



Case Study

Medical Devices

Transformative Digital Solutions: A Healthcare Technology Triumph

How a Nearshore Partnership Catalyzed Groundbreaking Advances in Diabetes Care



Introduction

In the rapidly evolving world of healthcare technology, leveraging strategic partnerships is often key to making significant strides in patient care. This case study underscores this reality. It details the remarkable journey of an innovative company that developed a proprietary solution for precise glucose monitoring that leverages automated insulin delivery providing an innovative and hassle-free way to manage diabetes.

Facing the challenge of explosive demand and the need for ongoing product development, the company turned to ITJ, a US based nearshore resource provider with operations across LATAM, and a headquarters in Tijuana, Mexico. ITJ's Build-Operate-Transfer (BoT) model, coupled with their command of nearshore resources, provided the perfect solution to the company's scaling needs.

The resulting partnership led to the establishment of a Center of Excellence in Tijuana, Mexico, dedicated to deliverables, improvement, ownership, and accountability. This collaboration not only fueled exponential growth for the company but also facilitated the release of over 20 core products and increased code coverage.

The success story of this company and ITJ unveils how nearshore partnerships can propel technological advancements in healthcare, specifically in diabetes care. Dive in to discover the transformative impact of this strategic alliance and how it continues to shape the future of diabetes management.

Our Client

Mission:

A trailblazer in healthcare technology, committed to revolutionizing diabetes management through cutting-edge solutions.

Key Innovation:

A proprietary technology that marks a significant leap in diabetes care, offering enhanced insights for patient and clinician collaboration.

