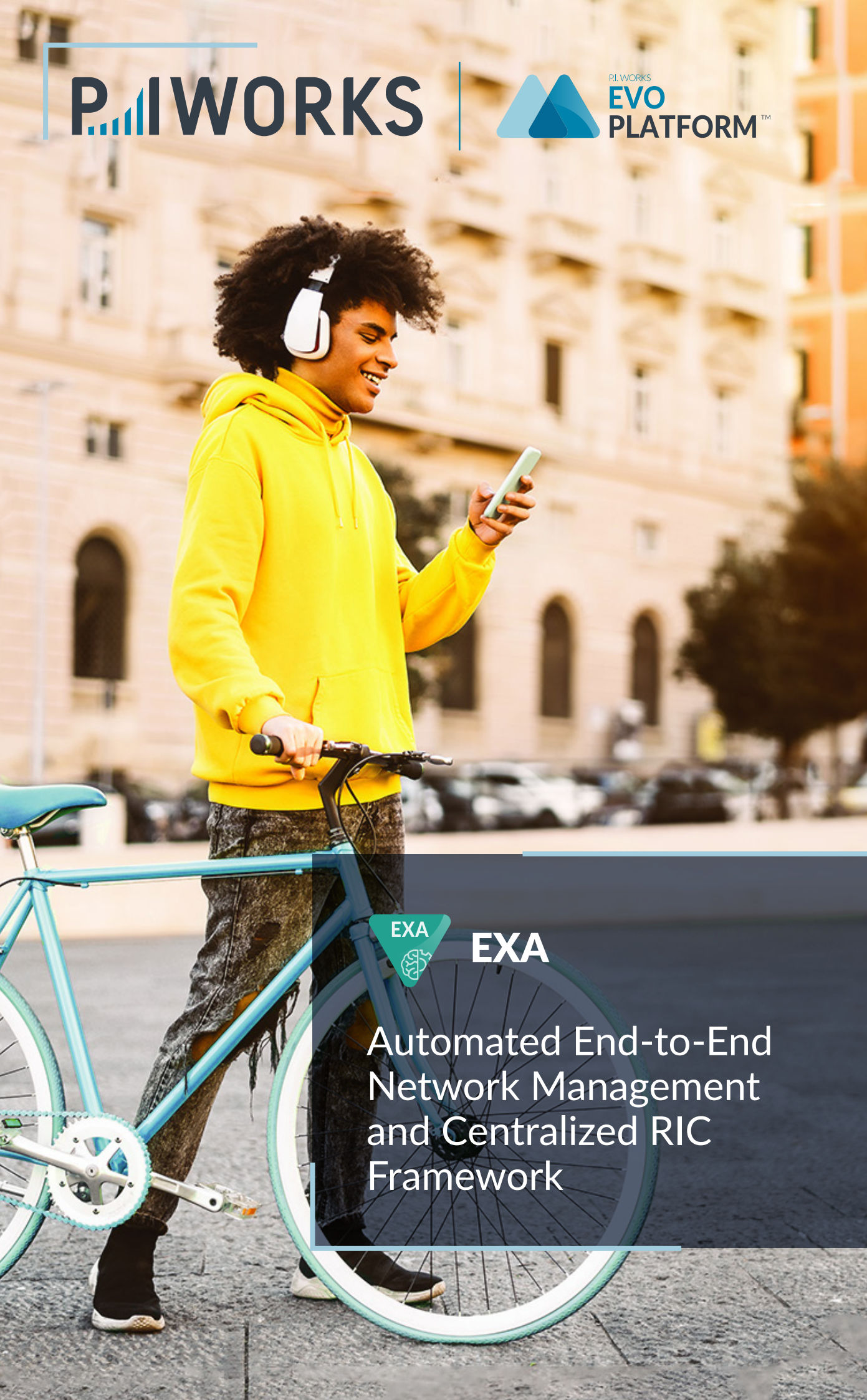
P.I.WORKS

P.I. WORKS EVO PLATFORM™



EXA

Automated End-to-End Network Management and Centralized RIC Framework

Industry-Leading Centralized SON and Centralized RIC

A learning-based approach for autonomous and proactive mobile network optimization.

