

# A telecommunications company utilises Telco-Connect to enhance their customer experiences through digitised products and services

Over the last few years, the telecommunications industry has experienced a continuous acceleration towards digital transformation. The client has been on this journey, identifying digital transformation as an opportunity to improve the digital experience for their users, increase security and provide faster IT services.

The client immediately recognised the role that digital transformation could play in digitising its products and services to better serve its customers. This is why the CIO invited Chakray to join their digital transformation journey to solve this immediate need, as well as to provide a robust and specific platform for the telecom industry to deliver an enhanced customer experience.

## The client was very clear about what they were looking for:



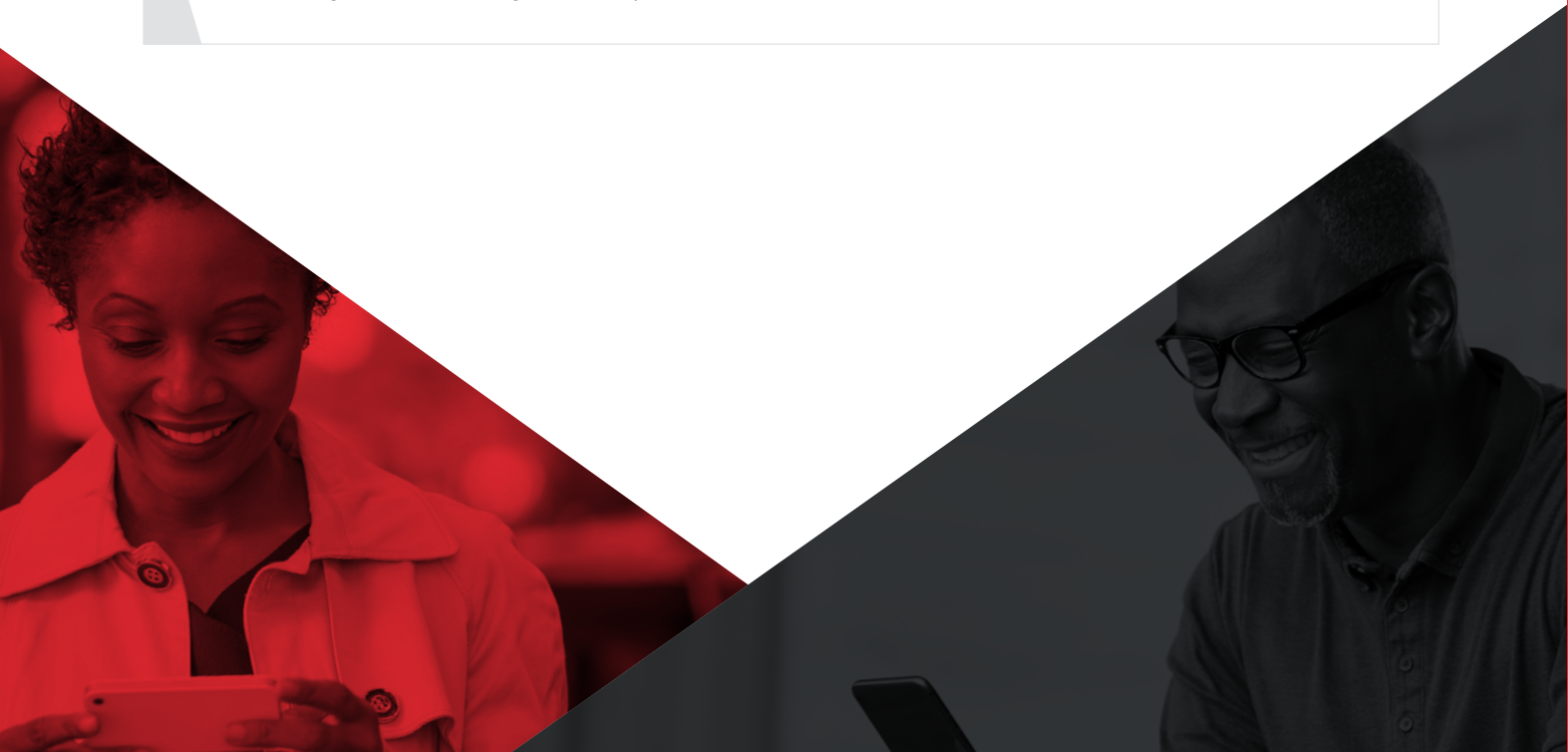
An API Management and Integration solution where they could securely expose APIs internally and externally to their stakeholders.



