

# **EMERGING TECHNOLOGY**



**ABC**

**DR.KYAW KYAW MOE**

**F.MES**

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# Abstract

- ❑ The world of technology evolves rapidly and trends change quickly. Technology jobs will include analysis, design and diagnostics, while non-tech jobs will include theoretical analysis and research. It can help us build a reliable, secure and safe digital world.
- ❑ The digital era has computerised every mobile device and application, firmly establishing computing power in the generation. We live in an era called the information age. New technology is emerging, everyday to make life simpler, more advanced and better for everyone. The rate at which technology is evolving almost exponential today. For business organisation, new technology helps to reduce costs, enhance customer experiences and increase profits.



# EMERGING TECHNOLOGIES



- Emerging technologies are technologies whose development, practical applications, or both are still largely unrealized. These technologies are generally new but also include older technologies finding new applications.

# FEDERATION OF MYANMAR ENGINEERING SOCIETIES (FED.MES)



Aim and objectives  
Technical Divisions  
Chapters





- **TECHNOLOGY**
- **ENGINEER**
- **COMPUTER** In fact, one of the first computer was an abacus. Invented in Babylon in 500 B.C., the abacus was made of string and beads.
- **CNC** Computer numeric control
- **Soft ware** AutoCad, ChemCad, Peach3, ERP, SAP, MYOB, XERO
- **Transportation** Unmanned, drone, Underwater train
- **Transmission** Telegraphic transfer (Email, skype, Whatapps, linkedin)



# The Industrial revolution

- The Industrial revolution 1.0
- The Industrial revolution 2.0
- The Industrial revolution 3.0
- The Industrial revolution 4.0



# ***THE INTERNET***

- history
- USA invent in round about 1960
- 2019 World population 25 %
- 2020 World population 57%
- Europe 83%
- Africa 27%

# Some of latest Top Technology Trends of 2022-2023



- Artificial Intelligence (AI) and Machine Learning (ML)
- Robotic Process Automation (RPA)
- Edge Computing
- Quantum Computing
- Virtual Reality (VR) and Augmented Reality (AR)
- Blockchain
- Internet of Things (IoT)



# Some of latest Top Technology Trends of 2022-2023



- 5G
- Cybersecurity
- Full stack Developent
- Computing Power
- Datafication
- Digital Trust
- Internet of Behaviours

# Some of latest Top Technology Trends of 2022-2023



- Predictive analytics
- DevOps
- 3D Printing
- AI-as-a-Service
- Genomics

# Who is No. 1 Technology in the world?



Rank	Country	Innovation Inputs
1	South Korea	2.74
2	Japan	1.75
3	USA	1.59
4	China	1.76

