

# Building a Robust IoT Strategy for B2B

## Three Reasons OEMs are Turning to IoT

### 1 Monitor your devices from anywhere

Gain anytime anywhere device data to ensure your devices are operating as they should.

### 2 Troubleshoot when issues arise

Be proactive about device maintenance and resolve issues quickly with cloud-based troubleshooting tools.

### 3 Improve device lifecycle management

Easily deploy firmware updates to keep your devices running smoothly and gain analytic insights to potential device degradations.

**20%**

growth per year for enterprise IoT<sup>1</sup>

**65%**

of manufacturers have an IoT strategy<sup>2</sup>

**29 billion**

active IoT connections expected by 2027, up from 16 billion in 2023<sup>3</sup>

**\$805.7 billion**

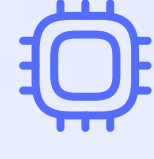
in worldwide IoT spending in 2023<sup>4</sup>

**\$145 billion**

market size of industrial IoT in 2023, growing by a CAGR of 17.9% through 2030<sup>5</sup>

## The 6 Components of an IoT Architecture

An IoT architecture includes the technology components and the relationship between those components. In some cases, the layers are made up of sublayers.



### Device layer

Physical devices that interact with the environment, including sensors that gather data, actuators that perform a physical action, or smart devices that do both.



### Network layer

Responsible for communicating and transmitting data within an IoT ecosystem between smart things, a gateway, and the cloud.



### Data/Database layer

Also called the computing layer, this includes where the local processing takes place, where IoT data is locally collected, stored and initially analyzed.



### Analytics/Visualization layer

Responsible for analyzing the data provided by IoT devices and displaying it in a visual way that makes sense to users.



### Application layer

The layer where data is analyzed to solve business problems or meet objectives for the user. (This is where the magic happens!).



