



How can
Digital Transformation
bring back the lost glory
of the **Pharmaceutical**
sector + _____



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In 2011, shortly before his death, when Steve Jobs decided to sequence and decode his genome to find the best suited treatment to fight his cancer, personalized medicine had acquired its most famous patient. Today, the cost of sequencing the genome has come down to \$1000 and will fall, in all probability, to \$100 in the near future, making the technology accessible to all. On a less terminal note, in the world of flu, rashes or minor illness, the internet opens out to a plethora of websites, portals and apps that offer their two cents' worth of advice (and home remedies), allowing patients to take ownership of their health. Two things have happened: One, medicine has been democratized through digital proliferation; and two, the digital patient believes in having greater control of their healthcare outcomes.

The landscape for pharma companies is quickly changing with technology infiltration that is allowing nimbler entrants and digitally enabled patients to define their own outcomes and remedies. Pharma companies operate in a world where data is publicly and electronically available, alternative health devices collect petabytes of information to be stored in cloud servers, and where government and other healthcare payers are scrutinizing the efficacy of medicines and therapies in a bid to rationalize the cost. This has put pharma companies in a precarious spot. Only a digital rebirth can help pharma companies discover their lost mojo.

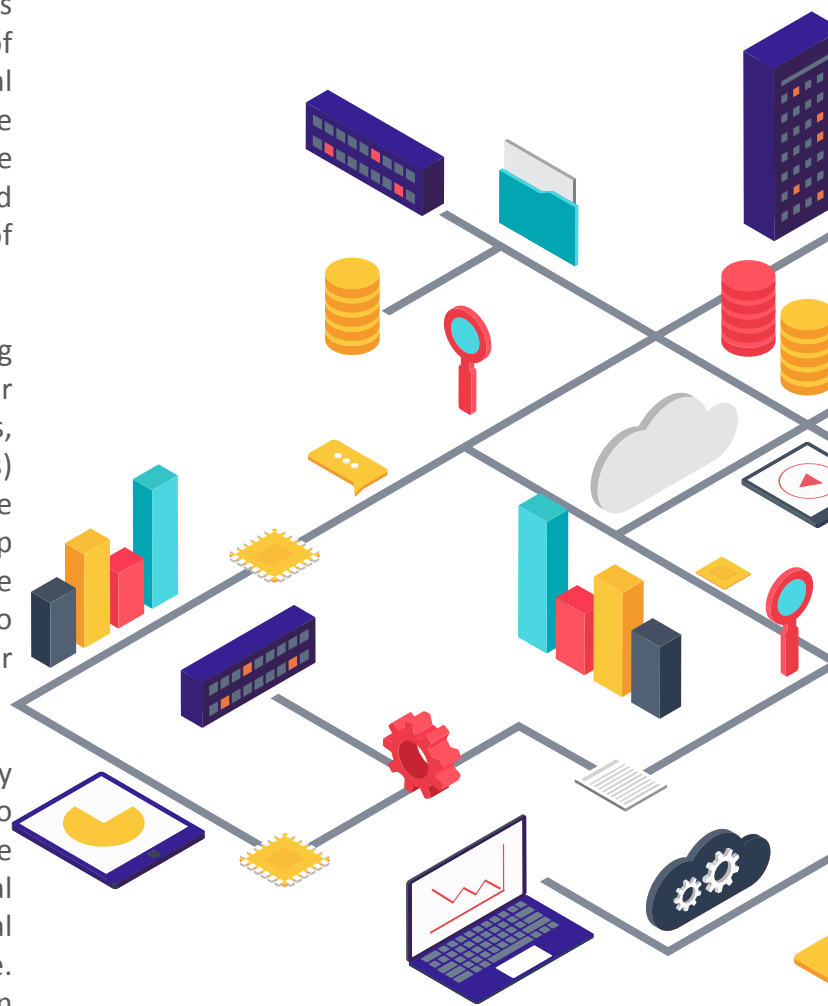


A Data Driven World: Possibilities and Threats

Data has long been a double-edged sword for pharma companies – while companies effectively controlled the data on the effectiveness of their formulations as a closely guarded secret, they could not access patient data to postulate possible solutions that people might want. The digitization of medical records, the prevalence of medical devices connected to the cloud and the emergence of social internet forums where patients can discuss their illness and remedies have disrupted the dynamics of data.

