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APAC Telecom Radar

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Table of Contents

Key Innovations explored

- **Nxtra by Airtel: AI-Driven Data Centre Operations -** AI deployment enhances operational efficiency and sustainability in data centres, reducing power consumption and improving productivity, setting a new standard for intelligent infrastructure in India.
- **China Unicom and Huawei: 5G-Advanced Intelligent Network -** Establishes the world's first 5G-Advanced network in Beijing, enhancing urban connectivity and supporting advanced digital services, showcasing the transformative power of next-gen mobile technology.
- **Chunghwa Telecom: 5G AIoT Smart Manufacturing -** Integrates 5G, AI, and IoT in the wood industry to improve production efficiency and quality, driving digital transformation in traditional manufacturing sectors in Taiwan.
- **Grameenphone: Advanced Data Processing with Ericsson Mediation -** Deploys one of the largest Ericsson Mediation systems to enhance customer insights and billing precision, boosting operational efficiency and setting a benchmark in data processing.
- **Indosat Ooredoo Hutchison and GoTo: Sahabat-AI for Digital Sovereignty -** Introduces an open-source LLM ecosystem for Bahasa Indonesia, empowering digital sovereignty and cultural preservation, and positioning Indonesia as a leader in AI development.
- **Singtel: Network Slicing for Enterprise Connectivity -** Pioneers network slicing technology to dynamically allocate resources for enterprises, enhancing connectivity management and offering significant competitive advantages.
- **TPG Telecom: Cyber Centre of Excellence -** Establishes a Centre of Excellence for Cyber Security, setting a new standard in preemptive security measures and enhancing resilience against cyber threats in telecommunications.
- **SK Telecom: AI-Powered Customer Service -** Implements AI-driven customer service solutions, enhancing service efficiency and customer satisfaction through advanced AI interaction technologies.
- **Telstra: Dedicated Wireless Network Solution -** Develops a managed wireless solution for Australian industries, providing scalable, cost-effective private cellular networks for critical infrastructure and operations.

1. Nxtra by Airtel: AI-Driven Data Centre operations

Executive Summary

Nxtra by Airtel pioneered to deploy AI for its data centre operations in India, enhancing operational efficiency and sustainability. This deployment of AI technology for data centre operations in November 2024, marks a strategic move towards intelligent and future-ready data centre infrastructure, promising a reduction in power consumption and improvement in productivity.

Market Context and Challenge

- **Industry Challenge:** Data centres face increasing pressure to boost energy efficiency while maintaining operational robustness.
- **Current Market Dynamics:** Growing demand for cloud services necessitates more efficient data management solutions in India's burgeoning digital economy.
- **Relevant Regulatory Considerations:** Compliance with national energy efficiency standards and environmental regulations.
- **Strategic Imperatives:** Aligning with global sustainability trends and improving operational cost-efficiency.

Innovation Overview

- **Solution Architecture:**
  - Leverages Ecolibrium's AI-powered SmartSense platform for predictive maintenance and operational analytics.
  - Integrates real-time data processing to optimize energy consumption and asset performance.
- **Implementation Approach:**
  - Initial implementation at Chennai data centre, with planned rollout across all major Nxtra facilities.
  - Collaboration with Ecolibrium for AI technology integration.
  - Required resources: Advanced AI tools, skilled personnel for analytics, and robust IT infrastructure.

Value Proposition

- **Target Segment:**
  - Major enterprises, hyperscalers, SMEs, start-ups, and government bodies in India through its 120+ data centre locations.

- **Competitive Advantage:**
  - First in India to integrate AI into data centre management for enhanced efficiency, thereby implementing smart capabilities such as predictive maintenance, streamlined operational automation
  - Differentiates by improved asset management and lower carbon footprint.

Impact Analysis

With the deployment, Nxtra aims to achieve key efficiency milestones including:

- **Quantitative Metrics:**
  - 10% extension in asset life through real-time performance analytics.
  - 10% reduction in non-IT energy consumption, though proactive identification of deviations and energy loss in each piece of equipment.
  - 15% boost in equipment performance, facilitated by AI-driven Fault Detection and Diagnostics (FDD) algorithms.
- **Qualitative Outcomes:**
  - Improved reliability and responsiveness in data centre operations and a positive environmental impact.

