



Helping Pharmaceutical Companies Keep Pace With Digital Initiatives

Pharmaceutical companies are running hard to keep pace with changes brought about by digital technology. Mobile communications, the cloud, advanced analytics, and the Internet of Things are among the innovations that are starting to transform the healthcare industry in the ways they have already transformed the media, retail, and banking industries.

Disruptive trends show that outcome based care is gaining more importance. Patients are much less dependent on their doctors for advice, increasingly able and willing to take greater control of their own health.

In addition, patients are becoming keener to evaluate different healthcare products and services given that they bear a growing proportion of the costs. In a digital world, the ability to engage with patients as they make such evaluations could be key to the success of a pharma company's commercial model.

Pharma companies will need to decide soon how to position themselves to compete or collaborate with new age technology companies to build complementary capabilities.

Today, Clinical Decision Support are backed by advanced solutions using advanced analytics and natural-language-processing capabilities over data collected from patient engagement through apps, health and fitness devices, and online communities.

Advanced analytics, sensors, and the automation of complex decisions are capable of delivering a step change in the efficiency, speed, quality, and responsiveness of business processes across industries.

To stay competitive, pharma companies will need to implement next-generation technologies to streamline their business processes. They need to achieve near real-time transparency of their clinical-trials portfolio, and create seamless sales and operations planning in the supply chain, as well as take expectations to the next level in efficiency and agility from customers, employees, patients, and suppliers.



Opportunities with Digital Initiatives

Personalized Care

With growing focus on personalized medicine, targeting the needs of each patient with greater precision is possible with advanced data analytics that mine electronic medical records, including diagnostic results, medication history, and genomic, proteomic, and gene-expression data will help identify optimal therapies and predict how individual patients will respond to treatment.

Combining these with other sensor data about patients as they go about their daily lives it becomes easier for pharma companies to deliver real-time alerts to caregivers and physicians when there is a need for intervention.

Advanced Analytics

There is a wealth of data sitting with pharma companies that needs to be brought together to drive superior results. Marketing and sales forces will deploy advanced analytics to understand prescribing behavior and potential patient profiles, enabling more precise targeting of providers and increasing the number of prescriptions filed. R&D can benefit from discovery and the testing of molecules with advanced modeling and simulation techniques.

Pharma companies and other healthcare players link and analyze data from insurance claims, clinics, laboratories, sensors, apps, social media, and more in order to generate real-world evidence about a drug's efficacy, guiding reimbursement and clinical practices.

Omni-Channel Engagement

Digital-engagement technologies open up a whole new world for marketing, the exchange of information, and recruitment for trials. Pharmaceutical sales reps, medical-science liaisons, and patient-service teams can inform and influence patients, physicians, and caregivers in person or via mobile phones, the Internet, apps, or social media. Patients are already starting to use patient portals for their medical records and to communicate with their physicians, and they use apps to fill scripts and online patient communities to speak to other patients with the same disease.

Real-time Automation

In pharmaceuticals, employee on-boarding, sales and operations planning, launch monitoring, and marketing-content approval would especially benefit from streamlined, automated work flows and increased transparency. Clinical-trial management, from recruitment to submission, is another area that will see dramatic change with advanced automation.

Targeted online recruitment and remote-monitoring technology (sensors, connected devices, and apps) will increasingly enable clinical trials to take place in "real world" settings so that patients can go about their lives with very minor changes in habits, while participating in a trial. Increased connectivity and automation in trial-management processes will also enable advanced trial design and monitoring approaches.

Plumb5 is a Unified Data Platform that is built using the concepts of Real-time Decision processes, which on a broad level, helps pharma businesses to organize their patient data to achieve single patient view, enhancing personalized patient strategies and communication and automate timely engagement with patients.

The Data Platform comes integrated with point applications to render seamless engagement between touch-points like web, mobile, email, SMS, social notifications, push notifications, browser notifications and other channels of communication

This allows the platform to quickly connect data and run models to extract patterns and relationships over any data types spanning sales/marketing, R&D and operations. The generic models allow in repurposing the algorithm to fit different kind of data-sets

The platform is capable of learning and making decisions using inbuilt decision processes. For example, it can learn to decide which dosage alert to trigger based on the patient prescription and behavioral states.

Automation Use Cases

Automated Patient Engagement: Enable Automation of Dynamic Newsletters based on behavior and preferences, sharing useful information to the patient periodically

Automated Patient Alerts: Based on preference and product tags, automated triggers can be configured to notify patients on dosage, diets or other pertinent information with regard to the engagement

Bot based Chat Setup bots to answer patient queries regarding products and services and escalate queries to human based on rules

Clinical Trial Management With sensor data integration, advanced workflows can automate processes from recruitment to submission

Decision Automation Using real-time models, decision states can be generated in real-time enabling truly automated decision driven workflows.



Inbuilt Features

Real-time Propensity Scoring Model

Real-time Recommendations

Probabilistic Attribution Model

Pattern Detection

Unified Data Structure

Deep Analytics

Auto-segmentation

Learning Network

NLP Compatible



Tech Stack

Built using .NET, MongoDB, SQL, ElasticSearch, with Proprietary Models and Algorithms