EXA by P.I. Works is the industry-leading, multi-vendor and multi-technology automated network management solution for hybrid Open RAN and existing networks. EXA features best-in-class Centralized RIC implementation to unleash observability and programmability of hybrid networks and ensure portability of it's use-cases across deployments and RIC implementations. EXA helps mobile operators to efficiently manage their network resources and improve customer experience levels with the help of top-class AI/ML algorithms.

Key Capabilities

– Proven track record in Tier 1 mobile operators worldwide.

– 30%+ OpEx and CapEx reductions through AI-based automation and 15%+ faster download speeds observed through various deployments.

– Power saving features providing 5%+ reduction in electricity costs.

– Marketplace including more than 60+ field-proven off-the-shelf automation use-cases supporting all major vendors and technologies, including Open RAN vendors.

– Diverse programmability options with advanced implementation of RAN Intelligent Controller (RIC) beyond O-RAN standards.

– Cloud-native microservices based design enabling flexible deployment options, including private and public cloud providers.

– Improved customer experience driven by advanced data correlation capabilities, including third party data sources such as crowdsourced, geolocation or CEM system.

The Formula for Superior Customer Experience

EXA yields significant OpEx and CapEx savings and streamlines their network optimization processes. This leads to better managed networks and improved service quality levels from day one.

Product Features

Selected Automation Use-Cases of EXA

– **Energy Saving** evaluates carrier loads in a centralized manner. Based on macro-macro, macro-small cell, inter-technology, and inter-band traffic patterns, it automatically forecasts traffic levels and turns off/on network elements to reduce energy costs and the carbon footprint.

– **Code (PSC/PCI/RSI) Optimization** offers user mobility and cell type-aware code planning optimization in two modes of operations; bulk planning and conflict resolution.

– **Plug and Play** offers optimal initial site configurations, including but not limited to PCI/RSI/PSC/BCCH/BSIC codes and initial neighbour relations for rapid and consistent network rollouts.

– **Special Event Handling** performs instant improvement actions prior to and during planned and unplanned customer events, based on its machine learning-powered anomaly detection algorithms.

– **Cell Outage Detection & Compensation** instantaneously detects and compensates cell outages as well as sleeping cell and sick cell problems, to reduce customer complaints, churn, traffic loss and the MTTR (Mean Time to Recover).

– **Coverage & Capacity Optimization** boosts coverage and resolves capacity issues with near-real-time actions, using network logs, call-traces, external system metrics, crowdsourced data and RF prediction outputs.

– **Hybrid Load Balancing** dynamically offloads traffic from heavily utilized cells by intra-frequency, inter-frequency and IRAT traffic steering actions, in order to proactively prevent congestion issues and minimize site capacity expansion needs by considering the load quality status on target carriers.

– **Mobility Robustness Optimization** improves the mobility experience of subscribers by resolving handover problems and ping-pong activities, based on the data collected from source and target cells in heterogeneous networks.

– **Automated Neighbor Relations** accepts the mobility management policies set on the web-user interface and identifies optimum intra-frequency, inter-frequency and inter-technology neighbours, including inter-NEMS and inter-vendor relations

Creating Value for Our Customers

P.I. Works' EXA offers the most comprehensive capabilities in the market, having been field-proven in numerous Tier 1 operators worldwide.

EXA is the best choice for mobile operators looking to automate their networks and provides:

- Streamlined and consistent network operations
- Truly vendor-agnostic network optimization
- Proven OpEx and CapEx reductions via automation
- Reduced customer churn and better service quality
- Proactive actions to prevent potential problems beforehand
- A single platform for managing all network resources
- Extended flexibility and programmability options with rich APIs, SDK and Non-RT RIC Framework
- External enrichment and data correlation capabilities with diverse third-party data sources

About P.I. Works

P.I. Works is a leading provider of AI-driven mobile network planning, management and optimization solutions.
P.I. Works combines field-proven expertise with a commercially available product portfolio and services. These solutions enable Mobile Network Operators to accelerate Open RAN Adoption and improve network quality. P.I. Works has deployed its solutions at 70 mobile network operators in 48 countries.

For more information, please visit
http://www.piworks.net/products
or send an e-mail to marketing@piworks.net

... Enable Automation for Superior Customer Experience

Automation Now and Forever

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