

ADINET e-News Digest

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PAUSE & PONDER

It is one of the most beautiful compensations of life, that no man can sincerely try to help another without helping himself.

Ralph Waldo Emerson
Philosopher, Poet, Author, Essayist

Robots can manipulate children, says study

The study used the Asch paradigm

Robots can influence the opinions and decisions of young children, according to a study which shows that kids are significantly more susceptible to manipulation by machines than adults.

Researchers from University of Plymouth in the U.K. compared how adults and children respond to an identical task when in the presence of both their peers and humanoid robots.

[Study](http://robotics.sciencemag.org/content/3/21/eaat1587) | [Details](#)
<http://robotics.sciencemag.org/content/3/21/eaat1587>

Who said shelves will be empty soon?

With books fighting for space at stores, publishing is nowhere close to being a dying art. Powered by new genres that have developed as an offshoot of the digital revolution, reading is here to stay, says Chahak Mittal

Youngsters do not read.” “They are hooked on to mobile devices.” “Gadgets are the go-to play things of the new gen.” Descriptions that we hear often, but despite financial challenges and the current go-online trend, publishing in India still remains a popular business. The silver bullet for the industry is that a major share of population is still digitally behind. Though metro cities are embracing online spaces, hard copies still remain the readers’ choices. Even in regional languages, readership is increasing in tier

II and tier III cities in India, making the translation industry boom.

Link | [Click Here](#)

Unconnected Data is a Liability

So, what exactly is a data silo?
Data silos mean unconnected data

Individual information systems handle their own data, rather than drawing from a common data source. They may be connected through a series of file exports and imports, but they aren’t working from the same pool of information. Instead, each of these systems is hoarding its data and putting roadblocks in the way of true data transparency.

Data silos are usually an accident brought about when different departments implement various information systems that meet their specific needs. To them, the system they’ve chosen to use is everything they’ve ever wanted, but that may not be true to the corporation as a whole.

More critically, while these individual systems may provide robust analysis within their own domain, they may miss interesting relationships between seemingly unrelated data points. And because there is inevitably a human gatekeeper determining which key performance indicators are worth exporting and which ones are not, a significant amount of data is simply discarded as not relevant to the discussion at hand, even if it might hold the key to an interesting little relationship that leads to better profitability.

Information is Power!

In an ideal world, there would be transparency in silos, allowing people to see inside each department or channel and enabling people to understand what that part of the organization is working on and reassure them the work is in the best interest of the whole organization. They would also need to be permeable –

allowing information to flow in and out, while enabling other groups to leverage the expertise and information best across the entire enterprise and also allowing the silos to better understand their impacts on the organization as a whole.

Link | [Click Here](#)

Literature Enthusiasts @ 7 Must Have Apps



Source | [Economic Times](#) | 23rd August 2018

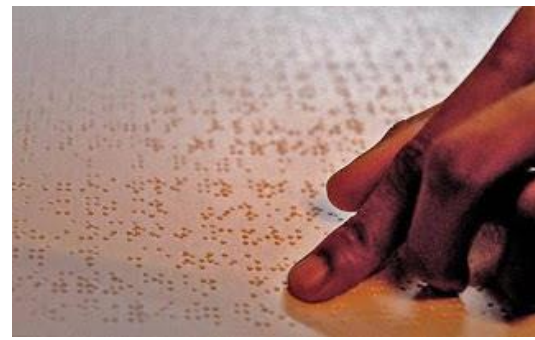
Sound of Knowledge @ Library of audiobooks opens up exciting ways for Visually Challenged Students

Helen Keller Memorial Association for the Blind is abuzz. The carpets on the floor and the shamiana lend it a festive mood. Students dressed in their best walk around and there is a barely contained excitement in the air. The reason for this?

An audio books and Braille library that has just recently been launched. The library brings hope with it as for the past 10 years the students have been making do with academic books provided to them at the school. The new library will change all that as it has 100 paperback Braille books and many audio books across genres.

