



DIGITAL DIALOGUES: THE NEXT STAGE OF PHARMA'S DIGITAL REVOLUTION

Abstract

The pharmaceutical industry, a key stakeholder in the healthcare and life sciences ecosystem, is experiencing a watershed moment in history. With 56% saying their impression of pharmaceutical companies has positively increased during the COVID-19 crisis¹, now is the time to harness this new wave of technological transformation as we approach the apex of the new health economy.

That said, we do have a lot to tackle. Challenges in research and development (R&D) and meeting the soaring demand for treatments, as well as the increased need for remote healthcare services—are just some of the issues. Financial Times (FT) Live and Infosys invited leading executives in the field to take a deep dive into real-world examples of how pharmaceutical companies are using data and AI at every stage in the lengthy process of getting a drug from the lab to the market.

Moderated by Hannah Kuchler, FT's global pharma correspondent, the Digital Dialogue panel of speakers comprised eminent panellists from renowned organizations in the healthcare and pharma landscape.

The experts explored the evolution of digital in pharma, what's next and how the ongoing digital transformation is reshaping the operational and business models of the industry.

Innovation in R&D and New Possibilities in Pharma Manufacturing

Setting the scene about pharma's place on this digital journey, the panel talked about how Sanofi is intently focusing on infusing digital transformation across its three different pillars – building new data foundations, cloud migrations, and looking at the application landscape. Then rationalizing and bringing the foundations together, and integrating them through automation and advanced data analytics, to enhance efficiencies and expedite business. For example, data analytics can facilitate the running of decentralized clinical trials for resource optimization. In terms of the R&D landscape, the digital aspects run a comprehensive gamut of drug research, drug discovery, drug optimization to clinical development, clinical trials, pharmacovigilance, and regulatory and medical businesses.

Over the years, there has been a gradual mindset shift among service providers – a noticeable change in the dialogue of digital in the pharma and medical devices sector. It was in the back burners initially, but now it's blazing at the forefront and driving rapid transformation across. On the commercial side, investments are being made to improve the patient journey and boost commercial platforms. An end-to-end digital agenda is essential to thriving in the new economy. For instance, the adoption of blockchain technology to improve track and trace can help businesses monetize their data and deploy at scale like GSK did –

as it tapped into advanced analytics to meet a surge in demand for the popular Shingrix vaccine.

Digital holds a far greater promise of introducing new processes, bringing in more capabilities, and changing the traditional mindset of doing things, as my fellow guest mentioned. Today, businesses are looking at technology from the perspective of adding value to their business. There is a greater focus on the adoption of agile tech. While in the past, IT used to be on the backend, today, IT and business are coming together to initiate a big business transformation.

Successful IT integration cannot happen without data. This brings us to the question of how manufacturers can successfully leverage data. Today, a lot of investment is happening in ensuring that the data across the organization is democratized, harmonized, and the quality is good. One needs to ensure that the data is accurate, otherwise, it will throw the entire analytical process into disarray, leading to insights that will not be useful. That can be achieved by investing in the right technology and scaling up. In GSK's case, the data analytics team built a very predictive product that was able to understand all the drivers of yield and helped increase vaccine production and deliver immediate and fast results within the Shingrix supply.



Closing the Gap Between Patient and Physician

The new business model for healthcare and life sciences companies is patient-centric and it necessitates taking a different approach to looking at data. With IT now becoming an integral part of a business to drastically transform outcomes, pharmaceutical companies are increasingly leveraging technology to achieve more than hitherto possible. This includes – enhancing drug cycle time, democratizing high-quality data, and making patient journeys more seamless while maintaining cost-effectiveness.

For Medtronic, a leading medical devices company, Infosys supported the creation of disruptive software as a medical device (SaMD). The result was an AI-enabled data-driven technology platform that delivered a highly personalized diabetes management vision to offer improved health outcomes and improvements in the patient journey. They are planning to implement the same platform for other pathways – oncology, renal failures, and respiratory to name a few.



Emphasizing both patient and physician-focused perspectives, Ipsen developed an app that would help healthcare professionals (HCPs) in their jobs by facilitating and enabling HCP-patient communication, thus allowing HCPs to remotely monitor a patient's treatment.

An Evolving Strategy is Key to the Future of Pharma

The three principal areas of a watertight roadmap boil down to the adoption of agile, tactical collaboration, and human transformation. With the growing range of global challenges, an enterprise's success will be defined by how well it is able to adapt and respond to uncertainty. This requires agile and fast-paced teams that are well-positioned to meet the needs of digital transformation.

In addition, strategic collaboration can lend itself to innovative long-term gains. For instance, Bayer just launched Calantic™ Digital Solutions, a suite of AI radiology resources and app solutions developed by radiologists for radiologists. They are also collaborating with startups to specifically look at patient journeys as well as mentoring several nascent startups. By combining their experience, unique approaches, and technologies, Bayer aims to uncover more real-world business solutions. The biggest takeaway in the process of developing their strategy is that today's ecosystem is no longer the traditional one.

Finally, the real transformation in the midst of this digital upheaval is the human workforce. The first step lies in recognizing that the

digital ecosystem is changing and then changing the inherent way of thinking about talents. Secondly, planning a focused strategy led by good leaders and well-aligned with company strategies. Thirdly, create enough empowerment and surface area through a federated operating model to drive digital transformation. And finally, bring in new capabilities and people who understand data literacy and how to operate in the target state.



¹PWC, "Where next for pharma and life sciences?"

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