A middleware platform that could manage all integrations with different telecoms-related back-end systems and provide services as REST APIs to their front end channels, following the GSMA Mobile Money API Specification. This platform should also allow customer applications to seamlessly consume and implement new features.

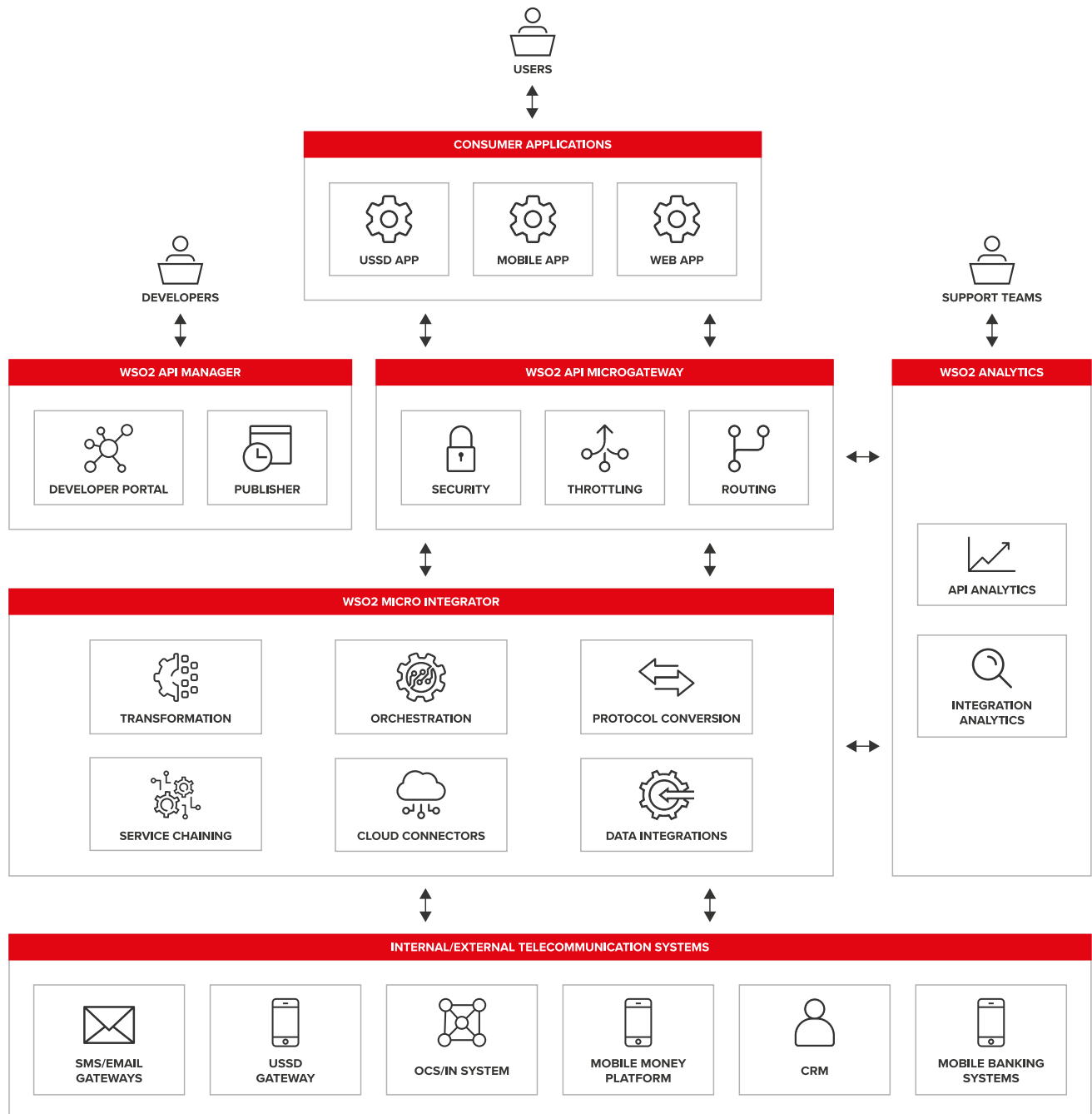


Implementation of a platform to digitise products and services to better serve customers and to allow the company to seamlessly integrate with its core systems and fintech applications, integrated into a single central platform.