More Info | [Click Here](#)

Sound of Knowledge @ Library of audiobooks opens up exciting ways for Visually Challenged Students



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More Info | [Click Here](#)

Unusual Research Collaboration @ Research crosses boundaries at IIT-Delhi, touches new horizons

This unusual research collaboration has been made possible through the School of Interdisciplinary Research (SIRe) which was set up at IIT-D last October.

Interdisciplinary is a fact of life, and it is a very good idea as collaboration helps raise questions of significance from varying perspectives. Interdisciplinary research throws new light on issues; however, it should not be done at the cost of the core discipline.

Full Info | <https://indianexpress.com/article/education/research-crosses-boundaries-at-iit-delhi-touches-new-horizons-5347790/>

How private sector can play a bigger role in higher education

To meet the huge demand for education that India is facing, private sector participation in higher education must not only be encouraged, but rather be incentivised. It is crucial that the government as well as private institutions coexist. In addition, the government must consider making regulations based on need and be objective-driven. This means that all higher education institutions in India must have a common regulatory framework, and not be divided on government versus privately-funded institutions, akin to a common corporate law that governs private and government corporations in India.

More Info
| <https://www.financialexpress.com/education-2/how-private-sector-can-play-a-bigger-role-in-higher-education/1307763/>

Job-readiness is about constantly evolving Do not Do not wait till you actually need to start a job search.

In a report, Nasscom has identified 55 new job roles and 155 new-age skills that will be required for the future. Big data and analytics are two major areas opening up and are expected to grow eightfold to \$16 billion by 2025. This calls for an increase in the demand for business analysts, solution architects, data integrators, data architects, data analysts and data scientists—careers that didn't exist a few years ago. That's why, no matter how long you've been in your current job, you must constantly evolve and be ready for the next gig.

More Info
| <https://www.financialexpress.com/jobs/working-and-happy-heres-why-you-should-always-be-job-ready/1307759/>

Letter of Appreciation @ Study find people underestimate the value of sending a "Thank You Note"

Saying 'thanks' is more powerful than you think Undervaluing Gratitude: Expressers Misunderstand the Consequences of Showing Appreciation", Chicago Booth professor Nicholas Epley and University of Texas at Austin's Amit Kumar discovered a wide gap between how little senders think their letters of gratitude will affect the recipient and the high level of happiness the recipients feel upon reading the letter. "There's so much talk in the world—both in academic literature and in the popular press—that expressing gratitude is good for you," said Kumar, a post-doctoral researcher at Booth at the time of the research. "But that doesn't seem to line up with how often people are actually articulating their appreciation in daily life. So, we wanted to find out what are the barriers holding people back?"

More Info
| <https://www.financialexpress.com/lifestyle/saying-thanks-is-more-powerful-than-you-think/1307755/>

Report Card @ EducationWorld India School Rankings 2018-19

The Education World India School Rankings 2018-19, in collaboration with Centre for Forecasting & Research (Cfore), interviewed 12,214 people, including teachers, students, parents, principals and educationists, from 27 cities to rate the country's top 1,000 schools in 13 categories.

Source | <http://www.educationworld.in/>

Open Access @ Movies

A new documentary film taking aim at for-profit publishers is about to be screened at universities around the world, but will it further the goals of the open-access movement?

True to the spirit of openness the movie encourages, the film is, of course, free to watch and registered under an open copyright license that allows anyone

to share or adapt the movie however they wish, as long as they give credit to the creators.

More Info
| https://www.insidehighered.com/news/2018/09/10/open-access-movement-hits-silver-screen?utm_source=Inside+Higher+Ed&utm_campaign=fe44a3c519-DNU_COPY_01&utm_medium=email&utm_term=0_1fcbc04421-fe44a3c519-197553861&mc_cid=fe44a3c519&mc_eid=b44e1f7ac4

Dark Web @ Cybercrime in India

Use of the dark web brings in unique challenges for law enforcement agencies in India and raises questions on the loopholes in the laws in place to govern cybercrime in India.

