Artificial Intelligence:
Leading the age of Augmented Humanity

BY SHAKUN KHANNA
HCM Strategy & Transformation Advisor
Oracle, Asia Pacific

Let's talk
talent

ORACLE® | people matters

CONTENTS

Introduction

Advances in artificial intelligence has generated much debate – especially in the last two years, where its impact on jobs and the world of work has been directly felt. This ongoing disruption is still expected to be at a nascent stage, and a more robust change is expected in the upcoming years. In this context, People Matters in partnership with Oracle conducted a snap poll on the business readiness in India. The poll pointed to sharp differences in how influential HR leaders and a general audience view the issue.

Since the conversations today loom around how artificial intelligence will replace human intelligence, it is important to understand what human intelligence actually is. Psychologists and scientists define it primarily as the ability to adapt. When scientists studied the lateralization[1] of the brain, they identified that the brain is divided into two hemispheres. The Nobel Prize winning Roger W. Sperry and his colleagues in 1960s revealed[2] the functional specialization of the two halves of the brain – the famous left-right brain theory. They postulated that the left brain is specialized in carrying the analytical and verbal tasks while the right brain is a master in creative intelligence.

Apart from two-half brain intelligence, cosmic or quantum[3] intelligence explains our consciousness that cannot be explained by classical mechanics. Hence, while doing any specific activity, intuitively we tend to use our natural intelligence which is a combination of these three forms of intelligence which are called for, more often than not, without any self-control.

Artificial intelligence[4] often referred to as a simulation of human intelligence, is applied when a machine is programmed to mimic the cognitive abilities of the human mind. And since it is based on a mathematical algorithm, anything and everything that humans do which do not fit in a logical frame of reference or cannot be recreated through an algorithm, will not be replicated through artificial intelligence. This is indicative of the type of jobs that will be impacted by artificial intelligence.

- Are AI based threat on jobs real or exaggerated?

    – 50% of HR leaders said the impact is yet to be felt while 41% of twitter users believe that AI is going take over jobs

- Is India market ready for the AI based job revolution?

    - 50% of HR leaders said no while 57% of twitter users said India is ready

- What should be the top priority for organizations in an AI world?

    – Re-skilling current workforce to leverage the power of AI

* Snap poll conducted by People Matters-Oracle - Let's Talk Talent campaign included 130 HR leaders and twitter responses

"The great pleasure and feelings in my right brain is more than my left brain can find the words to tell you." - Roger Sperry[5] (These feelings are something that AI can neither develop nor demonstrate)

According to a snap poll conducted by Oracle under the Let's Talk Talent campaign, 42% of the respondents believed that AI is going to take over the existing jobs. However, it is important to understand why and which jobs will be impacted through artificial intelligence. A recent example of a leading car maker, Mercedes Benz is replacing robots with human beings presents an interesting story to consider. Markus Schaefer, Mercedes' head of production said[6] that humans are better suited for the customizations that their cars require. "Robots can't deal with the degree of individualization and the many variants that we have today," he said. "We're saving money and safeguarding our future by employing more people." In Japan, Toyota also is heading the same way. Project lead Mitsuru Kawai told Bloomberg[7], "We cannot simply depend on the machines that only repeat the same task over and over again. To be the master of the machine, you have to have the knowledge and the skills to teach the machine."

How will AI change the nature of work

Artificial intelligence is like an evolution that has been impacting human species and the way we work, over the entire course of his-

tory. At the theoretical level, parts of what we now understand as artificial intelligence was first seen in intelligent computers in the 1950s. However, it was with machine learning coming into the picture in the 1980s and 1990s that the power of artificial intelligence was realized, it was machine learning that gave programs the ability to learn and evolve themselves.

But even with machine learning in the 1980s and 1990s, there was no strong infrastructure and computing capabilities to be able to harness its full potential. It is only with the advent of cloud computing and deep learning that humongous amount of computing power is now at our fingertips. However, an important myth to break is that artificial intelligence is not new but a technology revolution that is leading to smarter people who advise, smarter machines that automate and ultimately smarter businesses that anticipate.

