CASE STUDY



Overview

Tork is building new age connected and premium e-bikes



Required Features



Vehicle Usage Analytics



Integrating with CAN Bus



Firmware & ECU OTA updates



Data Pipeline & Data management



Device registry & provisioning



Mobile Application

Tork Motors started building on a popular IoT platform which has many features readily available and was quick to get started with the integration. On moving from pilot to prototype and later to production, Tork Motors encountered a number of challenges.

Challenges with previous solution



No unified solution

Platform supports only one vehicle version



Less Customisations

Limited, costly, and timeconsuming firmware changes



Data Handling

Limited data transfer flexibility



Support & TATs

Long issue resolution and feature implementation times



Battery Drainage

High power consumption by telematics device.



Data Reliability

Data loss due to poor connectivity and processing.



Bytebeam solution

Pilot



Integration

Completed in 2 weeks



Data Handling

Successful pilot with accurate data capture and fast visualization



Internal Battery

1800 mAh battery allows upto 7 day run on a single charge



Custom features implemented in 8 weeks



Single unified platform for multiple version of the vehicles



Android SDK developed for unlock, tracking, and alert features.



Sleep mode logic and firmware updates were done within 4 weeks

Production



Data access was given via APIs (push & pull)

Results



12weeks

Production ready devices and platform in 12 weeks



<24_{Hours}

SLA driven outcome for all the queries in less than 24 hours



<0.5% data loss

With persistence and improved connectivity, overall data loss < 0.5%



7days

With increased capacity and custom sleep mode device could run upto 10 days