There is lot of curiosity regarding the Dark Web, there may be lot of questions in your mind they are.....

- What exactly is the dark web?
- How does one access the dark web?
- What is the nature of content on the dark web?
- Is there an upside to the dark web?
- How do law enforcement agencies deal with the dark web?
- Why is policing the dark net more challenging than other crimes?
- What do the laws say about the evidence gathered by investigating agencies through the dark web?
- Is there a need for amending the laws in keeping with the unique challenges posed by the dark web?

More Info
@ <https://indianexpress.com/article/cities/>

[mumbai/the-dark-web-and-how-police-deal-with-it-5359482/](https://www.indianexpress.com/article/cities/mumbai/the-dark-web-and-how-police-deal-with-it-5359482/)

Email Etiquettes @ What not to say in an email to your colleague

Adobe's research comes after a survey carried out by Glassdoor last year revealed the most annoying phrases used by colleagues in conversation. About 2,000 participants were asked to name their most-hated office catchphrases, with "touch base" ranking highest. This was followed by "blue sky thinking" and "game changer".

More Info
| <https://epaper.timesgroup.com/Olive/ODN/TimesOfIndia/shared/ShowArticle.aspx?doc=TOIM%2F2018%2F09%2F16&entity=Ar02203&sk=88691A5F&mode=text>

Three simple ways to cure your dread of public speaking

Public speaking is so stressful for so many people that it is routinely used as a stress manipulation in psychological studies

When preparing your talks, figure out the three things you want people to remember, and focus on them. Find ways to make comparisons among the elements you are presenting to help your audience generate expectations. Resist the temptation to add more content. Less is more.

More Info
| <https://www.livemint.com/Leisure/JI6UntU9b1BkVxp2uDJIrJ/Three-simple-ways-to-cure-your-dread-of-public-speaking.html>

Wharton courses to be soon available in India

NSE and Wharton are designing customized content for the course; it will be delivered through a digital platform.

The NSE Academy, a wholly owned subsidiary of the National Stock Exchange of India Ltd (NSE), Knowledge@Wharton (K@W), the online journal of research and business analysis of the Wharton School of the University of Pennsylvania, and Wharton Executive Education (WEE) have signed a MoU to impart financial knowledge and skills to Indian high school students across the country.

The 9th and 10th grade students in tier-2 and tier-3 cities would get an opportunity to have access to courses from Wharton School—offered to students in smaller towns through technology.

More Info | <https://www.financialexpress.com/education-2/wharton-courses-to-be-soon-available-in-india/1315463/>

Maharashtra to set up cyber varsity

It will train 3,000 professionals to fight online space attacks, internet crimes

The Maharashtra Government has taken the first step towards setting up a varsity dedicated to mitigating cyber threats. It has set aside ₹80 crore for the first round of its funding and the proposal for the project will be tabled in the State cabinet's consideration in the first week of October, sources said.

The new Cyber University will train 3,000 professionals to fight online space cyber attacks, internet crimes, and conduct cyber forensics. It will also impart training in 15 other Internet of Things (IoT) areas such as Data Analytics and Artificial Intelligence (AI).

A team of senior government officials recently visited the Massachusetts Institute of Technology (MIT)'s Computer Science and Artificial Intelligence Laboratory (CSAIL), which monitors cyber attacks in real time, to acquire

technical knowhow. CSAIL's latest system correctly predicts about 85% of the world's cyber attacks using machine learning and AI. "At the lab we saw in real time that the majority of the world's cyber attacks are directed towards Russia, Japan and India," an official said.