It is helping us transition to an age of **Augmented Humanity,** where the human capabilities are augmented through artificial intelligence. Parallels can be drawn from how auto-pilots help pilots in navigating planes safely. Augmented humanity is bound to lead to **smarter people** who can give better advice.

Smart machines will help automate a lot of processes bringing in a lot of more efficiency. When Apple created App store and Oracle created platforms like Java, machines were created that use this computing capability to build multiple applications – in a way
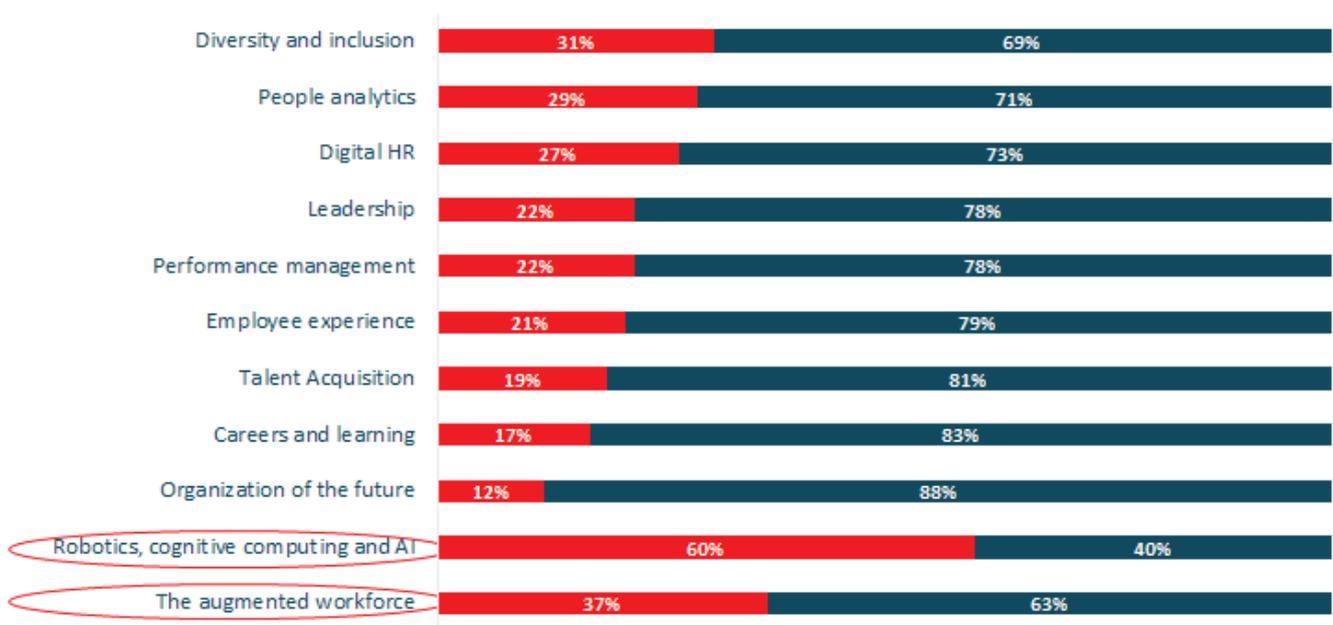
enabling automation. So, clearly, there is a co-existence.

And finally, it will be about **smarter businesses** that anticipate. With these insights that lead to the real underlying cause and are predictive in nature, business owners and leaders are bound to make smarter decisions. So, if as HR leaders you are concerned about the employee engagement levels and what is going to happen next, the good news is that there are a lot of applications being built with artificial intelligence which can predict the behavior at an individual level and patterns across the functions in the organization.

Building future-readiness

With digital transformations changing the way we work, the biggest question is, " Are we future ready?". Deloitte Global Human Capital Trends 2017 survey asked multiple questions to the leaders in terms of what is on their top agenda, what is bothering them and what they are going to focus on. While there are usual suspects like designing organizations of the future, careers & learning and talent acquisition on the list, what is intriguing is that 60% of the senior HR leaders who responded to this survey do not feel robotics, cognitive computing, and artificial in-

2017 Deloitte Global Human Capital Trends

	Not Important	Very / Important
Diversity and inclusion	31%	69%
People analytics	29%	71%
Digital HR	27%	73%
Leadership	22%	78%
Performance management	22%	78%
Employee experience	21%	79%
Talent Acquisition	19%	81%
Careers and learning	17%	83%
Organization of the future	12%	88%
Robotics, cognitive computing and AI	60%	40%
The augmented workforce	37%	63%

ORACLE

telligence is important. Similarly, augmented workforce also doesn't appear to be a key priority.

