



Tracking Business Impact in Real-Time

New tool enables operators to immediately see the business impact of network performance

In telecoms, as in any highly competitive industry, real-time commercial data is becoming a must have. If you can see how your business is performing in real-time, you can potentially make immediate adjustments to boost revenues or cut costs.

Several mobile operators are deploying a dashboard developed by P.I. Works that is designed to present this kind of data in a straightforward and accessible way. The leadership team can then see how the operator is tracking on customer revenue, operating costs, cash flow and other key performance indicators (KPIs) by the hour, day, week or month.

One of the new additions to P.I. Works' suite of automated network management solutions, the software behind the dashboard takes operating metrics, such as the traffic load and throughput, and translates that into commercial indicators that show the actual impact on the business. In the event of a power outage or a network fault, the dashboard will show the business impact of the related loss of capacity or functionality. In this way, the new P.I. Works tool removes the need for business leaders to be able to interpret what complex technical reports actually mean for the business.

P.I. Works, which serves 67 mobile operators worldwide, says mobile operators can use the dashboard to track strategic KPIs, such as the net promoter score, customer complaints and market share, as well as financial metrics. Users can set specific KPI thresholds that will trigger alarms. The new tool can also be used to monitor roaming traffic, both international inbound and outbound traffic. The dashboard can segment the indicators by market or region, or by different segments of the business.

"In a telco, two pieces are always key: what's happening on commercial and what's happening on technical because that's customer facing," notes Hussain Suliman, Advisor to P.I. Works' CEO. "And everybody is focused either on the commercial or on the technical. Nobody focuses on the two together, but with this tool, we are marrying up the commercial and the technical."

PIWORKS



Drawing on data from many sources

The new tool is designed to bring together data from all elements of the network, such as the radio network, the transport layer and the core network, providing end-to-end transparency for the first time. Abdullah Yildizhan, Program Manager of P.I. Works, says one large European operator has used the tool to aggregate data from more than 100 interfaces covering the radio access network, the core network, value added services and IT domains. These tool is drawing in data from 2G, 3G and 4G radio access networks supplied by a Chinese vendor, as well as data from a wide range of IT and telecoms systems and tools supplied by other vendors. "Employing a table structure, it enables end-to-end monitoring of the network infrastructure with minimal data processing time," Abdullah Yildizhan adds.

P.I. Works expects the dashboard – part of its VantagePM performance monitoring solution – to be particularly useful for operators as they rollout 5G. They will immediately be able to see what impact 5G base stations have on the overall network performance. VantagePM can also be used to compare the performance of equipment from different vendors, helping to guide the mobile operators' future procurement decisions.

If VantagePM is used in conjunction with P.I. Works' EXA automation solutions, any network issues can be rectified automatically. The goal here is to improve business continuity and increase customer satisfaction, while providing full end-to-end visibility

of the business from sales to network performance. P.I. Works' automation solutions are widely used by mobile operators to continuously adapt their networks to changes in demand and environmental conditions. One telecoms group based in Europe has piloted the use of VantagePM to optimise its networks in Latin America. The tool enabled it to successfully monitor operations in four different countries in near real-time. The four networks were optimised remotely by EXA optimizers located in the P.I. Works HQ private cloud (more than 7,000 miles away).

As telecoms networks become increasingly complex, they have to become increasingly automated. "When I was at Veon and we were doing a turnaround in Moscow, once we installed the EXA system, it was doing a million events a day," recalls Hussain Suliman. "There's no human being that can do that number of events today. So if you start to add on 5G and it impacts the performance of the network, the good, the bad, the ugly and you can rectify very quickly."

The new dashboard also allows telecom operators to monitor and research mobile subscription information by geography. As well as assisting with day-to-day tasks, P.I. Works says it can help users keep track of and accomplish long-term goals and objectives.

The visual BI tool enables users to access information almost instantaneously on one screen, saving them hours of time compared to tedious spreadsheets or various databases

Abdullah Yildizhan - Program Manager of P.I. Works

“Geographic mapping, heat maps, and scatter plots are just a few of the charts and visualization styles available in the BI Tool library,” says Abdullah Yildizhan. “Executives in the telecommunications business can tailor any completed dashboard to specific demands at any moment. The visual BI tool enables users to access information almost instantaneously on one screen, saving them hours of time compared to tedious spreadsheets or various databases.”

Rapid digitalisation has generated the need for real-time data analytics and automated business intelligence systems to improve business operations, financial performance and decision-making abilities

Transparency Market Research

Demand for business intelligence is growing steadily. Valued at US\$24.6 billion in 2021, the global BI and analytics market is set to grow at a CAGR of 8.8% from 2022 to 2031, according to Transparency Market Research. As a result, the market could be worth almost US\$ 57 billion by the end of 2031.

“Rapid digitalisation has generated the need for real-time data analytics and automated business intelligence systems to improve business operations, financial performance and decision-making abilities,” says Transparency Market Research. “Additionally, demand for dashboards for data visualisation to enhance the ability of taking business decisions and cloud infrastructure has increased.”



About the GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

For more information, please visit the GSMA corporate website at gsma.com

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About the GSMA Foundry

The GSMA Foundry is the go-to place for cross-industry collaboration and making positive change happen, supported by leading technology organisations and companies. By bringing together members and key industry players, engaging, and unifying the end-to-end connectivity ecosystem, the GSMA is solving real-world industry challenges.

Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. This enables the mobile industry's mission: to connect everyone and everything to a better future.

Find out more, or submit a new project idea, at gsma.com/Foundry

About PI Works

P.I. Works, founded in 2005, is the leading provider of AI-based mobile network planning, management, and optimization solutions that empower mobile operators to drive the evolution toward Zero-Touch Operations. The company is headquartered in Turkey and has offices in the US, the UK, Romania, and Singapore.

The use of advanced automation techniques has been at the center of P.I. Works' approach to mobile network planning, operations, and optimization. P.I. Works has deployed its solutions at 67 operators across 47 countries and has been leading the market in automating the 5G networks with award-winning network automation products and value-added services. P.I. Works plays an important role in the development of key standards that define the future of mobile networks. P.I. Works actively contributes to the ETSI, O-RAN Alliance, GSMA, GTI, and 3GPP standardization forum as well as strategic open-source initiatives.

<https://piworks.net/>

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