Changing Industrial Connectivity: Ataya, KYOCERA and Ecrio's Partnership for Private 5G Network

Assignment Summary:

KYOCERA, Ataya and Ecrio have teamed up to deliver a complete end-to-end private 5G network solution designed for mission critical industrial use in all forms of industrial labor. The initiative brings together Ataya's existing wireless infrastructure, KYOCERA's ultra-rugged DuraForce PRO 3 smartphone, and Ecrio's VoNR (Voice over New Radio) technology to enable secure and high-performance communication in rugged environments. The combined solution was built for industries such as defense and public safety, logistics, and emergency response agencies where uninterrupted private and precious connectivity are lifelines for modern day operations.

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5G, the fifth generation wireless technology, has pushed the bar even higher for communication and connectivity of individuals. With additional capabilities, such as ultra-low latency, extremely fast data throughput and the ability to connect millions of devices, 5G is a game changer for consumers and industries alike. While public 5G networks enable vastly enhanced connectivity capabilities over 4G LTE networks, public networks still do not provide the reliability, security, and levels of customized performance required by mission-critical industrial environments.

Three industry leaders, Ataya, KYOCERA and Ecrio, have come together to launch a private 5G network initiative to fill the gap that exists in the existing public 5G networks in terms of reliability, security, and performance. In particular, Ataya, KYOCERA, and Ecrio will partner to design and deploy customized high-performance networks that meet the requirements of the dynamic and high-demand sectors of which they represent, including manufacturing, logistics, public safety, healthcare and defense. Collectively, they want to reshape how industrial enterprises leverage 5G to enhance productivity, safety and digital transformation.

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Why Private 5G Networks?

As industries rapidly evolve, the growing need for automation, the (IoT) Internet of Things, AI, and real-time data exchange is driving them to greater reliance on real-time data exchange and integration. In industries like energy, transportation, healthcare, emergency response, and Public Infrastructure, operational exposure and demand exceeds the capabilities of many public 5G networks. Safety and performance in these industries need continuous uptime, unbreachable cybersecurity, and ultra-lowThe appeal of private 5G networks is the ability to operate without slippage of connectivity, or the risk of crowded traffic lanes that are found on public networks. Private 5G networks are an opportunity for organizations to configure their networks to gain operational efficiencies, connect their dependent proprietary devices, and comply with standards or requirements specific to their industry sector. For example, a smart factory with autonomous robots, remote diagnostics, and predictive maintenance applications anywhere in the process will only benefit from the combination of immediate network connections through privately installed and managed networks.

The requirement for private industrial 5G networks is crucial for industries that command strict protocols like defense and public safety, because in some instances, lives are at stake if dense traffic on networks delay important information. For many organizations, performance under stress is really urgent for the type of service and value it provides. There is currently another level of demand for a specific purpose-built industrial private 5G infrastructure.

Strategic Partnership

The possible effect of private 5G on industrial connectivity has not gone unnoticed. Ataya, KYOCERA and Ecrio entered a collaborative partnership to leverage their complimentary capabilities to create an integrated data and communication solution ready for the real-world. Each partner brings an essential core capability:

Changing Industrial Connectivity: Ataya, KYOCERA and Ecrio's Partnership for Private 5G Network

- Ataya provides private wireless infrastructure knowledge that consist of design, deployment and management of localized 5G ecosystems.
- KYOCERA brings decades of ruggedized communication devices able to communicate under extreme conditions.
- Ecrio is a leader in real-time communication software and provides VoNR (Voice over New Radio) and IMS (IP Multimedia Subsystem) that provides clear voice and video over 5G networks.

This partnership is not a bundled solution but an integrative co-development. Together, they are building vertically optimized solutions that address the full stack from core network infrastructure and edge computing, to field deployable mobile devices and seamless, mission critical applications. This enables industries to build, scale and operate their private 5G networks quickly, robustly and confidently.

Technological Innovation

Innovation for this partnership is both practical and performance oriented. One of the leading technologies in this ecosystem is the KYOCERA DuraForce PRO 3, an ultra-rugged smartphone, built for field operations, for use in arguably the most extreme conditions possible. The DuraForce PRO 3 is impact shock, drop, extreme temperature, chemical use, and UV degradation resistant, and can be totally submerged in water. It is also rinseable, making it a perfect go to for first responders, military, construction, and utility workers.

The DuraForce PRO 3 paired with Ecrio's VoNR technology provides persistent high-quality voice and data. In areas of weak or inconsistent coverage, the DuraForce PRO 3 ensures uninterrupted voice and data that – in operational environments where decision making is based on real-time information – is mission critical.

Ataya's infrastructure backbone complements the technology, enabling all sorts of advanced capabilities like network slicing, ultra-reliable low-latency communication (URLLC), and edge computing.

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These functions provide the opportunity for users to process data closer to the source (where the data is created) reducing latency and increasing system responsiveness for industries that depend on autonomous systems or live remote operation.

Value Proposition of Private 5G Networks

Private 5G networks provide a value proposition and operational benefits of their own that is simply not possible with commercial public networks:

- Increased Reliability: Private networks are stable and consistent, meaning they will perform without impacting the external nationalEnhanced Security: With data contained on a company's own localized network infrastructure, potential exposure to cyber attacks is largely reduced while also complying with compliance requirements.
- Ultra-Low Latency: Real-time responsiveness is critical for certain situations involving remote surgery, simulated autonomous vehicles, and conducting analytics on live video feeds - private 5G has provided additional capacity in this area.