More Info | [Maharashtra to set up cyber varsity](#)

Digital Fraud @ How to Safeguard

ATM fraud @ Card skimming is when credit/debit card information is fraudulently obtained and copied onto a fake card

Types of fraud

There are two major types of data-driven frauds:

- Identity theft
- Phishing

Safety Steps | You can follow certain precautionary measures to help protect your data from fraudsters.

Digital Hygiene, ATM: Dos & don'ts

Link | [Safeguard against digital fraud](#)

Artificial Intelligence vs Human Intelligence @ Who will Win the Ultimate Battle?

Artificial intelligence vs human intelligence is a long on-going debate. There are supporters and strong believers in the power of one form over the other and one replacing the other.

Intelligence is the mental ability that is used in reasoning, problem-solving and learning and integrates the core cognitive functions of perception, memory, attention, focus, planning and language. Years of research has proven over and over again that intelligence is measurable through

standardized, scientific tests and can be altered through customized means and methods.

Artificial intelligence (AI) has evolved greatly over the years and is going to see more revolutionary changes in its design, functions and importance over the years. Currently, AI is being used in several industries and business functions like cyber security, banking, marketing, sales, transportation, customer engagement, etc. mainly for the purposes of automation of regular and mundane tasks.

Will AI replace human intelligence?

With the magnitude of investment flowing into R&D of AI solutions in various fields, it is widely feared that AI will take over the jobs leaving several millions of individuals unemployed and at some point, even take over the world. It is justified to some extent to have such fears since there is a number of jobs lost especially those involving mundane and regular tasks and judgements. But overall, AI cannot replace human intelligence. Why?

Three reasons. One, human intelligence is a product of millions of years of learning and fine-tuning. Our cognitive skills and abilities are evolved to a point that we can multi-task, respond to new circumstances and changes effectively, adapting to a dynamic environment, handle abstract ideas and complicated tasks, process even vague commands, be flexible and so on.

Two, human intelligence includes interpersonal and intrapersonal intelligence which enables humans to process emotions, make observations, respond to sensitive information, make judgments, creatively solve problems, etc. Both of these are human prerogatives and cannot be mimicked by machines.

Three, AI being a replicated version of the human intelligence, will require several times more R&D, instructions and investments to be able to completely mimic the human intelligence or become

superior to it. At best, AI can be a powerful tool for humans to use to improve the way the world functions.

The emergence of Intelligence Amplification

The idea and understanding that AI and Machine Learning need not replace humans but aid them and help augment human intelligence has led to the emergence of intelligence amplification (IA) and IA technologies. A great example of IA technology is IBM's Watson supercomputer which provides information to accentuate human intelligence, understands and analyzes their decisions based on the information and amplifies its own intelligence.

It has proven to be very useful to doctors in making diagnosis and providing treatment because doctors need not rely only on their finite knowledge; Watson sifts through the abundance of newly published and existing medical-diagnostic materials to present the doctors with new pieces of knowledge and information that will help them in making data-driven decisions that they may not have thought of otherwise.

Intelligence amplification can be started as early as primary and secondary stages of cognitive development of children using education technology to enable them to unleash their full potential and bring out the genius in them.

Through scientific assessments, we can delve deep into the human brain and understand its efficiency. Based on this understanding, personalized learning plans can be drafted, and customized education can be provided to children to develop their cognitive skills and augment their intelligence. With more research and development in intelligence amplification, we improve the brain efficiency manifold and significantly alter the way the world functions.

Source | <http://trak.in>

Study Reform for Special Kids @ CBSE Draft Policy

The Central Board of Secondary Education has introduced a draft policy for children with special needs. Read the draft guidelines here.

This new draft will benefit students with various types of disabilities including those who are blind, deaf, and with learning and mental disabilities. Students who come under the category of autism spectrum disorder will also be part of this new draft.

Draft Policy @ Features

- Flexibility in choosing subjects.
- Taking exams with the help of computers.
- Attendance relief.
- Setting up exam centres close to homes.
- Cancellation of registration fee for class 10 and 12 students.