"The partnership with Ecolibrium and the integration of AI into the core of our data centres is a crucial step in this direction with which we will advance our energy efficiency and overall performance."

- Ashish Arora, CEO, Nxtra

Source: Company website; Image reference

Future Roadmap

- Planned Enhancements: Expand AI algorithms for broader predictive capabilities.
- Scaling Strategy: Apply AI solutions across additional data centres and explore opportunities in adjacent digital infrastructure sectors.
- Market Expansion Plans: Target more diverse industries requiring efficient data management.

Key Takeaways

- AI integration in data centres can significantly enhance efficiency and sustainability.
- Early adoption of innovative technologies positions companies as industry leaders.

2. China Unicom and Huawei: 5G-Advanced Intelligent network

Executive Summary

China Unicom Beijing, in partnership with Huawei, announced to have established the world's first 5G-Advanced intelligent network in November 2024, setting a new standard for connectivity and offering unprecedented network services across key facilities in Beijing. This large-scale deployment illustrates the power of next-generation mobile technology in urban environments.

Market Context and Challenge

- **Industry Challenge:** Rising urban connectivity requirements call for infrastructure that supports advanced digital services.
- **Current Market Dynamics:** Beijing's need to lead in smart city applications is key driver of the demand for robust 5G networks.
- **Relevant Regulatory Considerations:** Alignment with government policies promoting urban digitalization.
- **Strategic Imperatives:** Delivering high-speed connectivity to enhance urban living standards and attract technological innovation.

Innovation Overview

- **Solution Architecture:**
  - Built a 5G-Advanced three component carrier (3CC) network which enables high and low-band integration.
  - Supports diverse digital applications including Internet of Vehicles (IoV), Internet of Things (IoT) and Extended Reality (XR).
- **Deployment Methodology:**
  - Comprehensive coverage across Beijing's major zones, including deployment of 10-gigabit 5G-Advanced base stations at the Great Wall scenic area in collaboration with Beijing Yanqing District Government.
  - Joint initiative with Huawei leveraging its cutting-edge 5G technologies.
  - Required resources include vast infrastructure deployment and expert collaboration between telecommunications engineers and urban planners.

"Only by providing 10-gigabit network capabilities can we guarantee a gigabit experience for all users. We are confident that, based on Huawei's advanced technologies and our smart operations capabilities, we will provide users in Beijing with an increasingly better network experience in the future."

- Yang Lifan, Deputy General Manager, China Unicom Beijing

Source: Huawei; Image reference

Value Proposition

- **Target Segment:**
  - Residents and businesses within Beijing's network coverage zones, including stadiums, metro stations, and commercial areas.
- **Competitive Advantage:**
  - First to offer such extensive integrated 5G-Advanced capabilities.
  - Enables next-gen applications with unprecedented bandwidth and connectivity reliability

Impact Analysis

- **Quantitative Metrics:**
  - 85% 5G-Advanced coverage in core urban areas (within Beijing's 4th Ring Road and the Beijing Municipal Administrative Center).
  - Field tests reported 11.2 Gbps downlink peak rate and 4Gbps uplink peak rate supporting large-scale events (viewing experiences for ~68,000 people).
- **Qualitative Outcomes:**
  - Enhanced user experiences and support for innovative city applications, enhancing the city’s global technological reputation.

Future Roadmap

- Planned Enhancements: Develop further intelligent network features.
- Scaling Strategy: Expand the technology to other Chinese cities and regions.
- Long-term Vision: Establish an international standard for 5G-Advanced networks in urban settings.

Key Takeaways

- Next-gen networks can transform urban connectivity and service delivery.
- Strong industry partnerships facilitate large-scale technological advancements.

3. Chunghwa Telecom: 5G AIoT Smart manufacturing

Executive Summary

Chunghwa Telecom, in collaboration with Industrial Technology Research Institute (ITRI) and Maosen Wood Industry, partnered to create 5G Artificial Intelligence of Things (AIoT) smart manufacturing application in December 2024, for improving production efficiency and quality in the wood industry. This innovation addresses traditional industry challenges, leading to a digital transformation of manufacturing processes.

