Data driven decision making in the “new normal”

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Most of us could never have imagined the unparalleled effect Covid-19 is having on everything that we used to consider normal. Businesses that have survived the initial crisis and now subsequent waves will have to navigate through the recovery period, which some analysts say will be even harder on balance sheets than the initial lockdowns. Government and public services organisations are also having to reform and transform the way they operate due to the effects of the pandemic on the citizens they serve and staff and suppliers – often from the private sector, who deliver the services.

No one really knows how long the recovery will last or what shape it will take, but clearly we will have to find new ways to manage in what is sure to be a “new normal” post-pandemic.

As organisations move forward, they will need to perform and manage not only basic impact analyses, but also more complex ones as people adjust their lifestyles and preferences. Your well-established decision-making tools and models may no longer be enough in these unprecedented times when servicing your customers or building new products.

As a result, the need for more advanced techniques such as advanced scenario modelling and analytics insights as a service, leveraging new functionality in easy to scale cloud platforms, are even more important now than ever before.

Weathering the new normal

The very novelty of today’s circumstances undercuts the use of solutions that have been trained and optimised based on historic data going back several years. But one timeless truism is that the best decision techniques are based on the use of high quality and reliable data. The more unpredictable the circumstances, the more important it is for organisations to be adaptable and able to change to these fluid circumstances. If data-driven decision making was a competitive advantage before the pandemic, now it is a tool for survival (link to this article around Digital Disruption in SA: https://www2.deloitte.com/za/en/pages/digital-disruption-index.html).

If historical precedence can’t help with the analysis of data, what will? The answer is “what if” scenario simulations – but with a twist – as most contemporary “what if” scenario simulations would have used historical data and patterns to predict.

The new, post-pandemic “what if” simulations will need to work with much more uncertain data and much less of it – and answer very different questions. Simulators will need to use a digital replica of the business and draw on algorithms and experts that are better at working with lower data volumes and can calculate thousands or millions of possible outcomes based on the latest circumstances at any given point in time.

It’s similar to predicting the weather: the accuracy of long-term forecasts are low, while very short-term ones are high – but still not perfect. You use the weather forecast as a guide to make decisions on a day-to-day basis. Likewise, “what if” simulations will need to be run frequently as the business or market changes, which can be hourly or daily.
The viability of organisations adopting these new types of simulation-based tools to make decisions will depend on the following factors:

**How digitally do you operate?** In order to simulate highly volatile circumstances, your organisation needs to operate and utilise (both internally and externally) digital information and data on a real-time basis that can then be used as input to run dynamic simulations.

**What is your data capability like?** Do you have people in-house who have the skills and technologies to develop these new tools and, more critically, can you invest funds to do it?

The ability for your organisation to make sense of large amount of external data in order to identify a signal that might point to a specific event.
Investing in the new normal

While many organisations are operating digitally, few are likely to have the capabilities to develop new solutions, and even fewer will have the funding – especially in these desperate times when surviving and being frugal with limited resources are the norm. This is also true in the public sector where new government investments are likely to be focused on health and economic recovery while the budgets for other public service areas will remain the same or likely to be reduced.

In the new normal, industries and governments will have to find ways to fund, develop, and utilise data and analytics solutions that will drive businesses, markets, and society to recover and thrive. The following is a guide on how to navigate the new normal using data-driven approaches:

**Be led by the science:** Given that the response to the pandemic is led by science, organisations should follow suit. Leaders should rewire the mind-set and cultural DNA of their organisations to be data – or science-driven. For data science to work, the organisation should be operating digitally. That is, processes should be enabled by digital systems and produce data on a near real-time basis. For those who are not yet on the digital journey, this is the existential event that doesn’t give you a choice in the matter.

**One for all, all for one on data:** No organisation operates in a vacuum. So to get the most effective results, the scope of “what if” simulations and other analytical models should be the entire value network, including customers. This means the more data the ecosystem generates and makes available to the rest of the network, the better the results will be for all. While this approach will not be without challenges in the private sector, it should be especially feasible and appropriate for public sector organisations to come together to share data that can improve the services they deliver. Governments can play a key role here in facilitating better and safe data sharing across private and public sectors through policy and regulation. Regulation, in this instance can be an enabler for organisations to share data with more confidence. Global collaboration by governments in policy development and regulation will make it even more effective.

