

Embracing the Economy of Things

A whitepaper that considers how the Internet of Things will shape the ways businesses buy and sell

Elavon

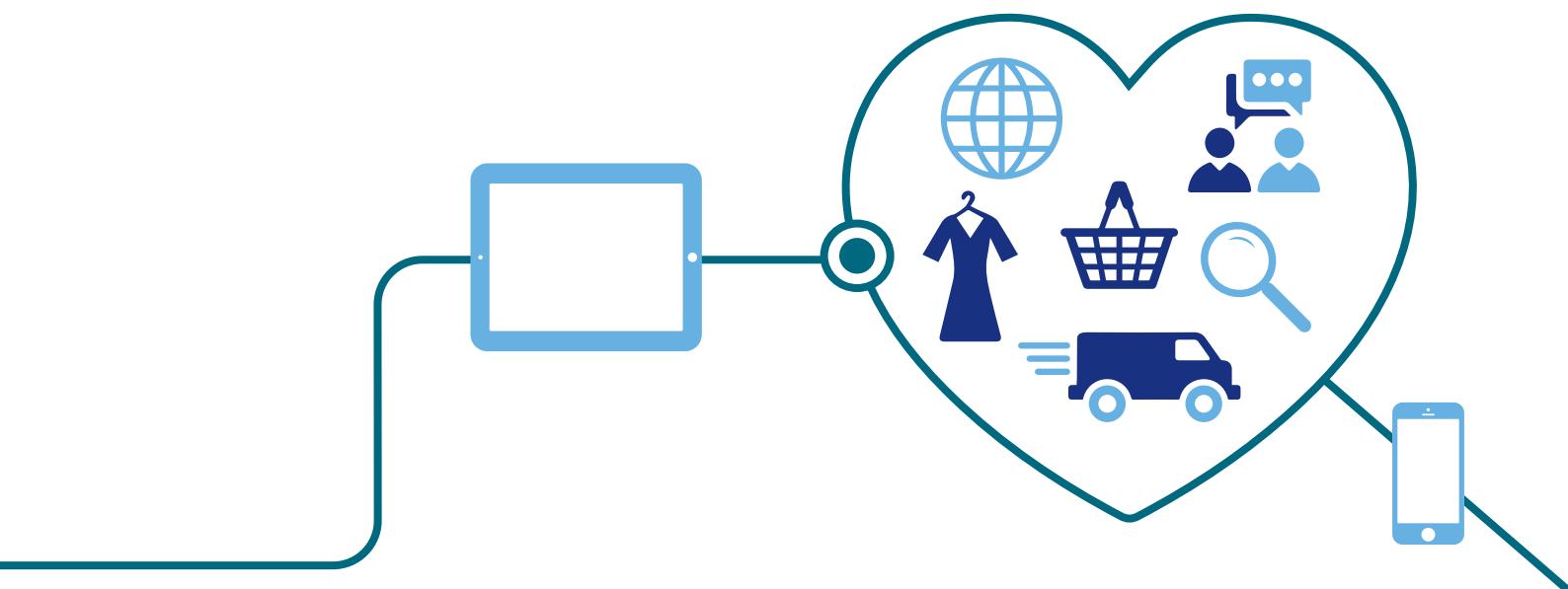


Embracing the Economy of Things

Commerce is entering into a period of unprecedented change – a wave of innovation unlike anything seen before.

At the heart of this transformation is new technology – and specifically the connected web of smart devices we call the Internet Of Things. Over the next decade, the nature of buying and selling will itself be transformed as new participants explore ways to harness this infrastructure, applying disruptive business models to once predictable markets.

This isn't just a technology story though; consumers are active participants in this revolution. It is their conscious participation in the data-for-service value exchange that creates new opportunities for the brave and threatens commercial irrelevance for the laggards.



Beyond the HypeCycle

In the fifteen years since Elon Musk and pals sold PayPal to Ebay, he has reinvented the solar industry, the car industry and the space exploration business. It has taken the banking and payments industry the same amount of time to realise the potential of what PayPal created – and by the time they did Apple was on the doorstep creating another step forward. Change comes slow to incumbents in highly regulated, valuable and complex markets!

This commercial inertia is certainly a contributing factor to Amara's law, which tells us that we overestimate the speed of change and underestimate its impact. But what many don't realise is that IoT is not a new concept - it's now 16 years since Kevin Ashton coined the phrase 'The Internet of Things' (IoT) and most mainstream businesses are yet to give it more than a cursory look. This needs to change.



A new, smart planet requires smarter business

You probably know about the IoT. Simply put, this is the concept that everyday mundane objects will be connected to the internet, from dishwashers to coffee makers, Christmas lights to alarm systems. It's not just consumer goods - components embedded in industrial products and manufacturing processes will be a part of the IoT, things like assembly robots or crop harvesting equipment.

There's a fairly basic formula here: contextually aware devices streaming rich data via ubiquitous connectivity = The Internet of Things.