Market Context and Challenge

- **Industry Challenge:** Traditional industries face challenges with manpower scarcity and maintaining consistent product quality.
- **Relevant Regulatory Considerations:** Encouragement of innovative solutions to enhance national manufacturing capabilities.
- **Strategic Imperatives:** Drive digital upgrades in manufacturing to keep pace with global innovation.

Innovation Overview

- **Solution Architecture:**
  - Integration of 5G private networks, AI for defect detection, and IoT sensors for real-time data management.
- **Deployment Methodology:**
  - Collaboration with technology companies like Jumu Intelligence (for creation of AI image recognition collaboration system), Gulin Computing (for the development of IoT viscosity sensing technology) and Ataya Technology (for secure and stable 5G private network platform).
  - Applied in Maosen Wood's production for instant quality checks and process optimization.
  - Required resources included AI-based imaging technologies and IoT sensor integration.

Value Proposition

- **Target Segment:**
  - Traditional manufacturing sectors, specifically the wood industry in Taiwan.
- **Competitive Advantage:**
  - Implementation of AIoT solutions digitize traditional manufacturing processes.
  - Ensures enhanced quality control and production stability, with real-time data insights.

Impact Analysis

- **Quantitative Metrics:**
  - Significant reduction in process variability and increased production quality.
- **Qualitative Outcomes:**
  - Improved efficiency in veneer processing, leading to a new model for smart manufacturing.

Future Roadmap

- Planned Enhancements: Extend the application of AIoT to other manufacturing processes.
- Scaling Strategy: Introduce solutions to other sectors with similar production challenges.
- Market Expansion Plans: Application of smart manufacturing techniques globally.

Key Takeaways

- Real-time data integration offers substantial quality improvements.
- Strategic collaborations are critical to advancing smart industry initiatives.

4. Grameenphone: Advanced Data Processing with Ericsson Mediation

Executive Summary

Grameenphone has set a new benchmark in processing network data with completion of one of the largest Ericsson Mediation deployments in October 2024, enhancing customer insights and billing precision, thereby boosting operational efficiency.

Market Context and Challenge

- **Industry Challenge:** Telecom operators need precise data mediation to support accurate billing and customer analytics.
- **Current Market Dynamics:** The increasing complexity of network data and growing subscriber base demand robust data processing solutions.
- **Relevant Regulatory Considerations:** Adherence to data accuracy and privacy regulations is crucial for maintaining customer trust.

Innovation Overview

- **Solution Architecture:**
  - Ericsson Mediation's virtualized platform facilitates the integration of diverse network technologies and data formats. It achieves this by aggregating data from various network components and processing it into a unified, standardized format.
  - Real-time data processing capabilities for efficient use in billing and analytics.
- **Deployment Methodology:**
  - Joint initiative with Ericsson to handle over six billion records daily.
  - Utilization of advanced software features for seamless integration and future technology support.
  - Required resources include high-performance data processing infrastructure and skilled analytics teams.

"The deployment of one of the world's largest Ericsson data mediation tool underscores our commitment to innovation and customer-centricity while enhancing our operational efficiency. ...we are ready to cater to our customers' evolving digital needs and lead Bangladesh's digital transformation, ensuring superior customer experience as we navigate the future of connectivity."

- Yasir Azman, CEO, Grameenphone

Source: Ericsson, Image reference

Value Proposition

- **Target Segment:**
  - Solution will cater to process data of 100 million+ Grameenphone subscribers, focusing on improved customer experience.
- **Competitive Advantage:**
  - Hyper-personalization and real-time analytics for subscriber data.
  - Supports diverse network technologies ensuring robust data accuracy and billing precision.

Impact Analysis

- **Quantitative Metrics:**
  - Processes over six billion records daily, ranking among the largest global deployments.
- **Qualitative Outcomes:**
  - Enhanced network performance insights, leading to superior customer service.
  - Provides hyper-personalization and real-time analytics for usage and context.
  - Supports diverse network technologies and ensures data accuracy for billing and analysis.

