



MTN Mobile Money Open APIs: Accelerating fintech innovation in Africa



The challenge

MTN Mobile Money (MoMo) is Africa's largest mobile money service available in 17 countries, powered by the **Ericsson Wallet Platform**. MTN MoMo has shown strong growth and leads the African mobile money market with 69.1 million active MoMo users, 1.3 million agents and 1.5 million merchants at the end of 2022. It has processed phenomenal 13.4 billion in transaction volume and US\$ 221.3 billion in transaction value in 2022 through its fintech platform. MTN has an ambitious plan to grow to 100 million active MoMo users, 2 million agents, 3 million merchants and US\$ 750 billion transaction value in 2025. It plans to realize this vision by rapidly expanding its partner ecosystem through integration with third party providers, that will create new financial use cases and services, accelerating customer and transaction growth.

To accelerate the pace of growth, MTN decided to open its mobile money platform for all third parties and create an inclusive partner ecosystem which includes banks, corporates, utility companies, financial institutions, retail chains, small and medium enterprises, remittance companies, physical merchants, online merchants, NGOs, start-ups, fintechs, tech companies and more, with the aim to collectively digitize and transform the economy of Africa.

However, wide scale integrations are time and resource intensive for MTN and third parties. Additionally, testing and deploying integrations in live environment was difficult and risky.



