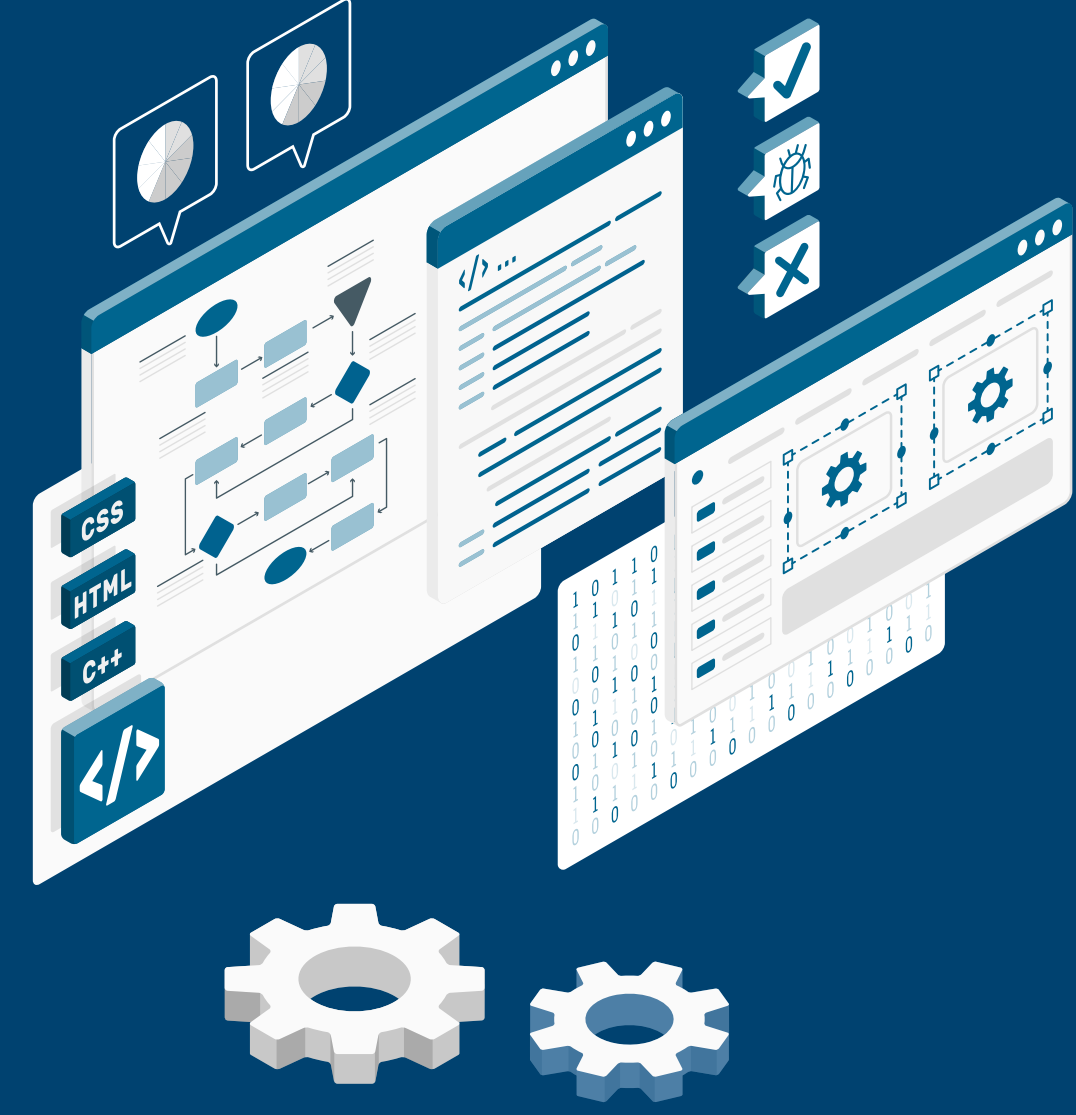




## What is RunAPI?

RunAPI is a software product developed to provide a scalable, flexible and secure API Portal to financial sector. It covers both the “Gateway Layer”, which allows organizations to open their own services to the entrepreneurial ecosystem, and the “Developer Portal” interface, which allows this layer to be used in a user-friendly way.



## Why RunAPI?

With RunAPI, institutions will be opening their own services to entrepreneurs, as well as development teams of corporate companies. By cooperating with these people and organizations, the institutions that will use the RunAPI, will contribute to the fastest adaptation to the changing technology and accelerate their development with the applications to be developed and the variety of services they will provide.



## Necessity and Solution

Service and data sharing applications such as open banking and service model banking have started to have an increasing importance both in Türkiye and in the world. This has led to the need for institutions and organizations to share some of the data and functions in their own systems with third parties. Our product will ensure that this need is met with minimum cost, and that it is constantly updated from a single center, in a safe and standard quality level. In addition, the next versions of the product, which will provide cloud-based services, will pave the way for the use of cloud services without data conveying abroad.



## Administration (Admin) Panel

The Admin Panel provided by RunAPI is a web-based interface where users can manage settings related to the API Portal service. Thanks to this user-friendly interface, all settings such as APIs, resources, requests, authentication and authorization, configuration and monitoring operations can be easily managed. Client creation, deletion and editing operations can be performed. In this way, access permissions for different applications to the API Gateway service can be determined and each application can access the APIs using its own authorization keys. In addition, the details such as the list of transactions, realization durations, source IP addresses of requests, monitoring of high-traffic APIs can be displayed through the Admin Panel. Therefore, the performance of APIs can be monitored, and necessary measures can be taken.