Future Roadmap

- Planned Enhancements: Further integration of AI-driven analytics capabilities.
- Long-term Vision: Drive Grameenphone's leadership position in digital transformation and data-driven telecommunications.

Key Takeaways

- Advanced data mediation technologies are pivotal in achieving precision and accuracy in billing.
- Future-oriented data processing platforms support additional digital services and innovations.

5. Indosat Ooredoo Hutchison and GoTo: Sahabat-AI for Digital Sovereignty

Executive Summary

Indosat Ooredoo Hutchison (IOH) and PT GoTo have introduced Sahabat-AI, an open-source LLM ecosystem tailored for Bahasa Indonesia in November 2024. This initiative is instrumental in empowering digital sovereignty, cultural preservation, and technological leadership in Indonesia.

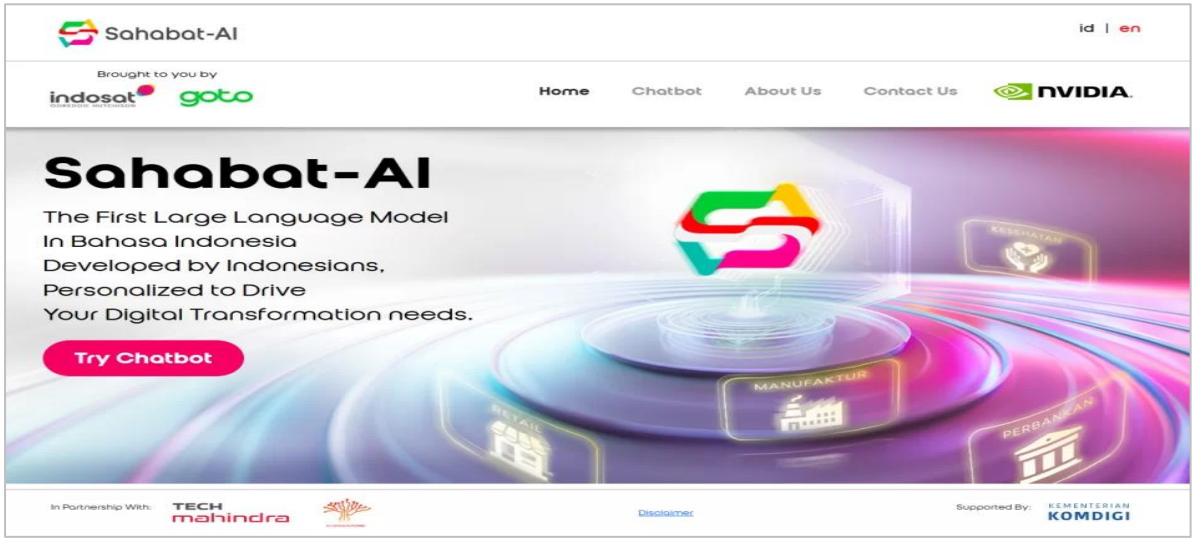
Market Context and Challenge

- **Industry Challenge:** Global AI models often lack local context, underscoring the need for region-specific solutions.
- **Current Market Dynamics:** A growing need for inclusive digital solutions that accommodate linguistic diversity.
- **Relevant Regulatory Considerations:** Alignment with national digital literacy and leadership agendas.
- **Strategic Imperatives:** Support national leadership in technology and infrastructure, bridging the digital divide.

Innovation Overview

- **Solution Architecture:**
  - Sahabat-AI built using NVIDIA's AI platform, is capable of handling local languages while preserving cultural nuances.
  - Ecosystem supports applications across diverse sectors.

Exhibit 1: Sahabat- AI



Source: Sahabat-AI

- **Deployment Methodology:**
  - Collaboratively developed through local expertise, aligning with Indonesia's Golden Indonesia 2045 vision.
  - Initial launch includes models with 8 and 9 billion parameters.
  - Required resources include extensive linguistic data collection and local AI development expertise.

