

THE WALL STREET JOURNAL.

[CIO JOURNAL.](#)

Automation Is Transforming the Network and the Role of Engineers, Panelists Say

At the same time, IT teams are expected to shrink

By [Sara Castellanos](#)

Oct 18, 2017 5:17 pm ET



Avi Freedman, co-founder and CEO of Kentik, Richard Whitehead, chief evangelist at Moogsoft, Kelly Ahuja, CEO of software-defined networking and security company Versa Networks, Mansour Karam, founder and chief executive of Apstra, Neal Secher, senior vice president and head of networks at State Street, speak at ONUG in New York City, Oct. 18, 2017. PHOTO: SARA CASTELLANOS / WSJ

NEW YORK – When artificial intelligence becomes more widespread in IT, network engineers won't have to miss birthdays and anniversaries because they're working late on debugging issues or manual fixes to network infrastructure, panelists at an IT conference said Wednesday. At the same time, IT teams will shrink and traditional IT roles will change.

The impact of artificial intelligence on IT was discussed by panelists at the ONUG Fall 2017 conference on Wednesday. ONUG is an organization previously known as the Open Networking User Group and its members advocate for open hardware and software-defined infrastructure and security solutions.

Nick Lippis, co-founder and co-chairman of ONUG, estimates that one-third of the IT workforce will shrink within five years because of automation in IT. Analysts at Forrester Research Inc. estimate that IT groups will be up to 40% smaller within five to seven years in part because IT workers will be free from maintaining archaic legacy systems, [as CIO Journal has previously reported](#).

But the sentiment among panelists about automation's impact was largely positive, and they said it's imperative that companies start thinking about how they're going to automate IT processes.

"If you don't automate, you'll be walking at a snail's pace ... you're not going to be in the digital age," said Kelly Ahuja, CEO of software-defined networking and security company Versa Networks, at the panel event.

Artificial intelligence is expected to automate the most routine tasks for IT groups, said Richard Whitehead, chief evangelist at IT operations analytics company Moogsoft.

Mundane tasks such as resolving network issues can be a source of frustration, burnout and boredom, which may in turn lead to mistakes, he said at the panel event. Instead, automating aspects of networks means IT employees will be able to refocus their time and effort toward more creative efforts, such as improving application latency across the network, he said.

By automating IT processes, network engineers can free up time to "improve their skill sets in a way that focuses on what the business really needs," said Mansour Karam, founder and chief executive of Apstra, which specializes in automating network infrastructure and services.

"In the years ahead, I really hope that the technology we're bringing to the table will help (IT employees) achieve a better work-life balance," Mr. Karam said.

Although companies such as [Bank of New York Mellon Corp. are finding ways to automate IT processes](#), panelists said the industry is still far away from a fully autonomous network, with machines

telling machines what to do. BNY Mellon recently built an internal, proprietary AI chatbot in an effort to help IT employees automate manual storage-related tasks.

But the reality is that many companies are still operating 1990s-era networks, Mr. Karam said.

In the future, the role of network engineers will evolve because they won't be spending 80% of their time doing redundant tasks manually, he said. Instead, they'll be thinking about how to architect their network in a way that embraces microservices and the needs of the business, he said.

"Finally, you can focus on more important problems," Mr. Karam said.

Hands-on technical roles including system and network administrators and storage managers will decrease because cloud vendors will largely be in charge of maintenance and provisioning services such as storage, [Forrester analysts have said previously](#).

CIOs of the future will do away with these technical roles in favor of hiring specialists in relationship and vendor management, data and customer experience in order to provide more business value, according to Forrester.