The Internet of Things for Telcos: BUILD FROM THE CORE TO WIN

ACHIEVE COMPETITIVE AGILITY
IoT data marketplaces will unlock more than **US$3.6 trillion** in value by 2030.¹

Data is a valuable asset. One that telcos have sat on for years. Meanwhile, over-the-top (OTT) players made data monetization an everyday practice. Telcos are sitting on gold that OTT competitors have already begun to claim.

From usage to location information, telcos could profit from the data running through their infrastructure—using it to innovate and create highly personalized customer experiences. Their legacy in building networks, connectivity and data management positions them well for the opportunity. But they must move fast. By 2020, one in four large organizations will be either sellers or buyers of data via formal online data marketplaces.²

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¹ IoT data marketplaces will unlock more than **US$3.6 trillion** in value by 2030.

² Thanos Malevitis
Managing Director
Accenture Strategy, Technology Strategy
Thanos helps Communications, Media and Technology industry leaders develop and implement disruptive digital strategies at the intersection of business and technology. He applies innovation and design thinking to recommendations that place the customer and digital technologies at the heart of clients’ transformations. Thanos is based in London.

³ Kevan Yalowitz
Managing Director
Accenture Strategy, Software & Platforms
Kevan teams with Internet, Technology, Media & Entertainment, and Asset Management executives to identify, assess and capture leading-edge growth opportunities that lie at the intersection of business and technology. He specializes in helping clients around the world capitalize on tech-driven disruption, and has extensive experience advising Internet and Technology leaders on investment and product-creation strategies. Kevan is based in Seattle.

⁴ Brian Berg
Principal Director
Accenture Strategy, Communications, Media & Technology
Brian collaborates with leaders in Telecommunications, High Tech & Software across the globe to achieve digitally enabled growth from vision to execution. He specializes in business and operating model transformation, digitization strategy and the technology innovation agenda especially translating new technology trends (e.g. AI, machine learning and analytics) into tangible value propositions and business outcomes. Brian is based in Düsseldorf.

⁵ Edward Gonzales
Senior Manager
Accenture Strategy, Communications, Media & Technology
Edward partners with Communications, Media and Software industry leaders to develop and execute growth strategies across the new digital economy. His experience in digital disruption has helped clients transform legacy communications and media services into growth businesses of the future. Edward is based in San Francisco.
The rise of the Internet of Things (IoT) provides telcos a second chance to spring into action. If telcos can capitalize on IoT—given the unique selling proposition 5G and edge computing bring them—they put themselves in the running for huge potential profits in a global IoT market expected to reach more than US$600 billion by 2022. Through high-end IoT services based on excellent connectivity, telcos can set themselves up to enter the most valuable market to hit the industry in a very long time.

For many telcos the method of entry is a conundrum. IoT is an entirely new venture, a departure from their traditional business. Telcos need to first capitalize on their strong core muscle—connectivity—before tackling higher levels of the IoT value stack. Just as a master yogi builds a strong core before attempting more advanced poses, telcos should build on their core strength before flexing their IoT muscle more broadly.

The Internet of Things: A path to growth

A universe of intelligent products, processes and services that communicate with each other and with people over the Internet. That’s how Accenture Strategy defines the Internet of Things (IoT).

It promises to be a transformative industrial revolution for companies, changing the way they think about resource allocation, production processes, materials handling, and the workforce. As such, IoT will open a new era of economic growth and competitiveness.
Starting pose: Connectivity

In a world of IoT and 5G—one where low latency reigns—telcos are in the best position to transform themselves from “dumb pipe” operators to IoT champions. They can already provide reliable and secure connectivity across locations, campuses and complex value chains. Moving forward, leaders will customize owned technology assets to continue building and maintaining connectivity platforms and infrastructure—but in the IoT realm.

When telcos master that feat, they should progress to a role as important and trusted players in data service provision—moving into higher layers of IoT value as they move up the stack. Almost half of the value to be gleaned lies in IoT consulting and integration—a sweet spot worth chasing.

From Life Sciences to the Automotive industry, companies will increasingly need computing power at the edge to optimize the capabilities of advanced IoT solutions. Telcos are well positioned to leverage their existing infrastructure to complement cloud computing with low-latency, Quality of Service (QoS)-enabled connectivity.