The Solution

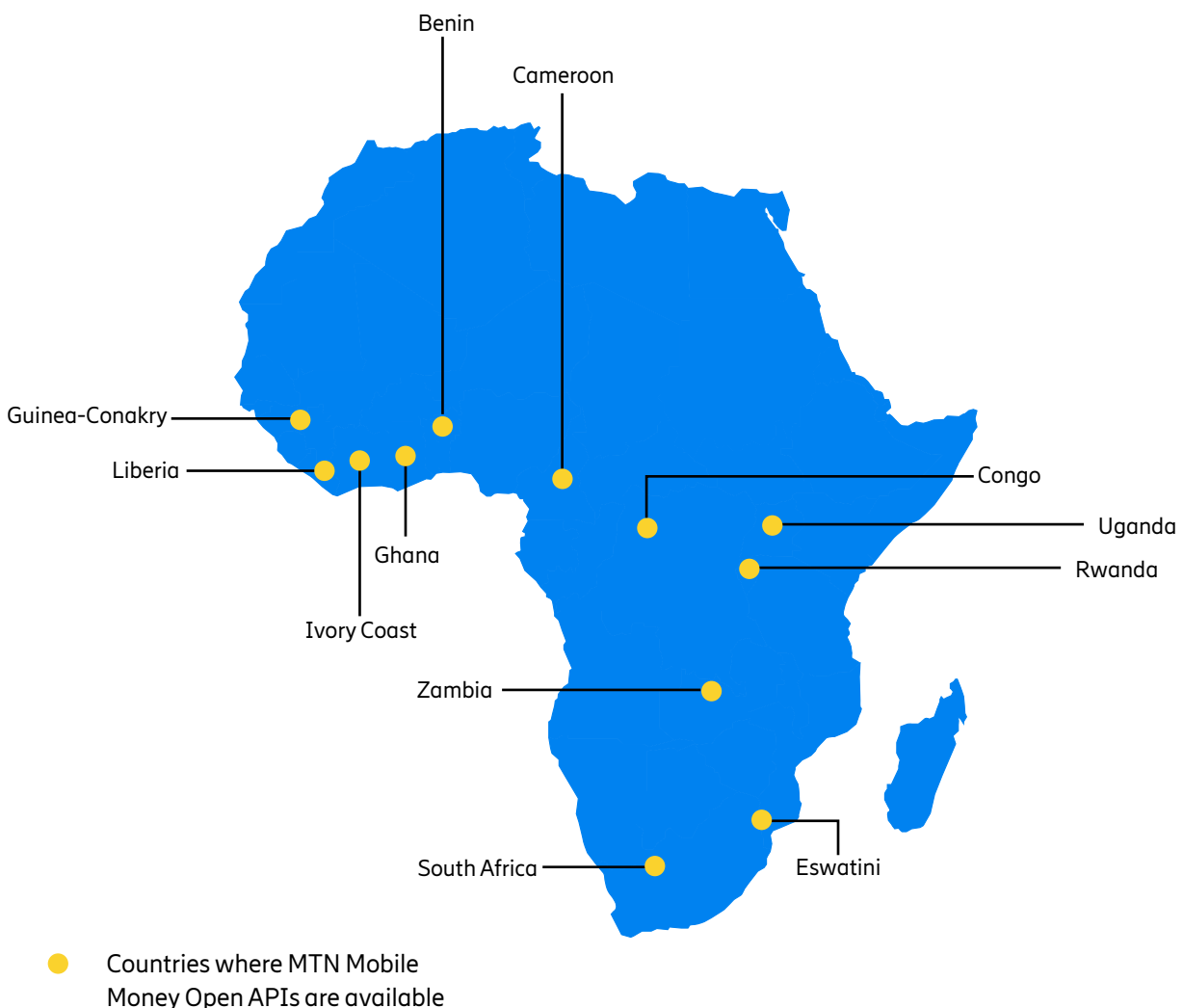
Outside the box solution approach

To overcome the challenges, MTN thought outside the box and worked with Ericsson to introduce its Mobile Money Open API platform and developer portal <https://momodeveloper.mtn.com/>

API stands for Application programming interface. The API defines how two software communicate with each other using request and response. Financial service providers usually expose their APIs to selected third parties only. MTN opened its API to all third parties allowing

developers and programmers to get free access to MTN's mobile money proprietary software platform and create new payment and financial use-cases and applications.

The **MTN MoMo API platform** was launched first in Uganda in November 2018. Following success in Uganda, the API platform was extended to 11 more countries from 2019 to 2022 including Ghana, Zambia, Cameroon, Eswatini, Ivory Coast, Benin, Rwanda, Guinea-Conakry, Congo, South Africa and Liberia.



Seamless experience for developers

To offer a seamless integration and development experience to developers, MTN introduced an intuitive developer web-portal accessible freely via the internet with 3 main components:

- 1. Documentation:** Guide for developers detailing design principles, objects, behaviours and error handling for the MTN MoMo APIs, to get started on integration
- 2. API Sandbox:** Sandbox provides developers a testing environment that replicates the live production environment. It helps developers to thoroughly test their application by creating simulated responses from APIs it relies on, reducing the risk while deploying the application in live environment. Developers get Sandbox access after signing-up on the MoMo developer portal.
- 3. Support:** Provides access to MoMo API community and support team to address queries and ensure success. After successful testing and fulfilling KYC requirements, developers can go live with their application.

