

# Everything you wanted to know about Digital Transformation, but were too afraid to ask

As a citizen of the new age, which everyone is referring to as the 'Digital era', you must have been hearing a lot about how the world is 'going Digital'.

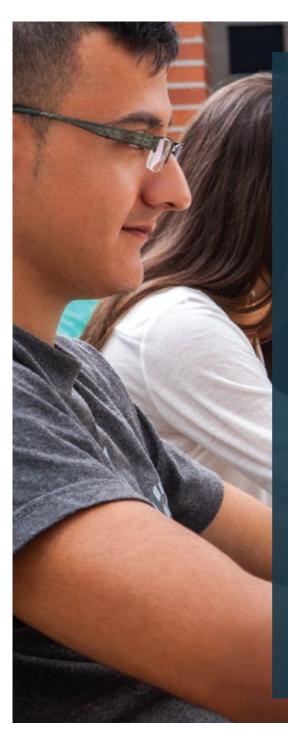
There is a big buzz around Digital and as you yourself would have noticed and experienced first hand, there are now multiple technologies that you are dealing, using and interacting with in your lives, both at home and beyond.

In the recent past you may even have heard of the term 'Digital Transformation' (DT), which seems to be popping up ever so often everywhere. If you have been following the news of the day, you will know that the Prime Minister of India has himself initiated the 'Digital India' program that underscores the importance that DT will assume in national life in the years ahead.

## DT, it's everywhere

At first glance 'Digital Transformation' sounds a bit complex and something that only the techies of the land need to know about. However, the fact of the matter is that this new phenomena is set to touch each one of us. Owing to this massive wave, which is now sweeping across nations including our own, we are all going to live very different lives from the ones our predecessors did.

It is therefore not just important, but imperative that you make your peace with this new, hot buzzword, know what it's all about, and most importantly, understand how you, as a Digital native need to prepare for this most critical phase of evolution.



## DID YOU KNOW

From the cup of tea that reaches thirsty lips to 'communicating refrigerators' that inform users about milk running out, to hospitals that remotely monitor the health of their patients—its Digital everywhere. These tasks, for instance are enabled through IoT (Internet of Things).

Further, **Big Data** is being used today to analyze trends related to healthcare, especially life threatening diseases. This analysis is spurring the rise of new cures leading to a reduction in the spread of communicable diseases.

**Robotic** welders are being used in automobile factories replacing human welders. These machines seal the corners of car windscreen frames, eliminating the need for human intervention.

Several Japanese restaurants use robots to chop veggies and make sushi, work as receptionists and cleaners and serve clients.

**Machine Learning** is being used by Transportation departments in various countries to predict traffic patterns at busy intersections based on past data on traffic.

# Are you aware for instance, that Digital Transformation is being talked about as the Fourth Industrial Revolution, a turning point for the world and its citizens?

Leading news magazine, The Economist, in an article described the first three industrial revolutions in a very concise manner. The first, according to The Economist, began in Britain in the late 18th century with the mechanization of the textile industry. The second came in the early 20th century with the mass production of automobiles, initiated by Ford Motors. The third industrial revolution is a more recent phenomenon, and related to digitization of manufacturing.

Just as each of these revolutions caused upheavals, were disruptive and altered the complexion of society, the Fourth Industrial Revolution, considered synonymous with Digital Transformation, is expected to usher in massive alterations.

The Fourth Industrial Revolution, according to

a study titled, 'Future of jobs' by the World Economic Forum (WEF), is all about developments in areas such as Artificial Intelligence, Robotics, Nanotechnology, 3D printing, Biotechnology and Analytics (the science of understanding the voluminous data, especially customer data being created within organizations and using it to make predictions about everything—from where the next earthquake will hit the planet to trends in fashion, to how consumers will behave and their buying patterns in the future).

"This will lay the foundation for a revolution more comprehensive and all encompassing than anything we have ever seen. Smart systems—homes, factories, farms, grids or cities—will help tackle problems ranging from supply chain management to climate change", the research states.

Mobility, Social Media, and Analytics too are part of the huge excitement that is the Fourth Industrial Revolution, or should we say Digital Transformation. DT is increasingly also about the Internet of Things (another term you need to familiarize yourself with) which relates to all the data that is being generated by the growing number of sensors around us and which is being examined to draw significant insights.

So here we are, at this critical juncture with DT, that is all set to alter our landscape forever.



## Life within the DT universe

In order to further understand Digital Transformation, all we need to do is look at ourselves and what we see around us. Increasingly, more and more people in our country are owning mobile phones and other 'smart devices' (such as tablets, laptops and computers) and there is growing awareness and use of the Internet.

In fact, as members of Generation Next, many of you would have had some, or a lot of exposure to this ever-growing family of gizmos. You would certainly be using these to browse the Internet to improve your knowledge about different issues, access social media sites to connect with family and friends and yes, even do online shopping at your favorite retail stores. What you really have to remember is that no area of life, or work, is going to remain unaffected by DT. It is everywhere and will envelop you in its bubble. No field or industry segment can escape DT's long arms. From

manufacturing, to healthcare, to banking to retail, Digital Transformation is becoming visible across all segments.

DT for instance, is at the core of the products and services you are accessing. It lies at the center of the monitoring and care you receive in high-tech hospitals. It is what allows you to book your flights and hotel stays as you make your travel plans. DT is helping you to buy a shoe that you lose your heart to, at your favorite e-shop at the click of a key, and have it delivered to you within a day or less. Clearly, DT is a trend you cannot beat. It's much easier to sit back, join the movement and learn to survive and thrive in this evolutionary industrial phase.

## DT and You

Having accepted that yes, DT is here and yes, there is need for you to be cognizant of its impact, what must you then do?

