AWH

▸ CASE STUDY

IncludeHealth

IncludeHealth™

INDUSTRY: Health, Wellness and Fitness

FOUNDED: 2009

COMPANY SIZE: 2-10 employees

AWH OFFERING: Web, Internet of Things (IoT)

SITE: includehealth.com

COMPANY OVERVIEW   IncludeHealth provides a digital health and wellness platform designed to deliver more inclusive, effective, and efficient care for people of all ages and abilities. This is achieved by pairing HIPAA compliant cloud software, health information sensors, and inclusive fitness equipment. This combination offers unprecedented versatility and accessibility, seamless practitioner and patient collaboration, and precise data recording with measurable outcomes that can be shared across facilities and networks.

PRODUCT INSPIRATION   While attending the University of Cincinnati, IncludeHealth founder, Ryan Eder, was working out when a man in the wheelchair entered the gym. Eder noticed that the gentleman brought his own bag of homemade accessories to adapt to the equipment; however, he quickly became frustrated. "He spent more time transferring in and out of his chair and adapting the equipment than actually exercising," Eder said. The machines were not designed to accommodate wheelchair users.

Eder was determined to create a machine that would provide all users, despite age, size, shape, mobility, or fitness level, an equal platform to pursue and maintain personal health. He designed The Access Strength™, a machine that removed barriers, like pins and low weight stacks, and could be used seated or standing, and included stability for wheelchairs.

Post-graduation, Eder moved to Columbus and began work as an industrial designer. Six months later, he submitted The Access Strength™ into the International Design Excellence Awards annual competition. Eder went on to win gold in the Student Category, as well as Best in Show and the People's Choice Award, a prize presented to the iPhone the following year. Eder used the buzz and recognition to further build the company, and seven years later, began pursuing IncludeHealth full-time.

CLIENT SITUATION   Eder realized that the prototypes for The Access Strength™ provided physical accessibility, but he wanted IncludeHealth to also address cognitive accessibility. "We decided to expand our offering and develop a software called The IFCloud™," said Eder. With The IFCloud™, users have access to a library of workouts as the machine tracks their progress. Once saved and scheduled, all information is sent through the cloud to The Access Strength™, removing the burden of remembering exercises, machine setup, or how much weight to use.

IncludeHealth originally partnered with a software development group on the West Coast to begin work on The IFCloud™. However, the relationship quickly ended and Eder began researching new firms he could meet with face-to-face throughout the project duration. For Eder, it wasn't just about finding someone with the right capabilities – a strong cultural fit was vital. He explained, "The path towards building something is never linear – there are ups and downs, good times and bad. I interviewed over 20 development firms in the Midwest – all possessed the technical expertise, but I wanted someone who believed in what we were doing, would listen to our needs, and get the project to where it needed to be."

In addition to developing the software, the new firm would be expected to meet deadlines with budgets that were pre-defined by the previous group. "We worked with our West coast partner for about eight to nine months before ending the relationship. It was critical that whoever stepped in could build the product with the already established foundation," said Eder.

PRODUCT REQUIREMENTS   Eder was introduced to AWH by the Ohio Tech Angel Fund (OTAF) and immediately had a personable connection with the team. "With our previous firm, we felt like their methods were being forced on us. With AWH, it was completely different. There were no egos, just authentic conversations about what our goals were, where we were in the development process, and how AWH could partner with us to grow our business," Eder explained.

The partnership with AWH was contingent on additional funding to be raised by IncludeHealth. "There are many organizations that would have walked away, but that wasn't the case with AWH. They met with us to discuss plans and once we had the money, began development." According to Ryan Frederick, principal at AWH, "We were extremely impressed with everything IncludeHealth had accomplished and knew immediately we wanted to be a part of their journey." Later that year, AWH and IncludeHealth partnered to complete The IFCloud™ project.

▸ CASE STUDY

IncludeHealth

PRODUCT DEVELOPMENT Eder had a clear vision for The IFCloud™ and AWH worked to bring that vision to fruition through cloud technology. AWH developed a series of APIs to drive communication between The Access Strength™ hardware and The IFCloud™ technology. According to Chris Slee, principal and founder at AWH, "APIs enable us to effectively communicate with The Access Strength™ machines and garner powerful data and insights." Slee continued, "Each machine contains heartbeat services and APIs specific to machine management. There may be thousands of machines in multiple locations, but with APIs, we have access to each individual machine. We can monitor machine maintenance and talk to the machines, sending calls for software updates when necessary."

APIs also play an important role in providing a powerful user experience. Once enrolled in The IFCloud™, powerful authoring tools enable IncludeHealth clients to customize and schedule exercises, or choose a templated workout routine from an extensive library.

At the gym, an RFID clip functions as a user's unique identifier and allows instant access through any connected machine. Once a user is recognized and authenticated, an API sends the machine the scheduled workout. "The Access Strength™ was designed to be inclusive. Cumbersome, spring-loaded pins were replaced with intuitive, dexterity-free handles that require almost no effort to adjust," explained Slee. "The IF Cloud™ was also built with inclusivity in mind. The API tells the machine exactly how much weight is required for the routine, so users don't have to worry about setting or adjusting resistance while they exercise."

If a workout is interrupted and a user chooses to continue later, exercises can be resumed from any connected machine. The IFCloud™ captures powerful metrics, such as reps, calories, time, and weight lifted, in order to review and analyze the workout. Post-workout, users can log-in to instantly see their achievements compared to goals in the powerful IF Dashboard. All metrics can be viewed on a workout, exercise, or set level, and provide deep insights into user trends and the efficiency and efficacy of routines.

BENEFITS AWH completed Phase I of The IFCloud™ in 2016. The project remains ongoing as IncludeHealth continues to expand features and capabilities. Today, IncludeHealth users experience the following benefits:

☁

INTUITIVE USER EXPERIENCE
The IFCloud™ technology is easily understood by individuals unfamiliar with tech, while also powerful enough for practitioners, trainers, and therapists.

📈

INCREASED ENGAGEMENT
The IFCloud™ dashboard connects practitioners to patients, regardless of location, for increased engagement and better outcomes.

📁

REAL-TIME DATA C APTURE A ND A NALYSIS
Fitness data is passively captured during machine use and is made instantly available through any connected computer or digital device for micro or macro analysis.

⚙

IMPROVED AUTOMATION
Automatic guided sessions, detailed documentation, and report generation remove the manual burden of delivering quality care.

♿

UNPARALLELED INCLUSIVITY
Infused universal design principles in both hardware and software remove barriers and ensure patients of all abilities can exercise with ease.

AWH also partnered with IncludeHealth to develop their new website using Umbraco, once again incorporating powerful APIs into the project. Umbraco makes it incredibly simple to manage and produce content to address user needs and interests, giving IncludeHealth a very flexible and customizable website.

Further, with Umbraco, IncludeHealth can make changes to the site without developer intervention. "I am a designer at heart, but needed more control over the look and feel of the marketing site, more than just being able to control the copy," said Eder. AWH built highly customized fields and integrated those into the Umbraco back-office. This empowered the IncludeHealth team to treat the website as a graphical editing tool, customizing all elements of the page layout.