OPINION

The Internet of Things (IoT) is a technological revolution that transcends individual technology siloes and in the process, brings about the transformation of any industry it touches. According to *Realizing 2030: A Divided Vision of the Future* research, around four in ten leaders in Asia-Pacific region. are already investing in IoT.

We know that some organizations are already on the road to realizing the promise of IoT solutions, but for many, technological and strategic roadblocks are at play. The Asia-Pacific region is set to become the front line for IoT, with spending on the rise and the number of connected devices reaching unprecedented levels, it's important that businesses understand what these roadblocks are and how to take the best step forward on harnessing IoT.

New compliance challenges

In the quest to digitalize, the healthcare industry has major scope for using IoT solutions, with benefits on offer such as better patient outcomes leading to shorter hospital stays, and lower mortality rates.

Yet the regulatory landscape is strict—our electronic patient records are sensitive documents that must be handled with security at the top of mind.

Finance, another highly regulated industry, also has the opportunity to benefit from adopting IoT solutions—for example with the use of telematics in insurance. Deloitte predicts that 50% of all sensors would be useful for financial services by 2020.

The increase in the volume and location of data creation means that for these and other highly regulated industries, compliance requirements must remain a priority.

From an infrastructure perspective, solutions located at the source of data creation that focus on data protection measures whilst allowing data to be moved quickly and simply, help ensure the benefits of IoT projects without creating compliance challenges.

Organizational structures

IoT projects have pan-organizational impact, with the power to transform business strategies and how we work, involving multiple departments in its conception, planning and implementation.

Standing in the way are obstacles such as organizational silos that impede the successful deployment of Internet of Things projects. A lack of ownership is also common: In the Realizing 2030 research, six in 10 Asia-Pacific region leaders cited a lack of digital vision and strategy as the number-one barrier to shaping successful digital businesses.

The challenge of ownership can be solved through the creation of cross-functional teams that have representation from IT (information technology), operations, customer and partner advocates and importantly the executive leadership team. Those teams should work together to complete initial projects, assess the lessons learned, and scale up or repeat as required.

To support this, flexible and scalable infrastructure that links the edge to the data centre core

and cloud while offering flexibility is needed.

Expectations around business benefit

Setting expectations is important. Defining the potential benefits of IoT is a challenge, and like any IT project, it has to go through multiple assessments before it is deemed to be worthwhile.

Helpfully, some industry sectors have sped ahead, creating examples of best practice that can be used to benefit future projects. Those examples help other organizations to find solid ways to demonstrate the business benefit, and to assess all aspects of infrastructure costs. Looking outside the organization to the wider ecosystem and seeking best practice is a key way to establish the expected outcomes and set those expectations internally.

A focus on demonstrating short-term return on investment is a key strategy for teams to make sure those business benefits are easily demonstrated, shared, and understood by the business. Asset tracking and utilization are of particular interest because it enables a shorter payback window.

The ecosystem is complex

Today, there is no one-size-fits-all IoT solution, and the Internet of Things landscape is vast. Solutions can come from many different sources and are far too complex for most organizations to navigate, compounded by a lack of standards.

To create solutions, organizations need to work with multiple technologies and solution providers, which is ultimately time consuming and a resource drain.

This can be daunting, but the IoT ecosystem can also be used to its advantage. Through engaging with partners and advisers on best practice, organizations can simplify the process of finding solutions.

By pulling together wider expertise from outside of the organization, the ecosystem can be leveraged to create bespoke solutions using creative technology mash-ups that ultimately provide competitive advantage. All of this must be built on infrastructure designed for an Internet of Things connected world.

Readying infrastructure

The value of IoT to the business is extracted not only in connecting things, but also in how data is used and acted upon. To extract value, organizations need to transform infrastructure with an architecture that is simultaneously centralized and decentralized.

Data centre strategies have to link the data centre with the edge and cloud, supporting a fast deployment of IoT projects, and helping reduce complexity. As IoT projects evolve, are replicated, and expanded upon, this flexible base will allow further growth without inhibiting organizational dexterity.

Addressing these five challenges is an important first step for Asia-Pacific region organizations looking to implement IoT solutions. To turn these roadblocks into opportunities, look to the industry and beyond for examples of best practice and business benefits, form cross-functional teams, and ready infrastructure for IoT projects.

Through collaboration and awareness of these challenges, organizations can start to reap the

vast benefits of Internet of Things .

Rajesh Janey is managing director and president, India Enterprise, Dell EMC