Building on that connectivity, telcos can move up the IoT stack via ecosystems, partnering with platform players. For instance, some telcos are experimenting with the delivery of value-add services, ecosystems and data analytics on top of IoT. Data platforms offer several value-add propositions, from price optimization to proactive asset maintenance and operations. For example, T-Systems, the arm of Deutsche Telekom that serves business customers, offers “Digital Drive,” a manufacturer-neutral retrofit solution for dealers, OEMs, insurance companies and fleet operators. With it, these businesses can offer their customers networked vehicle services.4

Source: Accenture Strategy analysis, 2019

Figure 1: The relative distribution of value across the IoT value chain
Eight out of 10 telcos agree current business models will be unrecognizable in the next five years and expect ecosystems to be the change agent. However, only four out of 10 telcos believe they have the capability and experience to build an effective ecosystem.

Ironically, Telecommunications is better positioned than any other industry to drive value through ecosystems, based on factors like vision, culture, talent, technology fit and more.

**Figure 2: Telecommunications tops the Ecosystems Capability Index, measuring the ecosystem capabilities of companies across six dimensions**

<table>
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<tr>
<th>Sector</th>
<th>Total</th>
<th>Strategy/Vision</th>
<th>Talent</th>
<th>Technology Fit</th>
<th>Culture</th>
<th>Innovation</th>
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Source: Accenture Strategy ecosystems study, 2018
Telcos can move into the next phase of their business by creating parallel universes. They need to focus on their core strength—connectivity—while building an ecosystem of partners to capture more complex, lucrative opportunities. For example, developers are rife with innovative product ideas, which are crucial to mastering value in areas like Applications for AI, autonomous decision making and robotics. Telcos can forge relationships that allow them to benefit from this expertise, forming a business-to-developer (B2D) partnership to share value.

The key to success is establishing an ecosystem of industry verticals after establishing themselves as capable, trusted IoT connectivity providers. Only after they have learned via single verticals should they then focus on co-creating more complex use cases involving multiple verticals. Ultimately, it will be these complex, multi-industry applications that open true innovation and completely new value streams.

Building open platform-based business models like shown on pages 7 and 8 requires telcos to have a clear understanding of participating industries’ value chains, the ecosystem and their potential for additional cross-vertical value. This is where the race will be won or lost. If telcos can leverage their natural strength in connectivity services, they can reinvent themselves to become the go-to industry connector and end-to-end data integrator.
Mastering IoT agility: The short version

Mapping out a path to IoT mastery helps combat ad-hoc point solutions that don’t really add value or fuel growth. Building on connectivity, telcos move from single verticals to orchestrating a platform of partners for cross-industry innovation. This is where more exponential value lies.

The graphic on the following page outlines these steps through a B2C example. Turn this into a B2B situation—such as fleet management—and the benefits quickly multiply.

Figure 3: The steps towards becoming an IoT platform orchestrator

01 Expand core connectivity capabilities to succeed in an IoT built on trust.

- **Develop an agile mindset** and working methods. You’re entering a digital arena where fast innovation cycles require new ways of operating.
- **Invest in new access technologies** and future connectivity to close your capability gaps in developing 5G, building campus networks, etc.
- **Partner with the right IoT players** such as device manufacturers.
- **Transfer core expertise** into the IoT business.

02 Deliver monetization use cases in single verticals.

- **One industry at a time**, offer connectivity in an orchestration role, bringing together device manufacturers and platform players. This is a great opportunity to build trust with partners.
- **Emphasize security**, where telcos secure the IoT core network while industry partners bring enterprise-grade secure solutions.
- **Remain industry-agnostic** to not favor certain industries over others and maximize future options.

03 Play the orchestrator platform game building cross-industry use cases.

- **Move beyond connectivity**, becoming a matchmaker for B2B players who want to monetize their own data or access relevant data sources.
- **Provide a joint innovation space** for businesses and developers. A good analogy would be an open, but walled, garden.
Car sharing based on separate connectivity-based capabilities (e.g. geolocation, door lock)

Operating data: Speed, mileage, lane drift

Technical car data: Tire pressure, engine issues, oil temperature, parts abrasion

Phone control: Alerts, door lock, heat settings, localization, payments management

GPS + external environmental conditions: (e.g. weather)

Predictive maintenance and improved user experience

Insurance: “Pay-as-you-drive”, “pay-how-you-drive”, car tracking, driving behavior profiling/scoring, accident assessment

Prevent unforeseen repair costs

Retail: Suggestions on route, catchment zones & times, marketing campaigns, demographic segmentation