Pharma companies are increasingly finding that the efficacy of their solutions are under the scrutiny of government agencies, healthcare payers (like insurance companies) and patients. With data being available online, pharma companies need to equip themselves with the tools to handle situations that arise as stakeholders begin to question the cost-effectiveness or value-additions.

But, pharma companies need not be unduly worried. The explosion of patient data also opens a world of opportunities which can be exploited if companies develop digital capabilities. Companies can leverage social media to get closer to the people they serve. The scope for analytics is limitless; it can enhance their operations, create new formulations and facilitate breakthrough discoveries, enable personalized healthcare solutions and real-time monitoring of patient outcomes. And these are just modest beginnings.



Connected Healthcare: Leveraging Digital for Personalized Solutions

The rise of the digital citizen has led to changes in consumer behavior not yet recognized by most companies. For instance, studies have revealed that both patients and physicians tend to search online before actually buying a product. They have an increased tendency to share photos, videos and reviews among their communities and have more trust in their peer reviews and experiences. This has also led to an increase in expectations of engagement and service levels that pharma companies are just not equipped to match, unless they adopt the digital mindset. Johnson and Johnson (JNJ) offers a brilliant case study of how it has embraced digital technologies to transform itself.

JNJ has embraced the concept of connected health by deploying applications to help consumer face numerous healthcare challenges. For instance, AllergyCast is an application that supplies real time pollen count by zipcode to help users understand the chance of catching allergies. It uses a proprietary algorithm with multiple data points such as weather forecast and social media mentions to rate the possibility of an onset of allergies on a scale of 1 to 12. Another app developed by JNJ works with its blood glucose monitoring device OneTouch and maintains a record of a user's glucose levels, providing insights into how it changes over time. The app allows users to share the data with their physicians and enable more personalized treatment.

Big Data and Analytics: The Power of Number Crunching

One of the key challenges of pharma companies is to reduce the development cycle of drugs – the faster the cycle, the better the chance of recouping the investment. The emergence of big data and advanced computing capabilities can help hasten the process. One of the challenges companies may face would be to streamline the data. Pharma companies have different types of data, such as from clinical trials, laboratory trials, patient scans, blood tests, x-rays and user feedback. All the datasets may be of different format; to harmonize them into a cohesive stream of meaningful data will enable them to tap into insights and resources.

A notable player harnessing the power of analytics is Pfizer with its Precision Medicine Analytics Ecosystem. The system sieves through various data sets, looking for patterns to isolate certain strains of rare diseases. For example, while mining a data set of lung cancer patients, it noted that about 5% of patients developed the cancer not due to high-risk lifestyle associated with lung cancer, but rather due to a unique situation – due to a mutation in the ALK gene. This resulted in the discovery of Xalkori to treat this specific string of lung cancer.

On the market side, pharma companies can benefit from using CRM tools like Salesforce to integrate and gain a holistic view of their customers. Harnessing analytics tools will help them to identify unique needs of patients, strengthen relationships with physicians and provide a 360 degree view of their customers.

Suyati helps companies integrate their customer and sales data with CRM tools, as in the case of leading pharmaceutical client, helping them develop an efficient file management system for the Salesforce CRM. You can read their story here.



Sometimes, sifting through the data can give insights and correlations that would otherwise not have been detected. For instance, JNJ crunching customer insights and user data, found that Listerine (its mouthwash brand) users were more likely to have skydived, which led them to ask the question as to whether Listerine users happened to be bolder than the average consumer. The result was the successful Bring out the Bold campaign and led to positioning their brand in a unique way.

24/7 Care: Remote, sensor based healthcare solutions

Remote Patient Monitoring (RPM), among other potential application of IoT in healthcare, is a potential game-changer that seeks to upturn the conventional way of caregiving. An expected \$700 billion in cost savings compounded with an aging population and an increase in chronic diseases, has made RPM a critical technology for those in the healthcare industry. Despite the controversy surrounding the effectiveness of these devices in transmitting accurate data and the regulatory hurdles that need to be overcome, we expect in the long term, connected devices would be sending signals on a 24/7 basis to physicians about how patients are responding to treatments. This could be critical for senior citizens, especially for those suffering from motor disabilities and cardiac diseases as it shortens the waiting time and allows physicians to make quick interventions. We can envisage a future where the doctor meets the patients through video conferencing and using the data transmitted from these sensors, prescribes treatment accordingly.