The role of HR leaders is to provide the right talent and the delivery capability to the organization. And if that is moving towards the change, HR leaders will have to lead the change from the forefront. According to the People Matters –Oracle's Let's Talk Talent snap poll, 50% of leaders thought that actually, India is not ready for artificial intelligence based job revolution. However, the increasing digital outreach and internet penetration might have a different story to tell. The number of Facebook users, YouTube revenues from India and the growth of e-commerce industry present a strong case for digital adoption in the country, it is also a witness to the readiness to embrace disruptive change. Therefore, nurturing a shift in mindset is important to bring about a lasting transformation.

Hence, in order to make your organization future-ready in the context of technology transformations, here are some key pointers:

- **Start with understanding the problem:** A critical aspect is to lead this change while you understand the exact problem that you are trying to solve. Today, the market may give you access a whole load of new-age, jazzy technology, but what is important is which technology solves your challenge. Understand the stage you are

in with respect to the transformation journey, current technology infrastructure and the business context of your organization before making a decision.

"The AI element will help contextualize data, but at the end of the day, HR professionals will still be required to make sense of the data, and extrapolate the impacts on their particular businesses." - Michael Hickins, Director of Strategic Communications at Oracle

- **Invest in people leadership:** The more machines we employ, the more people skills will be needed as managing emotions of employees who are working with bots day-in-day-out will be critical. Leaders will need to learn to enable people to deliver higher value rather than replace them.

- **Prepare your organization:** Majority of the organizations today are not even ready with the rudimentary systems that are required to feed into an artificially intelligent system, yet they have an expectation of overnight transformation. To minimize the chances of failure, being clear about the ecosystem and the organization's core is important before embarking on the journey.

- **Be future ready:** There is no particular time to wait for embarking on the artificial intelligence journey. The fu-

ture is already here. It is critical for HR leaders and organizations to identify the changes the artificial intelligence will bring to the way work is done and prepare for it. Imagine if automation was to create an environment where people only have to work 20 hours in a week, are the organizations ready from policy or a compensation structure perspective or are they ready to engage them while they are not working?

Conclusion

In today's disruptive times, as leaders, it is extremely important to understand the true impact of a transformation and lever-age it for the betterment of the enterprises and society. A transformation or an evolution is not a new phenomenon and both individuals and enterprises have through the course of history demonstrated strong adaptability skills to emerge out of it as a winner.

So, while the powerful computing capability available today has increased the focus on artificial intelligence and it is bound to impact everything we do, it will surely not be able to replace everything. And as leaders of the organizations, we should change our mindsets to embrace this revolution to augment our own capabilities and give way to smarter people, smarter machines and hence smarter businesses.

A case in point – Bharti Airtel

"I think as society and as leaders collectively all of us at the global scale, we have a collective responsibility to ensure that the direction and shape of AI as it goes forward is to add to the value of human beings at work and not blindly go and say AI is to substitute human beings at work because the future of the world is at stake."

Srikanth Balachandran,
Global CHRO, Bharti Airtel

Telecom is a highly regulated sector with each country having its own regulator, similar to industries like healthcare and transportation. One of the major reasons behind such high regulation is because the telecom industry has a huge influence on the voting public and hence complete freedom may pose national and political challenges.

A look at some of the global players shows the level of complexity that the companies have to operate in. Take Deutsche Telecom, a Germany based company with 70-80 million customers, operates in over 20 countries, where each country has its own regulations, laws and market definition. Another player, China Mobile has

900 million customer base in China alone. This is the largest, single country operator and the second largest single country operator is Bharti Airtel in India with 280 million customers in the country, with a 34% market share.

In the context of artificial intelligence, why are these statistics important? This is because automation is also evolving and a normal software-driven automation, has been completely transformed with the advent of big data. Big data provides huge computing capabilities under tools like Hadoop to give out sensible conclusions from pattern analysis. Hence, in software and applications that use huge amounts of data, elements of artificial intelligence are being embedded. So, if there is enough big data available to you and if you have deployed a big data tool, chances are that the elements of artificial intelligence are already part of the code.