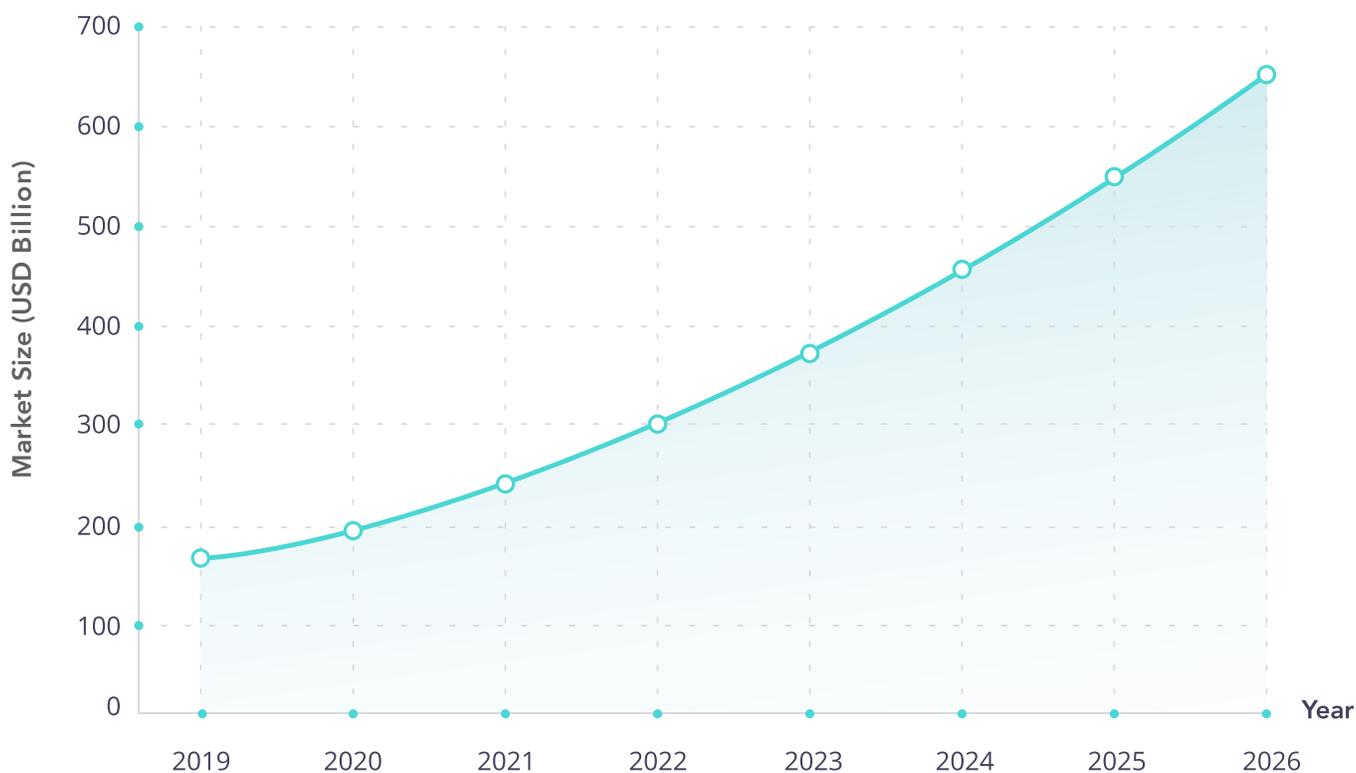
The Challenge

Scaling to Meet Demand and Drive Innovation

The rapid growth our client experienced, while a testament to their success, presented its own set of unique challenges. It necessitated scalable strategies to support the development of next-generation products. Their proprietary solution was in high demand, and they needed to scale up quickly to meet this demand while maintaining the quality and reliability of their product.

Establishing a Center of Excellence became an essential part of their strategic response. This center would serve as a hub for innovation, addressing the demand for the proprietary solution and facilitating ongoing innovation. However, setting up such a center came with its own set of challenges. These included finding the right location, recruiting and training highly skilled staff, and ensuring seamless coordination between different teams.

Global Digital Health Market Size Forecast (2019-2026)



Healthcare Technology Industry: The healthcare technology industry is booming. The global digital health market is projected to reach **\$639.4 billion by 2026**, growing at a CAGR of 21.1% from 2019 to 2026.

Source: Allied Market Research

Moreover, additional challenges that needed to be addressed included:

- 1. Maintaining Market Leadership:** As pioneers in the field, our client faced the ongoing challenge of staying ahead of competitors and maintaining their position as market leaders.
- 2. Regulatory Compliance:** Given the nature of healthcare technology, adhering to stringent regulatory requirements and standards was a significant challenge.
- 3. Cultural Alignment:** Ensuring that the Center of Excellence maintained the same company culture and values was crucial for consistent performance and employee satisfaction.
- 4. Data Security:** With patient data at the core of their operations, ensuring robust data security measures was paramount.
- 5. Continuous Improvement:** The need for continuous product improvement and innovation to meet evolving patient needs and expectations.

Addressing these challenges required a holistic approach that balanced rapid growth with sustainable long-term strategies. The partnership with ITJ offered a solution that catered to these needs, providing the resources and expertise necessary to overcome these hurdles and continue on their path of groundbreaking innovation in diabetes care.

\$16.9
Billion

Regulatory Compliance: According to a report by ResearchAndMarkets, the global healthcare regulatory technology (RegTech) market is expected to reach **\$16.9 billion by 2026**, indicating the importance of regulatory compliance in the healthcare industry.
Source: IBM Security

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The Solution:

ITJ's Strategic Approach to Overcoming Challenges

In the face of these challenges, our partnership with the client was instrumental in developing scalable solutions and driving innovation. Here is how we addressed each challenge:

- 1. Scaling to Meet Demand:** We facilitated the creation of a Center of Excellence in Tijuana, Mexico. This strategic location allowed us to tap into a rich talent pool, ensuring that the development of next-generation products kept pace with demand.
- 2. Maintaining Market Leadership:** Our partnership resulted in the release of over 20 core products. This not only helped maintain the client's market leadership but also bolstered their reputation for innovation.
- 3. Regulatory Compliance:** Our team's expertise in healthcare technology and regulatory compliance played a critical role in ensuring that all products met stringent regulatory standards.
- 4. Cultural Alignment:** We implemented a Build-Operate-Transfer (BOT) model, which ensured cultural alignment by building a self-sustainable site focused on deliverables, constant improvement, ownership, and overall accountability.

5. Data Security: We prioritized robust data security measures to protect patient data, a core component of the client's operations.

6. Continuous Improvement: Our partnership began with a Proof of Concept and quickly expanded to encompass three full ITJ scrum teams. This deployment of resources allowed the company to maintain existing products in the market while focusing on the development of Next Generation projects.

In addition to these solutions, **we are on track to position more than 260 engineers working on FDA-regulated applications in Mexico.** These professionals handle a variety of development and technical roles, further enhancing the client's capabilities.

