At transit event, new city analytics head stresses sharing

The city's new chief analytics officer Amen Ra Mashariki emphasized the importance of data access and sharing data between agencies in his first public remarks Wednesday afternoon.

Mashariki, just three days into his position, was a keynote speaker at the City College University Transportation Research Center's symposium on transportation technology, and focused on the role of "big data" in transportation research and policy.

He said that the data analytics office would be "extremely dedicated to opening data, whenever and however we can open data."

In introducing Mashariki, Matthew Daus, the former T.L.C. commissioner and now a distinguished lecturer at the center, spoke about the importance of being able to access government data.

"The biggest issue we have is access to data from the government," he said, citing examples of researchers who have not received responses to FOIL requests.

He said, "Mayor de Blasio, we need to tear down those data walls. ... We have researchers here who don't work for the government, but they're here to help."

MORE ON CAPITAL
- Council bill would revive anti-Lyft proposal
- Council approves Astoria Cove, touting concessions
- De Blasio on the Ferguson ruling and the attack on Bratton

MOST POPULAR
1. First Look Media ends 'Racket' project, fires staff
2. Red Bulls arrive just in time to leave

By Miranda Neubauer 5:53 a.m. | Nov. 25, 2014
Mashariki said the idea of open access was important to him personally as someone who had published his doctorate in an open-source format and contributed to other open-source projects. Citing his own experience in academia and the opportunity of researchers to push their colleagues to consider different ideas, he encouraged the audience to "challenge us from the open data side but also from the analytics side."

He recalled how a car accident as a young boy growing up in Brooklyn ended up leading him to his interest in engineering. After recovering from his injuries in the hospital, he was initially afraid to join his friends riding bicycles, and so he sketched out a bicycle with a seat-belt. That prompted his mother to send him to a trainee engineer's club that was a feeder into Brooklyn Technical High School.

"For a very long time, how we took on transportation safety had a lot to do with regulation," he said, noting rules about seat belts and air bags. "We need to begin to look into how can data now ensure transportation safety. ... The real question is what questions do we ask the data."

Mashariki, who most recently worked as the chief technology officer for the U.S. Office of Personnel Management, emphasized the important role that "datapalooza events," in which the government invited software developers to work with data, had on the federal level. Building on hackathons already organized by M.O.D.A. or the Mayor's Office, he said he expected a rebranding and more of such events.

He said the position of the office had been strengthened by now being under the Mayor's Office of Operations, after initially being housed in the Mayor's Office of Policy and Strategic Planning.

"The Mayor's Office of Operations is really the tip of the spear to really push the mayor's goals and initiatives," he said, citing as an example the Vision Zero traffic-safety plan. "We are a mechanism with which to successfully implement those initiatives."

He said that agencies have begun to build up their own analytics capabilities.

"MODA is not in the business of being the godfather of analytics," he said. "The larger business is helping to build up capacities in agencies where it doesn't exist and involving [ourselves] in interagency collaboration," he explained. "When it comes to big data, what's important is that you have access to all sorts of data sources," he said. "Anything you can get your hands on, throw it into the pot."

Data sharing among agencies can help them come to "not only different but more accurate and better decisions about how they can do their job," he said.

Mashariki pointed out that MODA has launched research partnerships with N.Y.U.’s Center for Urban Science and Progress, Columbia's Center for Data Science, R.P.I., sent its first chief programmer to the inaugural class of the Cornell Technion program, and noted that the Department of Information Technology and Telecommunications has worked to acquire collision data from the NYPD for the open data portal on a daily basis and assisted with a recently launched city Vision Zero map. He also highlighted that 17 D.O.T. data sets
are scheduled for release in the future in addition to the 15 released already.

When it comes to transportation data, he said areas that MODA would be interested in are the impact that subway line closures and roadwork have on roads and transit networks, predicting the impact of major unplanned events such as Hurricane Sandy on transportation utilization and the local economy, modeling and predicting the impact of urban development and commercial development projects, such as the building of a new stadium, analyzing patterns of usage as they relate to planned transportation network expansions as well as holidays, weather and the United Nations General Assembly, and how that could inform service adjustments.

In response to a question about how the data could help the administration defend its policies in the face tabloid criticism, Mashariki said that based on his federal government background he saw a role for data to "empower people in [government] who create policies to be able to make a decision and then be able to validate and verify the decision based on data."

