



CASE STUDY

WI-FI BOOSTS REVENUE & STORE DIFFERENTIATION AT D.PHONE

How can you deliver mobile apps and new services over Wi-Fi across hundreds of retail stores?

ABOUT D.PHONE

An Expanding Retailer Looking for New Opportunities

With annual revenues of \$2.3 billion, D.Phone is one of the world's largest retailers of cell phones. D.Phone serves millions of customers through its 3,000 Digitone retail outlets, including stand-alone stores and hundreds of Digitone stores within Walmart stores and other well-known superstores. Digitone stores are top sellers of Apple iPhones, Samsung Galaxy phones, and the newest mobile devices by Lenovo, HTC, Huawei, and other manufacturers.

Digitone stores operate in a fiercely competitive environment, so D.Phone executives understood that, to sustain and increase the company's success, they needed to excel at the same challenges that many other large retailers face:

- Providing the best possible customer experience
- Differentiating Digitone stores from competitors
- Adding new product offerings to boost sales,
- Increasing management insights into thousands of retail outlets

SOLUTION BENEFITS

- High-performance, in-store Wi-Fi improves the customer experience with lightning-fast wireless access.
- Service-Ready Access Points™ streamline in-store mobile app and content distribution.
- Plug-and-play access points eliminate cost and complexity of deploying the solution nationwide.
- Relay2 Cloud Manager offers centralized visibility and control across widely distributed remote sites.
- Aggregating client and traffic analytics gives D.Phone management visibility into store performance.
- Open-service delivery platform allows the future development of advanced in-store engagement solutions.



THE CHALLENGE

Adding a New Product Category for a Differentiated Customer Experience

Aware of D.Phone's need to provide a differentiated customer experience to distinguish Digitone stores from competitors, D.Phone decided to deploy in-store Wi-Fi to improve the customer experience and boost customer engagement. As part of this goal, the company also decided to promote in-store installation of mobile apps and content on purchased devices. This capability would open a new merchandise category for Digitone: selling downloadable apps and content in stores.

For D.Phone chief information officer Wu Huan and his team, one of their key concerns directly affected in-store sales. Shoppers in Digitone stores often try products in the stores before they buy. When connectivity in a store was slow, the products seemed slow, which could hurt retail sales.

D.Phone needed to provide the fastest possible in-store Wi-Fi network, then, not only to improve the in-store customer experience but also to allow hands-on testing of products at their best, which could directly improve per-store sales.

Wu Huan and his staff also faced additional challenges: High-performance Wi-Fi access-point hardware and software can be complex and time-consuming to install and manage. Digitone retail employees have limited technical knowledge and no time for complicated setup procedures.

For some retail chains, sending technicians to stores would be feasible, but not for Digitone. Its stores are spread across thousands of miles, so technicians traveling to far-flung locations to install and repair equipment would cost too much to be practical.

D.Phone's Wi-Fi network needed to be quick and easy to install by retail store employees with little technical knowledge. Its Wi-Fi network would need to scale to support thousands of retail outlets but provide centralized network management so a technician at headquarters could monitor and manage Wi-Fi use for all the geographically widespread stores.

Without capabilities for simple installation and management of in-store wireless networks, the retailer faced limits in its ability to grow.

D.Phone tested wireless networking products from several manufacturers, but all failed either because of low performance or complicated installation and management. Products that provided high performance were complex to install and maintain. Products that were simple to manage provided insufficient performance.

"We tried several Wi-Fi options in the past," explains Wu Huan, "but none met our needs for both simplified management and high performance."



Relay2's plug-and-play access points and cloud-based platform [have] given us a solution that lowers the cost of deployment and management."