**Utilise national assets:** Most organisations in the recovery phase of the pandemic will have neither the people with the skills to build new solutions nor the funding. If you do, congratulations; but you will be in the minority and will have a huge responsibility to enable South Africa and the market to get out of the current circumstances. If organisations try to build these capabilities individually, data science and digital technology skills will become even more scarce and expensive in a market where they were already in short supply prior to the pandemic. We need to think wider than our own organisational structures and assets. Perhaps, we need to think about how to best utilise the government assets, for example the Research & Design Tax Incentive or the CSIR.
The South African government has invested a lot of time into building an elaborate system of financial incentives that are available to fuel R&D, innovation and other business investments in the country. Predominantly, the R&D tax allowance stimulates investment in R&D by offering organisations a 150% tax deduction on qualifying expenditure, thus reducing some of the financial risks associated with investing in innovation. This could include investments in science and technology, creating or improving existing products/services, and the development of knowledge and skills. Want to know if your investments meeting the qualifying criteria? Check out our [Gi3 page](https://www2.deloitte.com/za/en/pages/tax/solutions/global-investment-and-innovation-incentives.html) for more detail.

The Council for Scientific and Industrial Research (CSIR), through a mixture of parliamentary and private funding, have created a number of analytics and data science assets which organisations can implement within their environment at a substantially reduced cost. Oftentimes, however, understanding which tools will be bring the most benefit to your organisation and training them to operate effectively within your environment takes a little bit of time and patience. However, Deloitte has seen that when companies invest in new technology and tools with innovative partners, the benefits can far surpass the costs.

Is your organisation adequately utilising all the assets it has available at its fingertips?

**Streamline and sweat your existing assets (including your people):** We’re all aware that duplication costs organisations copious amounts of time and money, while limiting their ability to make decisions quickly – how many times have your ExCo argued about two different numbers for the same metric? Given some of the operating constraints which the pandemic has highlighted, it is more important than ever to understand who is doing what, how they are doing it and by when. Organisations can use this as a perfect opportunity to push their analytics agenda to the fore by implementing simple yet effective data management processes, identifying key data assets, and reducing and sharing capabilities (people, technology, processes and data) across the organisation.

Additionally, the pandemic doesn’t mean you have to stop investing in your people. Utilising open source tools, pooling resources across the organisation to create communities of practice and participating in MOOCs (massive online open courses) are all ways that you can continue to show your employees your commitment to their continued growth and invest in your organisation’s future without adding large costs that take away from the bottom line.

**Manage your demand:** Prioritise your analytics initiatives using dimensions such as cost, complexity and anticipated value. Once your organisation understands and realises the value of data and analytics, you will quickly find yourself in a situation where demand for analytical products exceeds your team’s capacity to produce them. Through portfolio prioritisation you will be able to focus your scarce analytics resources on the projects which will have the biggest impact on your organisation.
Use the right technology recipe: While there are numerous technologies and techniques to select from, using the right combination to develop a scalable and modern data architecture will shorten the time to value and, more importantly, the time to market in our continuously changing world. Particularly, cloud computing has been instrumental in enabling both private and public sector organisations to quickly deliver solutions helping them respond to the crisis and maintain continuity. Demand for cloud services has increased drastically since the start of the first lockdown and organisations who were already utilising cloud services prior to the pandemic found themselves in a better position to respond to their internal and customers changing demands. For more information on how organisations are establishing a strong digital backbone in response to the Covid-19 pandemic, see The future of cloud-enabled work infrastructure article. https://www2.deloitte.com/us/en/insights/topics/digital-transformation/cloud-infrastructure-strategy.html?id=us:2sm:3tw:cisa:eng:cons:092620

Diversity and inclusivity still matters: All the reasons why diversity in your workforce mattered before the pandemic, matter now even more. Markets and businesses will need diversity in thinking, diversity in execution, and most importantly, diversity in adapting to the new normal. This level of change will require people who can think differently. It will need everyone to come up with ideas and every voice to be heard, as well as matter, within an organisation. Someone’s voice today can be the answer to a problem tomorrow. Furthermore, you can extend this thinking to creating an ecosystem of partners that your organisation can leverage, thus creating capacity, infusing skills as well as external data into your environment as needed.

If the pandemic has not imposed radical change already, in the future most businesses will need to reinvent or profoundly change their business models and ways of working to recover and grow again.

Thriving in the new normal

Without a doubt, the pandemic is forcing us to change the way we live and work. The technological and cultural changes required to become an Insight Driven Organisation have been accelerated in a way we could never have foreseen. However, smart organisations aren’t just using this time as an opportunity to accelerate their data and analytics maturity; they are also using it as a platform to increase the adoption of analytical decision-making and ultimately future proof their businesses. These businesses understand that the new normal is going to be about adaptability and by harnessing the power of data they will able to navigate the Recovery period of this crisis to place themselves in a position of prosperity. So the only question left to ask your business is whether you are wasting a good crisis?