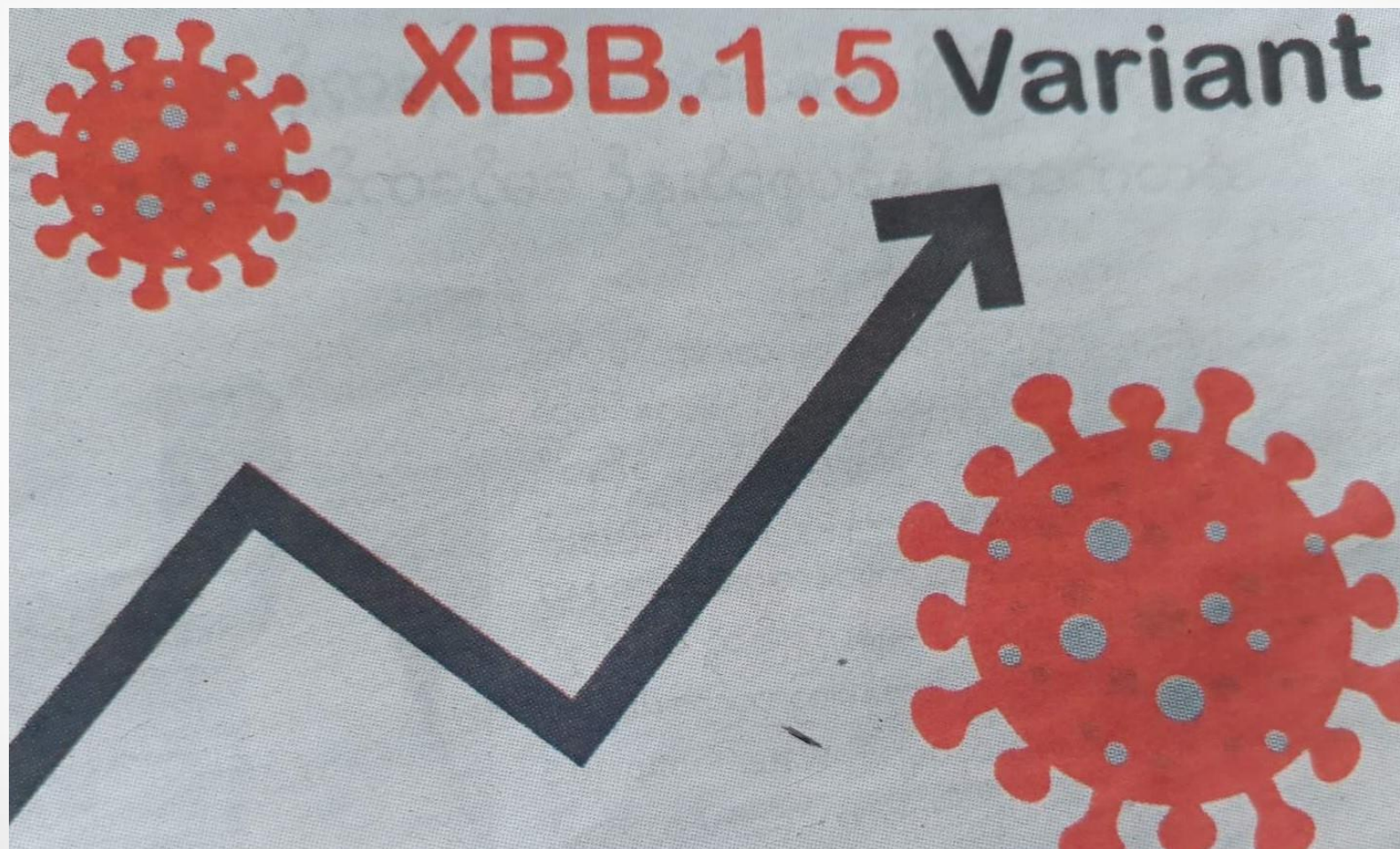
# Rapidly growing technology Industries



- Fin Tech(Financial Technology)
- Workplace technology
- Healthcare technology
- Cyber security
- Virtual Reality (VR)  
(Augmented,Extended)technology
- Cloud Computing
- Data science
- Quantum computer technology
- Autonomous vehicles(AVs)
- Connected vehicles(CV)



- ultra short laser pulses
- hologram
- cell tissues animal, zinnia cell,
- Huawei fusion
- Agriculture hormone
- SCADA system-Supervisory control and data acquisition,
- MCPA  
, Education, Forest, Renewable, Agri, sustainable





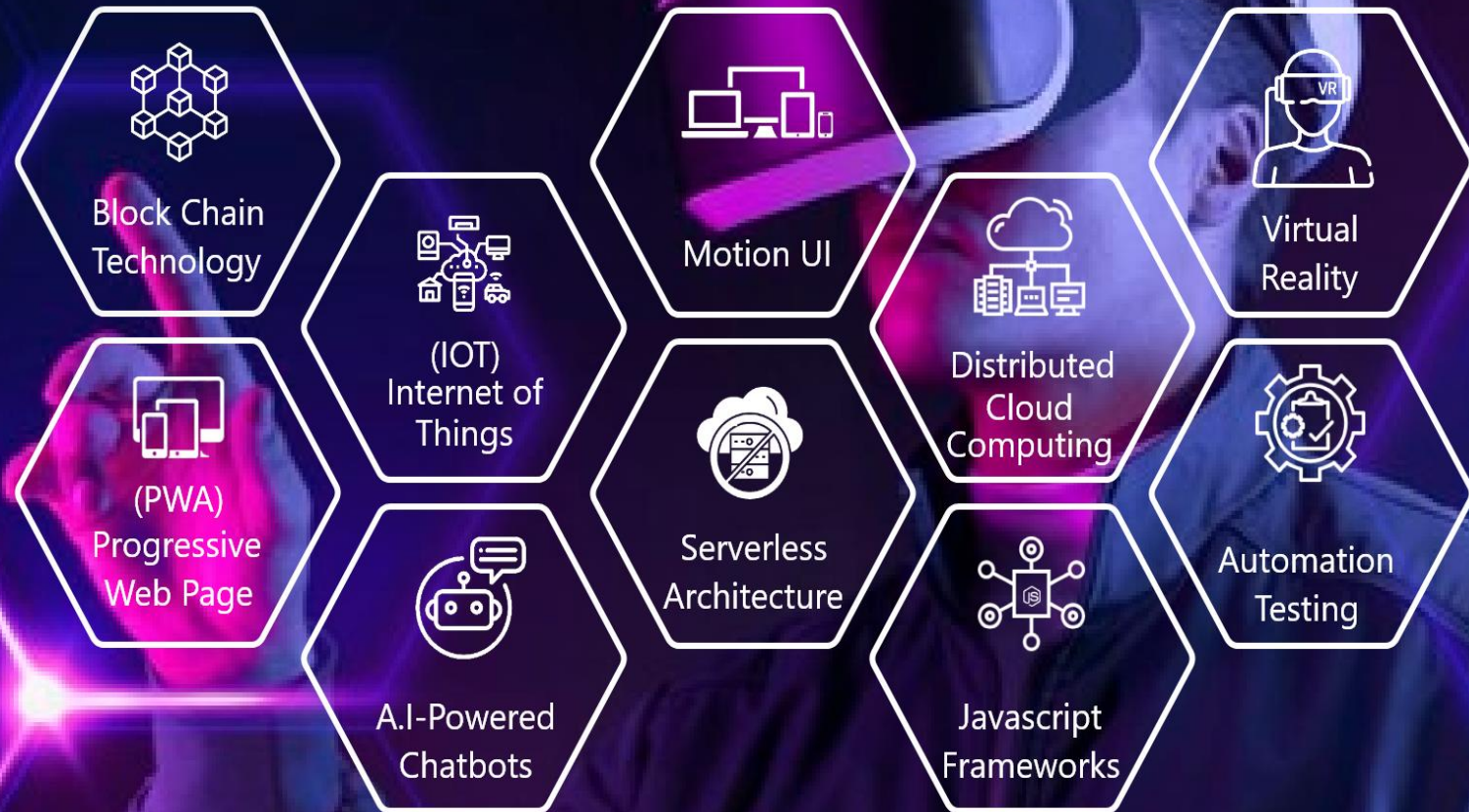
- Japan      29.12.23      420
- 6.1.23      456
- USA Omecron      **XBB 1.5**
  - **BQ      1.1**

