmarking, best practices, business research, and advisory services – use of e-procurement/e-sourcing drastically reduces cycle time to place a purchase order and average supplier lead time on purchased materials. It also increases the number of purchase orders processed per procurement Full Time Employees (FTE) substantially.

Examples from other countries

There have been numerous examples where countries such as Argentina, the US and Canada, to name a few, have been automating their public service delivery system to lower costs, improve efficiency and provide enhanced service delivery. The services which have been automated include claims management and pension plan

related services. Countries such as India, Australia, Japan and the Netherlands have also been automating public service delivery to provide improved benefits. South Africa is also moving towards a digital city through high quality safety services.

Conclusion

Due to current turbulent economic conditions, South Africa faces pressure on the public sector's bottom line resulting in an increased need for austerity and cost savings in the public sector. Automation holds the key for better revenue recognition and helps ease the bottom-line pressures in the Public Sector. The traditional paper-based operations are often associated with slow operations and higher costs, while also being subject to manual errors and risk of illicit transactions. This traditional way of service delivery is also inefficient when it comes to tracking maintenance and performance of critical infrastructure. Automation technologies such as robotics have the potential to substantially improve service delivery, reduce costs and equip public sector organisations in estimating infrastructure related break-downs and social needs. Automation does not necessarily mean that the digital machine will substitute the human element now or in the future. Automation technologies such as RPA really

act as an enabler for efficient processes, less errors and an empowered workforce. When talking about keeping government programmes cost-effective, efficient and viable; automation is expected to play a substantial role in enhancing the quality and transforming the mode of operations of government institutions and local departments.

Deloitte has been developing its automation capabilities and has helped a number of government departments across the globe in automating public sector service delivery. Deloitte Africa has also developed robust automation capabilities over the past few years and can help automate repetitive, error-prone, time-critical and rule-based public sector services.



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