

# **Executive Innovation Insight**

## A selection of the emerging technologies continuously monitored by DeltaHedron®

### **Emerging technologies**

3D/4D Printing and scanning Artificial Intelligence (AI)

Machine Learning, Deep Learning Artificial Reality (AR), Virtual Reality (VR) Mixed reality (MX)

Automotive and mobility

Autonomous, hybrid, scooters, ebikes **Urban air mobilty** 

Electric, petrol, diesel, hydrogen, battery

Astronomy, bio/chemistry, physics Mathematics, statistics, geology

Biotechnology Blockchain

Cryptocurrencies

Bots

Robotics, automation, chatbots, cobots **Robotic Process Automation** 

Biometrics, voice/facial recognition Computers and computing

Quantum computing, edge computing **High Performance Computing, memory** 

Big data, analytics, business intelligence Cybersecurity, data protection Data science

Digital and ICT

Mobile, cellular, cloud, wireless, wifi, lifi Broadband, 5G/6G, VOIP Software, SaaS, APIs, digital twins

Drones

**Electronics and photonics** 

Antennas, radar, lidar, LoRa, sonar Microwave, IR, microelectronics

Emerging and smart technologies Energy

Batteries, storage, renewables, fuel Electric, fossil, oil/gas, nuclear, hydro Hydrogen, solar, wind, tidal, geothermal

Holograms, photography, video Internet of Things (IoT)

Industrial, IxOT, sensors, RFID

Building, chemicals, bio, graphene, nano Metals, metallurgy, plastics, self-healing Ceramics, perovskites

Wearables

### **Applications**

Asset management Protection, tracking Anti-poaching

Cities and communities Real estate

Smart cities

Smart home, office, factory Customer experience Consumers, UX

Digital identity

Authentication, identification e-Privacy, GDPR

Environment

**Carbon emissions** 

Climate change, conservation Water, marine, oceans

Fraud prevention

Anti-counterfeiting Games, toys

Geolocation, mapping Navigation, GPS, tracking

Health **Dental** 

Digital health

Diseases/medical conditions

Health and safety

Hospitals, homecare Mental health, psychology

Pandemic impact Pharma, medicine

**Data centres Enterprise systems** 

Phones, tablets, apps Internet, online, web

**Search Engine Optimisation** Management/governance

Software development DevOps, low-code, no-code

**Telecommunications** Legal, IP and patenting

Maintenance Marketing, branding

Mobility

**Packaging** Workflow

X-as-a-Service (XaaS)

Agriculture, agritech, viticulture Food and beverage

Lab grown, 3D printed food

**Built Environment, construction** 

**Facilities management** Infrastructure

Chemical, biochemical Defence

Education (schools and higher)

**Edtech and Corporate learning** 

Engineering

Entertainment, music

Financial, banking, investment

Fintechs, insurtechs Insurance, actuarial

Health, pharma, cosmetics

Supply chain

Maritime, marine, oceans

Media, journalism, publishing Social media

Accounting, Auditing Engineering, Health, Legal

Safety

Security and policing Service industries Sport, exercise, leisure Telecommunications

Tourism, travel, hospitality Transport, infrastructure

Public transport Rail, road, hyperloop

## **Fourth Industrial Revolution**

**Ethics and values** Innovation systems/policy Competitiveness

### **Industries**

Aerospace

Animals, crops, plants, fisheries

Arts and culture

Constructechs, housing

**Energy and utilities** 

Fashion, textiles

e-Payments

Logistics, procurement Manufacturing

Shipping, ports

Mining and minerals Philanthropy, CSR **Professions** 

Public sector, digital government Retail, consumerism

Air trave, airports, vertiports

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### **Business impact and cross-cutting themes**

Trends, signals and future thinking **Digital transformation** Disruption Dynamics of technological change

Societies and communities Generational impact World of work and employment

Freelance, gig economy, WFH/remote

HR management, recruitment, training

Risk management Innovation management

**Business models/platforms** Corporate culture Incubators/accelerators Science and techno parks R&D, technology transfer Ventures, start-ups and entrepreneurship

Leadership and management Change management Decision-making/support National and regional interest **Economic impact** 

Contact DeltaHedron® to discuss how our Executive Innovation Insight service can provide you with personalised technology intelligence, decision support and strategic dialogue on emerging technologies - and their impact, opportunities, risks and threats for your business www.deltahedron.co.uk

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