video

<https://www.youtube.com/watch?v=N-9dbpAy48Y>



# Top 10 Technology Trends





car

<https://www.youtube.com/watch?v=S7ejLXkujp4>



# Tech at CES shows how farmers can save time, money and the environment

ARMED with a smartphone in today's ever more connected world, farmers can remotely monitor the health of their fields, the level of feed in their silos or even the aging of wine in barrels.

Both start-ups and agro-industry giants are exhibiting such cutting-edge tools — tools to help farmers collect and analyze data and improve decision-making — at the huge CES electronics show in Las Vegas, which closes Sunday.

Thus, Olivier Lepine, who heads the French start-up Brad, has developed a sensor that can provide real-time information on temperature, moisture and light falling in a farm field.

With such data in hand, farmers can make more accurate decisions on when to irrigate, how to reduce pesticide use, and how to treat their soil — while saving time normally spent travelling from field to field.

Farmers, and especially

younger ones, “want to have an impact, but they also want to have a quality of life,” Lepine said.

South Korean start-up AimbeLab meantime is offering a way to monitor the contents of the huge silos where grains and feed are stored.

Farmers often “simply use a hammer to bang onto the silos to check the sound — which is still very inaccurate — to see how much they have left,” said Sein Kwon.—AFP



# China builds its first holographic digital power grid

CHINA has successfully developed its first holographic digital power grid in the eastern province of Jiangsu. It is expected to greatly improve the smart operations and inspections of the grid, according to the State Grid Corporation of China (State Grid).

The virtual power grid has integrated technologies such as Beidou satellites, cloud computing and artificial intelligence. It has realized the three-dimensional restoration of the local power grid, which includes 100,000 kilometres of overhead transmission lines and 280,000 electric transmis-

sion towers.

Unmanned drones have also been deployed to inspect the automatic transmission lines of the electric transmission towers. The drones can perform functions such as automatic route planning and real-time monitoring, said Jiang, deputy general manager of Jiangsu Fangtian Power Technology Co, Ltd, the project builder.

Jiang said the drones have a centimeter-level high-precision positioning capability, which improves inspection efficiency by 10 times that of manual inspections. Xinhua



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Jiang said the drones have centimeter-level high-precision positioning capabilities and an inspection efficiency about six times that of manual inspections.—Xinhua