Changing Industrial Connectivity: Ataya, KYOCERA and Ecrio's Partnership for Private 5G Network

- Customization: Enterprises decide the parameters for performance of the network, control what devices are on the network, and can scale the network coverage to only the facilities and waste collection areas needed.
- Scalability: As organizations grow, administrative decisions may result in requiring more cellular devices or technology or more flexibility in expression. As such, private 5G networks can be added or redeployed without being too reliant on local telecommunications operators.

For industries that operate in fast paced, unpredictable environments, stakeholders will benefit from private 5G networks control and precision. Whether it be guiding multiple robotic arms on a production line, allowing drones to communicate privately while on or around a disaster recovery site, or simply evolving towards new industrial capabilities and performance, private 5G is the future and it is critical.

Impact on Industrial Connectivity

The joint venture between Ataya, KYOCERA and Ecrio is about more than a changing technology paradigm, it is about a new way of thinking about, managing and paying for connectivity in a siloed manner for industrial organizations. When infrastructure, hardware and communication software are integrated into a single platform, the industrial space finally has a way to connect secure, resilient, and high-performance networks without having to manage the challenges associated with disconnected pieces.

With the identity of this new connectivity model in industrial applications, an organization can consider its facilities as smart and self-sustaining ecosystems that connect machines, sensors, vehicles, and people in real time to produce higher levels of automation, better coordination, higher levels of intelligence, etc. available to industrial operations.It minimizes downtime, increases safety, and drives efficiency through predictive analytics and remote control, alongside immersive training technologies such as AR/VR. In addition, with the advent of edge intelligence—data processed at the source—industries are able to make instantaneous decisions and thereby provide less dependency on cloud-based networks with its latency or outages. That strategic advantage will be key going forward as the industry continues its digitization and expects sustained demands on its infrastructure.

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Outlook and Industry Take-up

Worldwide, appetite for private 5G networks continues to rise due to Industry 4.0 and the growing emergence of smart cities, autonomous logistics, and digital health care ecosystems. Early adopters are already seeing substantial ROI in uptime, operational cost reductions, and accelerated time-to-insight, and it is anticipated that as regulators and telecom standards continue to support private networks, new uptake will drive widespread adoption.

The Ataya-KYOCERA-Ecrio partnership is uniquely positioned to lead that transformation. Their integrated approach to providing an enterprise solution takes time out of deployment, and significantly reduces the pathways to transition from legacy systems to next generation infrastructure.

Governments, municipal agencies, and Fortune 500 organizations are just beginning to recognize private 5G networks not simply as an upgrade—but a strategic imperative. This will fundamentally change industries with 5G-enabled capabilities such as Digital twins, automated inspections, and remote asset monitoring.

Conclusion

The initiative of Ataya, Kyocera and Ecrio represents far more than a product launch—it is a strategic response to critical demands to accelerate industrial digital transformation. Their unique approach integrates robust network infrastructure, rugged devices, and intelligent voice and data applications that bridges a gap for incredible possibilities in operations.

This collaboration does not just address present-day pain points; it is futureproofing organizations with scalable solutions that can evolve in tandem to new technologies and changing industries. It fulfills the promise of 5G by applying it to the people and industries that need it the most.

Ataya, KYOCERA and Ecrio fundamentally enable and empower organizations to work smarter, safer, and more efficiently that unlocks new value and performance potentials in spaces where failure is not an option.

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Closing Thoughts

The movement of private 5G networks is perhaps one of the largest transitions in enterprise technologies in decades. It is a departure from generalized solutions to purpose-driven infrastructure that directly supports the unique needs of complex and mission-critical operations.

Ataya, KYOCERA and Ecrio exemplify this movement by providing a comprehensive solution that emphasizes user experience, innovation and resilience. Their partnership provides a progressive vision for connectivity, understanding that future industry will rely on smarter, dependable and secure networks just as much as it relies on faster speeds.

As industrial ecosystems continue to shape-shift, partnerships like this one tell a considerable part of the story moving forward, about the future of connectivity—and radically improve the outcomes of how we build, move, heal and protect.

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References

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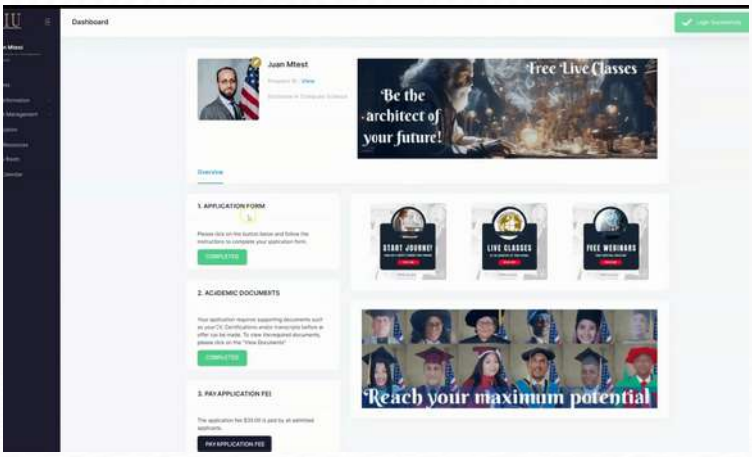

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