Value Proposition

- **Target Segment:**
  - Indonesians across private, public, and educational sectors seeking interaction with AI in their native language.
- **Competitive Advantage:**
  - Designed specifically for Indonesia, addressing gaps left by global AI models.
  - Facilitates inclusive digital literacy and local application development.

Impact Analysis

- **Quantitative Metrics:**
  - Introduction of 8 billion and 9 billion parameter LLMs during the first phase.
- **Qualitative Outcomes:**
  - Enhances digital literacy and provides culturally relevant AI tools, fostering socio-economic development.
  - Will support the development of tools that allow government ministries to engage with citizens
  - This model is specifically designed to facilitate the interaction of Indonesian individuals from diverse sectors, including private industry, government agencies, and educational institutions, to interact with advanced AI technology through their native language.

"Sahabat-AI is not just a technological achievement, it embodies Indonesia's vision for a future where digital sovereignty and inclusivity go hand in hand. By creating an AI model that speaks our language and reflects our culture, we empower every Indonesian to harness advanced technology's potential. This initiative is a crucial step towards democratizing AI as a tool for growth, innovation, and empowerment across our diverse society."
- Vikram Sinha, President Director and CEO, IOH

Source: GoTo website; Image reference

Future Roadmap

- Long-term Vision: Support Indonesia's leadership in regional digital technological advancements and inclusivity.

Key Takeaways

- Locally developed AI models effectively address cultural and contextual language needs.
- Open-source ecosystems foster widespread adoption and innovation.
- Strategic national focus on AI development catalyses socio-economic growth.

6. Singtel: Network slicing for Enterprise connectivity

Executive Summary

Singtel has pioneered new features introduction in network slicing technology in October 2024, enabling enterprises to allocate resources dynamically depending on their specific needs. This novel application enhances resource prioritization and network efficiency, offering significant competitive advantages.

Market Context and Challenge

- **Industry Challenge:** Enterprises need custom connectivity solutions to reliably support critical applications.
- **Current Market Dynamics:** Increasing enterprise demand for more flexible and reliable connectivity solutions.
- **Relevant Regulatory Considerations:** Compliance with service quality standards ensuring minimal downtime.
- **Strategic Imperatives:** Enable advanced network capabilities to meet specific enterprise requirements cost-effectively.

Innovation Overview

- **Solution Architecture:**
  - Leverages User Equipment Route Selection Policy (URSP) technology configured via Mobile Device Management (MDM) platforms.
  - Offer customization for specific enterprise applications and users.
- **Deployment Methodology:**
  - Partnership with Samsung for device compatibility, starting with selected Samsung models.
  - Integration with existing enterprise infrastructures using MDM platforms.
  - Requires technical customization and enterprise collaboration for successful implementation.

Value Proposition

- **Target Segment:**
  - Enterprises requiring critical application support and reliable connectivity.
- **Competitive Advantage:**
  - Global-first URSP feature offering high-degree customizability.
  - Enhanced business continuity through prioritized network resource allocation.

Impact Analysis

- **Quantitative Metrics:**
  - Notably improves connectivity management even under network congestion.
- **Qualitative Outcomes:**
  - Enhances business operations' reliability and supports tailored 5G offerings.
  - Useful for ensuring business continuity and the uninterrupted operation of mission-critical applications, including disaster recovery and incident response capabilities.
  - For organizations embracing hybrid work models, where communication apps and collaboration tools are critical for operations and productivity, this solution becomes increasingly valuable.

"We're proud of this achievement as implementing URSP requires eco-system alignment - support from the network, operating systems and mobile device management platforms and more – which isn't an easy feat. URSP is a gamechanger that allows organisations to tap into the advanced features of the 5G network to meet their specific needs."

- Ng Tian Chong, CEO, Singtel Singapore

Source: Company website; Image reference

Future Roadmap

- Planned Enhancements: Expand URSP compatibility across diverse devices and operating systems.
- Scaling Strategy: Widespread adoption among enterprises demanding bespoke connectivity solutions.
- Long-term Vision: Pave the way for enterprises to smoothly transition into full-scale digital infrastructures using advanced 5G technologies.