Pfizer has partnered with IBM in a project to use IoT sensors to monitor and collect data on Parkinson's to aid its research efforts to provide better care for these patients. Pfizer is hoping if the initial project is successful; then it can commercially market these devices to healthcare providers after regulatory approval. Parkinson's was a natural choice as its treatment needs to be monitored and modified as patients respond to the medicine. It also helped that the devices and sensors, needed to detect motion in movement disorders, were well developed. While the project is in



development, and not much details have emerged, Pfizer is hopeful to begin clinical trials in 2018. Currently, physicians treating Parkinson's rely on anecdotal evidence from patients which can be late and unreliable. Such technology would monitor movements, sleep and cognition activities. This would give physicians a clearer idea of the effects of medication on patients and would give pharma companies real world knowledge on developing new and better medications.

The Digital Rebirth: What Pharma Companies Can Do

Holistic Approach to Digital Transformation: Companies will have to introspect as to where they stand on the digital divide. Most pharma companies have in some way begun the digitization process, but for the most part, it has been random and isolated. Senior managers will have to change their approach towards digital technologies and incorporate them in their long-term strategic plan. Investment in technologies like digitization of records, using big data and analytics and automating business processes are a few areas that companies can focus on.

Choosing the Right Partners: It is easier to talk about transformation than to actually do it. Pharma companies have been late to the party and will have to rely on external partners to give them key capabilities as it adopts new technologies. With companies like Apple, IBM, Facebook among others, it would be best to seek a collaborative approach and build complementary capabilities. In the area of analytics, the shortage of data scientists and other key resources, companies would need to identify third-parties to outsource the work too.

Develop cross-functional teams: Companies cannot adopt an approach of planning and developing products on paper before introducing it in the real world; there will be a need to experiment in the market and concurrently develop products based on user feedback. Pharma companies would do well to set up new teams that consist of cross-functional members and ensure that data does not accumulate into silos but feed

off each other to bring about a 360 degree view. The need is even greater for companies to fail fast and fail often as they experiment with new technologies and small cross-functional teams can give them the bandwidth to do so.

Engage with the Customer: Companies should consider the use of social media to connect with their customers to solicit feedback and user insights. This would require companies to adopt a more transparent and open mindset to use the insights and discussions generated to develop better products.

All in all, these are exciting times for the pharma industry. There is optimism that new technologies can bring about revolutionary breakthroughs in healthcare and change the traditional models within which it operates. In the short run, digital disruptions would cause adverse impact to traditional business models and healthcare solutions; but in the long run digital transformation would be opening the window to the future.

About Suyati

Suyati is a fast-growing, digital transformation solutions company that helps you rebuild your customer experience for the digital consumer. We collaborate with businesses to strategize and implement impactful digital initiatives that position our clients ahead of the competition. We are digital-first and we focus on delivering digital transformation solutions that support your various engagement strategies. With our niche and rich expertise in a wide range of technologies and services- CMS, CRM, e-commerce, Cloud, IoT, Data Analytics, and Product Engineering- we help companies leverage their best on web/cloud/mobile platforms.

We enable you to create insights driven customer engagement across all touch points to build a unified marketing approach. Our custom technology solutions have been deployed successfully in companies across the globe, especially in the US, UK, Europe and Australia.

Learn more: www.suyati.com

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Reference

<https://suyati.com/industries/healthcare-solutions/>

<https://suyati.com/blog/big-datas-contribution-to-the-pharmaceutical-industry/>

<http://www.adageindia.in/marketing/cmo-strategy/listerine-looks-to-become-a-lifestyle-brand/articleshow/51698997.cms>

<https://www.forbes.com/sites/emilymullin/2016/04/07/pfizer-ibm-launch-ambitious-internet-of-things-for-parkinsons-research/#7911fda37618>