Scenario planning for M2M and IoT can help telecoms operators position themselves for success

March 2015

Tom Rebbeck

Operators face multiple uncertainties when developing their strategy for machine-to-machine (M2M) connections and the Internet of Things (IoT). A scenario-planning exercise can help them to develop a strategy that will prove robust regardless of how the market develops.

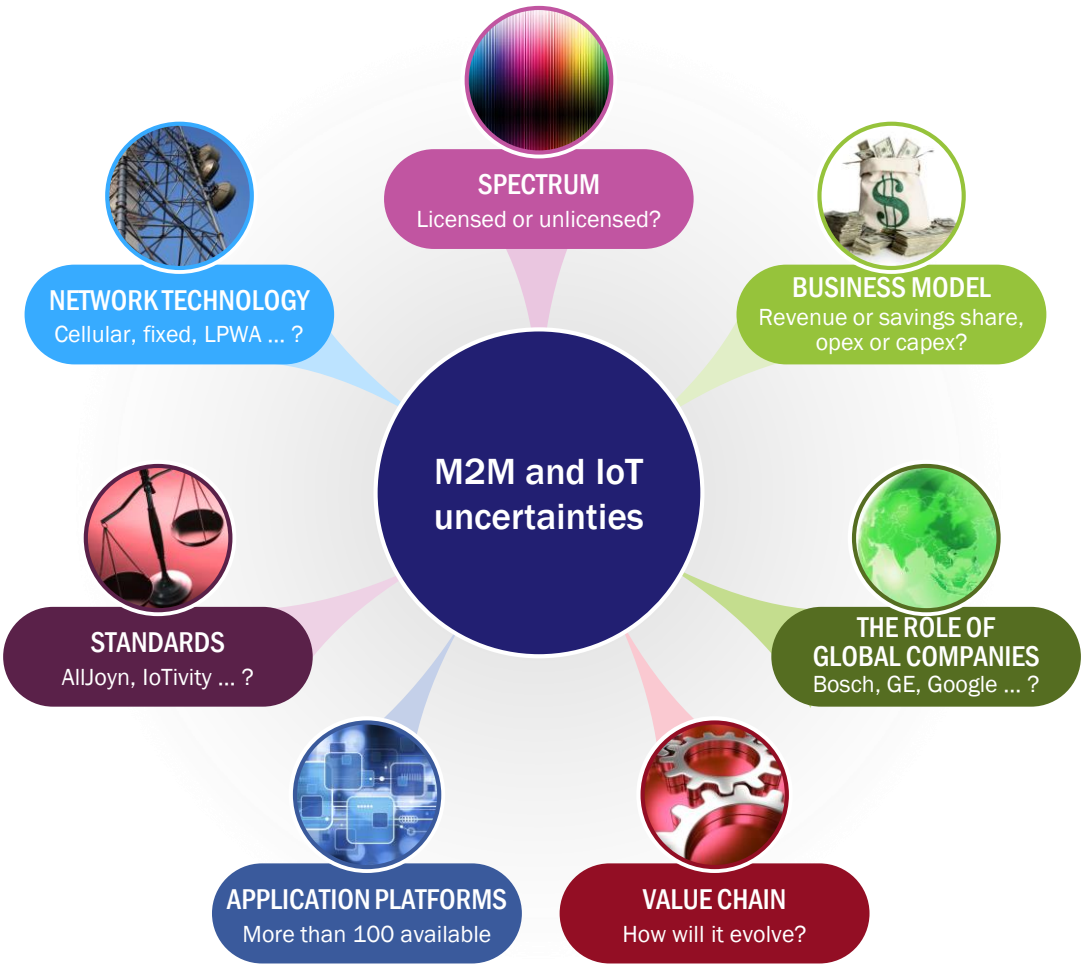
Many aspects of the IoT opportunity remain uncertain, but most agree it could be enormous

Forecasts for the number of connected devices differ significantly, but they are always extremely large – ranging from 20 billion to more than 200 billion worldwide in 2020. The potential opportunity may be enormous, but it is unclear:

- exactly how this opportunity will unfold
- which companies will benefit the most
- how the role of operators will evolve.

The uncertainty surrounding IoT spans many different aspects. For example, operators are faced with several choices for low-power, wide-area (LPWA) networks – technologies such as LoRa, LTE MTC and SIGFOX, as well as solutions from Huawei/Neul, are each gaining some traction. Operators that want to offer more than connectivity have many potential application enablement platform partners. Bosch, Cumulocity, ThingWorx and others have agreements with operators, who also have the option of developing similar capabilities internally. Figure 1 outlines some of the key aspects of uncertainty in M2M and IoT. These uncertainties are compounded by the number of vertical markets that the IoT affects. The standards and dominant players of one market, such as consumer electronics, may have a weak role in another, such as the industrial sector.