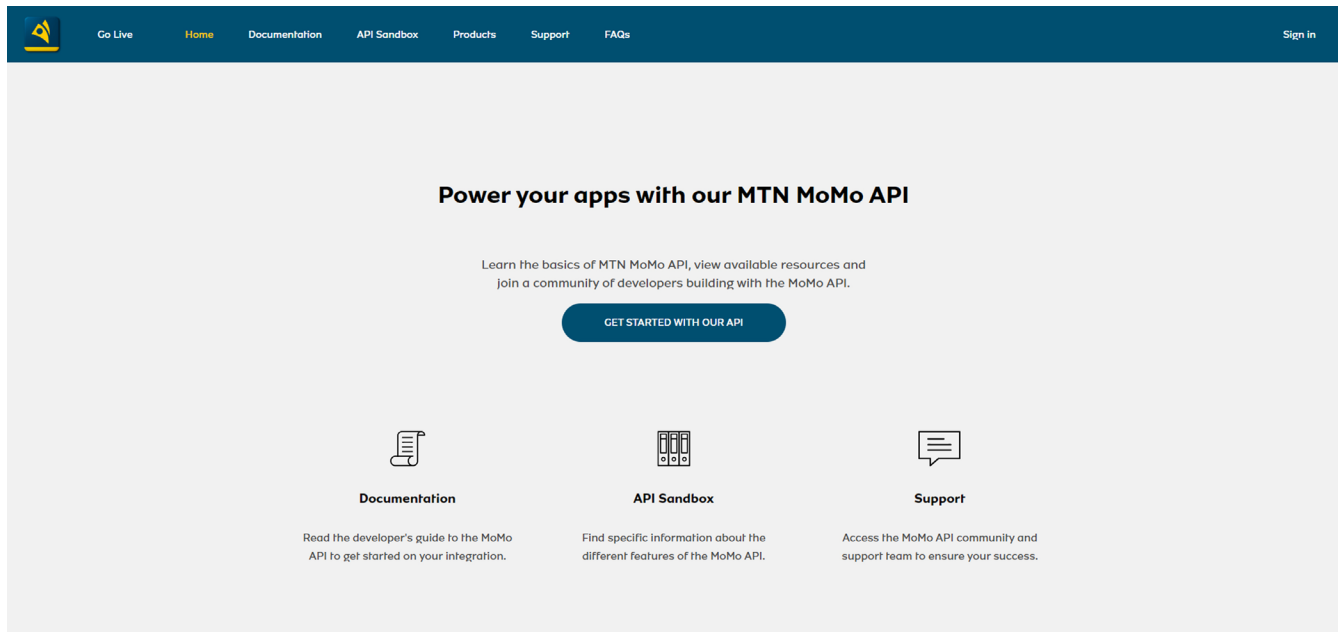
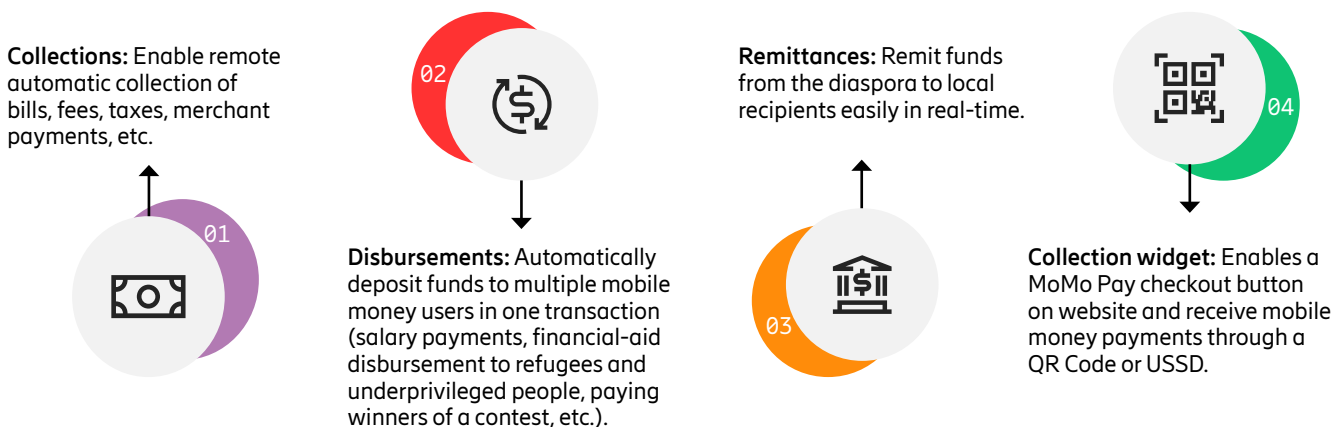


Image source: <https://momodeveloper.mtn.com/>

Enterprise developers can use MTN MoMo APIs to build innovative services related to:



