

**NEWS HIGHLIGHTS**

**Amazon, Flipkart bring Diwali spirit to Republic Day sales**

**IIT Kharagpur develops AI-powered tech for reading legal cases**

**How Pune became a global startup hub riding on these companies**

**Mobile-first approach and data science are giving a fillip to fintech**

**Today's View**

**TECHing on Air Pollution**

Air pollution has become the world's fourth-leading fatal health risk, according to the **American Association for the Advancement of Science**. Ninety percent of children are breathing in polluted air across the world daily, leading to a dramatic increase in respiratory issues such as asthma. The big concern is that air quality may deteriorate even further, thanks to increasing urbanization.

In fact, the **World Health Organisation (WHO)** has pointed out that India is home to 20 million asthma patients. One of the greatest obstacles in air quality control is the lack of accurate monitoring. However, by utilizing advanced IoT sensors, machine learning and low-cost, mobile-enabled sensor technologies, air conditions can be accurately monitored and data can be viewed in real time and analysed for trends.

Governments of various countries are waking up to this opportunity and investing in IoT-led air quality solutions. **Delhi** and **Beijing**, two cities that have suffered from poor air quality issues, are looking to IoT and AI to forecast pollution spikes so they can act to alleviate them.

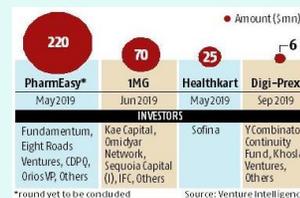
In **South Korea**, the government has partnered with **KT Corp** for nationwide 'Air Map Korea Project', worth over \$8.9 million. It logs expansive data via monitors installed on 4.5 million telephone poles, 330,000 mobile base stations, 60,000 public phone booths and 4,000 central offices. These IoT

**Akhil Handa**  
+91 22 6759 2873

**Manish Kulkarni**  
+91 22 6759 2885  
manish.kulkarni@bankofbaroda.co.in

**Online pharmacies see record funding in 2019, investments double to \$321 mn**

Online Pharmacy segment has seen the private equity and venture capital investments double in 2019. \$321 million was invested in four deals as compared to \$140 million in 10 deals during the previous year.



Source – *Business Standard*

[READ MORE](#)

Date – 20<sup>th</sup> January, 2020

enabled sensors monitor fine dust, volatile organic compounds and humidity in real time.

In **US**, Chicago-based authorities have deployed citywide network of sensors, developed in collaboration with **Argonne National Library** and the **Chicago Department of Innovation and Technology**. Based on a technology called 'waggle chips,' these sensors monitor the presence of air pollutants including carbon monoxide, nitrogen dioxide, ozone and particulate matter. The city is able to harness the data collected by these sensors to understand patterns which help them to predict and prevent future occurrences, while also using the data to address individual incidents.

Similarly, in **Spain**, authorities from Barcelona has tapped into smart lighting that feeds data to the government as well as sensors across the city to monitor air quality.

Apart from government authorities, multiple private organisations are also developing products to tackle air pollution. More on this in our next article!

---

## Today's News

### Amazon, Flipkart bring Diwali spirit to Republic Day sales

Amazon and Walmart-owned Flipkart have assured brands that there will be no change in the pricing and discount strategy on their ecommerce marketplaces and it will be business as usual during the sales that started on Sunday, said people with knowledge of the matter. Discounts during the ongoing Republic Day and Great Indian sales on Flipkart and Amazon, respectively, will be similar to that last year, said five senior executives of leading online-focussed brands. In some categories such as televisions and discounts, they could be as steep as Diwali discounts, they added. Brick-and-mortar traders said they will approach the government afresh with complaints about deep discounting by the marketplaces. Commerce and industry minister Piyush Goyal had reiterated last week that ecommerce marketplaces are welcome to invest in India but have to comply with the laws, which aim to ensure that small retailers are not hurt by unfair cashrich ecommerce companies.

Source – *The Economic Times*

[READ MORE](#)

### IIT Kharagpur develops AI-powered tech for reading legal cases

Researchers at IIT Kharagpur have evolved an Artificial Intelligence-aided method to automate the reading of legal case judgments, the premier institute said in a statement on Friday. The researchers from IIT Kharagpur's Computer Science and Engineering department have developed two deep neural models to understand the rhetorical roles of sentences in a legal case judgment, which could prove phenomenal in India where AI is yet to sufficiently penetrate the legal field. The country uses a Common Law system that prioritises the doctrine of legal precedent over statutory law, and where legal documents are often written in an unstructured way.

Source – *Hindustan Times*

[READ MORE](#)

This News Letter has been prepared with the assistance of Preeti Patil and Manish Kulkarni

## Mobile-first approach and data science are giving a fillip to fintech

FinTech in India has been growing at a significant pace for the last four years as a result of the increasing focus from RBI, government policies, advancing technology and affordable smartphones and data. People have also become more receptive towards digitisation and tax automation. This is owing mainly to the demonetisation of 2016 and the introduction of the Goods and Services Tax (GST) in 2017. In fact, implementation of GST alone has led to dedicated startups and new business verticals from established brands to help small, medium and large businesses with their taxes.

