

Ningxia Mobile

goes digital with Big Connectivity



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efficiency by 40 percent.

Ningxia Mobile and Huawei teamed up back in June 2015 to deliver a third-gen operations support system (OSS) as part of the Big Connectivity strategy that underpins China Mobile's roadmap for digital transformation. Completed last year, the solution delivers more product types and multi-channel services for subscribers, and has cut product TTM by 30 percent and boosted O&M

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Making the right connections

To create new revenue streams from digital services, operators that own extensive pipeline resources must approach digital transformation with a sense of urgency. In China, the national Internet+ strategy coupled with increasing cloud computing and big data maturity provides a sound policy and technology basis for Chinese operators to digitally transform.

China Mobile's Big Connectivity strategy involves increasing its number of connections, optimizing connectivity services, and strengthening connection applications.

However, the decade-old second-gen support system operated by its wholly owned subsidiary, Ningxia Mobile, was outdated and unable to execute the group's strategy. The first of three challenges involved low customer satisfaction due to bottlenecks in products and channels, with poor product management resulting from a lack of synergy between online and offline products, which was exacerbated by the inability to implement real-time, precision, and collaborative marketing. The second issue with technical architecture arose from the lack of scalability in the legacy OSS, leading to difficult O&M and high costs. The third challenge was support for digitization – Ningxia Mobile couldn't open up its systems to provide digital services.

Deploying a digital OSS could slash product TTM, increase product diversity, and give subscribers a far better experience.

The solution

Huawei's third-gen CRM system met China



Mobile's requirements for thin application and thick platform plus digital support, and the two joined forces to innovate a solution.

Huawei systematized Ningxia Mobile's services and streamlined the system by taking its operations management model online, retiring 74 percent of its menus, 80 percent of its interfaces, 36 percent of its processes, and 45 percent of its products. Digitizing operations support has enhanced user experience and increased O&M agility and efficiency within an open, integrated ecosystem.

Internetized user experience

Ningxia Mobile's product model integrates its traditional and Internet models. Customers can make one-stop product purchases and receive a consistent experience across the operator's online, in-store, and app channels, with full-channel coordination for all orders. For example, customers can assemble their own personalized service packages or purchase a product online and then collect and install it offline. The new Internet-based operating model has cut service processing time by 48 percent, significantly increasing satisfaction.

Agile operations

The agility provided by the third-gen CRM system has accelerated response time and enhanced the subscription process, providing a strong foundation for a future DevOps system. A rich array of preset

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templates with customized development tools based on metadata allows Ningxia Mobile to configure products and offerings on one page and launch them on all channels.

Massive O&M efficiency increase

Unified monitoring and automatic O&M based on IT PaaS has enhanced O&M efficiency by 60 percent, lowered CAPEX, ensured business continuity, and enabled agile expansion via cloud. A single engineer can deploy the CRM system in six hours and upgrade it in two thanks to one-click operations. The distributed cloud architecture supports real-time elastic scalability, greatly improving the utilization of IT resources; for example, peak concurrent service processing is between two and three times higher thanks to automated capacity expansion in real time, reducing costs by more than 50 percent. Gated launch capabilities enable new versions to be tested in commercial environments, allowing quick trial and error without interrupting services or users being aware. Automatic inspections and fault tracking unify service call and log chains, cutting fault location time by 40 percent.

Open, integrated ecosystem

The CRM system’s open capabilities enables Ningxia Mobile to monetize its fixed assets and create new revenue streams by opening up traffic, voice, IT, and data services to third-party developers. Partners like e-commerce companies,

MVNOs, and individual developers can join the ecosystem. Capabilities are integrated and shared, promoting application innovation and forming an open ecosystem that benefits all.

The integration capabilities of the CRM system attract partners from other industries, including insurance and finance. Integrated packages that combine mobile products and partners’ products have broadened the digital services available to customers and created new revenue streams. Moreover, Ningxia Mobile’s online-to-offline (O2O) operating model works in partnership with logistics and third-party payment platforms, maximizing convenience for consumers.

Ningxia Mobile and Huawei’s partnership will continue as the operator further transforms with schemes like centralized decoupling, Internetization, and enhancing the agility of the CRM system. Capabilities will be further integrated and shared, attracting more parties to join the ecosystem and launch products in an open ecosystem.

Ningxia Mobile also plans to build a converged private enterprise cloud and big data platform for three domains to cloudify its data center and provide intelligent network scheduling. It also wants to build an SDN network to enable smart O&M and the thin provisioning of IT resources and explore data governance and value monetization under the Big Connectivity strategy. [www](#)