Key Takeaways

- Network slicing offers significant advantages in enterprise connectivity management.
- Collaborative partnerships with device manufacturers ensure broad adoption.
- High customizability meets diverse enterprise needs, enhancing communication reliability.

7. TPG Telecom: Cyber Centre of Excellence

Executive Summary

TPG Telecom's Centre of Excellence for Cyber Security (CCoE) established at Sydney in October 2024, sets a new standard in preemptive security measures for telecommunications, by leveraging distinct strategies to mitigate security vulnerabilities in critical infrastructure before exploitation occurs.

Market Context and Challenge

- **Industry Challenge:** Increasing threat landscape requires focused efforts to identify and preemptively address security vulnerabilities.
- **Current Market Dynamics:** Rising sophistication of cyber threats necessitates advanced protective measures across essential telecom infrastructures.
- **Relevant Regulatory Considerations:** Compliance with national cybersecurity standards aimed at protecting critical infrastructures.
- **Strategic Imperatives:** Strengthen security research to build resilient, future-proof networks.

Exhibit 2: TPG Telecom Cyber Centre of Excellence

Source: Company website

Innovation Overview

- **Solution Architecture:**
  - Dedicated teams to test and defend telecom security weaknesses (Incorporated a Red Team to actively probe both physical and virtual security defences, while simultaneously employing a Blue Team to identify, alert, and effectively mitigate these adversarial attempts).
  - Focuses on 5G RAN equipment vulnerabilities and secure transmission protocols.

- **Deployment Methodology:**
  - Collaboration with academic institutions such as University of New South Wales (UNSW) and global tech companies for shared expertise.
  - Integration of findings with global InfoSec community for industry-wide resilience.
  - Requires dedicated cybersecurity personnel, advanced technical equipment, and collaborative partnerships.

Value Proposition

- **Target Segment:**
  - Telecommunications networks and critical national infrastructure in Australia.
- **Competitive Advantage:**
  - Unique national-first approach in cybersecurity research and collaboration.
  - Enhances ability to anticipate and respond to evolving cybersecurity threats.

Impact Analysis

- **Quantitative Metrics:**
  - Reduction in time to identify and mitigate security threats.
  - Decrease in successful cybersecurity attacks on critical infrastructure.
- **Qualitative Outcomes:**
  - Enhanced national telecommunication security, increased industry collaboration, and a bolstered reputation for TPG Telecom as a cybersecurity leader.

"Establishing a dedicated Cyber Centre of Excellence will help us to better understand and stay ahead of the latest exploits and tools used by nation states and cybercriminals in their relentless attempts to disrupt and deny Australians vital communications or to steal Australians personal information."

- Lee Barney, GM - Technology Security, TPG Telecom

Source: Company website; Image reference

Future Roadmap

- Planned Enhancements: Broadening the scope of research to include emerging cybersecurity threats such as AI-related exploits.
- Market Expansion Plans: Share research findings and collaborate on security frameworks with global telecom operators. To expand the impact of its research endeavors, TPG Telecom has established collaborative partnerships with the University of New South Wales (UNSW), Tata Consultancy Services, Ericsson, and Nokia. These strategic alliances facilitate the sharing of resources and expertise, enabling collective advancement in cybersecurity research and development.

Key Takeaways

- Establishing dedicated cybersecurity research and defence initiatives can significantly improve national infrastructure resilience.
- Partnerships with academic institutions and industry leaders can enhance research efficacy and knowledge sharing.
- Proactive threat identification and mitigation strategies are critical in staying ahead of cybercriminal developments.

8. SK Telecom: AI-Powered customer service

Executive Summary

SK Telecom has successfully implemented an AI-powered customer service system in November 2024, utilizing proprietary Telco large language model (LLM) and large multimodal model (LMM), significantly enhancing service efficiency and customer satisfaction through advanced AI-driven customer interaction solutions.

