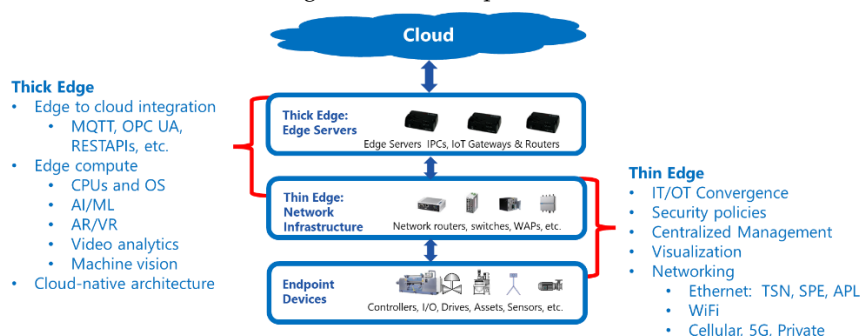# ARC Research on Digital Transformation at the Edge

## FIVE-YEAR TECHNOLOGY FORECASTS & SELECTION GUIDES

### ONGOING DIGITAL TRANSFORMATION OF THE NETWORK EDGE

After a solid decade of pursuing industrial IoT-enabled business process improvement and innovation, the value of the edge within digitally transformed architectures is now widely recognized. Originally viewed as the point where IT and cloud-based applications intersect with the OT environment, the edge functional definition continues to evolve in important areas such as edge-to-cloud integration, edge compute, and the convergence of IT, OT, and security.

As this evolution continues, the role of the various edge components also evolves. This includes expanding compute and store capabilities as well as increased incorporation of IT-oriented management and security. Combined with the expanding capabilities of high-end endpoint devices, including increasingly mobile and autonomous devices enabled by 5G and private wireless, the choice of where to do what at the industrial IoT edge continue to expand.



### STRATEGIC ISSUES

ARC has over 30 years' experience quantifying the industrial automation market, including over ten years analyzing digital transformation markets.

- What is the role of the edge in the digital transformation of Industry & Cities?
- How will descent of the hyperscalers impact the edge market?
- How do the roles of thick versus thin edge devices compare?
- How should edge hardware and software suppliers differentiate themselves?
- How will the increasing emphasis on subscriptions sales impact the market?

### RESEARCH FORMATS

Depending on the content selected, ARC research is available as a Market Intelligence Workbook (Excel) and/or a concise, executive-level Market Analysis Report (PDF) with or without detailed charts.

For more information about ARC's research into digital transformation, please contact your ARC Client Manager or visit our edge webpage: arcweb.com/technologies/industrial-iot-edge

## ALL STUDIES INCLUDE REGION, INDUSTRY, CUSTOMER TYPE, CHANNEL, MARKET SHARES, AND PROFILES

| Industrial IoT Edge Topic | Additional segmentations and forecasts | Market Analysis | Selection Guide |
|---|---|---|---|
| Industrial IoT Edge Software Platforms | Functionality; Revenue Type; Deployment Model; OS/Containers; New vs. Retrofit | Available | Available |
| Industrial IoT Gateways & Routers | Hardware, Software, and Services; Network Type; CPU/OS; Use in Edge Compute; New vs. Retrofit; Form Factor, Environmental Rating | Available | Available |
| Industrial Cellular Routers | Hardware, Software, and Services; 5G; Public vs. Private; Fixed vs. Mobile; New vs. Retrofit; CPU/OS; Edge-to-Cloud Integration; Use in Edge Compute; C1 Div 2; EN50155; IEC 61850-3; Form Factor; Environmental Rating | Available | Available |
| Industrial Ethernet Switches | Hardware, Software, and Services; Managed, Lightly Managed, Unmanaged; Layer 3; TSN; 802.1x; # Ports per Device; Ports by Speed, Media Type, PoE Standard; Form Factor; Hazardous Location; Environmental Rating | Available | Available |
| Industrial and Outdoor Wireless Access Points | Hardware, Software, and Services; Wi-Fi Standard; New vs. Retrofit; Fixed vs. Mobile; Form Factor; Environmental Rating | Available | Available |

Industrial Internet of Things Group

Industrial Network Edge Group