

Even **NASA** has created an on-board intelligence solution for space called **Frontier**. It has the ability to learn to make better decisions based on experience making frontier and other on-board intelligence more adaptable to uncertain environments.

Commercially used drones also benefit from on-board AI by enabling autonomous operations. In aircraft not operated autonomously, on-board intelligence can be a back-up to help ensure the craft does not fail its delivery or mission in the event of lost connectivity. Companies like **Rajant Corporation** is enabling drone manufacturers to provide on-board intelligence based drones with video backhaul capabilities, supporting public safety, border security, search and rescue, and site survey applications.

Looking at potential applications of On-board Intelligence in diverse areas like automobiles, space exploration and drone-based communication, it is a matter of time we get to see On-board Intelligence-based products in our homes.

Today's News

Ecommerce consumer law may include social media shopping

The government is thinking of regulating products and services sold on social networks such as Facebook, Instagram, Pinterest and WhatsApp under the upcoming rules to protect consumers who transact on ecommerce portals. The move comes amid increasing complaints, both on the National Consumer Helpline and other portals that track consumer grievances, about products sold on marketplaces attached to social networks, according to officials and people aware of the development. The Ministry of Consumer Affairs, which is chalking up rules for consumer protection on ecommerce websites and apps, is thinking of including social networks under its ambit as the popularity of Facebook Marketplace, Instagram's Shoppable Posts and WhatsApp Business is growing in India. "There are a large number of products and services being sold on social networks. They (social networks) are facilitating sales through P2P (peer-to-peer) as well as some brands creating storefronts to sell directly to consumers," said a person aware of the matter.

Source – *The Economic Times*

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How Amazon wields power in the technology world

Elastic, a software startup in Amsterdam, was rapidly building its business and had grown to 100 employees. Then Amazon came along. In October 2015, Amazon's cloud computing arm announced it was copying Elastic's free software tool, which people use to search and analyze data, and would sell it as a paid service. Amazon went ahead even though Elastic's product, called Elasticsearch, was already available on Amazon. Within a year, Amazon was generating more money from what Elastic had built than the startup by making it easy for people to use the tool with its other offerings.

Source – *Business Standard*

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

EdgeVerve's bet on automation segment helps fuel high growth rate

EdgeVerve, a subsidiary of Infosys that builds software products and platforms, is hopeful of sustaining its high growth rate, given that clients are seen spending aggressively on emerging technologies such as automation, artificial intelligence (AI), and Cloud. According to Atul Soneja, global head of Edge Products and Nia at Infosys, the company is seeing strong demand for its products and platform across enterprises, and the deal pipeline continues to stay robust. "The robotic process automation (RPA) industry is growing at more than 60-70 per cent CAGR (compound annual growth rate)." said Soneja.

Source – *Business Standard*

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Google wants US Fed to replicate India's UPI model

American multinational technology company Google wants the US Federal reserve to replicate India's Unified Payments Interface (UPI) for online digital payments. Developed in 2016, after a push by Prime Minister Narendra Modi-led government, the UPI is an instant, real-time payment system developed by the National Payments Corporation of India facilitating inter-bank transactions. The interface is regulated by the Reserve Bank of India and works by instantly transferring funds between two bank accounts on a mobile platform.

Source – *Deccan Herald*

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This tech may replace swipe machines

The merchant at your neighbourhood store (kirana) may soon be able receive small-ticket payments on his smartphone for purchases you make using contactless cards. This is a step up from using hefty Point of Sale (POS) devices. Global payments major Visa is set to enable POS operators and fintech companies to upgrade merchant smartphones with NFC (Near Field Communication) and RFID (Radio Frequency Identification) technology to accept digital transactions from contactless cards. The technology, called 'Tap to Phone', will allow merchants to process payments made through contactless cards directly on their smartphones without having to use the swipe machines. This is expected to reduce both the cost of setting up the infrastructure and handling these intermediary devices, used to process small-ticket retail transactions instantly.

Source – *The Economic Times*

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QR code mandatory on e-invoicing for Rs 500-cr businesses from Apr 1

Business with turnover of more than Rs 500 crore will issue 'e-invoicing' with a Quick Response (QR) code from April 1. This among various other provisions is part of five notifications, issued by the Central Board of Indirect Taxes and Custom (CBIC) to bring in place 'e-invoicing' system. The new invoicing system has been made mandatory for businesses having turnover of Rs. 100 crore or more from April 1. 'E-invoicing' is a system in which invoices are authenticated electronically by GSTN (GST Network, the IT backbone for new indirect system) for further use on the common GST portal. This system will prescribe an identification number will be issued against every invoice by the Invoice Registration Portal (IRP) to be managed by the GSTN. All invoice information will be transferred from this portal to both the GST portal and e-way bill portal in real-time.

Source – *The Hindu Business Line*

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Soon, use FASTags to buy fuel in select cities

Soon, you can use FASTags to buy fuel in Ahmedabad, Mumbai and Chandigarh. This will be the first such service in India, claims 1Pay, the company which has provided the technology for the facility to one of the largest private sector banks that will issue FASTags. 1Pay is also in talks with various stakeholders to make it possible to pay penalties and parking charges through FASTags. Over 20 banks issue FASTags, the RFID stickers attached to vehicle screens that can be used to pay toll charges at over 500 toll booths of the National Highways Authority of India (NHAI) electronically. Large private sector banks that issue FASTags include Axis Bank, HDFC Bank, ICICI Bank, IDFC First Bank and Kotak Mahindra Bank. "For FASTags issued by one of the largest private sector banks, we have the approval from the RBI to start using FASTags to make payments at fuel outlets and parking spaces," Abhijeet Sehgal, CEO and co-founder, 1Pay, told BusinessLine. "This experience — of people driving into a fuel outlet and using their FASTags to pay for fuel — will be the first such in India." 1Pay, launched in end-2016, did not name the bank due to client confidentiality.

Source – *The Hindu Business Line*

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Zomato looks to line up more food carnivals in the New Year

Online restaurant discovery and food ordering platform Zomato plans to scale its offline events and experiences vertical—Zomato Live—to host more small-format food events, and take its flagship Zomaland food festival to college campuses across India. In November, Zomato piloted Zomato Parks, where it curated the entire food and beverage space at artist Katy Perry's concert in Mumbai. The company has a strong pipeline of more such small events lined up for 2020 that will see Zomato partner with food, music, and literature festivals across India and curate the food experiences at these live events, said Chaitanya Mathur, global head, Zomato Live.

Source – *Live Mint*

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With Xi's backing, China looks to become a world leader in blockchain as US policy is absent

China is poised to take the lead in blockchain after it was given strong backing by the country's leader President Xi Jinping, experts told CNBC. The move could allow the world's second-largest economy to control the development of the nascent technology in the absence of competition from other regions like Europe and the U.S. Blockchain refers to a technology which began with the cryptocurrency bitcoin. In that case, its role was an immutable and tamper-proof public ledger of activity. It was also "decentralized," which means it was not owned by any one party.

Source – *CNBC*

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