Mexico's Tech Talent Pool

Mexico is emerging as a key player in the tech industry with a large pool of software engineers. The country produces around 130,000 engineering graduates annually, which is more than Canada or Brazil.

Source: Washington Post

By addressing these challenges head-on, we have helped the client continue their groundbreaking innovation in diabetes care. With a Center of Excellence fully operational and a growing team of skilled engineers, the client is well-positioned to meet demand and drive innovation now and in the future.

The Approach: Strategic Scaling and Innovation

In response to the challenges faced by our client, we implemented a strategic approach that blended scalability with continuous innovation. This approach was two-pronged:

1. Proof of Concept and Rapid Scaling: We initiated our partnership with a Proof of Concept involving a small team of embedded mobile software engineers. This allowed both us and the client to assess our compatibility and effectiveness in a real-world setting. Following the successful completion of the Proof of Concept, we rapidly scaled up our involvement to full ITJ Scrum teams. This scaling process was carefully managed to ensure seamless integration and coordination between the new and existing teams.

2. Balancing Maintenance and Development: Our approach was not solely focused on developing new solutions. We also prioritized maintaining the client's existing products to ensure their ongoing success in the market. This dual focus ensured that the client's current customers continued receiving excellent service, while also paving the way for the introduction of innovative new solutions.

This strategic approach allowed us to address all of the identified challenges effectively. With the Proof of Concept validating our initial strategy, we were able to quickly scale our resources to meet the client's growing demand. Simultaneously, our focus on maintaining existing products ensured that the quality and reliability of the client's offerings remained high, even as we pushed forward with the development of next-generation solutions.

Through this approach, we have helped the client maintain their market leadership, adhere to regulatory standards, align the Center of Excellence with their company culture, ensure data security, and drive continuous improvement and innovation. We're proud of the role we've played in their ongoing success and look forward to continuing our partnership in the future.

The Impact:

Expanding Capabilities and Driving Innovation

Our partnership with the client has had a profound impact on their operations, product development, and digital capabilities. Here's how:

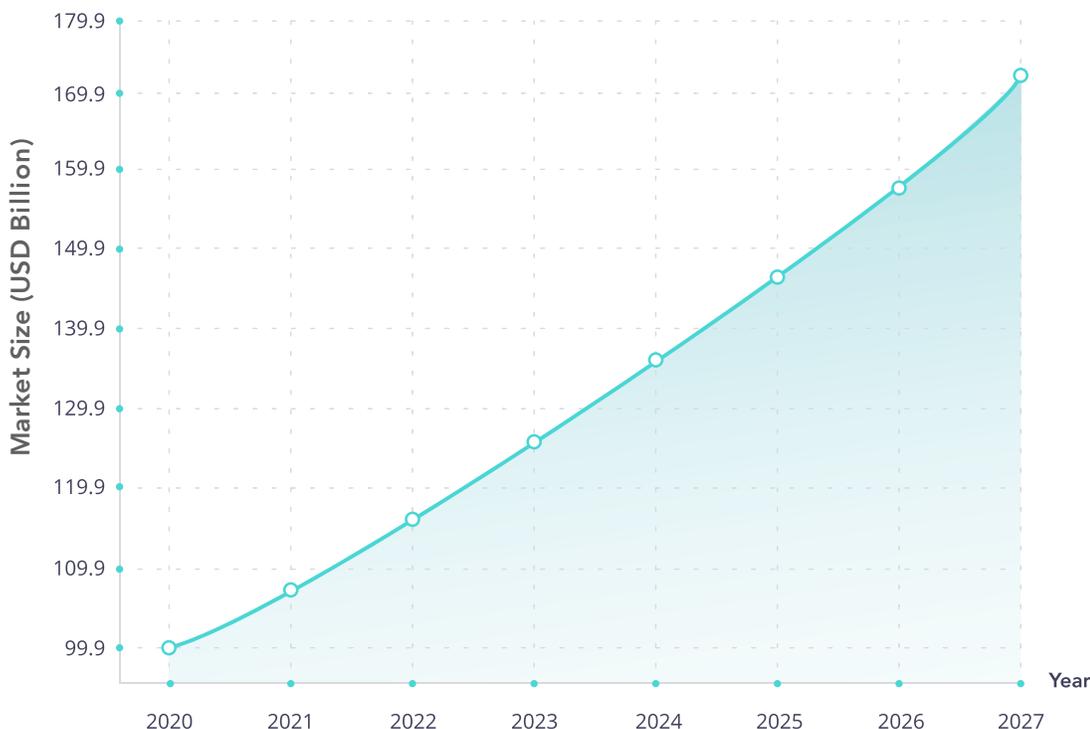
1. Significant Product Releases and Improved Code Coverage: Our collaboration led to significant product releases, which further established the client's market leadership and innovation in diabetes care technology. Furthermore, we have improved code coverage for most of the client's product lineup to above 80 percent. This enhancement in code quality not only improves product reliability but also boosts customer confidence in the client's offerings. These achievements demonstrate a robust expansion of the client's digital engineering capabilities.

