## Industrial Internet of Things (IIoT) TIMELINE



On January 1, 1968, Dick Morley had a hangover. It was not an auspicious start to the day he would draft a memo that led directly to the invention of the Programmable Logic Controller (PLC).

68 PLC is born



Machine-to-Machine (M2M) devices that combined telephony and computing were first conceptualized by Theodore G. Paraskevakos while working on his caller line identification system.

**'83** Ethernet standardized

'86 PLCs are linked to PCs



successful communication between a **Hypertext Transfer Protocol (HTTP)** 

client and server via the internet.

is invented to share research

**'89 World Wide Web** 



**'92** Ethernet and Transmission

**'95 MS Windows** becomes the mainstream OS in the factory

to secure data exchange in industrial automation





becomes prevalent in industry



**Human Machine** Interface (HMI)

**Supervisory Control** and Data Acquisition

(SCADA)



'99 "Internet of Things". is coined by Kevin Ashton

takes hold with the launch of

Amazon Web Services (AWS)





Legacy devices connect to the

'98 Ethernet turns 25

and becomes ubiquitous

in industrial environments

to industrial things

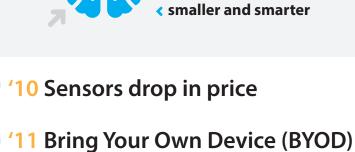
internet, extending connectivity

data sources, and applications Historian

**06 OPC Unified Architecture (UA)** 

remote communications between devices,

protocol is released, enabling secure



Devices get



adoption rises

Battery and solar power become more powerful and economical

connected things

**(((** 

becomes mainstream

industrial automation (Ex: MQTT, REST, HTTP)

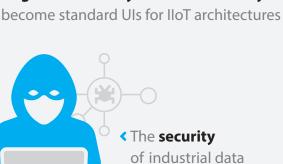
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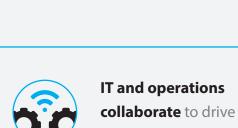
**16** lloT vision emerges



Augmented reality and virtual reality



of industrial data and assets remains critical





connected things

future •

hold for IIoT?

\$3 Trillion generated in revenue

business-level decisions