Smart city: Traffic jam detection, optimized route & traffic planning, disaster planning, dynamic parking, automated road toll and taxation, road and infrastructure maintenance

Use Cases

Data Sources

Enabler

Figure 4: Transforming car ownership through IoT
Flexing telcos’ advantage: Trust

Eight out of 10 business-to-business customers are more likely to do business with companies that are trustworthy. Fortunately for telcos, they are already in a trusted provider position. Millennials associate telcos with the mobile phone that has been their constant companion over the years—one that works reliably and consistently. They also have a billing relationship with their telco of choice, adding to the basis for trust. Moreover, telcos have not struggled publicly with data privacy issues to the extent some of the technology platform players have.

With 88 percent of consumers citing protection of their personal information as an important factor in choosing a service provider, telcos are well placed to put themselves at the center of a consumer-centric ecosystem of players. Their trusted relationships with government, employees, media and analysts, investors, suppliers and partners also put telcos in good stead.

Combining this trust in a balanced strategy with growth and profitability will help telcos’ competitive position in an age where agility is the Holy Grail. The Accenture Strategy Competitive Agility Index quantifies the impact of trust on a company’s bottom line, and it is significant. The Index uncovered that 54 percent of the 7,030 companies analyzed experienced a material drop in trust over the past several years. As a result, affected communications companies can expect an average decline in revenue growth of 3 percent and a decline in EBITDA growth of 10 percent. For a US$25B telco, that translates into a loss of US$750M in future revenue.

Moving forward, anonymization, transparency and checkpoints in how they use consumer data will help telcos maintain their trusted provider status.
Striking the right balance

Telcos know they need to capture their share of the IoT market, but many are hamstrung by the “how.”

We see building on their core capability—connectivity—as an imperative while parlaying the trust they’ve earned into partnerships and new growth in the IoT market. It means existing in parallel universes for a bit—the old and the “New”—but the eventual shift to the New is imperative to regain competitiveness.

Learning via single-industry use cases will help them expand to more complex value later, combining multiple industries in scenarios to provide value at entirely new levels.
In addition to the three steps detailed on page 7, the following actions will help telcos move into their futures successfully:

**Don’t lead on all fronts**
Do not waste time competing in the upper value-stack levels now. Rather, become the go-to connectivity player and ecosystem partner. Build on that core strength, as well as future unique selling propositions.

**Be honest with yourself on gaps**
Historically telcos have been stable, commodity-based organizations with capabilities, incentives and skills that fit that model. IoT requires different expertise with regards to vertical know-how and more consultative selling. To fill a gap, they must be able to honestly identify it. The sooner they do, the better placed they are for the IoT space.

**Make frenemies**
Learning to work with companies they may have seen as competitors—platform providers and the like—is core to moving into the New. Telcos who can forge profitable friendships with companies they also compete with will move into the New much faster.

**Mobilize the organization**
Given its long legacy, some layers of the organization may show reluctance to change. Lead from the top by clearly defining a role as an ecosystem leader. Dedicate the time and resources needed to share the vision and embrace an ecosystem culture, which will likely be a change for many parts of the workforce.

The time is right for telcos to leap forward given advancements in AI, 5G and IoT. Forward-looking telcos start with their core competency of network connectivity. From this strong core, they can move into the New, unlocking greater value across the IoT value chain. Pivoting the legacy business requires capitalizing on dedicated core networks, developing the right set of ecosystem partners, and fostering IoT agility built on customer trust.

Business agility, just as physical agility, is built via a consistent practice. One step at a time, telcos can forge their IoT future and position themselves to win.
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References

5. Accenture Strategy Ecosystems Research, 2018
6. Accenture Strategy Ecosystems Research, 2018
7. The Ecosystems Capabilities Index shows the ecosystem capabilities of businesses across six dimensions—strategy/vision, culture, talent, partnership architect, technology fit and innovation. For each, we determined the percentage of respondents scoring a 4 or 5 on a 5-point scale for all questions within a capability. Individuals responding along those lines felt they have strong ecosystem capabilities.
10. A meaningful drop in trust is defined by a quarter-over-quarter drop of five percent or more in a company’s Accenture Strategy Competitive Agility index trust score.

Contributors

Felix Bengelsträter
Felix Frohböse
Karin Lupsa-Henel

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@AccentureStrat
https://www.linkedin.com/showcase/accenture-strategy

@AccentureComms&Media
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