DCB INDEX 2023:

ASSESSING THE EVOLUTION AND POTENTIAL OF DIRECT CARRIER BILLING (DCB) PER COUNTRY

THE MIDDLE EAST AND AFRICA EDITION



KEY PERFORMANCE INDICATORS (KPIS) OF THE DCB INDEX:

The DCB Index 2023 offers a detailed analysis of the Direct Carrier Billing (DCB) market's progression and potential in the Middle East and Africa. This year's edition continues to rank countries on a 5-point scale, incorporating new insights into fraud prevention, innovation, local market penetration, and DCB's growth potential.

The DCB Index 2023 compares DCB's development in the first half of 2023 to the same period in 2022, while also considering anticipated growth in 2024. This edition broadens its analysis to encompass three new countries.

The development of the DCB Index 2023, consistent with previous editions, is a collaborative effort between Evina and Telecoming. This partnership leverages their respective expertise in DCB experiences and protection to craft a comprehensive analysis.

DCB FRAUD PREVENTION:

Assesses each country's fraud prevention effectiveness, based on the number of fraud attempts on DCB and the robustness of the local ecosystem's defenses against cybercrime.

DCB INNOVATION:

Measures the innovation level in each country's DCB sector, considering the emergence of new DCB applications or other mobile payments.

DCB GROWTH POTENTIAL:

Uses an algorithm to evaluate DCB's potential in each country, factoring in population size, credit card usage, and smartphone adoption.

DCB PENETRATION:

Determined by the number of mobile operators offering DCB, with the calculation excluding considerations of their market share.

THE DCB INDEX, THAT RATES THE STATE OF DCB AND ITS POTENTIALITY, USES A 1 TO 5 RATING SCALE, WHERE 1 IS THE LOWEST AND 5 THE HIGHEST LEVEL OF DCB DEVELOPMENT AND POTENTIAL.

| 902 2,9 ALGERIA | NEW |
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| 909 2,9 BAHRAIN | • |
| •19 2,3 BOTSWANA | NEW |
| ° ¹⁴ 2,3 BURKINA FASO | • |
| °17 2,5 CAMEROON | = |
| ♥04 3,5 EGYPT | |

Algeria's Direct Carrier Billing (DCB) market, with its strong potential for development, presents a distinct DCB landscape. While all local mobile network operators provide direct carrier billing, the market is challenging to penetrate externally due to stringent regulations and specific operational methods.

Bahrain is only slightly ahead of last year, mainly because DCB penetration among mobile operators has reached 100%. However, the sector is increasingly vulnerable to sophisticated and targeted cybercrime. This vulnerability can be mitigated by appropriate DCB protection measures.

Carrier billing is expanding in Botswana, with most mobile operators enabling end users to purchase digital content through DCB. However, the potential for sustainable DCB growth in Botswana is currently limited until an adequate security infrastructure is in place.

In Burkina Faso, the DCB market, primarily SMS flow-based, is moving towards enhanced security, with most mobile operators actively involved. Building on a foundation of stable fraud protection, the market is poised for new initiatives in 2024, signaling potential for further innovation and growth in DCB services.

Cameroon's carrier billing market has experienced a period of instability, marked by significant cyber attacks and frequent stops and starts in DCB activity. Despite these challenges, the market continues to show high innovation potential in alternative payment methods like DCB, as evidenced by the successful deployment of MTN's MOMO (mobile money) app. A few key DCB players continue to set the example for secure and sustainable DCB development.

While still in its early stages of expected significant growth, Egypt's DCB market is showing signs of improvement in cybersecurity. Despite being a target for cybercriminals, many players have begun enhancing their protections. Coupled with the country's high innovation potential and the increasing popularity of digital payments, DCB is poised for sustainable growth in a market where cash has traditionally dominated.