As we've been engaging with business leaders across major service sectors to work through the implications of IoT, it's become clear that this isn't really about the internet, or indeed about the things. Like it or not, the technology story is already being rolled out.

Rather, the commercial implications of turning over great swathes of decision making to 30bn+ connected devices will end up being much more interesting than the devices themselves. What's needed now is the commercial glue that joins up these services – the market mechanisms to incentivise service providers to share information beyond their own boundaries, the legal constructs to delegate authority (and liability) in decision making. It's also to great extent about consumer perceptions of risking handing over control to a faceless cloud of benign service providers.

We believe that this agenda will herald a commercial transformation far bigger than most realise. It will transform much more than technology – re-engineering value chains, service delivery, competition and customer relationships across manufacturing, services and the third sector.

Depending on whether you prefer your forecasts from IDC, Cisco or McKinsey this is a \$7tr, \$11tr, or \$19tr transformation in the making. This isn't about new tech, it's about a new economy.



The journey from here to there

There is clearly a sizeable journey to join up this grand vision with today's reality. We've identified 4 indicators that the Economy of Things is on its way:

1. Indicator 1: The Smart-Tech Rollout

Of all the challenges to realising the vision of an integrated Economy of Things, the technology roll-out is the most certain. According to Samsung, there are already 18 smart devices in the average UK home, with smart TVs the fastest-growing category. In fact, 30% of all TVs sold this year were smart TVs, and 93% of owners connected them to the cloud.

When it comes to smart home infrastructure, 20% of UK homes have already invested, with 50% of under 44's planning to acquire smart thermostats, lighting or home hub this year.

Where are we seeing this today?

British Gas Hive. 200k live customers, £500m invested.

2. Indicator 2: The Collaborative Economy

An Economy of Things in which devices procure services for us will source from anywhere – mainstream suppliers and marketplaces and increasingly local & neighbourhood suppliers. It makes more financial and environmental sense, for example, to charge your electric car with energy from your neighbours' solar panels, rather than a large energy supplier.

The EOT will enable all of us to become micro buyers, sellers and collaborators – making it easy to fulfil the potential of the sharing economy. Borrow my car when I'm not using it, automatically take in my deliveries while I'm on holiday, negotiate group deals from the local water company based on real-life data.

Where are we seeing this today?

Easy CarClub. 15k+ live members, 60k+ days rented per year.



The journey from here to there (continued)

3. Delegated Transaction Authority

Potentially the scariest concept within the EoT is the idea that your 'stuff' is able to buy and sell on your behalf. But while the concept might seem somewhat alien, the reality is much more prosaic – payment companies are already set up to securely process recurring transactions from third parties to whom you've delegated authority, and there's a whole raft of protection in case things go wrong.

Consumers tend to be more comfortable and familiar giving over this control in low interest areas of their life – in the UK we already hand over control of 5bn+ transactions to service providers via the direct debit scheme. In fact, the energy start-up Flipper is building a business based entirely on delegated trust – you give them authority to change your energy supplier whenever they see a deal that will save you money.

Where are we seeing this today?

Whirlpool smart kitchen suite with integrated Amazon DRS.

4. Predicting Preference

If our homes, cars and clothes are helping make our lives easier by taking care of everyday transactions, then they need to have a pretty good understanding of our behaviours, expectations and preferences. The intrinsically connected and sensing nature of IOT takes a big step in this direction – creating a data set of archive or location, behaviour, transactions and so on. There are high expectations that machine learning and AI will be able to take this data, append authorised third party sources (social, medical, educational, leisure) and accurately source and trade on our behalf – essentially knowing us better than we know ourselves.

Where are we seeing this today?

Amazon recommendations. Already responsible for 10-30% of trade on the Amazon platform, the new Echo smart home hub is now live in 3m homes after just one year – learning and reflecting preference for the whole family.

New roles, new profit pools, new experiences and new competitors. The EoT is a seismic change, a long-time in the making. Underestimate it at your peril.



Commercialising the Internet of Things

Commercialising the Internet of Things poses several questions for Elavon:

- How do we apply the Economy of Things to our products and services?
- How do we provide seamless access to payment services and physically manage the resultant volumes of data?
- How do we manage the payments for our partners and customers who are delivering the services resulting from the ubiquitous community?
- How do we simplify the payments for our customers and theirs?
- How do we aggregate payments across multiple services for multiple providers across billions of devices for billions of people?

Working with our partners and customers we look forward to working together to answer some of these questions in the very near future.



This white paper was written for Elavon by Hunch.

Hunch is a strategic innovation practice, based in London. They partner with the world's biggest businesses to develop confident and actionable perspectives on the future.

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With European offices in the UK, Ireland, Germany, Norway, Poland and Spain, Elavon's innovative payment solutions are designed to solve pain points for businesses whatever their size. In 2013, they handled over a billion transactions for 240k European outlets

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