2. Growing Team in Mexico: The Center of Excellence in Tijuana has seen the rapid growth of a dedicated team working on FDA-regulated applications. This team, which is set to encompass over 260 engineers, brings together a diverse range of technical skills and expertise. This growth has enabled the client to scale up their operations to meet increasing demand while maintaining the quality and reliability of their products.

3. Wide Range of Technical Areas Covered: The team we've helped build covers a wide range of technical areas, including Software Engineering, Quality Assurance, Verification & Validation, Technical Writing, Platform (Cloud Development), DevOps, and Mobile Architecture. This breadth of expertise has been instrumental in driving forward the development of new solutions and maintaining existing products.

In conclusion, our strategic approach and partnership have had a significant positive impact on the client's operations and capabilities. It has enabled them to scale up their operations efficiently, improve their product quality, and drive innovation - all while maintaining their market leadership and adhering to stringent regulatory standards. As we look to the future, we're excited to continue supporting their growth and helping them deliver groundbreaking solutions in diabetes care.

Global Digital Health Market Size Forecast (2020-2027)



Global Nearshore Market Growth:

The global nearshoring market has been growing at a rapid pace. According to Grand View Research, the global outsourcing market size was valued at USD 92.5 billion in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 8.0% from 2020 to 2027.

Source: Grand View Research

Meet Your Partner for Software Engineering Innovation: ITJ

As a leader in software engineering and digital innovation, ITJ is uniquely equipped to address the challenges of fast-growing and high-value market sectors, especially within Life Sciences, Biotechnology, and Medical Devices companies. Our expertise lies in establishing Centers of Excellence in strategic locations such as Mexico, offering a significant advantage in software engineering capacity and talent.

Here's what sets ITJ apart:

1. Establishing Centers of Excellence

We specialize in setting up Centers of Excellence that tap into Mexico's rich talent pool. These centers serve as hubs for software engineering and innovation, providing our clients with the resources they need to scale their operations and drive forward technological advancement.

2. Quality, Productivity, and Innovation

At ITJ, we're committed to delivering the highest quality solutions. Our focus on productivity and innovation aligns perfectly with our clients' objectives, ensuring that we're not just meeting their needs but exceeding their expectations.

3. Cultural Alignment and Timezone Compatibility

Our nearshore model offers unique advantages, including cultural alignment and timezone compatibility. This ensures seamless collaboration and communication, enhancing the quality of work and accelerating time to market.

4. The Build-Operate-Transfer (BOT) Model

Our BOT model provides flexibility and long-term value for US-based medical and biotech firms. It allows us to build self-sustainable sites that can be easily transitioned back to the client, minimizing nearshore set-up complexities and providing cost-saving opportunities.

5. Compliance and Scalability

We excel in delivering FDA-compliant digital solutions. Our emphasis on rapid team scalability and high-quality talent at competitive costs ensures that our clients can grow their operations without compromising on compliance or quality.

6. Proven Track Record

We have a proven track record of successful partnerships with leading companies in the life sciences sector. One of our notable successes includes helping Insulet build a fantastic software team in Tijuana.

As your partner, ITJ is committed to driving your digital innovation and aligning with your objectives for technological advancement in healthcare. Our proficiency in establishing Centers of Excellence, commitment to quality, productivity, and innovation, and our cost-effective nearshore model make us the ideal partner for your software engineering needs. Partner with ITJ today, and let's create the future of healthcare together.

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