

Telkom South Africa develops data-driven AI platform to drive consumer service strategy

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Overview



Who: Telkom South Africa

What: A data-driven commercial integrated digital platform that integrates network, business and external data to guide sales, marketing and investment decisions across fixed and mobile services

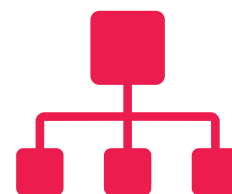
How: By consolidating previously siloed datasets across Telkom's consumer, fixed-line and IT services businesses, and applying analytics to classify opportunity at a granular geographic level

Telkom South Africa's consumer business has implemented a data-driven, grid-based AI platform that brings together network, commercial and socio-economic data from across the organization. Developed in collaboration with Huawei, the platform enables Telkom to align fixed and mobile network assets with go-to-market execution, improving customer acquisition, upsell and network utilization while supporting its broader organizational shift toward a "One Telkom" operating model.

Results



A closed-loop platform links insight, execution and evaluation with performance data from sales activity, allowing Telkom to refine its understanding of customer needs.



Online marketing success rate increased from 4.3% to 6.8%, achieving a 58% improvement through data-driven targeting. AI-powered campaigns boosted ARPU from R93 to R105, delivering higher customer value and stronger monetization.



By addressing culture, structure, and data together, Telkom has created an environment in which converged fixed-mobile services can emerge more naturally.



Integrated online and offline strategies helped achieve 3X growth in offline retail on-the-go performance compared to previous campaigns.

From operational data to commercial outcomes

Like many telecoms operators, Telkom South Africa has historically been strong at collecting and storing large volumes of network data, but less effective at using that data to inform day-to-day commercial decisions. Network information was primarily used for planning, build and maintenance, while sales and marketing teams relied on separate business systems and local knowledge to identify growth opportunities.

The result was a fragmented view of opportunities. Fixed and mobile teams operated with different priorities, different datasets and different performance targets, limiting Telkom's ability to coordinate investment, optimize capacity or present customers with integrated fixed-mobile propositions.

To address this, Telkom worked with Huawei to develop what it refers to as an intelligent digital marketing engine, a platform that applies a grid-based operating model to the entire country. Telkom divided its footprint into granular geographic grids and layered multiple sources of information on top, including network performance, market share, customer value indicators and broader economic activity data. This approach transforms dormant network data into actionable insight that informs where Telkom should acquire customers, how it should upsell existing customers, and how it should balance usage across fixed and mobile networks.



Watch this video



In an interview with TM Forum Chief Analyst, Mark Newman, Telkom's Chief Commercial Officer, Simo Mkhize, explains how a business KPI and customer insights platform across its fixed and mobile networks is helping the South African operator to drive revenue growth and cost efficiencies.

Aligning fixed and mobile through 'grid intelligent operation'

At the heart of the initiative is Telkom's ambition to execute fixed-mobile convergence (FMC) in practical, commercial terms rather than as a theoretical product concept. By bringing fixed and mobile network data into a single analytical view, Telkom can see where it has excess capacity, where it faces congestion, and how those conditions intersect with customer demand and economic activity.

This enables more nuanced decision-making. In areas where mobile networks are congested but fiber assets are available, Telkom can encourage customers to adopt fixed services, improving customer experience while alleviating pressure on mobile infrastructure. Conversely, in locations where fiber is not yet available, mobile broadband and fixed wireless access can be positioned more aggressively.

This offer is not framed as substitution. Customers are not being pushed to drop one service in favor of another. Instead, Telkom is able to position fixed and mobile services as complementary, supporting upsell into bundled propositions and higher overall usage.

The model also supports investment decisions. Rather than defaulting to additional mobile capacity build when congestion appears, Telkom can evaluate whether existing fixed assets can be used more effectively first, improving capital efficiency while maintaining service quality.



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From dashboards to frontline execution

The operations IT platform developed with Huawei supports both centralized oversight and local execution. At both headquarters and regional level, large dashboards provide managers with real-time visibility into performance indicators, opportunity hotspots and progress against targets.