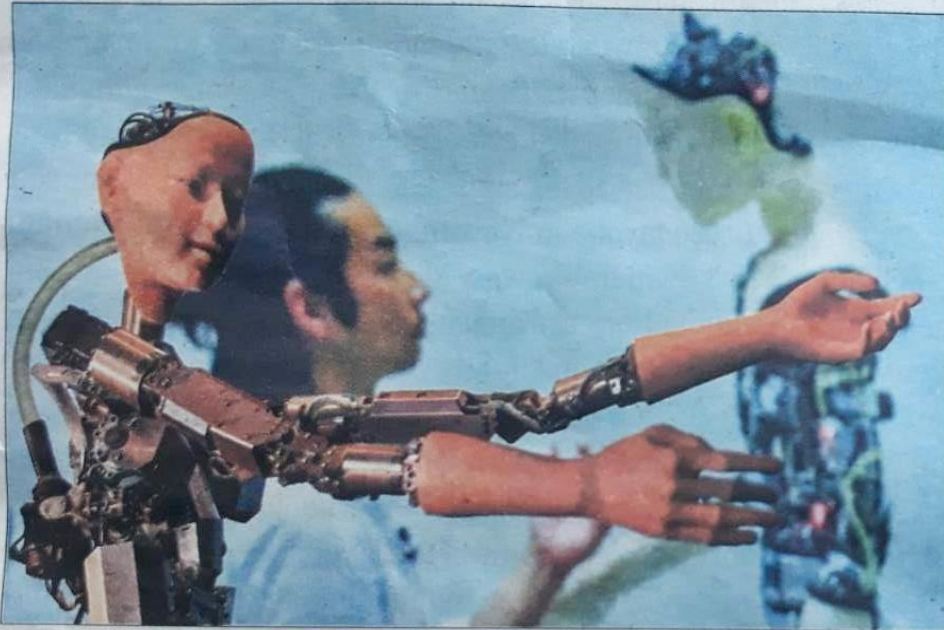


An unmanned drone with centimeter-level high-precision positioning capabilities inspects the automatic transmission lines of the electric transmission towers in east China's Jiangsu Province, 29 Dec 2022.

**[PHOTO: STATE GRID JIANGSU ELECTRIC POWER CO., LTD.]**



# US, Japan to expand cooperation on key technologies beyond chips



An artificial intelligence robot with a humanistic face is presented prior to an exhibition entitled "AI: More than Human" at the Barbican Centre in London on 15 May 2019. **PHOTO: BEN STANSALL/AFP/FILE**

**THE** United States and Japan have agreed to expand their cooperation on critical emerging technologies beyond semicon-

ductors to include areas such as artificial intelligence and biotechnology, Japanese industry minister Yasutoshi Nishimura

said Thursday after meeting with his US counterpart.

On semiconductors, Rapidus Corp, a new Japanese government-backed company, and US tech giant IBM Corp, which have partnered in developing next-generation semiconductors, also plan to work together on marketing and promoting human resources development, according to the Japanese Ministry of Economy, Trade and Industry.

The moves represent the latest efforts by the close allies to address potential economic vulnerabilities amid intensifying competition between the United States and China over technology and other issues.— Kyodo





The Deer & Co John Deere See & Spray technology is shown in a display beneath a spraying arm connected to a John Deere 412R self-propelled sprayer at the company's booth at the company's booth during the Consumer Electronics Show (CES) in Las Vegas, Nevada on 5 January 2023. **PHOTO: AFP**

# Australia Food Delivery Robot









# ECONOMY

## WORLD

### Japan startups team with farmers to put tech to work in agriculture

FROM robots to artificial intelligence and blockchain-based marketing, technological innovation is increasingly being harnessed in Japan to improve farming methods and create a more sustainable industry.

Among those embracing the digital trend is Metagri-Lab, a community launched in March 2022 that aims to merge agriculture and blockchain technology to increase farming revenues while revitalizing regional areas.

The group is working to make decentralized finance, an umbrella term for peer-to-peer financial interactions using smart contracts, a reality in the agricultural industry by next with the launch of its first non-fungible token project in April 2023.

From robots to artificial intelligence and blockchain-based marketing, technological innovation is increasingly being harnessed in Japan to improve farming methods and create a more sustainable industry. A drone delivers a package to residents in a mountainous area in Iba, Nagano Prefecture in August 2022. PHOTO: KYODO FILE

farm in Kumamoto Prefecture, southwestern Japan, issued 20

actual watermelons and other benefits delivered to those who purchased them.

has since issued similar agricultural NFTs for tomato, grape and rice farmers, with the sale

NFTs to support the revitalization of Nakajima, an island on the coast of Ehime Prefecture, one of its latest projects.

Going from cyber space to outer space, Tenshijin Inc., startup of the Japan Aerospace Exploration Agency founded in 2019, has been utilizing AI and data collected from satellites to assess land for optimal rice production.

Known as Compass, the system analyzes big data to identify ideal conditions and cultivation methods for growing higher-quality rice in a global environment affected by climate change.

The technology, which uses machine learning, takes "into account everything from environmental to socioeconomic factors in the characteristics of proposed land use," Tenshijin CEO Masahito Sakuma said in a recent release. — AP/ANSA





# VIRON

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**THANK YOU VERY MUCH**