— Wu Huan, CIO, D.Phone

THE SOLUTION

Unified Native-Cloud Wireless Networking and Edge-Service Delivery to Drive Immediate Deployment ROI

The D.Phone team selected the Relay2 wireless broadband solution after extensive evaluations. During the selection process, they discovered Relay2 offers several advantages for retailers that other companies do not:

Robust Wireless Access

High-performance Wi-Fi access provides the foundation for offering amazing customer experiences and delivering value-added services and applications in store. Relay2 access points are designed to provide fast and reliable coverage in challenging client-dense environments, such as shopping centers, resorts, and large venues. Deploying Relay2 access points with dual-band radios supporting up to 3x3 MIMO, D.Phone is able to provide customers with the high-speed connectivity they expect.

Service-Ready Access Points™

Unique to Relay2's integrated and powerful compute and dedicated storage, Relay2 Service-Ready Access Points™ enable the delivery of value-added applications and content right from the

edge of the network, as close as possible to mobile users. Service-Ready Access Points are part of the Relay2 Service Delivery Platform: a single, unified platform that lets businesses leverage the cloud and network edge to build, deliver, and manage rich, connected apps and experiences over Wi-Fi. The platform provides new ways for retailers to engage customers, motivate employees, and generate rapid growth.

Sales-generating applications and computation-intensive services are able to run locally, allowing business solutions never before possible, all while greatly increasing performance and cost savings at the edge. High-capacity connectivity and enterprise-class functionality ensure seamless delivery to connected clients in the most demanding deployment environments. For D.Phone, onboard storage and associated services are initially being used to cache mobile applications and content directly on the in-store access points. Placing content a single hop away from the user reduces downloads to mere seconds. This seamless over-the-air distribution streamlines the experience of purchasing mobile applications and content in-store. Bandwidth bottlenecks are avoided too.





Plug-and-Play

For the first phase of D.Phone's implementation, Relay2 was installed in 500 Digitone stores. Even though the retail stores were spread across thousands of miles and staffed with limited on-site technical ability, the networks could be brought online in a matter of minutes. When first plugged in, Relay2 access points automatically discover and connect to the Relay2 Cloud, where they download configurations and join the appropriate network. Access points self-optimize to determine the ideal channel, transmit power, and client connection parameters.

Cloud-Managed

Each Relay2 AP is managed by the feature-rich Relay2 Cloud Manager for simple yet

powerful administration of the network and edge applications. An intuitive web-browser-based management interface allows a single IT team to manage networks across remote sites. Easily managed over the web, Relay2 cloud management is the ideal "zero-IT" solution from deployment to ongoing operation for remote D.Phone sites with little to no IT staff.

Scalable

Cloud-managed Wi-Fi enables the simple, rapid growth of multiple networks with no physical hardware connection boundaries or subnetting restrictions. Whether Wi-Fi networks are spread across multiple floors or different countries, Relay2 Cloud Manager lets D.Phone administrators monitor and instantly manage all those networks from anywhere.

THE RESULTS

Increased Sales, Improved Customer Experience, and Reduced Costs

Relay2's Service-Ready Access Points™ have been deployed at over 500 D.Phone-operated Digitone stores. Relay2's retailer advantages not only met D.Phone's business goals but also, in many cases, exceeded them. Because of Relay2, D.Phone increased retail sales, improved its customer experience, and reduced costs:

Rapidly Expanded Sales of Digital Merchandise

D.Phone used Relay2 to quickly enable partners to distribute popular partner apps and content to Digitone shoppers' smartphones over D.Phone's in-store Wi-Fi.

"Our ability to distribute third-party mobile apps in our stores seamlessly adds tremendous value in the eyes of our partners," explains CIO Wu Huan.

In Digitone stores, customers purchased applications, games, ringtones, ebooks, and premium content. With Relay2, D.Phone generated millions of dollars in sales of mobile apps and content.

Differentiated Digitone Stores from Competitors

The new in-store digital services that Digitone stores deliver to shoppers help differentiate their stores from competitors. Apps and videos take minutes to download in other places but only a few seconds in Digitone stores, thanks to Relay2 Service-Ready Access Points.





Provided an Improved Customer Experience

Because Relay2 serves Digitone customers from devices closest to them (at each store's network edge), shoppers experience digital services that are faster. But speed is not the only improvement Relay2 brought to Digitone customers.