Direct Carrier Billing is a common payment method in Ghana, with the majority of mobile operators enabling the purchase of digital content via DCB. Innovation in this sector remains high this year, but to ensure DCB's continued success, strengthening security against cyber threats is now more important than ever.

Iraq is experiencing a maturing DCB market characterized by improved security and increased innovation, exemplified by forward-thinking partnerships in the fintech sphere such as ZainCash with Western Union. While there's room for further development, the market is becoming more secure and sustainable, with anticipated cybersecurity collaborations in 2024.

Ivory Coast has shown increased DCB potential since last year, marked by a heightened push for innovation in the fintech sphere, evident in developments like the personal finance app Djamo. In addition, DCB players have shifted towards improving the customer experience through enhanced security for DCB users. These developments have laid a solid foundation for DCB, allowing players to continue to focus on innovation and diverse DCB services.

With over 80% smartphone penetration, mobile payments have become an integral part of the financial landscape in Jordan. The future for DCB is promising, especially if Jordan maintains its focus on effective protection and continues to explore the diverse applications of direct carrier billing while improving the protection of the market against all types of fraud.

This year, Kenya's carrier billing market has achieved a level of stability and continues to exhibit considerable potential. Despite the persistent threat from cybercriminals targeting DCB, the market is poised for stronger defenses. With more cybersecurity collaborations anticipated in 2024, the Kenyan DCB market will strengthen its resilience.

Kuwait's DCB potential has seen a notable rise, particularly due to enhanced protective measures. The increasing demand for contactless transactions is catalyst in this trend. As digital payments, including mobile wallets, continue to drive the country's digital transformation, DCB is poised to play a crucial role in shaping Kuwait's future payment landscape.

Characterized by stability and robust protection against technical fraud, Morocco's DCB market is a reliable and consistent sector. This stability has allowed for steady, albeit gradual, revenue growth without the disruptions of 'stop and go'. The market's resilience and steady progress point to a solid foundation for future DCB development.

Oman's DCB market, still not at its full potential, faces challenges this year, notably with decreased protection levels. The adoption of DCB is varied; not all mobile operators provide it and smaller businesses remain overall hesitant about mobile payments. Despite these issues, growth opportunities exist. Diverse DCB payment flows continue to be implemented and ongoing initiatives to innovate are led by key players.

In Qatar's appealing and innovative direct carrier billing market, the risk of fraud by cybercriminals poses a challenge to secure growth. Addressing this through enhanced security measures can unlock further potential. A stronger commitment from DCB players to effective fraud protection is critical to strengthening the security and resilience of the DCB ecosystem in Qatar.

Saudi Arabia offers a significant DCB market, yet it poses unique challenges. Strict compliance regulations can incur substantial costs for DCB players if not adhered to rigorously. However, this is offset by the country's commitment to security, notable innovation and widespread DCB adoption.

For the third consecutive year, Senegal echoes previous sentiments: the pursuit of DCB innovation remains stagnant. On the security front, there's a noticeable laxity among some players, increasing their vulnerability to fraud. Prioritizing robust cybersecurity tools is crucial to attain a protection level that instills confidence in exploring and deploying DCB.

South Africa is a frontrunner in the African DCB market, with significant growth potential. Mobile users are quick to

adopt alternative payment methods such as mobile money, which reached 8 million users in South Africa this year. This trend, when combined with effective cybersecurity, will enable DCB to significantly boost revenues for mobile players.

The momentum of innovation, driven by major players such as the Tunisian Post Office investing heavily in digital payment services, is pushing DCB in a promising direction. To maximize this growth potential, mobile players should focus on further developing innovation and ensuring effective cybersecurity, which are critical to establishing DCB as a widespread payment method and revenue-generating source.

With 1.7 million underbanked people in UAE and the market moving towards cashless transactions, DCB has a huge window of opportunity. All mobile operators continue to offer carrier billing to pay for services. However, it's imperative to safeguard this payment method as the UAE is a prime target for cybercriminals.

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