



QoS fallouts on mobile money industry



**Autorité de Régulation des
Télécommunications et des Postes**

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Ensemble, comblons le gap numérique

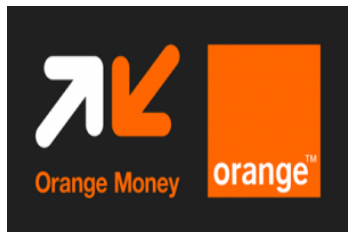


- *Mobile money outlook in Senegal*
- *Trends shaping the mobile money industry in Senegal*
- *QoS and QoE challenges in mobile money industry in Senegal*
- *KPIs Targeted*
- *Conclusions*



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Mobile money outlook in Senegal



Others...



Mobile money outlook in Senegal

20 Mobile money platforms are live in 45 departments
8 million registered customers in 2018 19% increase from 2017
12 mobile money platforms have more than 1 million active accounts.

Reaching the underserved through innovation.
Orange is leader in this segment and is having 38% of the market shares.

Mobile money outlook in Senegal

Generating more than \$6 million per day and real job generator and business enabler

2018 saw efforts to pursue new investments and strategic partnerships, to leverage data and innovative financial technologies, and to develop robust and interoperable payments systems to support a range of use cases and financial products.



Trends shaping the mobile money industry in Senegal

An enhanced customer experience

A strategic focus on interoperability
The rise in smartphone adoption

Increasingly complex regulation

Taxation, Know Your Customer (KYC) requirements, Cross-border remittances, National financial inclusion strategies, Data regulation

Trends shaping the mobile money industry in Senegal

Diversification of the financial services ecosystem

The looming opportunity for mobile money providers

Expansion of the mobile money value proposition;

Enterprise solutions, E-commerce, Credit, savings and insurance



QoS and QoE challenges in mobile money industry in Senegal

Many issues are harming mobile money growth:

- Network reliability

1. *Software Failure;*
2. *Hardware Failure;*
3. *Network Connectivity Failure;*
4. *Transaction Delays;*
5. *Loss of Data*

- Network security and consumer protection

1. *Cyber attacks;*
2. *Data privacy*





QoS and QoE challenges in mobile money industry in Senegal

- Consumer education

- 1. Increase Literacy rate;*
- 2. Improve agent education;*
- 3. Work on KYC*

- Interoperability

- 1. Lack of network interoperability prevents customer from transaction with the desired party;*
- 2. Interoperability increases churn*

- SMB payments acceptance

- 1. Provider loses customer funds due to failure of trustee bank;*
- 2. Asset – liability matching;*
- 3. Credit risk of agents and merchants*





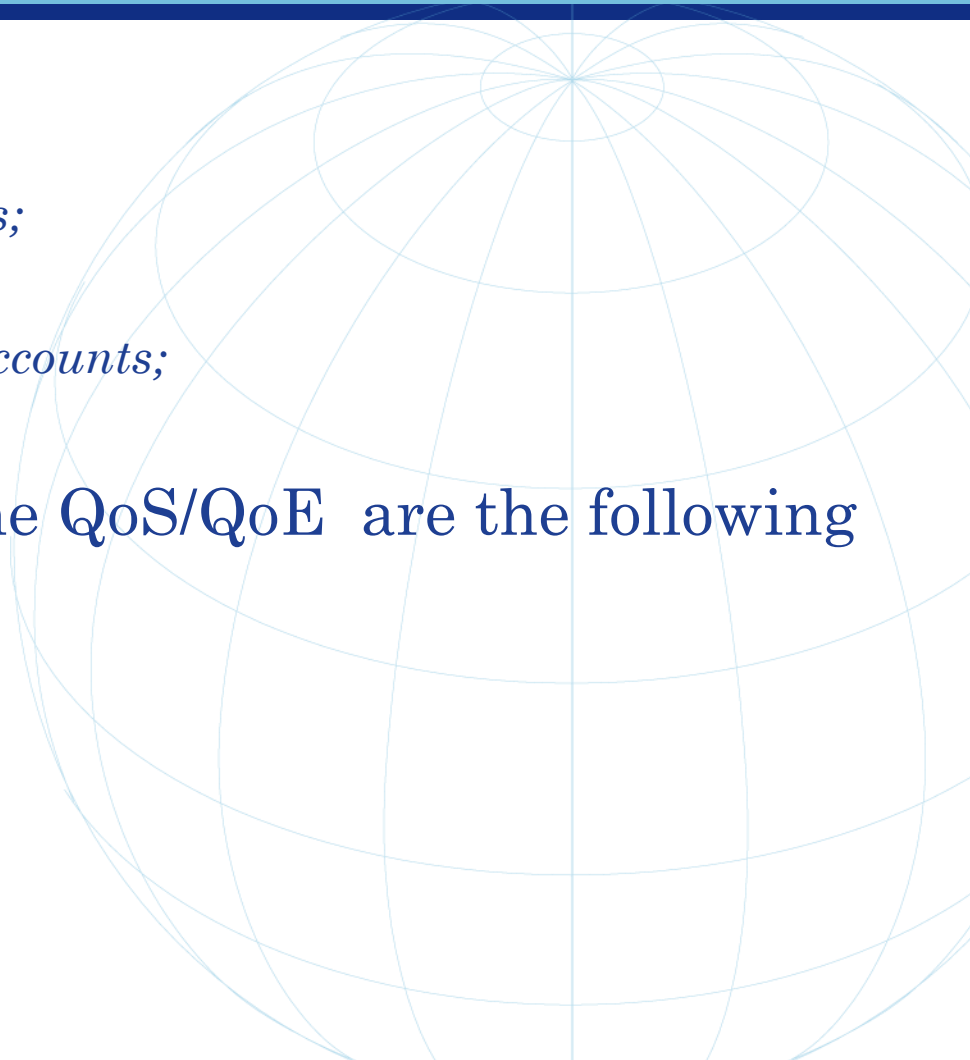
QoS and QoE challenges in mobile money industry in Senegal

