

WHITEPAPER

# How to save up to 90% on SMS costs while maintaining reliability and security





# What is **Catapush**?

Catapush is a **push notification solution** that allows banks to send important notifications to their customers' mobile devices.

In particular the IT solution offered by Catapush consists of software (Software as a Service – SaaS) which **guarantees the reliable, traceable, secure and confidential sending** of in-app messages and Push notifications, transactional one-to-one to the end users, even in critical situations.

# How Catapush can help banks Save Money

Add a reliable, traceable and secure in-app and push notification solution.





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## **SEND PUSH NOTIFICATIONS TO CUSTOMERS AT A FRACTION OF THE COST OF SMS MESSAGING**

Banks rely heavily on SMS messaging to communicate important real time updates to their customers, such as payment cards alerts, One Time Password (OTP) for strong authentication (SA) for bank account access or transaction confirmations, transactional communication to support the customer journey, massive info and promotional campaign.

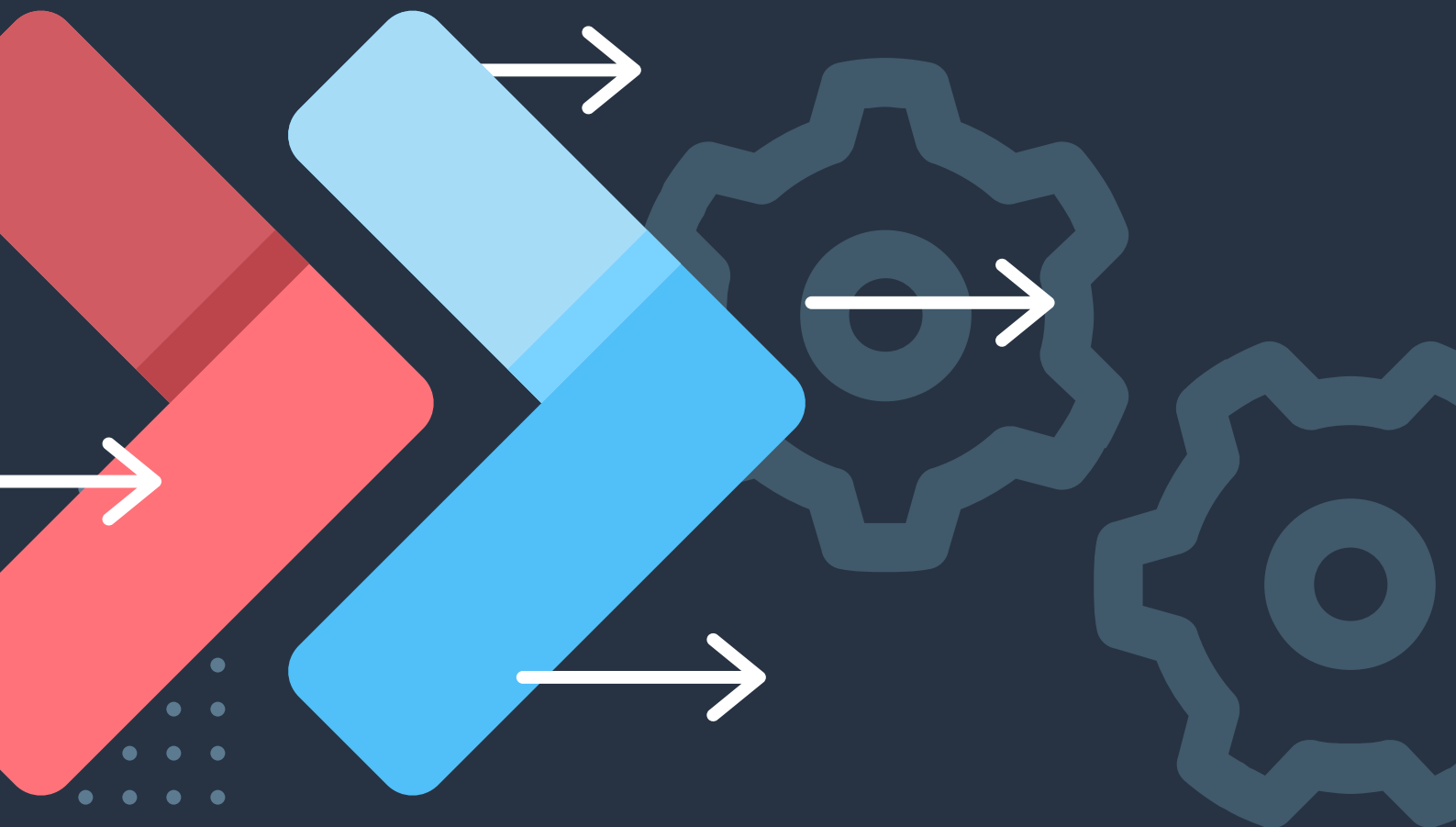
However, the cost of SMS messaging can be quite expensive, especially when sending messages to a large customer base. This is where **Catapush can help banks save money.**

Catapush allows banks to send push notifications to their customers' mobile devices at a fraction of the cost of SMS messaging. In fact, **banks can save up to 90% on their SMS budget by migrating to Catapush.**

This is because Catapush uses data connectivity to send Push notifications and in-app messages, which is much cheaper than SMS messaging.

