KORE®

CASE STUDY

IoT Empowers People with Chronic Diseases to Achieve Quality of Life

The Challenge

According to the U.S. Centers for Disease Control and Prevention, 14% of adults in the United States have diabetes, impacting approximately 30 million people. The prevalence of this disease, compounded by corollary complications and societal costs has elevated this condition to epidemic proportions. At a personal level, the implications of living with a chronic disease are significant, as one patient recounted "Diabetes takes 2 hours out of my day, every day, but no one gave me those extra 2 hours".

Advances in IoT technology, medicine, and knowledge-mining have created a strong foundation from which life-changing solutions that help people manage their chronic diseases can be developed. If

properly implemented, IoT has the potential of transforming diabetes self-care from an isolated, multi-step process into a connected and automated experience. The issue lies in orchestrating the various components and resources of a complex ecosystem into a cohesive, purposeful system.

Although these initiatives are achievable, the challenges facing healthcare companies remain sizable and diverse: navigating the regulatory landscape, establishing a viable roadmap, significant CAPEX outlays, and traversing the maze of connectivity technologies are just a few. By assessing their core-competencies, committing resources, and partnering with a trusted IoT partner, healthcare companies can overcome the challenges to introduce sustainable, long-term solutions.

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The Solution

Livongo is an early adopter of innovative technologies, delivering best-in-class digital health solutions. The company provides its customers with next-generation products and services that leverage leading-edge medical research, technologies, and systems.

Livongo understood that transforming information into intelligence is predicated on successful implementation of an IoT solution that offers network-agnostic connectivity solutions that tightly integrate edge-devices, applications, as well as data analytics into a unified ecosystem. Realising this, Livongo set about to develop a knowledge-centric solution that would fundamentally improve the day-to-day treatment experience required for diabetes patients. With that said, Livongo also realised that it would require a trusted, neutral, and expert IoT advisor with the global reach and industry expertise to help solve complex regulatory and connectivity challenges. The IoT solution would need to actualise Livongo's existing device

certification, product engineering, and analytics development efforts while also enabling Livongo's hand-held tester with secure, managed connectivity via cellular carrier networks to the Livongo Cloud.

KORE was that trusted IoT advisor. Working closely with Livongo leadership and product development groups, KORE was instrumental in simplifying the following strategic complexities:

- Regulatory Compliance: Network and industry road-mapping, testing, and certification

- Seamless Connectivity: Carrier integration and global, secure, managed network access

- Next-Gen User-Experience: Automatic SIM provisioning, configuration, and data visibility

The success of the partnership was in part due to the modular approach in which KORE applied its professional certification services. Given the aggressive go-to-market timeline, KORE quickly appropriated a dedicated team of IoT experts who immediately set out to onboard KORE connectivity

and accelerate the device certification process. The KORE certification team worked closely with Livongo product development, the FCC, the PTCRB, and AT&T to rapidly identify and resolve quality of service issues, green-light outstanding RF safety requirements, and optimise the performance of the connectivity-chain. Carrier certifications were approved quickly, enabling Livongo to painlessly transition from legacy technologies to more advanced AT&T networks.

KORE carrier-agnostic API's enabled Livongo to extend its connectivity footprint beyond city-centers into rural communities and other sparsely populated regions. Test meters equipped with KORE SIMs could be automatically activated and provisioned to cellular service right out of the box, allowing patients to upload their blood sugar reading results immediately after receiving their welcome kits.

The partnership has enabled Livongo to leverage an enterprise grade IoT ecosystem and certification services, resulting in a robust lifestyle management solution for people with chronic diseases.