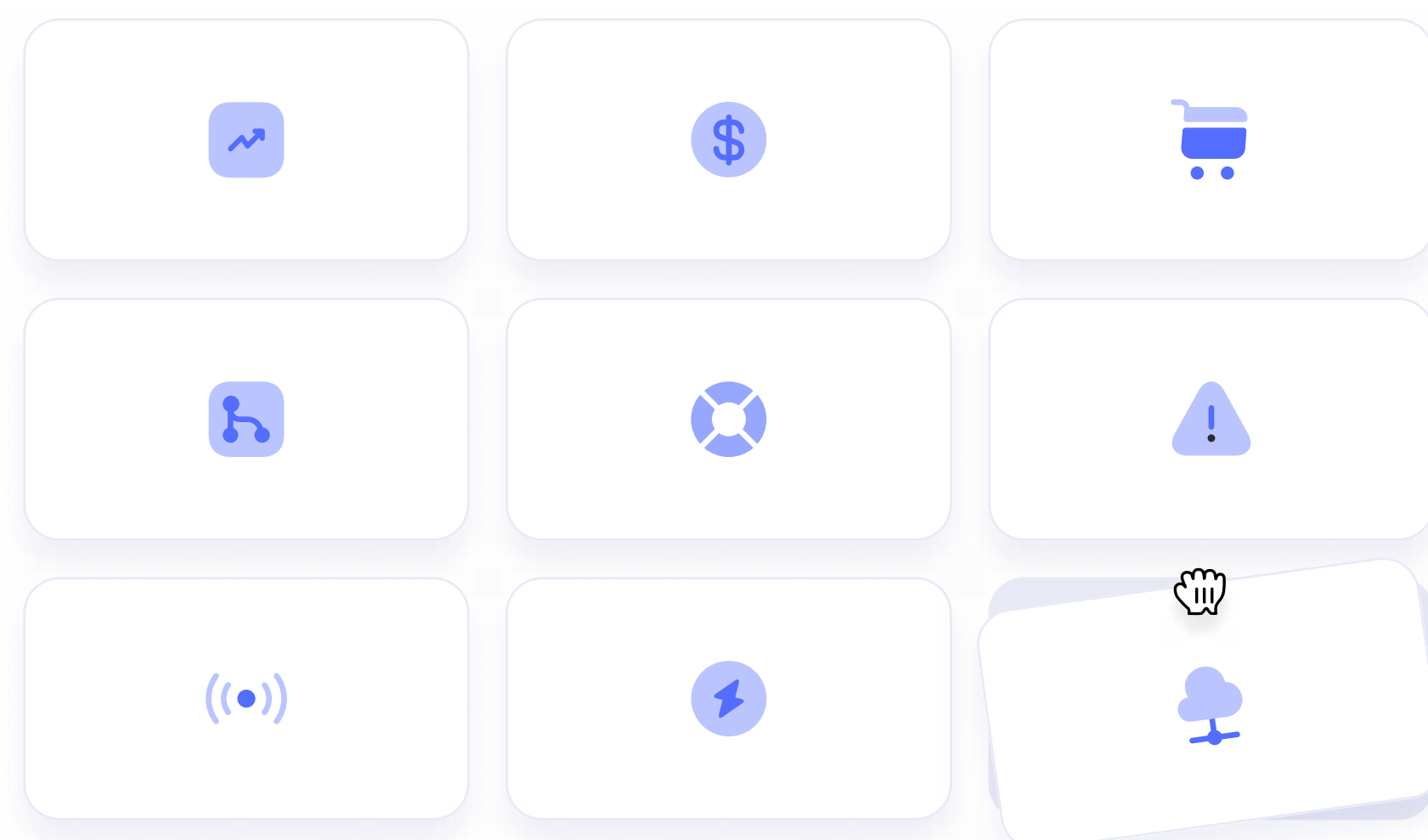
### Security

Responsible for access control, security of data transfer, data leakage prevention, and scanning malicious software. (Strictly speaking, this is not an individual layer, but connects to all others).

## Drill Down: Critical Features in a B2B Application Layer

An IoT system requires a powerful application layer that provides customers with:

- License entitlements for asset management
- Support center and ticket routing
- Integrations with CRM, ERP and other systems
- Commercialization tools
- Access management
- Data visualizations and dashboards
- SSH tunneling (to cloudify previous local-only configurations)
- Customer portal



## Additional Considerations for B2B IoT Solutions

## Does your IoT platform support...

### Multi-tenancy & branding

Customers manage their entire sub-fleet in a fully-federated, white-labeled manner.

### Ecosystem connectivity

Collaborate with channel partners.

### Scalability

Connect unlimited devices and customer tenants.

## Build vs Buy

Should you build your own IoT system or partner with an established provider?  
Consider the following:

**~\$2M – \$10M**

approximate costs to build your own IoT device cloud<sup>6</sup>

**~4–20X**

faster to deploy a purchased solution vs building your own IoT device cloud<sup>7</sup>

See the [Build vs Buy debate for IoT Device Clouds](#)

## Let Us Do the Heavy Lifting

Whether you're just starting to think about connecting your devices or are already on the way to full digital transformation, Xyte offers OEMs tools to successfully navigate the future.

[Schedule a Demo and Get Started Today](#)

**XYTE**

[www.xyte.io](http://www.xyte.io)

<sup>1</sup> TechTarget

<sup>2</sup> Digital Operations Signals, Industrial IoT Solution Spotlight, Microsoft, July 2023

<sup>3</sup> State of IoT – Spring 2023, IoT Analytics

<sup>4</sup> Worldwide Internet of Things Spending Guide, IDC, May 2023

<sup>5</sup> Industry 4.0 check-in: 5 learnings from ongoing digital transformation initiatives, IoT Analytics

<sup>6</sup> Based on 2023 average salaries in the US, according to talent.com, for a team of 2 cloud architects, 4 DevOps engineers, 2 platform testers, 2 security engineers, and half-time salaries for a program manager and agile coach.

<sup>7</sup> Digital Operations Signals, Industrial IoT Solution Spotlight, Microsoft, July 2023, and Xyte company estimates.