# Catapush proprietary solution

Add a reliable, traceable and secure in-app  
and push notification solution.

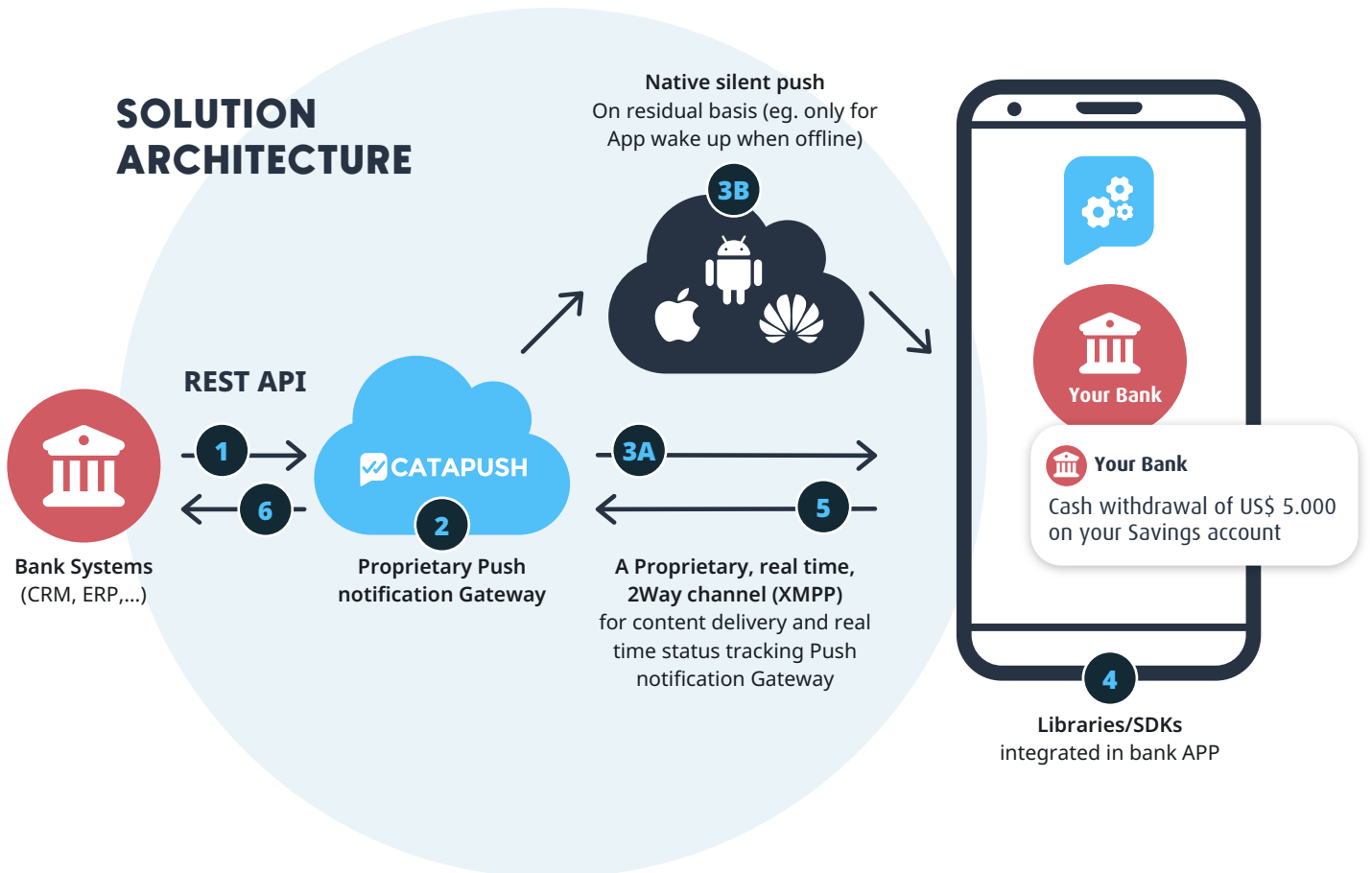





# A PROPRIETARY PUSH NOTIFICATION SOLUTION

Catapush has implemented a **proprietary push notification solution**, autonomous and independent from those proposed by OTTs such as Apple / APNs and Android FCM and HMS (in the paper also the "native push notifications").