Source – *The Financial Express*

[READ MORE](#)

### Flipkart's ex-CTO allies with entrepreneur Raj Vattikuti to start credit firm

Former Flipkart chief technology officer Ravi Garikipati has launched a financial services and micro-credit startup along with serial entrepreneur Raj Vattikuti, who in 2007 had sold his company Covansys for \$1.5 billion to Computer Sciences Corp. The duo has seeded the venture, DAVINTA, with Rs. 140 crore of personal money. It already holds an NBFC licence, with disbursed loans of Rs. 50 crore. DAVINTA provides short-term credit of up to 12 months to underserved families and MSMEs, including rural women, urban bluecollar workers like factory workers and nano entrepreneurs.

Source – *The Economic Times*

[READ MORE](#)

## How Pune became a global startup hub riding on these companies

Pune, a satellite city about 75 miles from India's financial capital Mumbai, has picked up a few monikers over the years – 'Oxford of the East', 'Maharashtra's cultural capital', 'India's upcoming metro', and more. Sometime in 2013, when India was on the brink of a startup revolution, a UK-based journalist travelling to the city found it "fresh and almost Californian in its energy". And, the city has lived up to the hyperbole. In a 2018 report titled Rise of the Global Startup City, the Center for American Entrepreneurship described Pune as an emerging startup hub in the 'Global Next' category. It was the only Indian city (besides Hyderabad) to feature on the list. A year later, KPMG revealed in a study titled Pune 2.0: The Startup Hub that the city was home to 3,200 startups. About two percent of India's tech startups are based in Pune. The city received funding worth \$1 billion (Rs 6,653 crore) through 132 equity deals between 2014 and 2018.

Source – Your Story

[READ MORE](#)

## Here's how ex-Flipkart CTO Ravi Garikipati's fintech startup aims to enable financial inclusion at the bottom of the pyramid

In 2017, former Flipkart CTO Ravi Garikipati was responsible for the ecommerce group's financial technology initiatives. He went on to seed many financial initiatives on the ecommerce platform, including Flipkart's Buy Now Pay Later scheme, cardless EMI, and a unique mobile protection insurance product. These products focused on pushing affordability and consumption, and led Ravi to think about the "bottom of the pyramid". He began to think of ways on how technology could assist in financial inclusion. After almost four years at Flipkart (three as its CTO), Ravi decided to hang up his boots at the ecommerce major. The "what next" question had a couple of answers: joining a venture capital fund or starting one of his own to invest and mentor deep tech initiatives. But, the idea of starting something in the financial inclusion space kept cropping up. And, in April 2019, Ravi applied for an NBFC licence to start Davinta Financial Services, a technology-focused umbrella NBFC for the underserved.

Source – Your Story

[READ MORE](#)

## Texas Governor Scouts for Israeli Tech, Urges Deeper Collaboration with Startup Nation

Texas Governor Greg Abbott began his visit to Israel last week as head of an economic development mission looking to deepen collaborations and partnerships with Israeli entrepreneurs in the cybersecurity, energy, and health sectors. "There is a connection between businesses in Israel and Texas that make both Israel and Texas far better," said Abbott during a visit to the Tel Aviv headquarters of Start-Up Nation Central, an Israel-based non-profit that tracks the Israeli high-tech ecosystem and helps facilitate connections with Israeli startups developing innovative solutions. "We're proud to make that connection while we're here," he added. The governor met with key startups already currently doing business Texas or whose innovations could be a fit for Texan institutions, according to a statement by Start-Up Nation Central.

Source – No Camels

[READ MORE](#)

## Swiss firm LGT in talks to back housing startup Oxfordcaps

Student housing startup Oxfordcaps is in talks to raise \$30 million in an equity funding round which will help it expand to more cities and tie up with more universities, said two people aware of the matter, requesting anonymity as talks are private. The round is expected to be led by Swiss investor LGT, via its impact investment platform Lightstone Aspada, valuing Oxfordcaps between \$100-120 million after the round, said the people cited above. LGT, which manages over \$200 billion in assets, acquired Lightstone Aspada in August last year, with a plan to write larger growth stage cheques in startups.

Source – Live Mint

[READ MORE](#)

## Israel Rocked Fintech in 2019

Israel is a country well-known for its innovation-driven economy. As the saying goes, in Israel you are either an entrepreneur or an investor. Spend a few days there and you will see what I mean. While the factors that have fostered a start-up boom are many there is no denying the fact that Israel is unique when it comes to entrepreneurship relative to its small population. Many of the biggest global VCs have offices in Israel and most big-techs have established a presence as ignoring the ecosystem is at your own risk. Recently, IVC Research Center, in partnership with ZAG-S&W Law Firm, published a report on venture funding of tech in Israel covering 2019.

Source – Crowd Fund Insider

[READ MORE](#)

**Disclaimer:** The views expressed in this newsletter are personal views of the author and do not necessarily reflect the views of Bank of Baroda. Nothing contained in this publication shall constitute or be deemed to constitute an offer to sell/ purchase or as an invitation or solicitation to do so for any securities of any entity. Bank of Baroda and/ or its Affiliates and its subsidiaries make no representation as to the accuracy; completeness or reliability of any information contained herein or otherwise provided and hereby disclaim any liability with regard to the same. Bank of Baroda Group or its officers, employees, personnel, directors may be associated in a commercial or personal capacity or may have a commercial interest including as proprietary traders in or with the securities and/ or companies or issues or matters as contained in this publication and such commercial capacity or interest whether or not differing with or conflicting with this publication, shall not make or render Bank of Baroda Group liable in any manner whatsoever & Bank of Baroda Group or any of its officers, employees, personnel, directors shall not be liable for any loss, damage, liability whatsoever for any direct or indirect loss arising from the use or access of any information that may be displayed in this publication from time to time.