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Disruptive technologies penetrate into healthcare

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metropolis

Commercial television took 13 years to reach 50 million people; internet reached the same number of people in three years, while Facebook and Twitter accomplished the task within a year. This is what I call 'Disruptive Technology' - a technology by virtue of which recreating a virtual counterpart of the physical world has become possible. This digital virtual world has disrupted the traditional economic behavior of the marketplace.

The internet, social media, hardware systems, mobile and software technologies have changed the way people interacted, did business, valued organizations and even affected people's choice of a workplace. Ask a young tech savvy executive about his/her job preference, he/she is most certainly going to opt for a workplace where he/she finds technological access and freedom. These disruptive technologies have penetrated healthcare and modified the care pathway from redefining prevention to managing critically ill patients remotely.

From diagnostic company Metropolis's point of view, our own tryst with technology has been exciting, challenging, engaging and remotely dogmatic. Thanks to the company's inherent flexibility to flex towards changing market dynamics and our technological ability to further enhance our agility. To say the least, we are engaging in all types of disruptive technology, few in the pipeline while the others already implemented.

Operations supportive software: A game changer
From the smallest software for online leave management to a large enterprise resource planning (ERP) solution like SAP, at Metropolis we have either customized or built them to suit our needs. Why we had to do so? Because the uniqueness of a diagnostic business and error prone laboratory operations demanded technologies adapted to it, rather than the other way round. Even our on-line leave management software was built in-house because of our 24*7*365 lab operations, which might dodge standard office timings. This kind of operations also demand flexibility in the organizational hierarchy and employee-boss-approval structure.

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Talking about the mega-software solutions, a significant part of our business growth model has been through partnerships and acquisition of local labs. Many of such partnerships are not at the same technology pace as Metropolis, but to mainstream them, technology was a pertinent enabler. Our two major projects of SAP and Laboratory Information Management System (LIMS), along with other smaller technology systems, were essential for running the business smoothly in these pockets. While most of them were receptive to technology, others were wondering about the real objective of resource investments these systems called for. They had to experience it to believe, feel and experience the change these technologies brought about in their traditional ways of business.

Let us dive into what are these traditional ways that we seek to change to gain efficiency and excellence for better customer service and satisfaction.

Sensor technologies in diagnostics
I cannot emphasize more on the criticality of patient information in healthcare industry. Evermore for a pathology report, an error in which could lead to a life and death situation. Maintaining a standard, unique and uniform identity of sample across the lab process is essential for an error free report. Additionally, the most important differentiator for a lab is its turnaround time (time between sample received by the lab to report delivery).

The turnaround time offered to the customer must be competitive enough to be able to compete with the local competitors in an unorganized sector like ours. The sample barcoding system that we developed has not only enabled us to remain on the forefront of quality, but also reduced the tedious manual labor involved in registering and following up on samples.

Holding the business together: Internet and mobile technology
More than a decade ago, we started with a small offline laboratory information system. In less than decade's time, our business expanded exponentially to evolve into a lab processing 15 million tests annually. The unique hub and spoke model of the laboratory industry kept expanding, for with the current 105 labs and 700 collection centers of Metropolis across India and abroad. Each hub in the network was a processing unit in itself, with a different capacity and test menu.

It was getting increasingly difficult to mainstream them with offline software. We realized the software was now obsolete and we need to migrate to a cloud-based system for data processing and management. Our server requirements were increasing, and developing a full-fledged data center was inevitable. We decided to go ahead with cloud-based IT solutions for managing operations, materials and finance.

The implementation of these systems is unraveling its benefits, steadily and gradually. We have witnessed enhanced operational efficiency, meaningful managerial data reports and reduced resource leakage across the network. The mobile technology was integrated with this cloud-based system for connecting our logistic network together and to connect to our customers with our products - lab reports. These two technologies and integrated hardware network has had a lion's share in mainstreaming the business. But most importantly it has allowed our people to connect and communicate with each other and reach out to our customers more efficiently.

Gearing up for the next lap of disruptive technology
Think Social! Our next leap is our preparation to enter in social technology. A technology that has enabled businesses with a power these never had - real time interaction with consumers. Being in healthcare, the prime essence our consumer interaction is 'care.' To engage at a personal level, driving messages for a healthy life and empowering our consumers to make better health choices is the rationale on which we are planning our social platforms.

This will enable us to go beyond our sole communication line of 'lab reports' to an integrated communication channel that empowers them with information beyond reports. There is no better asset than an empowered consumer for a business. The insights of an empowered consumer are invaluable for a company to adapt quickly to their demands and expectations. The choice of the social platform, understanding the target audience and engaging in relevant communication with them is the key strategy for Metropolis's effort for going social.

What is there for the leader?
Each leader strives for insights. An unbiased, human error free data is the best management tool a leader can possibly possess to drive the organization towards its goal. The big data emerging from these various modes of communication have the capability of showing various facets of the company and the industry at large. However, by this I do not mean that the human leadership abilities can even remotely be replaced. Technology has exaggerated the role of an insightful leader. The

art of inspecting data to create meaningful insights and take measures accordingly is the human side of disruptive technology.

For a successful healthcare business, it is important to use technology as an asset rather than a replacement for human mind and efforts. Disruptive technologies and their impact on economy are to be closely watched to mold the company's growth pathway and to get the services closer and more relevant for its customer.