China Mobile with 900 million customers or Bharti Airtel with 280 million customers operating their mobile phones and internet daily will have an advantage of accessing huge amounts of data that could be fed into the artificially intelligent system to read patterns. With smaller amount of data, the patterns that the software identifies can be highly inaccurate. Hence, artificial intelligence has a huge dependence on the quality and quantity of data.

With reliable artificial intelligence tools coming into the market and access to this big data, Bharti Airtel took the step for-

ward to incorporate this intelligence at the customer end. Here is how artificial intelligence has transformed the business:

- **Understanding customer behavior:** With data of 280 million customers flowing in every minute, every second into the machines, predicting customer behaviors based on existing patterns has been made possible by improved software

- **Projecting scenarios:** Based on the behavior study, the organization is able to project scenarios. While unintelligent rule driven scenarios can be done by even a simple excel based formula and extrapolation, artificially intelligent codes are able to make more humanly projections and extrapolations.

- **Designing options for a customer:** Typically, this is something for the marketing people and data scientists but now computers are being leveraged for this purpose. There are a lot of challenges in terms of wrong reading of behaviors, patterns, but it seems achievable.

- **Communicating with the customer:** Once the options are developed, it is all about the communication to the customers. An intelligent system can identify the right time and mode to communicate to the customer.

- **Creating a recommendation engine:** An area where there is ex-

perimentation is in creating a reliable recommendation engine. Every time a customer goes to the market for a recharge, the backend prompts the sales person to present 3 more offers based on pattern reading from the past data. And the entire thing has been done in 8 seconds flat.

- **Giving promotions, bundling, waivers and credits:** In a typical telecom scenario, when the pre-paid balance of a customer goes below zero or a post-paid customer crosses the credit limit, artificial intelligence based on past recharging/bill payment patterns can decide whether or not to give that individual an exception – a decision that currently has biases as humans take them.

It is important for HR leaders to draw parallels from these business experiences for employees. At Bharti Airtel, the scale of opportunity is higher when working with the data of 280 million customers, however, the same level of opportunity cannot be said of the data of, 17,000 employees in India. But as artificially intelligent software get sharper to provide accurate patterns for a data size of 17,000 as well; one can surely take back learnings from the customer side. Conducting behavior studies for employees, projecting scenarios, designing options, communicating, recommending and giving promotions – all are perceivable for employees as well.

So, it's only a matter of time till we catch up on the challenge of limited data. So while artificial intelligence can surely not substitute the value that humans bring, it is a collective responsibility of leaders and society at large to direct this transformation towards the right path – one that presents an opportunity for artificial intelligence to add value to human beings and not the one with myths and fears that it will substitute human beings.
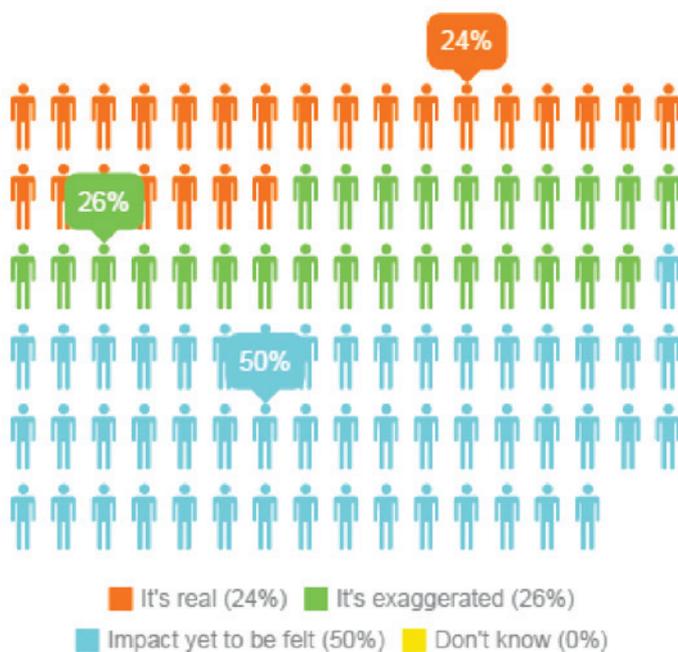
(As shared by Srikanth Balachandran, Global CHRO, Bharti Airtel)