At the same time, localized 'small screen' views are available to area managers and frontline sales teams using devices on site. These views guide day-to-day activity by highlighting where sales efforts should be focused, which products are most relevant in a given grid, and how campaigns are performing.

This is particularly important in South Africa's diverse operating environment, where sales activity often extends beyond traditional retail outlets into townships and temporary locations. By equipping teams with location-specific intelligence, Telkom can ensure that campaigns are targeted, relevant and aligned with network realities.

The platform supports a closed-loop process, linking insight, execution and evaluation. Performance data from sales activity feeds back into the system, allowing Telkom to continuously refine its understanding of demand patterns and opportunity.



Large dashboards provide managers with real-time visibility into performance indicators



Integrating across the group

A key differentiator of the initiative is its scope across the wider Telkom group. Telkom's consumer mobile business, its fixed-line infrastructure arm and its IT services business historically operated with separate datasets and objectives. The grid-based platform brings these perspectives together under a unified analytical framework.

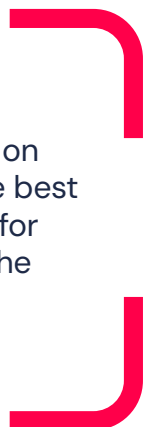
This supports Telkom's broader One Telkom strategy, which aims to break down organizational silos and align teams around shared outcomes. Rather than competing internally for capital or prioritizing individual network domains, teams can make decisions based on what delivers the best overall outcome for customers and the business.

This organizational alignment is critical to making fixed-mobile convergence work in practice. Telkom's experience reflects a broader industry challenge: while FMC is widely discussed, many operators struggle to execute it because their structures, incentives and reporting lines remain tied to legacy network silos.

By addressing culture, structure and data together, Telkom has created an environment in which converged propositions can emerge more naturally, rather than being forced through top-down product mandates.



Teams can make decisions based on what delivers the best overall outcome for customers and the business



Data beyond the network

The grid model goes beyond traditional telecoms datasets. In addition to network and customer information, Telkom integrates socio-economic and demographic indicators, such as household distribution, SME presence and measures of economic activity.

This enriched view allows Telkom to classify grids by potential value and opportunity, supporting differentiated strategies for high-, mid- and lower-value segments. Product positioning, channel selection and campaign intensity can all be tailored based on a more holistic understanding of local conditions.

The platform also supports predictive analysis. By combining historical performance with current conditions, Telkom can estimate the likely return on different investment or go-to-market options, helping prioritize actions across both consumer and SME markets.

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Cultural change as a force multiplier

While the technology platform is central to the initiative, Telkom's leadership emphasizes that organizational change has been equally important. Historically, different parts of the business pursued their own targets, competed for capital expenditure and optimized for local performance rather than end-to-end outcomes.

The move toward a unified, data-driven operating model required changes in mindset as well as systems. Teams had to become comfortable making decisions based on shared data rather than individual intuition or legacy practices.

This combination of cultural alignment and technology transformation creates a multiplier effect. Rather than simply automating existing processes, Telkom has reshaped how decisions are made, how success is measured and how teams collaborate across organizational boundaries.

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Laying the foundation for future growth

The grid-based AI platform is not positioned as a one-off project, but as a foundation for continued evolution. As Telkom expands its data capabilities and refines its analytical models, the platform can support more advanced use cases, including deeper personalization, enhanced SME propositions and more dynamic network optimization.

The initiative also provides a blueprint for how operators can move beyond static reporting toward real-time, insight-driven execution. By embedding analytics into frontline workflows, Telkom ensures that data is not confined to centralized teams but actively shapes daily activity across the organization.

For Telkom, the result is a more agile, coordinated and customer centric approach to growth, one that aligns network strategy, commercial execution and organizational culture around a shared view of opportunity.

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Key takeaways

- Grid-based analytics can bridge the gap between network data and commercial execution
- Fixed-mobile convergence depends as much on organizational alignment as on technology
- Integrating external socio-economic data enhances targeting and investment decisions
- Embedding insight into frontline workflows accelerates impact.