A very important part of embracing DT is skilling for it. In order to handle disruptive technologies, emerging people need new and different skills. Without these, it is impossible to survive in the Digital scenario. As you face a cashless, paperless and wireless realm, you have to stay abreast of the latest tech and business trends and developments to become a useful citizen, one who contributes to the growth of the country's Digital-led economy and participates in its progress.

Keep in mind that as you enter the world of work, you will meet DT head on. This is because recognizing its power, organizations too are working to conform to the DT wave. They are adopting and implementing state-of-the-art technologies that are re-engineering their processes, products and services.

Companies understand that if they ride the DT wave and build a multi-layered, multi-dimensional and multi-generational workforce, they have the best chance to be market leaders and achieve sustainable success. In fact, according to industry analysts, Digitally Transformed organizations are 26 percent more profitable than their industry competitors!

### Learning DT Skills

This naturally leads to the matter of skills. The sad reality is that most organizations are facing a severe talent crunch when it comes to employees with DT expertise. There is a severe shortage of these people in the market, which means, a huge opportunity lies before you.

Interestingly, DT skills are now the need of the hour for people working in the IT industry and beyond. As Jeffrey Immelt, CEO of US-based General Electric has said, "Everyone will need to be a Digital coder". Basically, whether you are in the IT or non-IT sectors, you will require Digital skills. No matter what your job profile, you will have to acquire DT knowledge. It is soon going to be a prerequisite for getting jobs, as the hirers will demand it.

Therefore, and in order to gain employment in Digitally transforming enterprises globally, you will require relevant Digital skill sets that will make you 'hour 1, day 1' productive, and job and industry ready. What you need to do is embrace the right Digital skills to become the first and preferred choice of hirers.

Therefore let's examine what you will need to become a true blue Digital Transformation professional.

- Digital skill sets in areas such as Big Data, IoT / Machine2Machine (M2M), Cloud / Platforms, Social Media, Mobility, Analytics, Artificial Intelligence and Robotics
- Deep domain knowledge of any of the top vertical sectors, disciplines and subjects—IT, Banking, Finance and Insurance, Retail, Travel, Healthcare, Manufacturing, Government, etc.
- Skills in envisioning, designing, manufacturing, operating, and servicing DT, in areas such as Mobile, Social and Analytics
- People and Interpersonal skills (Teamwork, Collaboration, Creativity, Design Thinking, etc.)

As you find your feet in the Digital arena, you must try and position yourself strongly in any of these professional spaces (see BOX 1)—as either Digital Leaders, Digital Innovators, Digital Developers, Digital Shapers, Digital Workers or simply, Digital Citizens.

#### The DT talent pipeline

#### The domain requires:



#### Digital Leaders (DL)

Essentially people at the CXO/VP/Middle Management level who are equipped with Digital skills.

#### Skills needed

- Knowledge of business trends
- Knowledge of how to leverage new technologies within the enterprise



#### Digital Innovators (DI)

Essentially scientists working in basic and applied Research & Development to create new DT-based products and services.

#### Skills needed

- Very high-end mathematical and technological skills in different application domains
- Product life cycle management and high-end collaborative and creative skills



#### Digital Developers (DD)

High-skilled professionals who will support Digital Creators to help them build DT products and services as well as to implement, maintain, modify, enhance and operate the same

#### Skills needed

- Around product manufacturing and software development methodologies and technologies
- Implementation, services and support skills for core products or software components



#### Digital Workers (DW)

Includes the rest of the work force in the organizations and businesses in the DT economy

#### Skills needed

 Relevant new basic functional literacy skills to operate effectively in new Digitally transformed organizations



#### Digital Citizens (DC)

Typically, participants in the Digital society

#### · Skills needed

Basic digital literacy skills to be full active members of the DT realm

## Skilling for DT

We hope you now have some idea about the Fourth Industrial Revolution that has us all in its grip. It's time then for you to examine how you can prepare for Digital Transformation and make your 'skilling plans' to ensure that you are ahead of peers when the recruiters come around to your campus.

According to a January, 2016 report on the 'Future of jobs' by the World Economic Forum (WEF), the current disruptive labor market changes could lead to a net employment impact of more than 5.1 million jobs lost during the 2015-20 period, with a total loss of 7.1 million jobs. Two thirds of this, says the study, will be concentrated in routine white collar office functions such as office and administrative roles. There will however, be a total gain of two million jobs globally, in computer and mathematical and architecture and engineering related fields.

What this clearly means is that there is a fair employment chance for people well

versed in new tech.

The most heartening news is that there will be a place for everyone. Interestingly, DT jobs are very well paying and the expectation is that even entry-level and experienced professionals with Digital Transformation skills will draw at least 50-60 percent higher salaries than people with traditional IT skills. What more do you want to hear?

And yes, there are enough and more institutions that can train you in DT skills. You however, need to be discerning and pick the schools that are known for their credibility, high quality learning and ability to place you in leading organizations once your program is over.

Therefore get cracking and get on to the DT gravy train. The DT opportunity is waiting for you. Just grab it with both hands.

## How to pick a DT training institution

When you are beginning your search for the training school that can help you become a DT professional, look out for the following:

- Global Company with a Pan India reach
- The trainers credentials, branding, reputation and 'name' in the market
- The company's experience and expertise in the business of technology training (how many years has it been around)
- Awards won in the Education and Training domain
- The number of students it has trained since inception
- The quality of its faculty and teachers
- The quality of its training centers and facilities—the infrastructure available
- Hands on Training experience
- Its online presence—whether it allows you to train remotely
- The range of programs it offers in DT
- Its placement record—how many students has it helped get excellent jobs



