In the age of IoT Technology and communications companies need to stand out or stand back

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With the advent of the Internet of Things (IoT), digital disruption has entered its next phase. Nearly one in four US consumers are interested in at least six IoT services. Business leaders in all industries have taken notice. They are actively looking to take advantage of IoT’s potential to transform everything from customer offers and relationships to internal processes and operations.

For technology and communications companies, the IoT opportunities are much more significant. And the stakes are much higher. That’s because technology and communications providers are the ones that will deliver the power of IoT to everyone else. If they place the right bets, the payoff will be enormous. If they stumble, they are likely to lose millions to competitors who made wiser strategic choices.
Are you fighting a battle you cannot win?

As technology and communications companies set out to identify the IoT services and solutions they can monetize, it’s understandable that many have turned their attention to developing IoT platforms. End-to-end IoT platforms—which allow companies to connect, manage, secure and analyze data to drive actions and derive insights—are the backbone of the IoT revolution. Companies that own the dominant platforms will capture significant growth in the IoT market—a market that some expect to be worth more than $14 trillion by 2022.²

The problem is that not everyone will generate the returns they expect in this crowded space, where some 300 platforms already exist.³

Those companies with the likeliest chance of winning the platform wars will adopt a true end-to-end approach, supported by a set of distinctive characteristics (see sidebar).

Who will win the platform wars?

Accenture Strategy believes winning IoT platform providers will share certain characteristics, including:

- Credibility in the consumer space and the ability to develop strong and relevant business-to-consumer use cases
- Experience owning, managing and monetizing a platform
- A strong community of developers that can amplify and diversify IoT solutions to end customers
- Expertise in managing large infrastructures (and using those infrastructures to achieve economies of scale)
- A scalable infrastructure and capabilities across the information value chain for data ingestion, storage, processing and presentation.
Based on our research and experience, Accenture Strategy believes that no more than 10 percent of existing platforms will succeed.4

The rest will likely waste substantial investments. This includes traditional communications technology vendors, communications service providers, global Web leaders, and even players from outside the realms of technology and communications that aspire to create their industry’s dominant platforms.

Most of these companies are placing their platform bets on capturing and collecting data. They lack compelling value propositions and monetizable business models, and will likely fail to generate the network effect that would help shift the cost of creating the market to the network participants. Further, most technology and communications companies simply don’t have the capabilities they need to effectively manage end-to-end IoT platforms. The sobering truth is that for most of these companies, their platform battles are lost before they even begin.
Snatching victory from the jaws of defeat

The good news is that there are plenty of opportunities for technology and communications companies to thrive in the IoT market.

A number of them are, in fact, already making IoT inroads—not by building platforms, but by focusing on their core business. Some semiconductor manufacturers, for example, are selling more silicon as more devices become connected, and are looking at additional ways to capture and monetize data. Communications companies are selling connectivity, which is a necessary component of any IoT solution. With strong capabilities in areas such as billing and service, they are also positioning themselves as providers of better customer experiences in the IoT domain. And companies such as Amazon, Apple and Microsoft have targeted business-to-consumer (B2C) IoT use cases by extending their reach into consumers’ homes.
Many of these opportunities, however, have limited value. Silicon content on sensors is low. And bandwidth is quickly becoming commoditized. Fortunately for semiconductor manufacturers and communications companies, value is shifting. Lucrative opportunities are emerging in the areas of software and analytics at every level of the technology stack. As machine learning continues to mature, and as more data needs to be connected, the importance of analytics and intelligence will grow exponentially. By developing their software and analytics capabilities in parts of the information value chain that they have mastered, technology and communications companies can gain more control over the flow of information, how that information is used, and the value that can be added as data flows through the information value chain.