- Account Functionality

1. *Trust accounts;*
2. *Minimum capital requirements;*
3. *Lack of agent liquidity;*
4. *Illegal transfers from mobile accounts;*
5. *Lack of agent availability*

- The key points of improving the QoS/QoE are the following

1. *Network availability;*
2. *Network accessibility;*
3. *Service accessibility;*
4. *Service integrity;*
5. *Service retainability*
6. *Service delivery on time*





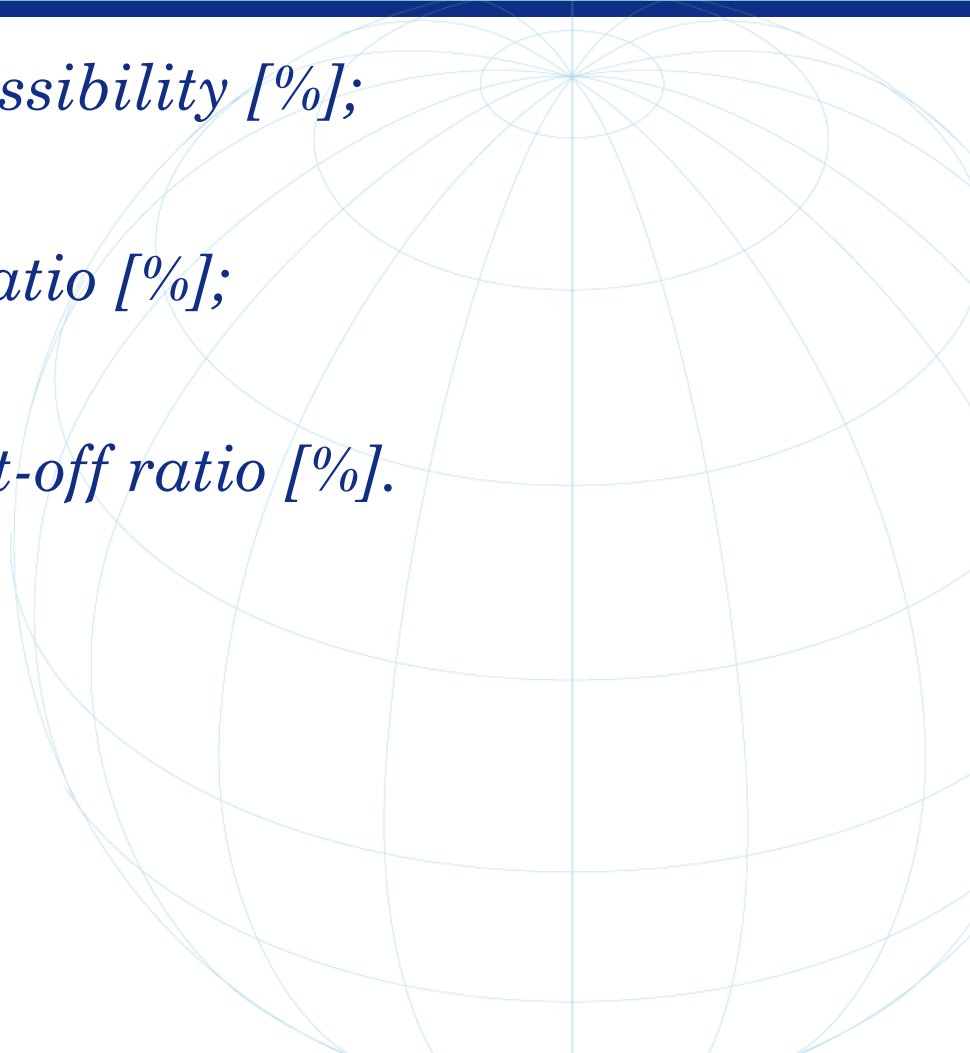
KPIs for SMS

- *SMS service non-accessibility [%];*
- *SMS completion failure ratio [%];*
- *SMS end-to-end delivery time [s];*
- *SMS receive confirmation failure ratio [%].*



KPIs for HTTPS

- *HTTPS Service non accessibility [%];*
- *HTTPS set-up time [s];*
- *HTTPS session failure ratio [%];*
- *HTTPS session time [s];*
- *HTTPS data transfer cut-off ratio [%].*





Derived KPIs

- *Money Transfer completion rate;*
- *Money Transfer completion time;*
- *Money Transfer False Positive Rate;*
- *Money Transfer False Negative Rate;*
- *Money Transfer Failed Transaction Resolution Rate;*
- *Money Transfer Account Stabilization Success Rate;*
- *Money Transfer Account Stabilization Time.*

Perspectives & Conclusions

To set a clear national vision and strategy

To set up a strong business and economic aspects

To set a strong legal framework

In Senegal, 2018 saw the involving industry shift its focus to meet customer needs, with more industry players embracing a platform-based approach connecting consumers with third party services across diverse industries.

To define clear roles for each authority

To engage an opened and ongoing with banking and telco regulators

To set up fair governance in term of security

Thanks you



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