# The Solution

The proposed solution was Telco-Connect, a solution designed specifically for the Telecommunications Industry, which allows the organisation to establish a comprehensive platform for digital transformation by interconnecting the complex backend interfaces, providing a simplified, standard set of APIs according to globally standard specifications.



**The WSO2 platform played an important role in the solution, WSO2 integrated with OCS/IN System, Mobile Money platform and different other internal systems to provide functionalities required by client applications related to mobile money services. Specifically, the WSO2 products used were:**



WSO2 API Manager and Microgateway - These were used to provide API management capabilities with a high-speed API Gateway to implement a Microservices Gateway Pattern, also providing the security and token management required by the APIs when exposing to external consumers.



WSO2 Micro Integrator - Used as the core integration layer which connects all back-end and front end systems together with transformation, service orchestration, service chaining and inbuilt connector capabilities.

**A Microservices architecture was used to deploy WSO2 Cloud Native products as containers. It enabled the reliability of services with a rich set of features provided by a containerised platform.**

**In addition to the above-mentioned technologies, the following were also used:**



Docker and Kubernetes: Used to containerize WSO2 products and deploy in the on-premise environment with a full CI/CD lifecycle covering development, testing and deployment.



OKD (OpenShift Origin): A Container Orchestration Platform which provides the seamless management and monitoring of the Kubernetes deployment.



Apache ActiveMQ: Used to implement asynchronous event driven messaging scenarios.

The solution proposed by Chakray was very well received, from the beginning, since it was a perfect fit for both technical and financial constraints.

In addition, they asked Chakray for services such as: Licensing, Managed Services and Training.










# Outcomes

The project was successfully executed and played a leading part in the client's digital transformation, largely thanks to the good coordination and collaboration between the telecommunication company and Chakray teams. The project was delivered on time, on budget and was executed flawlessly.

The project started by gathering the information available to scope an "as-is" architecture, ultimately gathering new requirements to establish a "to-be" and transition architectures, identifying many reusable components to minimise duplication of effort and promote reusability throughout the solution implementation.

## The main results obtained were:

-  **Scalability:** The number of instances was increased based on future customer demands.
-  **Reliability:** The system runs 24/7 without any downtime and components recover automatically in case of failure.
-  **Reusability:** With the standardized APIs, different applications and partners can use the same set of APIs to build their functionalities for subscribers rather than application specific APIs.
-  **Faster onboarding of new features and apps:** New APIs can be developed in a short period of time and launched according to their business requirements which can cater new features for different internal and external applications.
-  **Retain and acquire market share:** By adopting the API Management solution, the client was able to create new digital products for their consumers.
-  **API Integrations:** Nearly 50 APIs and complex integrations were implemented end to end within 5 months with an agile implementation and delivery approach. Moved USSD Application Traffic of the client subscribers to the new Telco Connect Platform successfully.
-  **Integrate Systems and APIs Security:** The implementation of the Telco-Connex platform allowed the telecommunication company to seamlessly integrate with its core systems and fintech applications that would be integrated into a single core platform, and to explore different ways to expose its APIs to third party vendors securely.







The Deputy CEO of the client had the following to say: "Chakrays' Agile and professional approach helped us to successfully deploy the full digital platform into production in less than 10 months. We highly recommend Chakray Consultancy as the WS02 Subject Specialists and digital services provider."

Undoubtedly, the project has been and is being executed successfully, as the telecommunications company continues its relationship with Chakray with the aim of further enhancing its customers' experience through Digital Transformation.



## The Technologies

The following technologies were required to deliver the desired outcomes:

## About the client

The client is now positioned as the global operator provider of fixed and mobile solutions.

## About Chakray

At Chakray we work with companies on digital transformation journeys to ensure they leverage strategies, capabilities, technology solutions and processes to ensure that digital agility becomes an advantage and not a constant constraint.



### Get in touch

**Do you want to improve your systems?  
Ask our experts.**

Ask our consultants without compromise.  
We will help you find the best solution for  
your project.

[CONTACT US](#)

