



vFunction

# The Continuous Modernization Platform

vFunction is the industry's first AI-Driven, Continuous Modernization Platform, that provides **Architectural Observability** and **Automation** to manage technical debt and enable iterative application modernization.

**Continuously observe the architecture of Java & .net applications, understand their domains, establish a baseline, measure architectural drift, get alerts and support their modernization process, including their transformation into microservices**

**Observe**

Your  
Architecture

**Manage**

Your  
Technical Debt

**Transform**

Your Applications into  
Microservices

**Modernization is a process not a project.  
Enable "shift-left" for architects.**

**"By 2026, 80% of Technical Debt will be Architectural Technical Debt" - Gartner\***

"To help their organizations to successfully measure and monitor technical debt, software engineering leaders should:

Prevent time-consuming architectural rework by introducing tools to analyze architectural technical debt and monitor the amount of debt in their software architecture".\*

vFunction addresses this challenge by:

- Enabling incremental & continuous modernization.
- Bringing architects into the SDLC.
- Allowing to plan effective incremental refactoring.
- Enabling building a multi-stage plan and business case for a large scale modernization projects where needed.
- Supporting large scale cloud migration and modernization projects.
- Reducing risk when re-architecting is a necessity.
- Automating services extraction when needed, rewriting and refactoring individual services.

\* Source: Gartner, Measure and Monitor Technical Debt With 5 Types of Tools, Tigran Egiazarov, Thomas Murphy, 27, February 2023

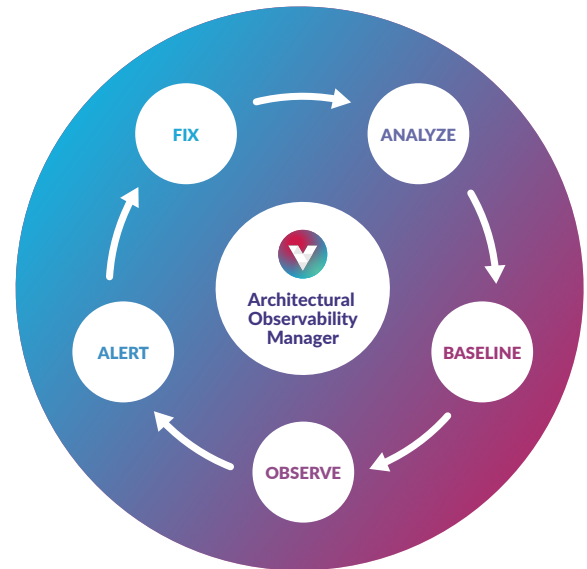


# Architectural Observability Manager

## Find and Fix Architectural Anomalies

Observability-driven architecture consists of a repeatable best practice that manages, observes, and fixes application architecture anomalies on an iterative, continuous basis.

- Baseline, monitor, and alert on architectural drift issues such as the detection of new services, new common classes found, service exclusivity changes, new dead code uncovered, and new high debt classes identified.
- Get notified of architectural anomalies immediately through various alert systems including Slack, email, and the vFunction Notifications Center.
- Once an architectural drift issues are pinpointed, address them directly with your development team or use vFunction Refactoring Engine to extract services.



## Refactor Engine

### Automation tool to accelerate the extraction of services:

An add-on module to Architectural Observability Manager that accelerates the extraction of microservices code.

The included functionality covers:

#### Decomposition Automation

- vFunction Code-copy utility identifies and extracts the microservices code.

#### Frameworks

- vFunction uses recipes to upgrade frameworks to fit the target modern architecture.

#### APIs

- vFunction creates Restful APIs for new end points.

#### Libraries

- vFunction generates updated Client Libraries



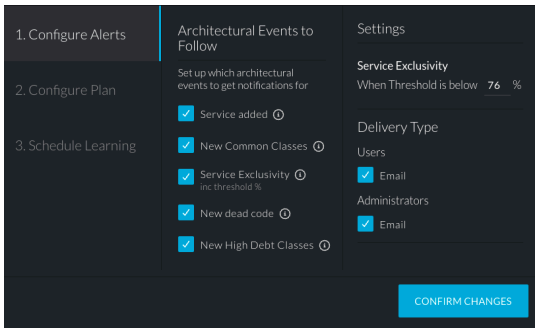
## Formulate a Modernization Strategy and Business Case

Assess and analyze the technical debt of your entire application estate, prioritize applications for modernization based on refactor complexity, business impact, and innovation speed.



## Beyond Lift and Shift

Lift and shift or just containerizing your monolith may be a good first step in the cloud journey, but may result in disappointment. A monolith in the cloud still suffers from long release cycles, poor agility, lack of scalability, high costs, and stalled innovation. Engage in a modernization process to refactor to microservices over time to start taking advantage of complete cloud native benefits.



## Shift Left for Architects

Use architectural observability to shift left left into your ongoing software development lifecycles and manage, monitor, and fix application architecture drift on a continuous basis to avoid technical debt disasters.



Request a Demo

### About vFunction

Function is the first and only AI-driven Continuous Modernization Platform for architects that provides Architectural Observability and Automation to manage technical debt and enable iterative application modernization, from basic refactoring to full rewriting and microservices extraction. vFunction is headquartered in Palo Alto, CA, with offices in Israel, Austin, TX, and London, UK. To learn more, visit [vFunction.com](https://vFunction.com).