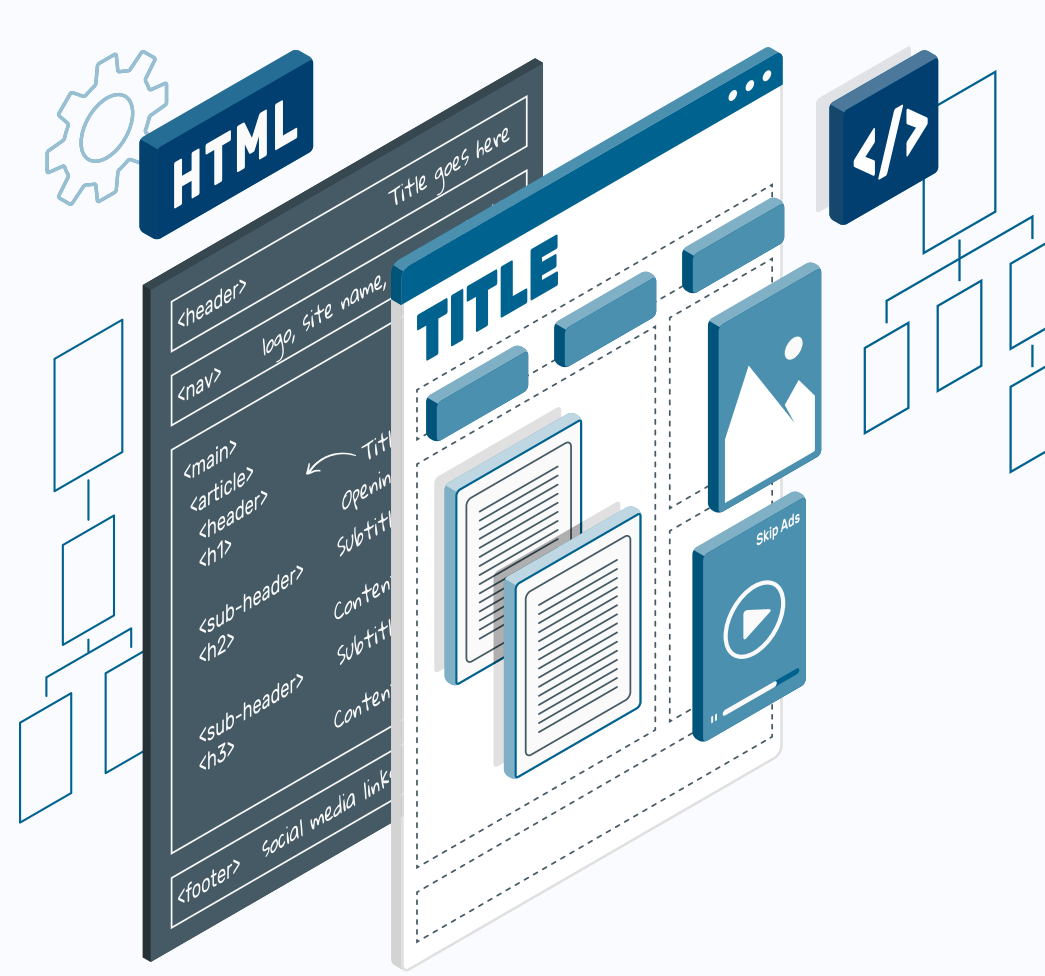
## Benefit to Stakeholders

RunAPI will allow banks to access the "unbanked" customers more easily thanks to companies using the banking services published on the API Portal. In this way, while banks gain new customers, companies using bank APIs will also be able to access financial functions at low cost. As a result of this cooperation, banks will gain new customers, deepen in current customers and indirectly increase their revenues without using their own resources and assuming operational burdens. On the other hand, fintech and entrepreneurs will be able to customize their new products according to the needs of their customers in a short time by using banking APIs, without using lots of their capital.



## Security

RunAPI is a platform where organizations can easily adapt to legal regulations and security, such as PSD2 and Berlin Group Standards. By always staying up to date on innovations, it helps organizations not to experience any problems in terms of legal compliance and security. A scalable API makes integration between the portal software and the systems of all segment players in the industry easy. It helps organizations to securely share their own APIs with fintechs and protect customer data from malicious software. Thanks to its standardized structure, which has a stronger discipline in security and inspection, it enables the development of value-added products and services.



## Technical Aspect

RunAPI has been developed with a “cloud-native” approach in microservice architecture. All services used in the API Portal can be run in the Kubernetes cluster and can be deployed and scaled independently. In services, Spring Boot framework is used for API layer, React and Node.js technologies are used for UI layer, and "Restful" and "sessionless" concepts are used in communication between services. Service security is provided by tokens produced with Oauth 2.0 standards. In addition, RunAPI provides an API Portal to allow fintech and other organizations to easily access their customers' services, software developers to create unlimited environments, and easily manage contents through the management panel. Software developers can access the technical documents of the APIs provided through this portal and work in a sandbox environment with dummy data.

## Components

- Administration (Admin) Panel
- Gateway Service
- Analytical Service
- Authorization Service
- Developer Portal Service ve Sandbox Environment



## InterBank Card Center (BKM) Integration

RunAPI also provides a strong infrastructure for the BKM gateway project (Payment Services Data Sharing Service - PSDSS). It provides end-to-end certification-ready structure that fully meets PSDSS's requirements. It contains the necessary functions and modules for companies to become Account Transaction Providers (ATP) and Authorized Payment Providers (APP). It provides a module that is ready to pass all the regulations, control mechanisms and certifications determined by the BKM, especially the Pay Order Initiation Service and Account Information Service.