References

1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3767540/

2. https://www.nobelprize.org/educational/medicine/split-brain/background.html

3. https://plato.stanford.edu/entries/qt-consciousness/

4. Russell, Stuart J.; Norvig, Peter (2003), Artificial Intelligence: A Modern Approach (2nd ed.), Upper Saddle River, New Jersey: Prentice Hall, ISBN 0-13-790395-2.

5. https://www.nobelprize.org/educational/medicine/split-brain/background.html

6. http://www.bloomberg.com/news/articles/2016-02-25/why-mercedes-is-halting-robots-reign-on-the-production-line

7. https://www.bloomberg.com/news/2014-04-06/humans-replacing-robots-herald-toyota-s-vision-of-future.html

8. https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/central-europe/ce-global-human-capital-trends.pdf
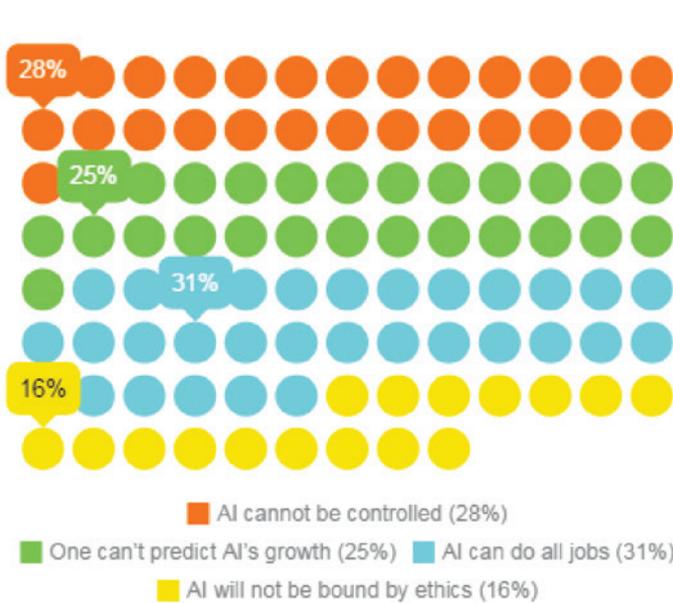
Snap Poll on Artificial Intelligence

Are AI based threat on jobs real or exaggerated?**

24%

26%

50%

Social Sentiment*: 41% say its real

- It's real (24%)
- It's exaggerated (26%)
- Impact yet to be felt (50%)
- Don't know (0%)

*The results are based on a Twitter poll
**127 HR Heads & HR - Tech leaders participated in the survey

## What is the biggest myth associated with AI? **

28%

25%

31%

16%

- ■ AI cannot be controlled (28%)
- ■ One can't predict AI's growth (25%) ■ AI can do all jobs (31%)
- ■ AI will not be bound by ethics (16%)

Social Sentiment*: 42% say the biggest myth is that AI can do all jobs

The results are based on a Twitter poll

***127 HR Heads & HR - Tech leaders participated in the survey*

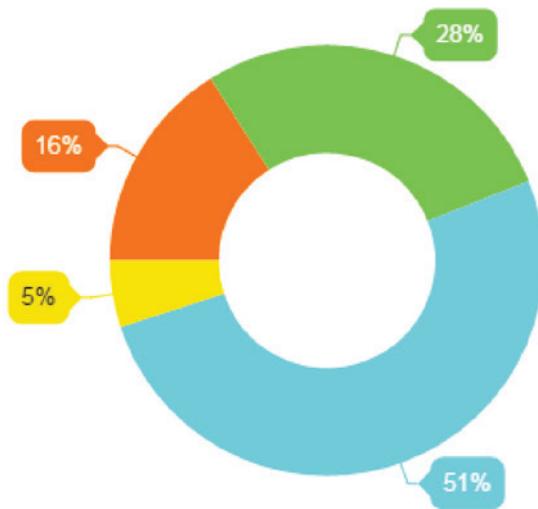## Is the Indian market ready for an AI based job revolution? **