The Catapush platform **also integrates native push notifications** which, however, are used only in a residual manner as silent notifications and only to execute the software application that uses the notification service and to establish the proprietary delivery channel, should this be necessary.





# Native Push inadequate for real time important communication

Add a reliable, traceable and secure in-app  
and push notification solution.





# PROBLEMS WITH NATIVE PUSH NOTIFICATIONS

Native push services with “best effort” QoS do not guarantee the delivery of all messages sent even under critical situations **because of:**



## **PROBLEM WITH APPLICATION:**

the FCM/APNs token changes and is not updated, causing failures in receiving new messages from the backend to the new token.



## **LACK OF OPTIMIZATION:**

although native push notifications function during development, the absence of optimization for bulk sending and proper management of multiple connections can lead to delivery delays in a production environment.



## **ABSENCE OF REAL-TIME TRACKING:**

the lack of real-time tracking of notifications can result in lost information about failed deliveries if the app does not communicate effectively with the backend.



## **PROBLEMS WITH THE DELETION OF EXPIRED NOTIFICATIONS:**

Not delivered/Expired native push notifications may not be deleted, causing double communications to the customer, e.g. duplicate OTPs in case of fallback on SMS.

# A CASE OF SUCCESS



In 2018 Unicredit, with millions of active customers on their mobile apps, **integrated Catapush platform** with its backend systems and iOS/Android mobile apps, phasing out the native push services provided by IBM Worklight.

Unicredit communicates today through Catapush with over **4 millions customers** on its mobile app, sending more than **1.000.000.000 messages per year** growing.

## BENEFITS OBTAINED BY UNICREDIT



### SIGNIFICANT SMS REDUCTION

SMS fallback lower than 10%



### SMS COST SAVINGS

over €10.000.000/year growing



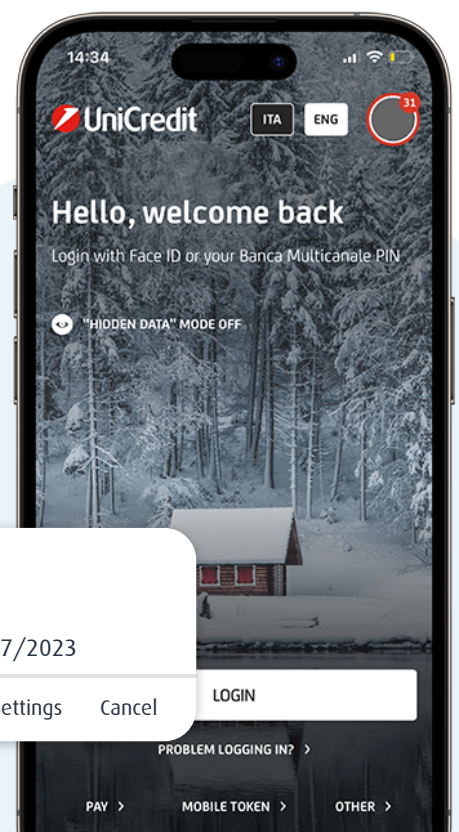
### IMPROVED SECURITY

thanks to end-to-end content encryption support (not available on the SMS) for sending OTP for 2FA, etc



### HIGH DELIVERY RELIABILITY AND REAL TIME DELIVERY STATUSES

with exact click through rates for CRM campaign automation



# USE CASES

## ALREADY IMPLEMENTED:



### PAYMENTS CARDS ALERTS

Sending of push and in-app messages on payments of all cards transaction notifications for fraud prevention. Storage of the notifications in the app's "inbox". SMS fallback if push delivery failed.



### OTP FOR SA/2FA

Push and in-app messages with encrypted OTP delivery for 2FA related to all online payment arrangements and for bank account access and consultation as per PSD2 requirements.



### MASSIVE INFO/PROMOTIONAL CAMPAIGN

Massive sending of push with reporting of "Delivered" and "Read" statuses for exact click-through rate and message/campaign performance.



### TRANSACTIONAL COMMUNICATION

Push and in-app messages to notify end users of process status changes or other significant step during customer journeys.



# Conclusions:

- **Catapush** is a push notification service that can help banks and financial services **save up to 90% on their SMS budget** while maintaining the same level of **reliability** and improving **security** and **UX**.
- With **Catapush**, banks can send real-time notifications to their customers' mobile devices at **a fraction of the cost** of SMS messaging.
- Furthermore, **Catapush** allows for **more targeted** messaging, which can further reduce costs.
- Overall, **Catapush** is a cost-effective and reliable solution for banks looking to communicate with their customers in a **more personalized and interactive way**.



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