The demands of the 5G reality

The age of 5G is here, and its wide-reaching proliferation is just around the corner – by 2025, 74% of mobile connections will be powered by 5G, and 2.6 billion 5G mobile subscriptions will be serving 65% of the world's population.

And, as network operators all over the world are gearing up for 5G as well as the mass densification of 4G, they are also seeking ways to face the many and formidable challenges of rolling out and managing next generation networks.

This is because the 5G technology is hyper-complex, comprised of multiple technologies, architectures, bands, layers, and RAN players.

This combination of challenges is presenting MNOs with a tough conflict they must resolve.

On the one hand, they want (and need) to accelerate the launch of their next generation networks. On the other hand, without clear additional revenue streams, deploying 5G with the current tools, processes, and methodologies is simply not economically feasible.

In comes (brutal) automation and AI

The key to meeting these challenges head on, to resolving the conflict, and to untangling the complexity is automation. But, not just any automation – as Arash Ashouriha, Deutsche Telekom AG 's deputy chief technology officer once coined it, what the industry needs is brutal automation.

Brutal automation , both at the network level as well as with all business processes is a crucial element of operators' success in 5G, delivering:

Accelerated time-to-market with faster configuration & deployment

Quality & reliability reducing errors & improving assurance

Cost-efficiency for CapEx and OpEx reduction

Greater simplicity in managing 5G, data, and vRAN

New service creation for end-to-end 5G services

Resilience with real-time adaptations & centralized management

And when automation is AI-driven operators can also:

- Gain an immediate understanding of the complete network landscape
- Predict the impact of network changes
- Take automated, closed-loop actions
- Continuously configure and optimize the network
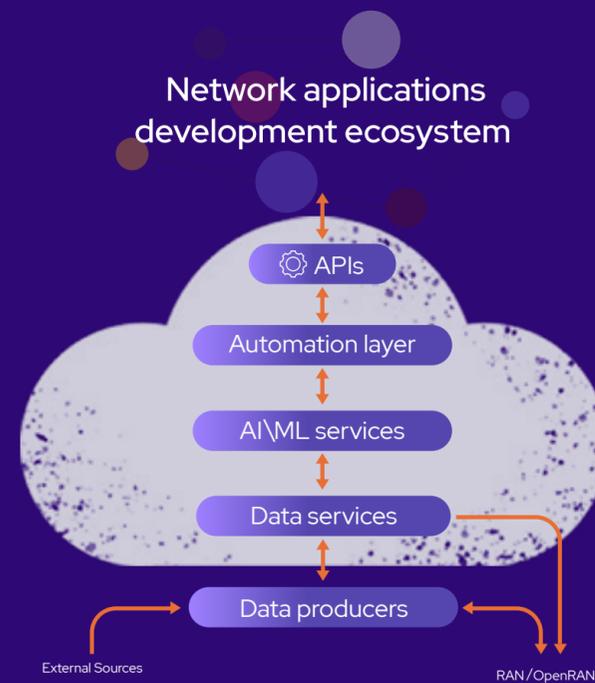- Seamlessly manage multiple systems, technologies, and vendors

Next Generation RAN Automation & Orchestration from Cellwize

This is where the Cellwize Chime comes in, an open, cloudified and AI-driven RAN automation platform that enables MNOs to accelerate 5G network deployment and go-to-market.

How it works

The Cellwize Chime platform:
- **Ingests** raw data from internal and external sources
- Applies AI/ML for **enriching** vendor specific data
- **Transform** data into an abstracted data model made available via APIs
- **Orchestrates** the various functions required to activate a new 5G site with automation recipes
- **Connects** any network app to any OSS or vendor though a single pane of glass

Network applications development ecosystem

APIs

Automation layer

AI\ML services

Data services

Data producers

External Sources

RAN /OpenRAN

Chime enabling solutions

cellwize
automation that enables

At Cellwize, we believe in the power of automation. Indeed, with all the complexities of next generation networks, and the mandate to make changes and launch technologies and services now – there is no greater enabler than automation.

This is why we have designed a set of solutions for automation that enables operators with the key capabilities required for meeting the needs of tomorrow today:

CHIME Deployer: automation that enables the rapid deployment and configuration of 5G sites.

CHIME Designer: automation that enables adaptive RAN configuration and policies, along with planning, audit, and enforcement of network parameters.

CHIME Optimizer: automation that enables network optimization for addressing traffic demand, improving coverage and capacity, and driving the customer experience.

CHIME Developer: automation that enables self-development, empowering engineers to create their own algorithms and apps, connecting them to the RAN through open APIs, and providing security with a network guard function.

CHIME Assurer: automation that enables assurance of the RAN component in the end-to-end 5G network.

CHIME Streamer: automation that enables data collection, enrichment, and distribution, to address multiple needs and enable multiple use cases in the operator's.

Key benefits to MNOs

5G acceleration for fast deployment and service operation automation of 5G technology and rollouts.

Full automation of complex heterogeneous networks, including both traditional network kit players as well as new vRAN players.

End-to-end orchestration for multiple business scenarios, including VoLTE evolution and network densification, to align with business and network objectives.

An open architecture that abstracts and orchestrates RAN vendor data, featuring an agnostic provisioning gateway for a robust and open provisioning framework that leverages third party and vendor applications.

Best-in-class implementation for all standard SON use cases, end-user focused business scenarios, and network-optimization use cases, for more shockproof radio networks.

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Why Cellwize?

Field-proven experience & expertise: with solutions that are enabling the 5G journey of leading operators worldwide

Industry recognition: we are proud to be on an accelerated growth trajectory that has been recognized by Deloitte, in the firm's 2018 Technology Fast 500™.

Innovation: having been selected for the third year in a row to receive funding from the Israeli Innovation Authority (IIA), as based on the quality of our innovation and R&D.

About

Cellwize is all about enabling the networks of the future today. With Chime, our cloudified and AI-driven RAN automation and orchestration platform, we enable mobile network operators (MNOs) to accelerate 5G network deployment and go-to-market, as well as the ROI on their network investments. Even in the most complex and dynamic of network environments, Chime enables operators to connect to any application and any vendor, as well as co-create on top of the platform, delivering unprecedented ease, speed, and agility. With the future of 5G already here, Chime is helping leading MNOs all over the world to launch and leverage their next generation networks and face the future with confidence.

To learn more about how Cellwize can help you enable the networks of the future today, we invite you to contact us at **info@cellwize.com** or go to **www.cellwize.com**.

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