D.Phone used Relay2 to deliver new services to its customers, from app delivery to buying lottery tickets and booking hotel rooms and airline flights. Shoppers learn about merchandise, view information about neighborhood stores, and receive e-coupons to encourage them to make purchases now.

Relay2 helped D.Phone provide a digital customer experience that reinforces its physical in-store experience and ensure that shoppers receive a consistent experience across stores and regions. Relay2 also helped D.Phone achieve increased uniformity in corporate branding across its entire chain.

Increased Management Insights and Control

Leveraging the centralized cloud-based management, D.Phone management could monitor and control networks across all stores. This provides valuable insights into store traffic as well as partner application downloads—both are valuable metrics for tracking individual store performance.

Generated Direct Cost Savings and Quick ROI

According to Huan, "Relay2's plug-and-play access points and cloud-based platform [have] given us a solution that lowers the cost of deployment and management."

Rolling out to additional stores was made easy by the Relay2 plug-and-play equipment, which required no on-site technical expertise. This minimized upfront and ongoing operational costs. Being fully cloud-managed, the Relay2 solution required no expensive on-site hardware controller, which kept down capital expenses for the network.

Taking into consideration the new revenue and limited costs of the solution, D.Phone's investment in Relay2 paid for itself in less than six months. Explains Huan, "The system paid for itself through revenue from the in-store distribution of third-party mobile apps."

Additional benefits continue to accrue, including faster time to market for digital merchandise and stronger branding—two of the most important competitive advantages for any retailer today.

LOOKING AHEAD

Building upon a Platform of Robust Edge-Service Delivery

In the near term, D.Phone continues to roll out the Relay2 solution in more stores to improve customer experiences and boost mobile application distribution. The Relay2 infrastructure deployed will also enable continued introductions of new capabilities that enhance D.Phone's ability to engage with customers:

D.Phone plans to leverage the Relay2 platform to offer shoppers both free and paid services that they can only obtain in Digitone stores—offerings such as e-coupons and exclusive digital content. This can be extended to provide an in-store advertising network for neighboring businesses and ecosystem partners, generating income from advertisers while the advertisements boost retail sales. This is achieved with the built-in HTML insertion and captive portal capabilities of the Relay2 platform that provide a unique channel for engaging mobile users.

By using Relay2 as D.Phone's own services aggregation and distribution platform, the retailer can also successfully provide shoppers with instant access to its own branded e-wallet to pay for purchases, encouraging customer loyalty.

The open Relay2 platform that includes SDK and API further enables D.Phone to innovate directly or engage a third party to develop solutions that further their business objectives today and into the future.



Relay2 is at the forefront of Wi-Fi-as-a-Service Edge Computing, powered by our patented ServiceEdge Platform. Our breakthrough device technology, Service Points, delivers unparalleled application performance, bolstering security, privacy, and scalability at the edge. Committed to revolutionizing how businesses manage, distribute, and optimize applications, content, and data, we strive to push technology's boundaries.

Built on our ground-breaking Service Points technology, our ServiceEdge Platform revolutionizes Wi-Fi-as-a-Service Edge Computing. Designed for scale and adaptability to meet diverse industry needs, our solutions provide unparalleled control, enhanced infrastructure efficiency, and optimized performance at the network edge. The ServiceEdge Platform improves application performance, simplifies your network, and reduces operational costs by streamlining computing and storage infrastructure. Our platform delivers unrivaled security and privacy, safeguarding application deployment across various networks and ensuring robust data privacy to create a cyber-resilient ecosystem.

At Relay2, we envision empowering businesses to achieve more through continuous innovation. Harnessing edge computing, our goal is to shape a seamless digital world where application performance and user experience remain uncompromised. Join us on our journey as we revolutionize the Wi-Fi-as-a-Service Edge Computing landscape, ensuring global delivery of unmatched performance, security, privacy, and scalability for applications, content, and data.