16%

34%

50%
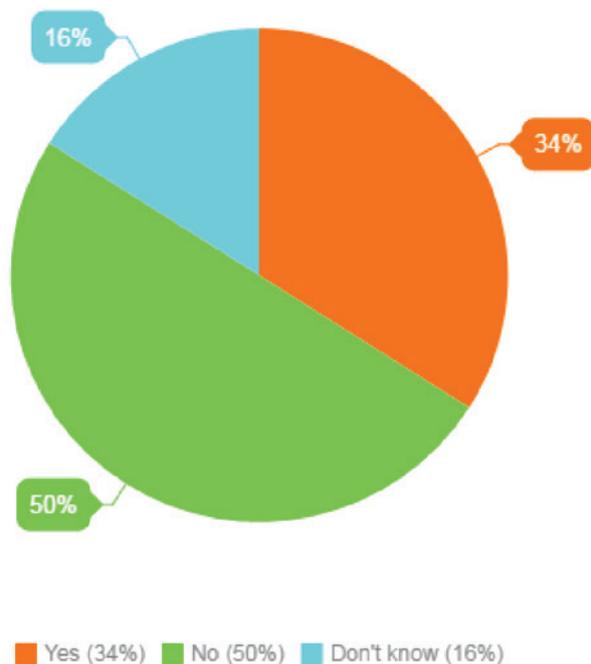
Social Sentiment*: 57% say India in ready for AI based job revolution

- ■ Yes (34%) ■ No (50%) ■ Don't know (16%)

The results are based on a Twitter poll

***127 HR Heads & HR - Tech leaders participated in the survey*

11

What should be the top priority for organizations in an AI world? **
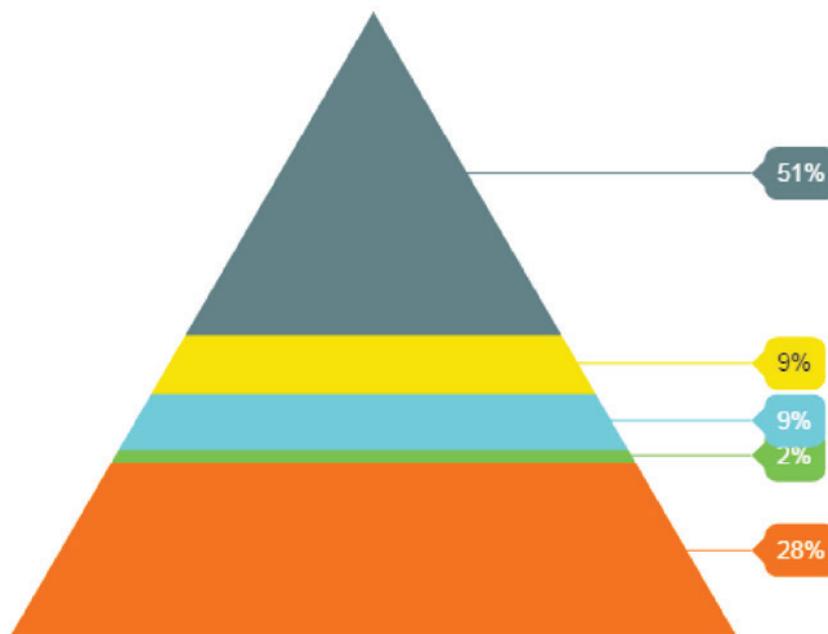
28%

16%

5%

51%

Social Sentiment*: 50% say that re-skilling employees is a top priority

- ■ Realign vision and goals (16%)
- ■ Invest in AI technology (28%)
- ■ Re-skilling current employees (51%)
- ■ Training new employees (5%)

*The results are based on a Twitter poll

**127 HR Heads & HR - Tech leaders participated in the survey

What is the biggest challenge area due to AI-based job loss? **

51%

9%

9%

2%

28%

- ■ Re-Skilling (28.28%)
- ■ IT Security (2.02%)
- ■ Redundant businesses (9.09%)
- ■ Unemployment (9.09%)
- ■ All of the above (51.52%)

**127 HR Heads & HR - Tech leaders participated in the survey