One way that is now possible, he said, is through MODA's implementation of end-to-end reporting on 911 calls.

"When someone says 911 doesn't work for this specific group, that data that we have has the capacity of giving the mayor the opportunity to say, well, here's what the data says," he said. "If the data speaks to something an agency isn't doing correctly, that actually gives the agency the cover to begin to engage smartly on how to solve that problem."

That, he said, gives an agency head a better view of how to specifically approach an issue, rather than "someone saying there's a problem, let's throw a lot of money at it because you don't know specifically where the problem is."

During an earlier session in the symposium, D.O.T. staff and researchers gave presentations on how they used New York City transportation data.

Stanislav Parfenov, a transportation engineer and data analyst at D.O.T., illustrated how analysis of taxi medallion data can show the impact of the U.N. General Assembly, a campaign visit from President Obama, holiday and weather travel and offer insights on how destinations change and the availability of pick-up and drop-off opportunities. An analysis of MTA BusTime data showed heavier activity in Midtown and during the morning.

A student of N.Y.U. professor Kaan Özbay presented research into collision data that showed that driver intention, failure to yield and pedestrian error were top collision causes and identified crash hotspots by bridges and tunnels.

The recently released Vision Zero map has come under criticism from civic technologists, who say there was no outreach to them and that the map does not reflect their priorities, and they have also identified gaps in data provided by the D.O.T.

John Krauss, a software developer who drew on NYPD crash data to develop his Crashmapper platform, wrote in an e-mail prior to Wednesday's event that D.O.T. had only released one of 18 data sets, "Citybench locations," that it was scheduled to release on August 1 according to the open data road map.

"Everything else, 17 data sets including street surfacing schedules, bridge traffic volumes, street assessments, and sidewalk construction schedules, amongst other data, is not yet
"released," he wrote. "As far as I know, there has been no comment about why they are over three months late releasing this data, and no revised schedule."

In response to an earlier inquiry about the Vision Zero map, a D.O.T. spokesman had said in a statement that the agency was in continuing discussions with the civic technology community about ways to make more data available, welcomed feedback and noted that the map's underlying data was available on the open data portal.

"The data 'released' on the Open Data Portal corresponding to the Vision Zero Map was actually released in a format ... that is almost impossible to read without spending thousands of dollars on an ArcGIS [software] license," Krauss wrote. "I am pleased to hear that D.O.T is interested in working with the civic tech community. I would personally love to talk to them about their revised schedule for releasing this data, and if there's anything the civic tech community in NYC can do to assist in the process."

More data could be available from the M.T.A. if it follows the recommendations of the M.T.A. Reinvention Commission, whose draft report Capital published earlier this week.

That report repeatedly emphasizes the importance of data and new technology. For the M.T.A. to be more transparent, it recommends that "information on board budget packets, real estate holdings and transactions, contracts, spending and professional service agreements...should be published online in a machine-readable format."

It also recommends that the M.T.A. make it easier to track the progress of capital projects by providing budgets and timetables and the possibility to sign up for electronic project updates. Additionally, the report recommends the establishment of an M.T.A. Office of Technological Opportunity led by a chief innovation officer, and capturing customer feedback through an M.T.A. mobile application that has ticketing and scheduling capabilities and can help "crowd source" complaints and responses.

On Saturday, software developers interested in participating in this year's MTA transportation application competition came together at N.Y.U. Center for Urban Science and Progress to begin working on prototypes and compete for an initial $500 AT&T Sprint Prize. Many of the teams were inspired by the beacon technology in Grand Central Station that Transit Wireless is piloting as part of the competition and worked on applications focused on wayfinding or aiding people with disabilities. The three winning concepts for the initial awards were Accessway, an application aimed at helping the visually impaired by giving subway directions using speech to text technology, NYC See, an application that offers location-based information on subway entrance outages and other station information especially aimed at the disabled and TranSight, a visualization platform that would algorithmically rate subway stops geared at an audience of riders, policy makers and advocates.

MORE: CITY HALL AMEN RA MASHARIKI COLUMBIA HIGHER EDUCATION MATTHEW DAUS MTA NYU TECH TRANSIT

Author: Miranda Neubauer

MORE IN CITY HALL

Council bill would revive anti-Lyft proposal