

The demand for intelligent devices and proliferation of IoT is fueling edge AI growth. By 2030, there will be 32.1 billion IoT devices worldwide¹, and global IoT spending is expected to reach \$1Tn plus by 2026². With this exponential demand, how can your organization turn edge AI into a powerful engine of growth and innovation?

Our edge AI roadmap checklist is your compass, designed to guide you through crucial steps of planning, implementing and optimizing your edge AI strategy. Let's build your future by exploring the key components of an effective edge AI roadmap:

Define Vision and Objectives

- Articulate long-term edge Al vision
- Align with overall business strategy
- Set clear, measurable objectives

Assess Current State

Evaluate existing infrastructure and capabilities

Identify skill gaps and resource needs

Analyze current data landscape and quality

Identify Key Milestones

- Define short-term (6-12 months) goals
- Outline medium-term (1-3 years) objectives
- Envision long-term (3-5 years) aspirations

Prioritize Use Cases

- Select initial pilot projects
- Plan for scaling successful pilots
- Outline the timeline for implementing various use cases

Technology Stack Planning

- Choose appropriate edge devices and sensors
- Select AI frameworks and development tools
- Plan for integration with existing systems

Data Strategy

- Develop data collection and management plan
- Address data privacy and security concerns
- Plan for data governance and quality assurance

Skill Development and Team Building

- Outline hiring and training strategies
- Plan for continuous learning and skill upgrades
- Consider partnerships and external expertise

Budget and Resource Allocation

- Estimate costs for each phase of implementation
- Allocate resources for different initiatives
- Plan for ongoing operational expenses

Risk Assessment and Mitigation

- Identify potential technical and operational risks
- Develop contingency plans
- Consider regulatory and compliance challenges

Performance Metrics and KPIs

- Define success criteria for each phase
- Establish monitoring and evaluation processes
- Plan for regular reviews and adjustments

Stakeholder Communication Plan

- Develop strategies for keeping stakeholders informed
- Plan for regular progress updates and demonstrations
- Prepare for managing change across the organization

Scalability and Future-Proofing

- Plan for scaling successful implementations
- Consider potential pivots based on technological advancements
- Align roadmap with emerging edge Al trends

Unlock your full edge AI potential. Sign up for the Professional Plan.

Have questions? Our team is here to help.

Contact us

Edge Impulse is the leading platform for building, deploying, and scaling edge machine learning models. Visit our website to **learn more.**

¹ Number of Internet of Things (IoT) connections worldwide from 2022 to 2023, with forecasts from 2024 to 2033

²Worldwide Spending on the Internet of Things is Forecast to Surpass \$1 Trillion in 2026, According to a New IDC Spending Guide