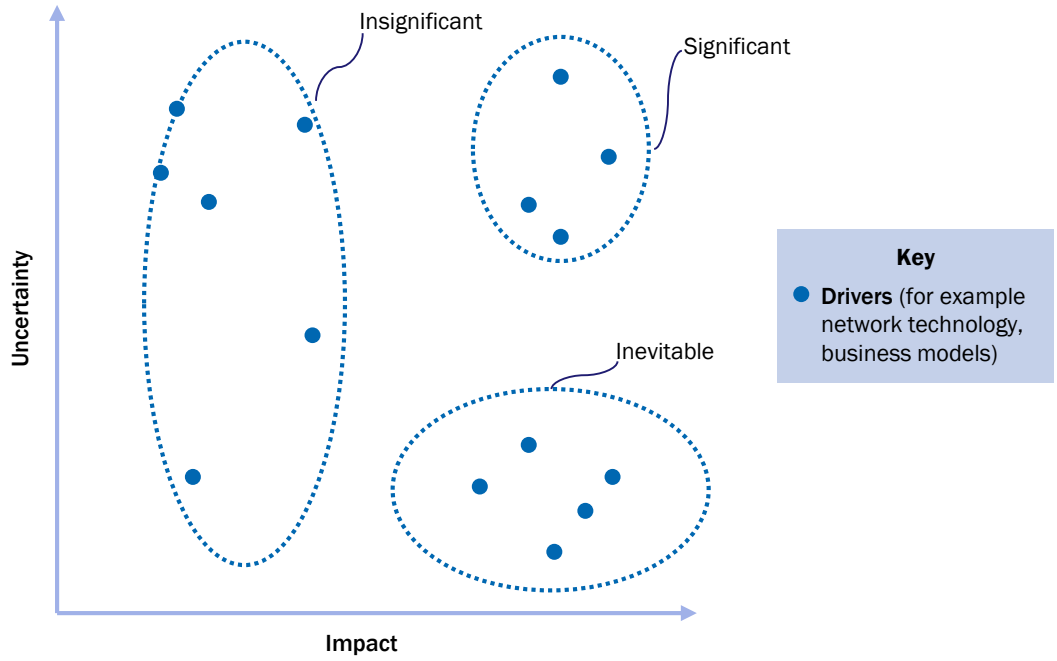
Figure 1: Key uncertainties facing operators in M2M and IoT [Source: Analysys Mason, 2015]



A well-organised scenario-planning exercise will help operators to consider the range of possibilities

A scenario-planning exercise can help operators to develop a M2M/IoT strategy that is robust in the face of these uncertainties. The exercise could be built around the items in Figure 1 and focus on the items with the highest impact and greatest uncertainty (see Figure 2).

Figure 2: Mapping of impact and uncertainty of key drivers [Source: Analysys Mason, 2015]



Scenario planning is well suited to uncertain situations, such as developments in M2M and IoT, for three reasons.

- **It allows you to embrace uncertainty:** Implicitly or explicitly, strategies are typically based around one vision of the future. Evidence that does not support this vision is often ignored and supporting evidence can be overemphasised (in what is known as confirmation bias). Good scenario planning addresses these shortcomings and allows you to consider different futures.
- **It helps you to devise a strategy that is strong in many situations:** A single operator has only limited influence over the future of the IoT. Operators need an approach that will be successful regardless of how the market develops. For example, they may need to consider how they could develop a strategy that will be effective regardless of whether the LTE MTC standard develops sufficiently quickly or if SIGFOX or another proprietary solution becomes the standard for cellular IoT.
- **It encourages people to express diverse views and promotes buy-in from multiple stakeholders:** Most planning processes discourage divergent views and this can lead to 'groupthink'. Scenario planning encourages people to express alternative opinions in a way that is positive and does not lead to conflict. For IoT, this will be important because people across the organisation will likely have very different opinions on how the market will develop.

Analysys Mason can help you perform a scenario planning exercise for IoT. We have developed a short set of materials outlining how we could help you to use scenario planning for your future M2M and IoT work. Please contact Tom Rebbeck (tom.rebbeck@analysysmason.com) for further details. Analysys Mason has been practising scenario planning for clients for over a decade. Telecoms operators, equipment vendors and regulators have engaged us to explore potential market developments.