The power of sentiment analysis for the public service

By Kroshlen Moodley   13 May 2016

In an age of near ubiquitous communication platforms, big data, and advanced analytic capabilities, sentiment analysis of social media holds huge potential for both private business and the public service. But while business is increasingly using the tools on hand, locally the public service lags behind.

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Yes, a few prominent ministers have become local social media stars, but beyond the entertainment and informational value of these individual accounts, social media is a rich source of data generated by government's 'customers', the South African public, that could be better utilised. Incorporating these feeds into a data strategy could transform service provision.

The tech is ready, but are we?

The connectivity issues that may have held us back to a certain degree in the past have largely been resolved. We have excellent broadband in the country now, and the penetration of cellphones (and increasingly smartphones) is extremely high. But our public institutions haven't mined that potential yet. The analytics technology available today allows for sophisticated and automated sentiment monitoring and predictive analysis. By establishing a taxonomy of critical keywords, analytics tools, and combining it with an organisation's structured data, departments will be in position to better formulate outgoing messages, target specific audiences for those messages, and agilely respond to citizens' complaints. Add in an additional geo-location layer, and these issues can be mapped to specific locations.

This will enable government on a municipal, provincial or even national level to respond to crises, to send in additional resources if necessary, and to not be caught on the back foot when service delivery protests spark up. Clever data uses helps public servants understanding where there are pain points across the country, and to capacitate ourselves to respond to those issues.

Additionally, with a dashboard view of information – with simple graphics and graphs, and real-time information – decision makers can speed up their response times, and are less reliant on out-of-date data held in legacy systems. It is this technology-based competitive advantage that is transforming the work world, and holds the same transformative promise for the public sector.

Real-world applications

Buzzwords and big promises are one thing, but what would this look like on the ground in offices of the public services bodies? In Home Affairs, sentiment analysis would allow managers to triangulate the data the organisation already has (such as staff numbers, transaction numbers, etc) with official reporting structures and customer-provided insights (social feeds). Then you can pinpoint the challenges (and the successes) per office, and can intervene for better service if necessary.

If we take the example of proactive policing and city management, analytics can also be an extremely useful tool. Knowing where the traffic lights are out, where the bus systems routinely run late, where the public sentiment suggests a forthcoming protest (or worse), would allow officials to send in peace-keeping officers to manage the situation, or traffic cops to man intersections. Here, we must caution, it is important to note that we are not talking about using analytics to "crack down" on citizens, but rather enabling policing in the service sense of the word. A joint effort by the broader policing and justice community could incorporate emergency services and Metro police, for example.

Ultimately, the applications of predictive analytics and sentiment analysis are broad, and impactful. Cross-comparing a tweet about being asked for a bribe, and information from geo-tagged police vehicles, may reveal a pattern of corruption that we can combat.

Connected, but still secure

One aspect that I believe has held back the government adoption of these technologies in the very real need to maintain secure systems and data sources – especially in highly regulated organisations like SARS and the National Treasury. Incorporating social streams and new technologies may be perceived as a threat to this. But the technology for dual streams and sandboxing data stores exists, and there are some very smart technology architects who can define domains that are secured through various means. We need to be forward thinking. A social platform is not dependent on a legacy system. This is about changing mind-sets and kindling the necessary political will to embrace the power of digital.

The reality is that social media is no longer a 'nice to have', it is a strategic need, and the next step is not just participating in the conversation but leading it, sharing information, and more and more critically - monitoring social feeds and linking this to our systems, to make a meaningful impact to citizen convenience and service delivery.

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