



Change Healthcare: Accelerating Healthcare Innovation by Productizing APIs

Application programming interfaces (APIs) are the technical constructs that connect different systems in standardized and repeatable ways, allowing for data sharing and communication. API technology is at the root of much of the innovation occurring in the consumer marketplace, playing a primary role in everything from ride-sharing applications like Lyft to e-commerce sites like Amazon. However, healthcare has been slow to embrace the API revolution.

A new way of thinking about innovation

As healthcare organizations continue to look for ways to drive down costs, increase efficiencies, and reduce waste, they can look to the use of APIs to help solve some of these problems. "To be successful in optimizing operational performance, organizations must have access to comprehensive data along with the space to apply innovations like artificial intelligence (AI) and Blockchain," says Gautam M. Shah, vice president of API and marketplaces for Change Healthcare. "They need tools that make it easy to create, iterate and fine-tune functionalities, so they can ultimately offer solutions that have a positive impact on patients, providers and payers. APIs are well-positioned to help organizations meet their goals."

Unfortunately, most in the industry continue to view APIs as code that sits between systems to drive connectivity and access. "Although this is a valid viewpoint, it is somewhat dated: API technology is evolving, and it is important to change our perspective to stay ahead of the curve," says Shah. "When we view APIs as products, they become more than just technical constructs, they are full-fledged offerings that solve critical problems. By delivering APIs as products, we can optimize workflows, create better user experiences, consolidate essential data, and accelerate innovation. Our partner and a thought leader in this space, Google Cloud's Apigee, describes it best, 'APIs are a window into your company's digital assets, exposing them so developers and partners can build [solutions] and become part of your innovation engine.'

Seeking actionable value by focusing on the user

At the core of the transformation to API-as-a-Product is a commitment to delivering value in smaller increments, so entities can weave API Products into their existing solutions to make them work better or improve the patient experience. "If you need to enhance your existing financial management solutions to add additional data and insights, such as ways to flag potential denials pre-submission, you could use an API. A productized API would

help you to focus on solving specific problems, meet your performance needs and is updated with new features; letting you improve your functionality more quickly and potentially more easily," says Shah. "Enabling this transformation requires a change in the way we approach solution development. First and foremost, we must take a user-centric perspective, considering the user's needs and the experience he or she should have and then design around those needs to solve the business issue he or she faces. By taking this approach, we can build an API that solves a particular problem, as opposed to performing a certain function. This makes the solution more scalable and multifunctional. "Developers can then leverage the API's existing capabilities and patterns, which is more efficient and facilitates faster development times, versus building new ones. This method of productizing APIs also encourages a highly responsive feedback cycle, so developers can iterate quicker across experiences and workflows.

Accelerating Innovation across the ecosystem

Change Healthcare is transforming its approach to APIs, embracing APIs as products that solve specific problems. "As we create API Products, apply user-centric design, incorporate security and performance standards, and continuously evolve with customers' needs, we are in the unique position to leverage our portfolio of API products that enable all parts of the patient-provider-payer interaction to create a broad set of solutions for the healthcare ecosystem," says Shah. "By extracting the value of our products at the smallest possible increment, not only can we power individual workflows, such as payments or denials, we can bundle together solutions and create whole new ways of solving problems that move the industry forward toward value-driven care." ■



We dare the industry to move to a place where we make data, insights, and connectivity available to all innovators so that we can address the needs of our patients, the providers that care for them, and the payors that support that care.



Change Healthcare is a leading independent healthcare technology company that provides data and analytics-driven solutions to improve clinical, financial and patient engagement outcomes in the U.S. healthcare system. We are a key catalyst of a value-based healthcare system, accelerating the journey toward improved lives and healthier communities. Learn more at changehealthcare.com.