DID YOU KNOW (An Initiative by) Scholastic Seed Inc.

Did You Know (DYN): DYN aims to achieve and fulfill the goals in readers' mind. The purpose is very clear and understandable that it showcases new and improved content, illustrating readers continuous improvement and expansion of cyber thoughts. It also highlights the variety of information on cyber and thereby provide an insight into the range of material that magazine covers. it includes the facts about a range of topics which may not essentially recognized in the main article disclosure.

What does 4.0 mean?

What is Industry **4.0**—the Industrial Internet of Things (IIoT)? Industry **4.0** refers to a new phase in the Industrial Revolution that focuses heavily on interconnectivity, automation, machine learning, and real-time data.

When did the Industrial Revolution 4.0 start?

The term **Industry 4.0** was first publicly **introduced** in 2011 as "Industrie **4.0**" by a group of representatives from different fields (such as business, politics, and academia) under an initiative to enhance the German competitiveness in the **manufacturing industry**


The convergence of the global industrial system with the power of advanced computing, analytics, low-cost sensing and new levels of connectivity permitted by the internet.

And with it, there's major transformation taking place in the industry.

#industrialinternet   http://www.geautomation.com/industrial-internet

What does IIoT mean?
Industrial internet of things

The **industrial internet of things** (IIoT) refers to the extension and use of the internet of things (IoT) in industrial sectors and applications.

Why Industry 4.0 is real and important?
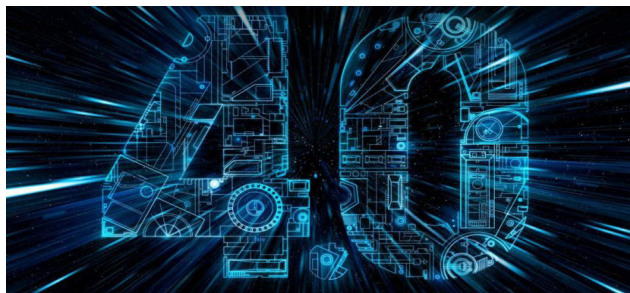
The reasons **why industry 4.0** is **important** are the benefits. It helps manufacturers with current challenges by becoming more flexible and making reacting to changes in the market easier. It can increase the speed of innovation and is very consumer centered, leading to faster design processes.

What are the third industrial revolution?

These are the first **three industrial** revolutions that transformed our modern society. With each of these **three** advancements—the steam engine, the age of science and mass production, and the rise of digital technology—the world around us fundamentally changed. And right now, it's happening again, for a fourth time

What is the difference between IIoT and IoT?

Both concepts have the same main character of availability, intelligent and connected devices. The only **difference between** those two is their general usages.

IoT	VS	IIoT
Commercial or Consumer Convenience	Area of Focus	Monitoring and Managing Systems for High-stake Industries- Defense, Manufacturing, Health care & Others
Smart Devices	Focus Development	Sophisticated Machines
Sensitive Sensors, Advanced Controls and Analytics	Degree of Application	Simple Application with Low-risk Impacts
Utility-centric	Security and Risk Measures	Advanced and Robust
Functionally Independent	Interoperability	Integration with Co-existing Legacy Operations Systems
Low Scale Networks	Scalability	Large Scale Networks
Critically Monitored	Precision and Accuracy	Synchronized to Milliseconds
Easy Off-site Programming	Programmability	Remote on-site Reprogramming Required to Support New Processes
Convenience	Output	Economic Growth
Not Required	Resilience	Must be Automated to Support Fault Tolerance
Consumer Preferred	Maintenance	Scheduled and Organized

While **IoT** is most commonly used for consumer usage, **IIoT** is used for industrial purpose such as manufacturing, supply chain monitor and management system.

What are industry and its importance?

Importance of **Industries**: - Industrial development has played very **important** role **in the** improving **the** economic condition of **the** various countries like America and Japan. Increase **in** Employment: - When **the** development of industrial sector **the** employment opportunities can increase and rate of unemployment can reduce.

When did the Industrial Revolution start and end?

This process began in Britain in the 18th century and from there spread to other parts of the world. Although used earlier by French writers, the term **Industrial Revolution was** first popularized by the English economic historian Arnold Toynbee (1852–83) to describe Britain's economic development from 1760 to 1840.