Market Context and Challenge

- **Industry Challenge**: The demand for quicker, more efficient customer service requires innovative AI solutions.
- **Current Market Dynamics:** Telecommunications face growing complexities in managing customer interactions due to diversified service portfolios.
- **Relevant Regulatory Considerations:** Compliance with customer data privacy and service accuracy standards.
- **Strategic Imperatives:** Enhance customer satisfaction by leveraging AI to minimize response time and improve service accuracy.

Innovation Overview

- **Solution Architecture:**
  - Deployment of Telco-specific LLM and LMM designed to understand and process both text and images.
  - Retrieval Augmented Generation (RAG) technology ensures response accuracy.
- **Deployment Methodology:**
  - Rigorous testing with a focus on iterative improvement and reinforcement learning.
  - Required resources include data specialists, AI trainers, customer service experts, and robust IT infrastructure.
  - The AI Customer Service Support System integrates three innovative features: an AI Knowledge Search Assistant, Intelligent Document Processing, and an Automated Post-Processing System for Consultation Results.

Value Proposition

- **Target Segment:**
  - Telecommunications customer service operations aiming to improve interaction efficiency.
- **Competitive Advantage:**
  - Novel use of LLM and LMM in telecom services enhances response precision.
  - Multimodal processing capabilities maximize the informativeness of customer interactions.

Impact Analysis

- **Quantitative Metrics:**
  - Reduction in customer query resolution times.
  - Improved accuracy in customer service responses.
- **Qualitative Outcomes:**
  - The automated document classification system has significantly enhanced operational efficiency (agent productivity), enabling agents to dedicate more time to customer interactions.

Future Roadmap

- Planned Enhancements: Expanding AI capabilities to cover additional service domains.
- Scaling Strategy: Wider deployment across all its customer service platforms and channels in 2025.
- Long-term Vision: Establish SK Telecom as a leader in AI-driven customer service, influencing global best practices.

Key Takeaways

- AI enhancements offer significant improvements in customer engagement and service efficiency.
- Continuous model refinement and data-driven learning are critical for maintaining service competitiveness.
- Combining technology advancements with service operations creates a comprehensive solution for modern customer service challenges.

9. Telstra: Dedicated Wireless Network solution for critical infrastructure

Executive Summary

Telstra, in partnership with Ericsson, has developed a Telstra Dedicated Networks – Industrial (TDN-I) managed wireless solution for dedicated wireless networks in Australian industries, providing a scalable, cost-effective solution for critical infrastructure and operations requiring private cellular networks.

Market Context and Challenge

- **Industry Challenge:** Traditional private networks are cost-prohibitive and require significant infrastructure development.
- **Current Market Dynamics:** A shift towards digital and automated operations in sectors like resources, logistics, and utilities requires effective communication solutions.
- **Strategic Imperatives:** Support critical infrastructure with reliable, flexible, and eco-friendly network solutions to drive digital transformation.

Innovation Overview

- **Solution Architecture:**
  - Utilizes Telstra's licensed spectrum with a dedicated Ericsson private cellular core.
  - Offers partitioned, managed services that simulate private network experiences.
- **Deployment Methodology:**
  - Fully managed service negates the need for significant capital expenditure from industries.
  - Real-time access to Telstra's infrastructure and spectrum, enabling immediate deployment.
  - Required resources include collaboration with Ericsson for core technology and skilled support staff.
  - Aqura, a Telstra Purple company, provides industry expertise and professional services in support of TDN-I.

Value Proposition

- **Target Segment:**

Critical Australian industries with complex operational needs, such logistics, oil & gas, utilities, mining, ports, energy and large-scale manufacturing.

- **Competitive Advantage:**
  - Cost-effective alternative reducing capital investment in network infrastructure.
  - Ensures prioritized connectivity and managed service support, enhancing operational capacity.
  - TDN-I specifically targets industries and offers tailored range of solutions that prioritize reliability and flexibility, making it ideal for essential, large-scale operations.

Impact Analysis

- **Quantitative Metrics:**
  - Improved network uptime and connectivity for mission-critical operations.
- **Qualitative Outcomes:**
  - Increased business efficiency and technological capability, enabling smarter operations.
  - TDN-I facilitates the prioritization of services across various vehicles, machinery, tools, and personnel. It empowers customers to process critical workloads in proximity to their operations while benefiting from the reliability of a 24/7 managed service.

