



Visibility. Context. Alignment.

Building your Control Tower for Industrial Decision-Making

What Is a Control Tower?

A Control Tower, also referred to as a Remote Operations Center or Integrated Collaboration Center, is a centralized operational hub. It enables teams across the organization to monitor, analyze, and act on real-time operational data from multiple sites and systems. The goal is to bring visibility, context, and alignment to operations, maintenance, engineering, and leadership teams.

A Control Tower is not just a dashboard

It is a strategic initiative that combines operational insight, system integration, and user-centered design into a cohesive set of visual tools. It represents a complete approach to how an organization sees, understands, and responds to its operations. The complexity of this effort should not be underestimated, but it is also what makes it transformative. When approached thoughtfully, a Control Tower becomes the point where strategy meets visualization, unlocking new levels of alignment, transparency, and agility across teams.

Why it matters

An effective control tower helps companies:

- Make faster, more informed decisions
- Identify performance trends and root causes
- Benchmark across assets, sites, or business units
- Increase transparency and alignment across roles and teams

How is a Control Tower different from a Remote Operations Center?

Category	Control Tower	Remote Operations Center
Strategic or Operational	Strategic	Operational
Control Level	Passive (insight-focused)	Active (control-focused)
User Type	Analysts, planners, executives	Operators, engineers
Focus	Insight, efficiency, coordination	Continuity, safety, availability
Dimensions	Vertical (organization) & Horizontal	Horizontal
Run-time	Office hours event driven	24/7 monitoring & control
Location	Corporate HQ / Regional hub / Virtual	Near operations / Remote monitoring site

The role of IOTA

IOTA is a self-service, source-agnostic visualization platform designed to support scalable, contextual, and role-based decision-making. It provides the tools to build and manage a control tower without requiring extensive custom development or third-party BI tooling.

With IOTA, your organization can:

- Connect to multiple data sources such as PI, Seeq, SQL, Databricks, cloud platforms, and more
- Make the right data visible through asset- and event-aware contextual views
- Build interactive, multi-role dashboards using reusable visual components
- Navigate from enterprise-level KPIs to individual asset performance
- Combine process graphics, KPI dashboards, and geospatial views into a unified environment with seamless navigation
- Embed external content and migrate HMI and control graphics to modernize legacy displays and support decision-making at all levels
- Create custom forms for write-back actions, approvals, and field-level input
- Apply custom branding, theming, and styling to ensure visuals align with internal design guidelines or UI/UX expert input, without being limited to standard formatting

However, IOTA is not a black-box application; it is a platform for builders. Your internal team will play a central role in delivering the solution, and long-term success depends on developing in-house capability and ownership.

Drive strategic value, not just deployment

Purchasing IOTA is only the beginning. A successful Control Tower requires ownership, prioritization, and resources. Companies that treat this as an internal initiative—rather than a one-time deployment—see far greater impact.

Key recommendations:

- Establish a clear business objective tied to operations, reliability, or strategy
- Allocate a core team responsible for building and maintaining displays
- Define success metrics (e.g., reduction in downtime, increased visibility, time saved during reviews)
- Build incrementally, starting with high-impact use cases

Build internal capability

IOTA significantly reduces the need for custom development and external visualization tools. However, successful adoption still requires time and investment to build internal expertise.

Teams should be prepared to:

- Build and structure displays
- Configure visual templates and contextualization
- Connect to multiple data sources
- Integrate data across systems to support contextualized views on a single display
- Understand the backend infrastructure behind data sources
- Align visualizations to user needs and business objectives

We recommend designating dedicated IOTA users who can lead development and continuous improvement across business areas. Many organizations also choose to work with a systems integrator to accelerate early implementation and manage broader deployment.

Suggested Project Approach

Phase	Customer Responsibility	IOTA Support
Discovery	Identify key personas, use cases, and success criteria	Advisory input and best practices
Architecture & Data Infrastructure Review	Assess current systems, define integration needs, validate infrastructure readiness	Guidance on how IOTA integrates within your architecture, including system compatibility, deployment patterns, and best practices. IOTA does not define or prescribe enterprise architecture.
Data & Access Setup	Connect data sources, configure access controls	Driver installation and configuration guidance
Training & Enablement	Allocate team members to become IOTA builders, plan onboarding	Platform training, documentation, and enablement resources
Initial Prototyping	Build first dashboards and asset models	Technical support and feedback
Iteration	Gather feedback, refine visuals, align with real use	Recommendations on structure
Scale & Ownership	Expand to new roles/sites, establish governance	Long-term roadmap support

Recommended Internal Roles

To execute the project successfully, we recommend the following internal roles:

- **Executive Sponsor** Aligns initiative with business goals
- **Project Owner** Manages scope, requirements, and timeline
- **IOTA Builder(s)** Engineers or analysts who build and manage displays
- **Subject Matter Experts (SMEs)** Provide domain and operational context
- **IT/OT Lead** Ensures system access and data connectivity

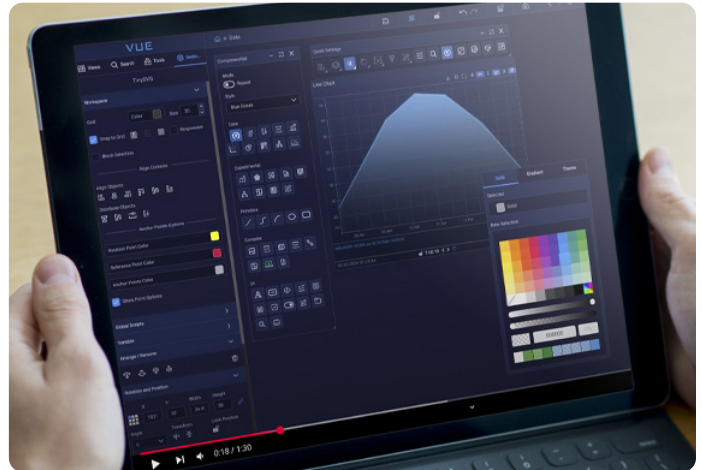
Key Takeaways

- + IOTA is a platform for building, not a predefined application. Your team drives the value.
- + Treat the Control Tower as a long-term initiative, not a quick deployment.
- + Build incrementally and prioritize use cases that deliver meaningful impact early.
- + Invest in learning the platform. The more capability you build internally, the more agile and scalable your solution becomes.
- + IOTA provides product support, documentation, and advisory services—but implementation ownership remains with you.
- + Engage a systems integrator if you need support with project execution, data contextualization, or change management.

Getting Started

IOTA will provide training resources, product documentation, and support channels to help your team get up and running. We're available to advise on how IOTA will work with different design patterns, data modeling, and best practices—but the ownership of implementation, iteration, and adoption remains with your team.

We look forward to partnering with you as you build a scalable, high-impact control tower that brings clarity, transparency, and alignment to your operations.



Turn insight into impact. Start building
your industrial control tower today.

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