The Result

Phenomenal uptake and benefit for all stakeholders

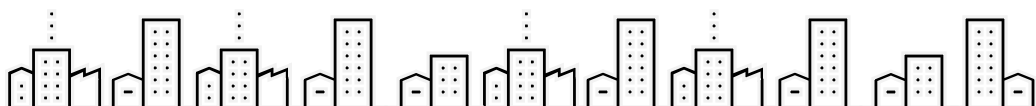
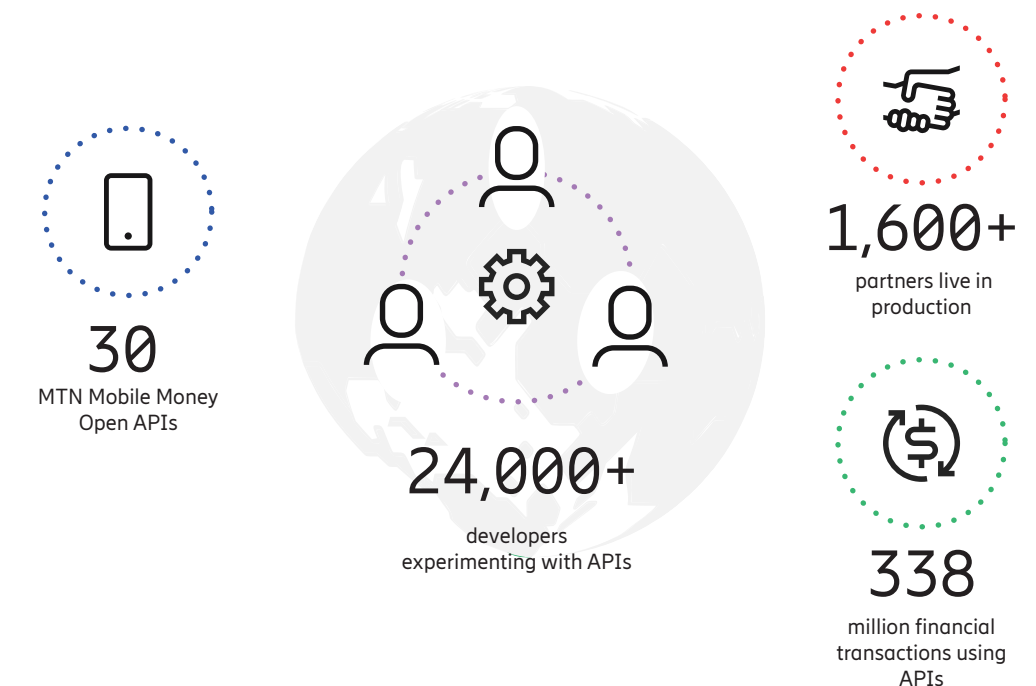
Africa’s leading open API portal: In a short span of time, the MTN MoMo developer portal has become one of the leading Open API fintech platforms in Africa, available in 12 countries. The MTN MoMo API portal has grown from 5 APIs in 2018 to 30 APIs 2022 and facilitates all key use cases including consumer to business payments (C2B), business to consumer payments (B2C), business to business payments (B2B) and government to person payments (G2P).

By the end of 2021, the MoMo Open API platform had 17,948 registered users. Statistics based 2022 data shows over 24,000 developers experimenting with open APIs in the platform’s Sandbox and more than 1,600 partners live in production. MTN MoMo APIs have successfully processed more than 338 million financial transactions in 2022.

Faster, cheaper and safer mobile money ecosystem growth: Previously, partner onboarding was a time-consuming manual process. The MoMo developer portal

has digitalized and accelerated partner onboarding and activation process. It saves time previously spent on submitting paperwork and a lengthy standard integration. The API sandbox facilitates concurrent testing and development, expediting application development. All this has reduced time and effort related to developing and launching new services for both developers and MTN.

Registering on the portal, using the APIs and testing in the Sandbox, is free for developers to encourage experimentation, however, after go live MTN earns revenue from fees on transactions. This makes it cost-effective for developers and commercially viable for MTN simultaneously. Additionally, testing in the API Sandbox environment reduces risks and application can be deployed more confidently in live production. Overall, this faster, cheaper and safer Open API approach has enabled more enterprises and merchants to leverage MTN MoMo platform, resulting in faster partner ecosystem growth for MTN.



Fostering innovation in Africa and driving mobile money transactions and revenue: MTN MoMo APIs have encouraged all third parties including banks, financial institutions, utility companies, remittance companies, big enterprise, large merchants as well as African start-ups, tech companies, small and medium sized merchants, mobile wallet providers and fintechs to experiment freely and launch innovative payments use-cases and applications, fostering innovation in Africa.

The services launched using MTN Open APIs include pay-as-you-go solar energy, real-time international remittance, pay-as-you-learn low-cost school networks, ride-hailing, AgriTech payments, HealthTech payments, savings, credit cooperatives, insurance, crowdfunding and more. These new open API-enabled use-cases have boosted MTN's mobile money transactions, resulting in revenue growth.