During the California Gold Rush, Mark Twain is widely believed to have stated, “When everyone is looking for gold, it’s a good time to be in the pick and shovel business.” This advice is as meaningful today as it was in 1850. Technology and communications companies need to realize that they hold valuable tools for all the other players looking to extract value from the IoT opportunity.
The challenge for each communication company will be deciding where to compete, based on their mastery of certain skills. For instance:

**Semiconductor companies have mastered sensing, communicating and processing data “at the edge.”**

By building on their strengths, semiconductor companies can bring even more intelligence at the edge to enable fog computing. Because of the tight link between chips and the software that is embedded in devices, these companies can expand their capabilities in embedded software and middleware, and can further adopt new business models and usage-based pricing to capture more value. They can also focus on achieving economies of scale in data creation and sensing in particular industries, and on driving the cost of IoT devices down—something that IoT’s ongoing maturation requires.

**Communications companies are clear leaders in the networking space.**

Communications companies can add tremendous value by providing the connectivity technologies for different use cases and by supporting the new IoT connectivity protocols that will enable features of certain IoT solutions and services. This means they must gain mastery over emerging technologies and protocol standards. Sigfox and Narrowband IoT, which enable connections between low-energy, always-on devices, are two examples.

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By 2019, at least 40 percent of IoT-created data will be stored, processed, analyzed and acted upon close to—or at the edge of—the network.⁵
Capturing IoT value is a team sport

Data from products is most valuable when those products are viewed as part of integrated systems that combine Products, People and Processes (PPP). Increasingly, the world of IoT will call for PPP systems that cross industry lines. These multi-industry PPP systems will, in turn, call for multiple companies to collaborate to create IoT value.

In this regard, capturing value from IoT really is a team sport. The power of IoT collaboration is already apparent. Utility, security, telco, media, energy management, insurance and other companies are joining forces to deliver “Connected Home” solutions for consumers. And chemical companies, farm equipment manufacturers, sensor providers, IT system integrators, financial services companies and others are collaborating to tap the $7.6 billion “Precision Agriculture” market with services that make farming more efficient and yields more predictable.6

The greatest impact that technology and communications companies can have in the IoT market will be found in the software products and analytics capabilities that drive actions and derive insights and intelligence from data.

Regardless of the role technology and communications companies will play in the IoT information value chain, they will need to pick the right ecosystem collaborators and partnership frameworks. That may be easier said than done. An ecosystem is only good if there is enough value for customers, and enough ROI for all participants. While IoT is a team sport, not all teams are winning teams. Good ecosystems are scarcer than most companies realize.
Seizing the IoT opportunity

To improve the chances that they place the right IoT bets, technology and communications companies should do three things:

Suppress their platform obsession

Building platforms first and then figuring out the value that can be delivered via that platform is a recipe for failure. Companies need to focus on the desired outcomes and then honestly assess whether they have what it takes to achieve that goal with an end-to-end platform. If they don’t possess the capabilities that will be needed to succeed, they must be willing to cut their losses and cede the platform battle to those with a better chance of winning. Walking away—or not entering the platform war in the first place—may be the wisest strategy of all.

Identify winnable pockets of value

Some of the most lucrative IoT plays will involve developing solutions and services that make data more valuable and accessible. IoT customers are more interested in product-related data than they are in product features. That means technology and communications companies should build on their strengths to create solutions and services that add value to the data as it flows through the value chain, and adopt new business models to monetize the value-added data.

Pick the right teammates

Data silos and stand-alone IoT strategies will have limited value in the IoT world. Technology and communications companies need to identify the right PPP ecosystem partners to create win-win opportunities. The first and most important step involves understanding the IoT applications and use cases that will create enough value for the end customers—and, consequently, enough value to be shared among the ecosystem’s participants. It will also be important to determine how to govern the relationships and distribute value equitably across the network.
The time is now

There are tremendous opportunities for technology and communications companies to build a distinct advantage in the lucrative IoT space in the coming years.

A few will be able to create platforms upon which a host of new services and solutions can be delivered. Many others, however, will thrive by building on their existing strengths, collaborating with others, and seizing opportunities to improve data as it flows through the IoT information value chain. When it comes to IoT value, there's plenty to go around. It's time for technology and communications companies to stake their claim.
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Notes


3. Accenture Research analysis, 2016

