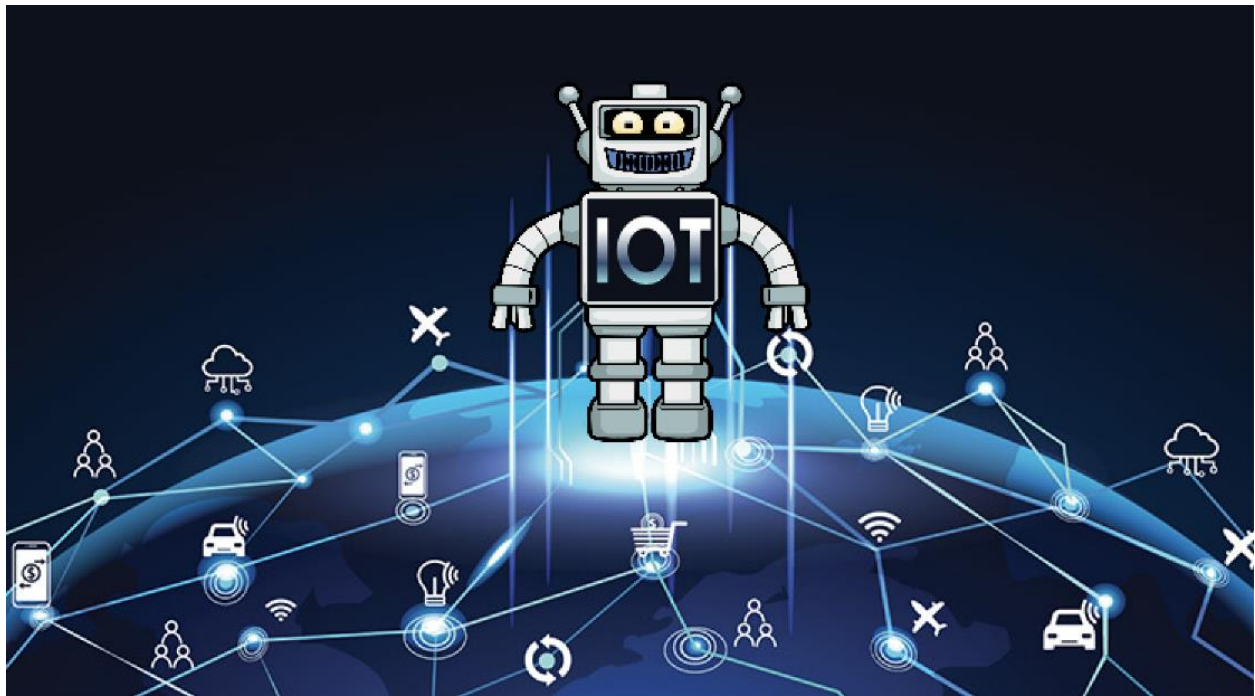


The Real Robot Opportunity – the IOT

By A J Blackham, 11-28-2019



The term Internet of Things (IOT) is a poor title for something that has such huge potential.

The impact of the smartphone on commercial and social productivity has been huge - just think of Uber - but the impact of the IOT will be an order of magnitude greater still, across all sectors of the economy. Cisco estimates that by 2022 the IOT will be worth \$14.4 trillion with benefits applying in roughly equal measure to improved customer experience, employee productivity, supply chain, reduced time to market and lower operational costs.

The IOT describes the myriad of devices that can be attached, implanted or positioned to supply data or control action. We see this today in a small way in home security systems – alerting you when your house is being burgled or warming it before you arrive home.

But these are simplistic examples, compared to what we are about to see.

Enter the robot – or rather the robot’s ability to make decisions and orchestrate and control a flow of activities - organizing and scheduling events.

Imagine you are at the mall and suffer a heart attack. Your IOT monitoring device picks this up and alerts the medical emergency system to which you are subscribed. The robotic automation software triggers a series of events engaging local support, paramedics, transport to hospital, making your medical records available on arrival and letting your family know what to do based on where they are located. The robot orchestrates these actions, making decisions about who to involve based on availability, location, traffic conditions and a host of details supplied by IOT devices. Just by connecting to an off-duty medic in the mall the IOT could save your life.



...the IOT could save your life



The pieces are coming into place – the IOT devices, network communications and robots.

However, we face a hurdle: Today's computer systems, the ones that IOT devices would have to engage with, were not designed for the real-time world of the IOT. Their underlying technology is based on hand-crafted code, meaning that responsiveness is measured in months, whereas the IOT is about making things happen NOW.

If the IOT identifies a problem that requires a change to the way things are done you will want your systems to change quickly. You can't afford to wait on the timeframe of handcrafted code. You will need No Code software. It is self-validating, cutting out the testing and error correction time of hand coded software, and eliminating the pesky bugs that make systems crash. No Code software can deliver change in a matter of hours ..or even less.

Unfortunately, most No Code software available today is simplistic. It can replace the myriad of spreadsheets that users tend to build into their systems but it's not enterprise strength. It lacks the business framework that integrates software into a single enterprise-wide structure that the IOT needs to be effective.

Today's systems rely on human intervention to trigger action, at best sending an email or other message to prompt the next action. Tomorrow's business systems will be like Uber, working in real-time, always up-to-date and ready.

Real-time robotic automated systems always know what is happening at any moment and can take alternative actions based on availability or lack of a human response.



Lack of human response costs business billions



Lack of human response costs business billions. Most business processes, whether dealing with a customer (or patient) or another business, are full of 'dead air' - that is, things are not moving, they're sitting on someone's desk or collecting dust next to a machine.

Always-on business is like a game of pass-the-parcel, always moving - and the robots controlling the automated processes make sure that it is.

Can the benefits of the IOT that Cisco envisage be realized by 2022?

For this we need Enterprise Strength No Code software that can...

- replicate what happens in the real world to...
- enable existing systems to become real-time, and..
- enable development of a new generation of always-on business systems.

This is the technology to go for.