What is IoT with example?
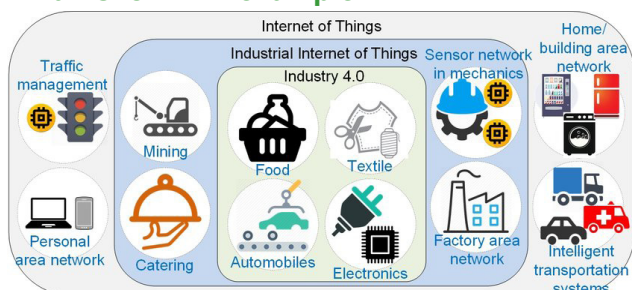
Examples of objects that can fall into the scope of Internet of Things include connected security systems, thermostats, cars, electronic appliances, lights in household and commercial environments, alarm clocks, speaker systems, vending machines and more.

What is Block chain and how does it work?

It **works** with Blocks, whereas spreadsheet **works** with "rows" and "columns". A block in a **blockchain** is a collection of data.

The Blockchain Process

Source: http://scienceandentertainmentexchange.org/
article/new-kid-on-the-blockchain
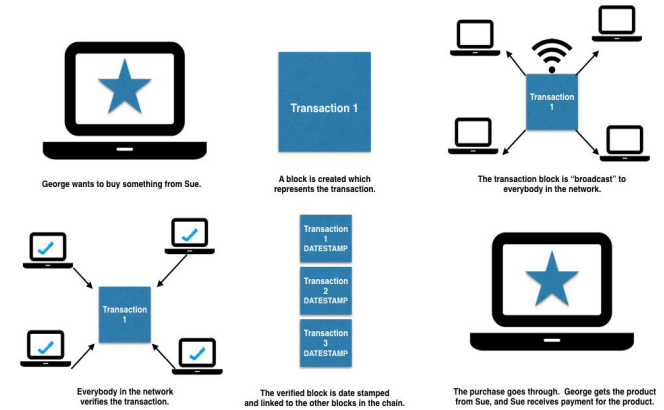
Blockchain is a distributed ledger, which simply means that a ledger is spread across the network among all peers in the network, and each peer holds a copy of the complete ledger

What is Block chain cyber security?

"Using **Blockchain** Technology to Boost **Cyber Security**" ... In fact, we already have a nearly impenetrable technology, known as **blockchain**, which can be used to protect our data from cyber attacks and improve **cybersecurity** across industries.

What is Block chain used for?
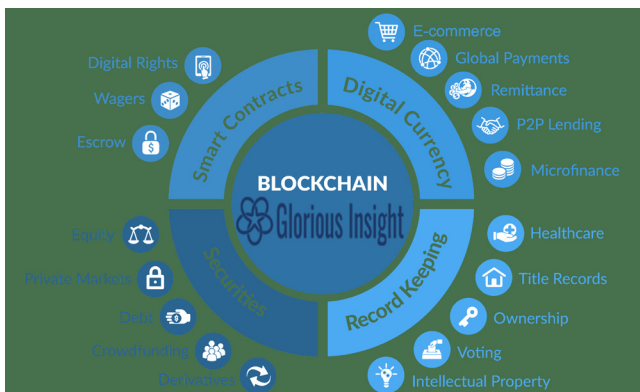
A **block chain** is a decentralized, distributed, and oftentimes public, digital ledger that is **used** to record transactions across many computers so that any involved record cannot be altered retroactively, without the alteration of all subsequent blocks.

What are the Artificial Intelligence And Laws In India
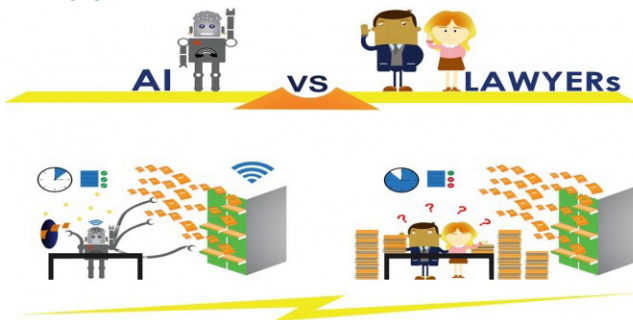
Artificial intelligence and law (AI and **law**) is a subfield of **artificial intelligence** (AI) mainly concerned with applications of AI to legal informatics problems and original research on those problems.

What are Challenges against CyberCrime

Cyber crime can include everything from non-delivery of goods or services and computer intrusions (hacking) to intellectual property rights abuses, economic espionage (theft of trade secrets), online extortion, international money laundering, identity theft, and a growing list of other Internet-facilitated offenses.