In case of medical emergencies, students who are enrolling for classes 10 and 12 will be directly admitted without having to attend attending classes 9 and 11. But for this, ample medical proof must be submitted by the student and school authorities.

In February this year, CBSE had put forward a rule in favor of children with special needs. Those who were attending board exams for classes 10 and 12 could use laptops and computers. But this was only after submitting documents in support of their medical demands.

Looks like, our school boards are moving in the right track. A panel had recently proposed including Indian Sign Language as a subject and offering Braille as a language option in academics. This was to be offered as a second language. This move had gotten a thumbs up from students, parents, teachers and schools from across India.

[Source | Times of India | 19th September 2018 | Page No 1 & 10](#)

Maharashtra @ New Internet Service - ₹100-crore project provide internet services based on point-to-point technology

Once the optic fibre cable (OFC) network is ready, three departments – public health, agriculture and education – will introduce services using the digital infrastructure, according to a senior information technology (IT) department official. In the next three years, all departments will switch to digital modes.

The state has already initiated a programme, MahaNet, to connect rural areas using the OFC network. The government also plans to roll out a “right of way” policy that will give network providers all requisite clearances through a single-window clearance system. “Our aim is to ensure minimum hurdles. A right of way or single-window clearance system will be put in place to implement projects and schemes smoothly and at a faster pace,” said a senior bureaucrat, requesting anonymity.

[Source | Hindustan Times | 19th September 2018 | Page No 07](#)

A treasure trove of Information @ Gazetteers

“The gazetteers contain information of great strategic importance.

Their great importance is clear from the fact that the Prime Minister of India in his speech in the Lok Sabha (April 28, 1965) quoted from different gazetteers to corroborate the fact that the Rann of Kutch was a part of India.

So the gazetteers, whether it is district gazetteers, or state gazetteers or Indian gazetteers, are indeed of a national asset. It offers considerable scope for research.

[Full Info @ Business Standard | August 2018 \(Print Paper\)](#)

[Smart paper @ It can bend, fold or flatten on your command](#)

Low-cost actuation technology allows electricity to be applied to common paper coated with conducting thermoplastic, causing it to bend or fold

Scientists have developed a low-cost technology that allows a simple piece of paper to spring to life — bending, folding or flattening itself on command.

[Source | Mumbai Mirror | 24th August 2018](#)

How far does a PhD go?

As the job market is tight for those with PhDs in science, it is important that they develop other skill sets

The number of PhD graduates has proliferated over the decades — while there were only a dozen doctorates till 1920 in India (the first was awarded in 1904), there were 24,000 in all disciplines from about 900 institutions in 2017. While the number may not be surprising, what is disquieting is that of the 6,000 people granted science PhDs annually, not even 2,000 find decent employment today.

More doctorates, less positions

Let's look at the numbers. There were 326 PhD-awarding institutions in 2000; this rose to 912 in 2017. According to the University Grants Commission and the Department of Science and Technology, the number of science PhD holders tripled in the same period. With the number of PhD holders surpassing the number of opportunities created, many are left without jobs.

The top-ranked universities in India grant around 2,500 science PhDs each year. In chemistry alone, Indian Institute of Technology (IIT)-Madras grants over 25 PhDs every year. The number is similar in the older IITs, which means that there are 150 chemistry PhDs from these IITs every year. The remaining 11 newer IITs (the latest six are not being considered) add another 100 PhDs. The National Institutes of Technology (NITs) account for about 150, the Indian Institute of Science (IISc)

for about 25, the older Indian Institutes of Science Education and Research (IISER) for about 60. The Council of Scientific and Industrial Research (CSIR) labs and institutions of the Department of Atomic Energy (DAE) add another 100 PhDs. Top universities produce about 250. In all, we have more than 800 chemistry PhDs a year. However, our capacity to employ them is dismal. On average, the IITs and the IISc together recruit only about 25 chemists to their faculty in a year.

