Life in the time of technology

IT FACTOR Before you dismiss it off as all hype, Gautam Rege urges you to know that many lives are saved and many more transformed, courtesy the innumerable uses of information technology in today's times.

Right from the moment we wake up in the morning till the time we go back to bed at night, technology is with us at every step of life today. Think of it, how many of us use alarm clocks? We don't need to; we are happy with the one on our smartphones. These clocks are so smart that you can just put the alarm on snooze mode without even touching your phone - just say "wake me up after 10 minutes" and the phone will do the needful.

Staying in touch has never been easier. We can connect with our loved ones on the go; no need to hunt for a public telephone booth to call home to let them know that you are going to be late for dinner. Thanks to the advent of social media, staying connected with the world has attained hitherto unheard of connotations. People are posting live happenings around the world; we are becoming more informed, aware and educated. There is barely a possibility of getting lost while travelling, not with your GPS-enabled smartphone in tow! Well, not only communication, but entertainment too is available in the smallest and the most compact form today.

Saving lives

For a majority of people out there, information technology (IT) is all about ease of access, comfort, entertainment, connectivity and much more. While all that is great, the real difference that technology is making in our lives today is by providing us with life-critical solutions. Major companies and corporations of the world are now providing healthcare solutions to hospitals and clinics. Many of them like Phillips, Siemens, GE, Bosch and HCL have ventured into being solution providers - in the form applications and programmes - to healthcare establishments in India. These applications and programmes have not only simplified the processes, but also reduced the cost of infrastructure required for storage of data in the form of hardcopy and manpower required to manage the data. Information is stored on cloud now; information can be accessed from multiple locations and from multiple devices.

Many foremost healthcare institutions in India are able to provide world-class facilities and treatment with the help of IT and automation. Because of introduction of hospital information system (HIS), picture and archival system (PACS) and electronic health record system (EHR), hospitals are able to provide high-quality and 360-degree treatment for patients suffering from fatal diseases.

Moreover, IT has opened a totally new realm of possibilities through the concept called Internet of Things (IoT). It is a setup in which objects, animals or people are provided with unique identifiers and the ability to transfer data over network without requiring human-to-human or human-to-computer interaction. IoT has emerged from the convergence of wireless technologies, microelectromechanical systems and Internet. With the help of IoT, everything and anything can be monitored, installed with unique identifiers like chips or sensors. In other words, a person installed with an artificial pacemaker and a sensor in his heart can be monitored from different locations, and minute fluctuations in the working of the heart can be registered in the system. Not only heart rate, but sensors dedicated to particular functions like blood supply rate, nutrition and IV drip frequency can also be monitored.

New developments are taking place at regular intervals. For instance, last year Pune-based Kimaya NICU, in association with KEM Hospital, developed Kimaya Total Parenteral Nutrition (TPN), an automated solution to help curb the neonatal mortality rate in the country. For premature infants receiving the right type and quantity of nutrition is critical in ensuring survival. Currently, a manual process involving complicated mathematical calculations - which is prone to human error - is practised. IT could very well make all that a thing of the past.

IT has many useful applications to offer, which can solve innumerable issues affecting the world – provided it's used and deployed in the right manner. Be it corruption, famines, terrorism, racial discrimination, just about any problem plaguing the society, it can be prevented or eliminated with the help of information technology.

While there may be no real harm in cocooning ourselves in this blanket of convenience offered by all these technological advances surrounding us, every once in a while we need to step out of the comfort zone, and think out of the box. As much as we may think of those silly forwards on WhatsApp as a nuisance, we also need to spare a thought for those who wouldn't have got a second chance at life were it not for some life-saving application or programme.

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