### What are the Potential of Virtual Class Room

Virtual classrooms are online spaces that are intended for learning. They're characteristically part of a larger learning platform such as a learning management system (LMS) or a virtual campus. They make easy live teaching, either one-to-one or for a group. This includes live video and audio streaming capabilities, an interactive whiteboard set up, file repositories for sharing additional resources and text chat options.

Source: https://news.samsung.com/global/survey-shows-that-teachers-see-potential-for-virtual-reality-in-education
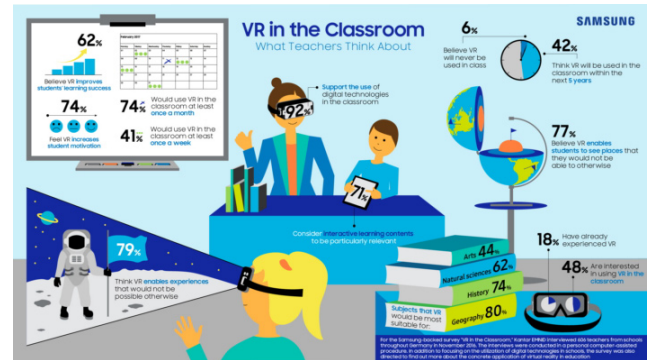
Synchronous **virtual classrooms** have the **potential** to provide significant added value to online learning by addressing the needs of the learners as they relate to social interaction and psychological safety. ... **Virtual Classroom's** high Interactivity.

What does a forensic officer do?
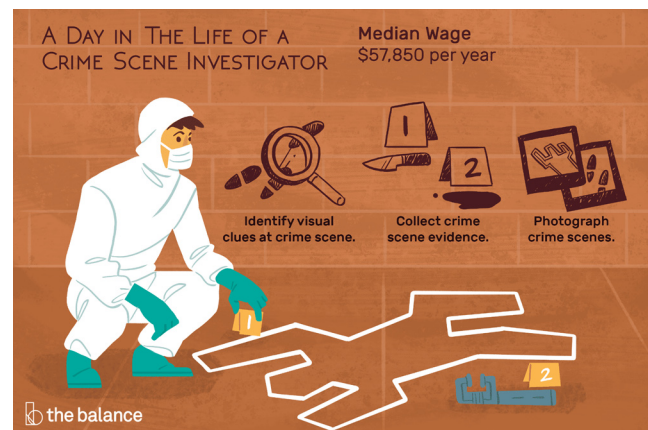
The term "**forensic officer**" is often used by government agencies to define either the **officers** who are assigned to crime scenes to gather evidence or the scientists in the lab who process that evidence. ... **Forensic** scientists' role is much more stable, as they spend their time in a lab, processing evidence

What were the effects of the industrial revolution?
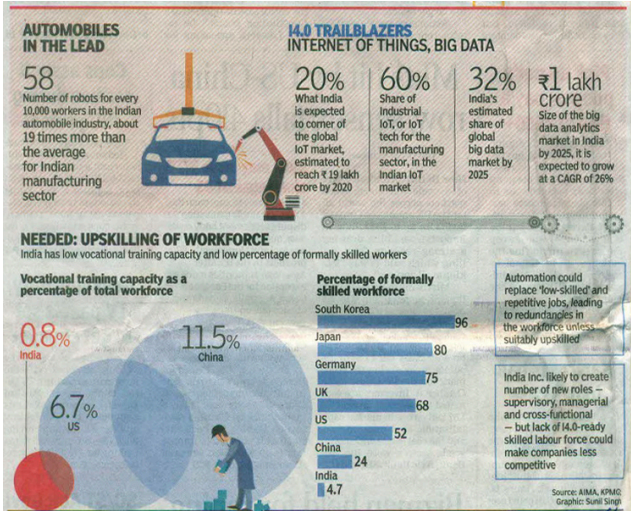
The **Industrial Revolution** impacted the environment. The world saw a major increase in population, which, along with an increase in living standards, led to the depletion of natural resources. The use of chemicals and fuel in factories resulted in increased air and water pollution and an increased use of fossil fuels.

Is Alexa an IoT device?

Amazon Echo is an internet-connected smart speaker that comes with **Alexa**, Amazon's digital assistant. It is able to serve as an **IoT** hub, a music player, an internet search engine, and anything else that a Skill enables it to do

What were the positive and negative effects of the Industrial Revolution?

As an event, the **Industrial Revolution** had both **positive and negative impacts** for society. Although there are several positives to the **Industrial Revolution** there **were** also many **negative** elements, including: poor working conditions, poor living conditions, low wages, child labor, and pollution.

What is Cybernomic

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