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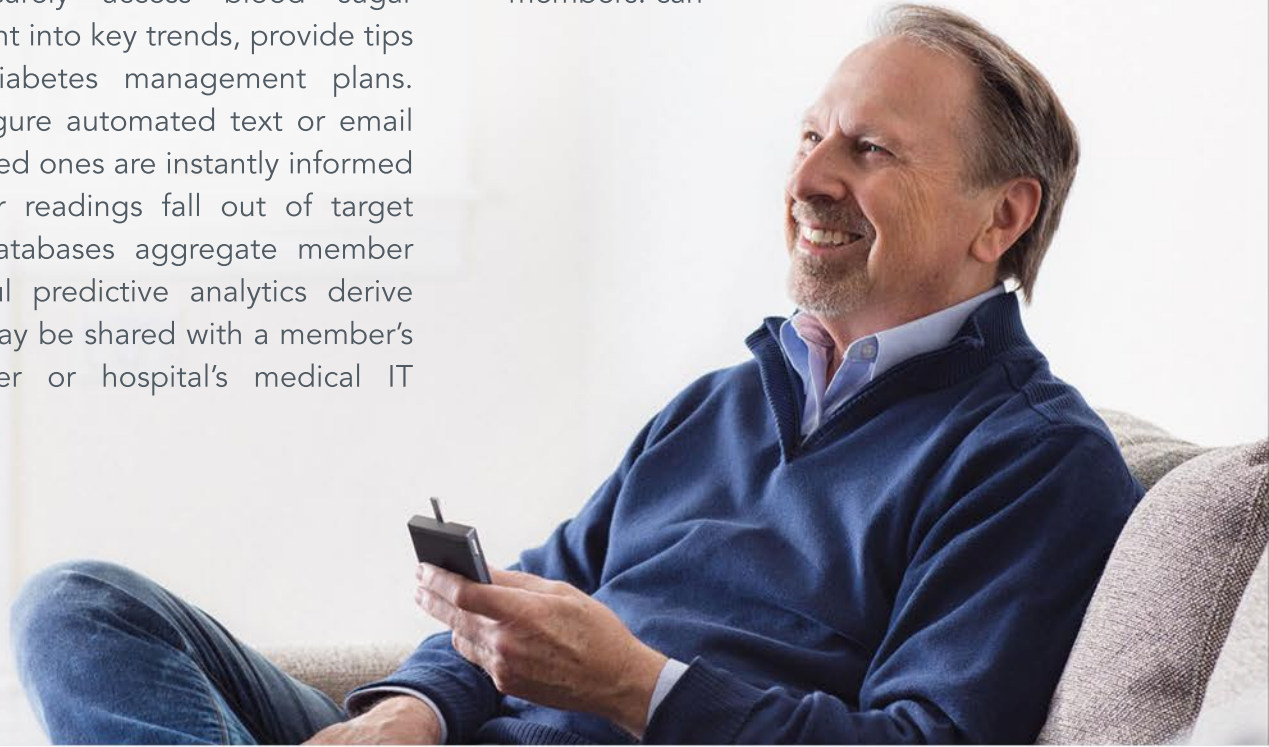
The Results

The solution resulting from the Livongo and KORE partnership came about from careful planning, application of core competencies, and the simplification of a complex IoT ecosystem. This had an immediate and positive effect on Livongo's product development effort and consequently, the success of its product offering. Product development cycles were simplified, certifications approved, and carrier network connectivity was assured, enabling Livongo to release its newline of blood testing meter solutions months ahead of schedule.

Livongo's blood sugar measurement meter became a full, integrated extension of the Livongo cloud, enabling patients to measure, store, and up-stream blood sugar results with no need for cumbersome paperwork. Carrier certification compliance, delivered via the KORE network, ensured connectivity was reliable and secure. Furthermore, with AT&T network certification locked in, certifying and integrating additional carrier networks or communication technologies in the future could be achieved quickly and efficiently.

The power of the Livongo solution is the implicit value unlocked by the seamless connectivity KORE provided. Test results, available on the Livongo Cloud, enable members, healthcare providers and Certified Diabetes Educators (coaches) to securely access blood sugar readings, get insight into key trends, provide tips and fine tune diabetes management plans. Patients can configure automated text or email notifications so loved ones are instantly informed when blood sugar readings fall out of target range. Livongo databases aggregate member data and powerful predictive analytics derive intelligence that may be shared with a member's healthcare provider or hospital's medical IT system.

By understanding the challenges facing people with chronic conditions, Livongo has created a unified purpose-built solution that takes full advantage of emerging IoT technologies by providing an empowered user-experience for its members. can

About KORE

KORE is a pioneer, leader, and trusted advisor delivering transformative business performance. We empower organisations of all sizes to improve operational and business results by simplifying the complexity of IoT. Our deep IoT knowledge and experience, global reach, purpose-built solutions, and deployment agility accelerate and materially impact our customers' business outcomes.

About LIVONGO

Livongo is a consumer digital health company that empowers people with chronic conditions to live a better life. Livongo has developed a completely new approach for diabetes management that combines the latest technology with coaching. On a personal level, many of us have loved ones with diabetes and many of us have it ourselves, which helps us better understand our members.

For more information, reach out to KORE to learn how we can simplify the complexity of IoT for your business.

KORE.