Science, funding and productivity

The vicious cycle continues because a scientist's performance is evaluated largely based on some standard criteria: in order to get the first promotion, he/ she has to publish five to 10 papers, and at least one PhD student should graduate under his/ her supervision. Awards and fellowships are also given based on such criteria. As a result, scientists end up training more scientists.

A big problem for scientists is funding, which is mostly provided by the government. Funding is crucial for good scientific research. Further woes for scientists include the fact that available resources are not distributed properly, funds are pruned, delayed, or stopped altogether.

[Source | The Hindu | 20 September 2018 | Page No 9](#)

Implications of data mirroring. It remains to be seen whether such a policy will backfire when it comes to the potential threat of data colonialism

Data is the new oil and a driver of growth and change. Indeed, India is a supposed to become data rich before becoming economically rich. This digital growth is being pushed by large foreign digital companies. They are largely fueled by the data of their users. Important sectors such as e-commerce, social media, digital entertainment, online communication, and information and communication technology (ICT) hardware

in India are predominantly served by foreign companies, or domestic companies funded by foreign capital.

Indian users today are accessing digital technology-driven services not only within India's boundaries, but also outside its jurisdiction. Consequently, these foreign service providers are free to process the personal data of millions of Indians within their own shores. The advancement of digital tools and technology in areas such as artificial intelligence (AI), has enabled them to monitor and profile user behaviour, granting them the potential power to influence their decisions through targeted communications.

Many experts have been ringing the alarm bells for the past few years, warning the government of digital colonialism by such companies. Data is now considered a strategic asset by many, and data driven network effects coupled with user feedback loops have given first mover advantage to the more developed western world. The data processed by these companies is not only used offshore to track and profile users but is also fed as fuel into modern technologies like AI & the Internet of Things (IoT), which are touted to be the drivers of modern manufacturing, service delivery and governance. Perhaps that's why it is Silicon Valley that is expected to lead the way in researching, implementing, controlling digital technologies, earning it the reputation of being the new Rome.

Recognizing the gravity of the issue, the Sri Krishna committee in its draft data protection bill has rightly observed that the freedom to share personal data in the digital economy works selectively in the interests of certain countries that have been early movers. These countries can support a completely open digital economy without any detriment to their national interests by virtue of their technological advancement. It goes on to state that popular websites owned by foreign entities refuse to provide data to Indian law enforcement agencies in many instances. It has also flagged other related

critical issues in the realm of personal data protection and data sovereignty, such as preventing foreign surveillance and fostering AI in India. This effectively means that though a draft law has been formulated, it is yet to be determined whether data mirroring will do more harm than good.

Source | Mint – Wall Street Journal | 21st September 2018

A look at India's deep digital literacy divide and why it needs to be bridged

We need to start by understanding digital literacy rates for the public and private sector, and also education sector. We need data for the status, the progress and the proliferation of digitisation across regions, gender and social strata.

Always on, always available, always enabled—this is the world of Generation C (“connected”) who will have grown up in a primarily digital world by 2020, according to a recent report by PwC. Computers, internet, mobile phones, texting, social networking are an integral part of their world. Their familiarity with technology and reliance on mobile communications will transform the way this generation works, entertains, collaborates, consumes and creates. Experts predict that 26 billion or more sensors and devices will be connected to the internet by 2020, bringing in an era of machine intelligence that is already re-framing the world of humans. While technologists, researchers prepare for the future of digitisation, it is imperative to develop a framework that will build a solid foundation for countries, governments, organisations & individuals to navigate this change. More Info | <https://www.financialexpress.com/education-2/a-look-at-indias-deep-digital-literacy-divide-and-why-it-needs-to-be-bridged/1323822/>

Information for this issue has been provided by Mr. Pralhad Jadhav, Senior Librarian, Khaitan & Co. Mumbai