# Next Year Roadmap

## Framework Decoupling

* Systematically identify all dependencies on the ASP.NET Zero framework.
* Rewrite core utility and business functions with custom code, abstracting them from the framework.
* Create generic, reusable services for common functionalities (data access, notifications, logging) on both .NET and Angular sides.

## Observability & Monitoring

* Integrate Azure Application Insights across all .NET layers (API, business logic, data access) and Angular frontend.
* Develop common service/middleware for Application Insights in both Angular and .NET.

## Background Jobs Optimization

* Review and refactor all background jobs to be fully asynchronous using async/await.
* Ensure correct use of multi-threading.
* Migrate long-running tasks to scalable worker services (Azure Functions, WebJobs).

## Database & Performance

* Plan and execute migration from Entity Framework to Dapper for performance-critical data queries.

## Security Enhancements

* Integrate OWASP ZAP security scanning tools into CI/CD pipeline.
* Remove high and medium vulnerability packages from dependencies.

## Testing & Quality Assurance

* Build robust integration test suite using Cypress or Selenium.
* Integrate static code analysis tools (SonarQube, Veracode, Snyk).

## Codebase Cleanup

* Remove unused projects (old MVC projects, startup samples) from .NET solution.
* Prune unused NuGet and NPM packages.

## Frontend Modernization

* Upgrade Angular from version 12 to 19+.
* Refactor components to use Angular Signals for efficient state management.
* Implement deferrable views and new control flow features to improve page load times.
* Identify part of the UI and rebuild as a micro frontend.

## API Management

* Integrate Azure API Management (APIM) as a facade for the existing monolith.

## Source Control Modernization

* Migrate source control from TFS to GitHub.

## Design System

* Establish a formal design system with defined colors, fonts, and component guidelines.

## Microservices Architecture

* Identify a well-isolated business capability and implement as a separate microservice.
* Define and establish communication patterns.

## CQRS Implementation

* Introduce CQRS (Command Query Responsibility Segregation) pattern using MediatR.
* Refactor key business domains incrementally.

## .NET Framework Upgrade

* Plan and execute .NET framework upgrade for all libraries.