In 2021, MTN MoMo APIs processed 155 million financial transactions through various partners and use-cases. In 2022, MTN MoMo APIs processed over 338 million financial transactions, a 118% growth over 2021 transactions.

The Open APIs are being used by various developers to quickly develop and launch innovative services. Following example depicts this. MTN Lonestar Cell Liberia is the latest operator to launch MoMo Open APIs in March 2022. Liberia organizes the popular Liberia Marathon every year during August, where participants register manually at selected locations. This year, Liberia Marathon digitized the registration process and facilitated mobile payments using MTN Mobile Money. The marathon's volunteer developer Mr. Kpetermeni Siakor used MoMo Open APIs and integrated MTN MoMo Wallet with Facebook Messenger registration feature. Participants could register for the marathon on Facebook messenger and pay the registration fee quickly and securely using MTN MoMo Wallet. This example shows that open APIs have made it easy for developers to rapidly and cost effectively create services even for short time use.

MTN has also leveraged open APIs to organize MoMo API Hackathons boosting the quickly growing startup and tech culture in Africa. MTN and Ericsson successfully organized the first MoMo API Hackathon in Ghana, Uganda, Cote d'Ivoire, Cameroon and Zambia in 2019. In July 2022, MTN announced its second Hackathon, taking place in 10 countries, inviting developers to create a mobile application that uses MoMo APIs.



The success of MTN Mobile Money Open APIs has been recognized by the industry, including winning the Global Telecom Award (Glotel) 2022 in the 'Mobile Financial Services Mastery' category, PayTech Award 2023 in 'Best Mobile Payments for SMEs Initiative' category, and MEA Finance Banking Technology Award 2023 in 'Most Innovative Digital Wallet Deployment' and 'Best Open Banking & API Solutions Provider' categories. The service was also shortlisted for the GSMA Global Mobile Award (GLOMO) 2023 in the 'Best Mobile Innovation for Emerging Markets' category and TM Forum DTW Excellence Award 2023 in 'Excellence in Serving People & Planet' category.

"We are delighted to receive the Glotel Award with our technology partner Ericsson for MTN Mobile Money Open APIs. This award is a testament to the great impact Mobile Money Open APIs are making in accelerating fintech innovation in Africa. Through Mobile Money APIs, we have created an inclusive ecosystem that is open for everyone to join to increase both the commercial and social benefits of mobile financial services."

Cedric Nguessan

Executive-Group Fintech Business Development at MTN

"This award reinforces MTN's position in the facilitation of mobile financial services as well as Ericsson's capability to deliver a state-of-the-art mobile wallet platform. Together, MTN and Ericsson are driving the transformation to provide more open, secure, and easily accessible mobile money platforms, thus building a more interconnected and transparent financial ecosystem."

Hossam Kandeel

Vice President and Head of Global Customer Unit MTN and Customer Unit MTN Africa at Ericsson

Source: <https://www.ericsson.com/en/press-releases/1/2023/mtn-and-ericsson-win-glotel-award-for-mobile-financial-services-mastery>



Recipe for success – a lean startup type approach

MTN adopted a lean startup type approach for MoMo Open API platform. It started with a minimum viable product and enhanced the platform iteratively. This made the platform economically viable, with low investment in

the beginning and additional resources and funds being allocated periodically to include new capabilities such as authentication and channel as a service.

The well-defined partnership between Ericsson and MTN has contributed to the overall success, with Ericsson focusing on technology and MTN focusing on the business aspect of the MTN MoMo Open API platform.

Explore more about [Ericsson Wallet Platform](#)

References

MTN MoMo Developer Portal: <https://momodeveloper.mtn.com/>

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MTN 2021 Annual Report:

<https://www.mtn.com/wp-content/uploads/2022/08/MTN-Group-FY-21-Integrated-Annual-Report-Interactive.pdf>

CGAP Blog: <https://www.cgap.org/blog/mtn-mobile-money-opened-apis-was-it-worth-it>

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