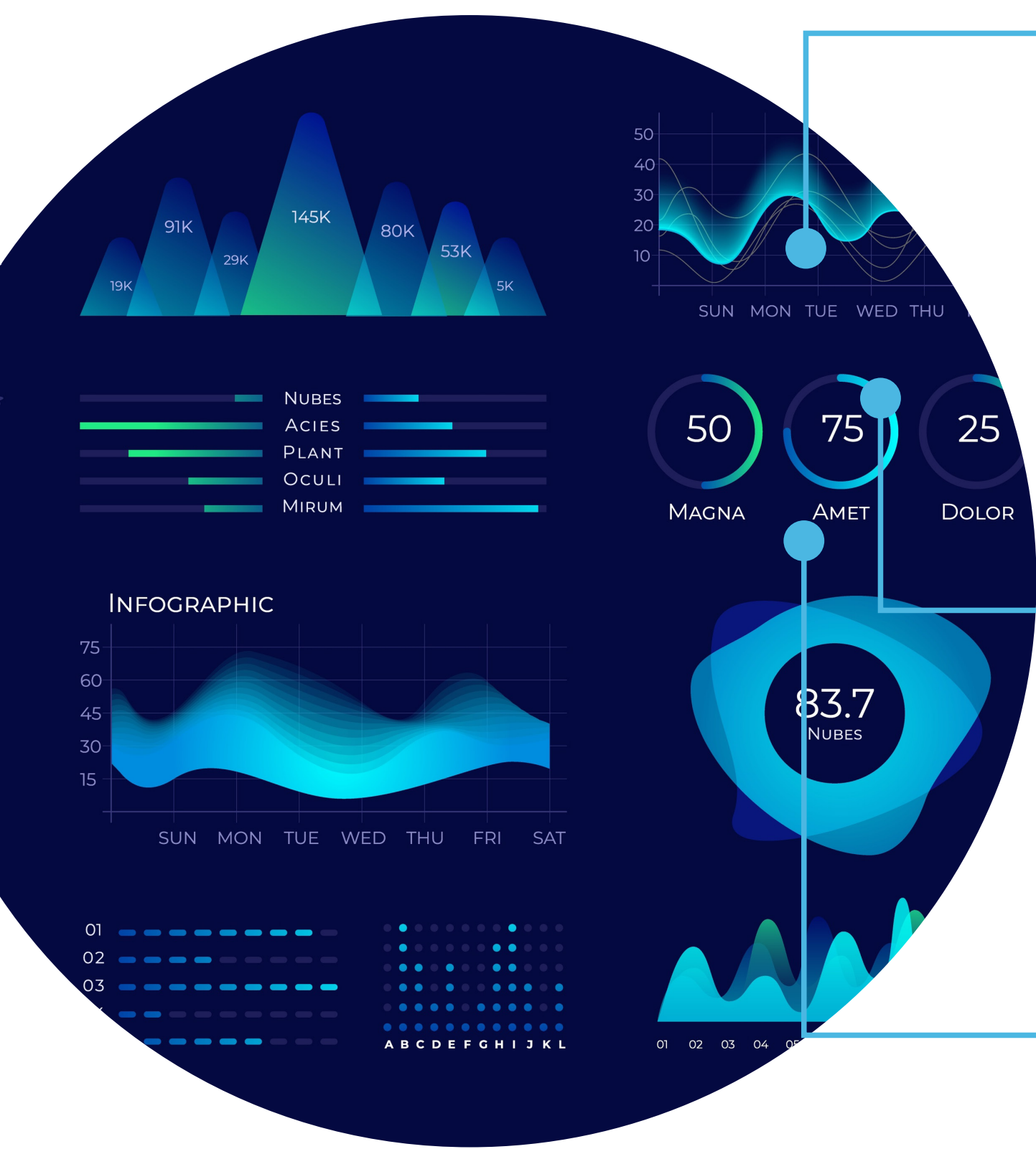




BICS Advanced Analytics

M2M, IoT and permanent roaming detection

The roaming landscape



M2M roaming: a significant monetization opportunity for MNOs

The total number of cellular M2M connections is set to reach 1.3 billion by 2022 (Juniper Research)

MNOs losing out due to lack of transparency, suitable charging models and actionable insights about devices roaming on their networks

IoT services will create a \$900 billion market by 2025 (GSMA)

Without the right techniques, it is virtually impossible to determine whether a connection is a machine or human

Up to 60% of roaming connections cannot be classified without machine learning techniques (BICS)



Limited visibility

Operators are unable to differentiate between M2M and human roaming connections



No accurate value and monetization

Without transparency, it is impossible to understand the value potential, identify M2M use cases and develop the right business models



Current roaming models not suitable

M2M roaming usage and connectivity patterns are unique and wholesale billing models must be adapted for the business to grow



Tailoring Quality of Service

Operators need to create the right level of value for each M2M use case by taking a differentiated approach to QoS, charging models, network priority and more

Benefits

Benefits



Accurately identify and segment inbound

M2M permanent roaming devices



Optimize the network

for consistent Quality of Experience



Increase profitability

by better monetizing inbound roaming M2M traffic



Receive alerts

for suspicious or unusual activity

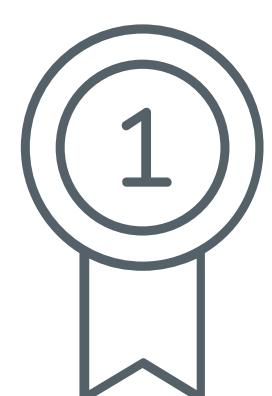
BICS Advanced Analytics

Identify M2M roaming devices with 98% accuracy



Classify

roamers as human or machine based on unique insights from SS7, Diameter, and GTP signaling



Unique capability

not dependent on IMEI information or DCH integration



Unlock

real-time, actionable data across 2G, 3G, 4G



Uncover

behavioral trends, device usage, bottom line impact, and more

Contact us to find out more. www.bics.com