"For critical infrastructure customers, and customers in rural and remote communities, TDN-I addresses backhaul resiliency by providing an on-site network core and local backhaul that is connected to the local Radio Access Network (RAN). This delivers full remote survivability as well as latency improvements."

- **Ben Kingston, GM - Operational Technology & Industrial Networks, Telstra**

Source: Company website; Image reference

Future Roadmap

- Planned Enhancements: Additional features to support emerging technologies and operational needs, including AI-driven edge processing.
- Scaling Strategy: Expand service offerings to other industries with similar enhanced connectivity needs.
- Market Expansion Plans: Explore international opportunities for TDN-I solutions across customers with similar demands.

Key Takeaways

- Managed wireless solutions provide essential flexibility and scalability for industries with significant network demands.
- Leveraging existing infrastructure offers environmental and cost benefits over traditional private networks.
- Strong partnerships are critical to delivering effective and timely technological solutions to industry-specific challenges.

Research Methodology and Assumptions

- “APAC Telecom Radar – Winter 2024” delves into notable innovations by telecommunications providers that have disrupted their respective markets, within the Asia-Pacific region during the period Oct- Dec 2024.
- The report primarily highlights key advancements and company announcements across various areas, including AI, 5G, IoT, XR, Quantum computing, security, bundled service offerings and customer experience.
- These case studies provide actionable insights and potential pathways for telcos aiming to adapt these innovations to their markets.
- This report also offers insights into companies leading the innovation charge, aimed at assisting business executives and technology leaders in shaping their own innovation strategies and future-focused projects.
- The data presented in this report is based on the most current information available at the time of compilation. As such, it may not reflect subsequent developments. This report is intended for informational purposes only and should not be relied upon as a substitute for independent research.

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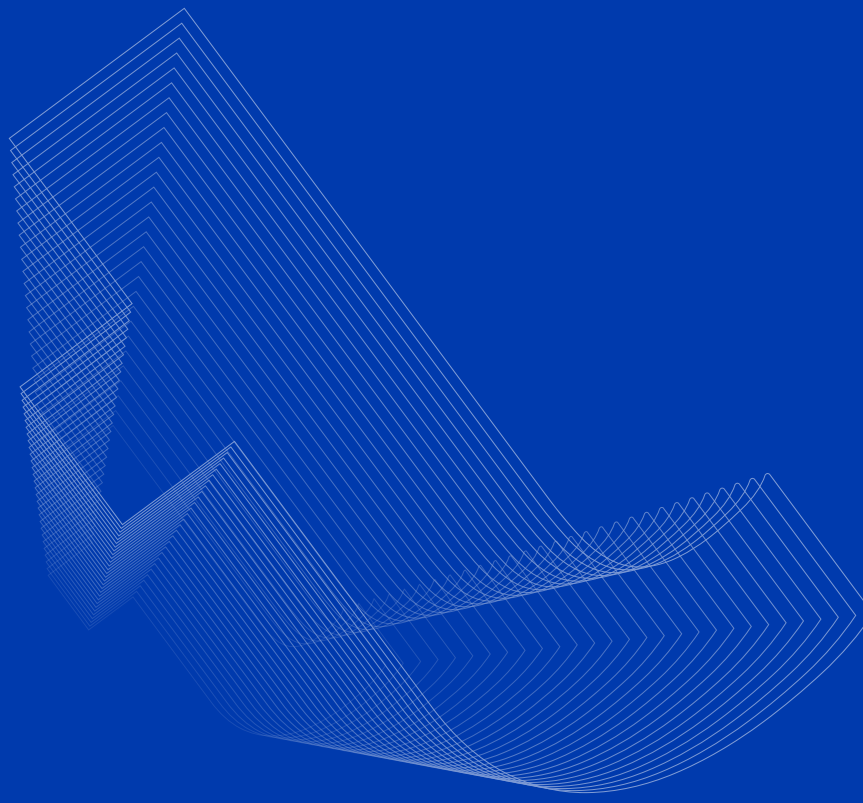

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