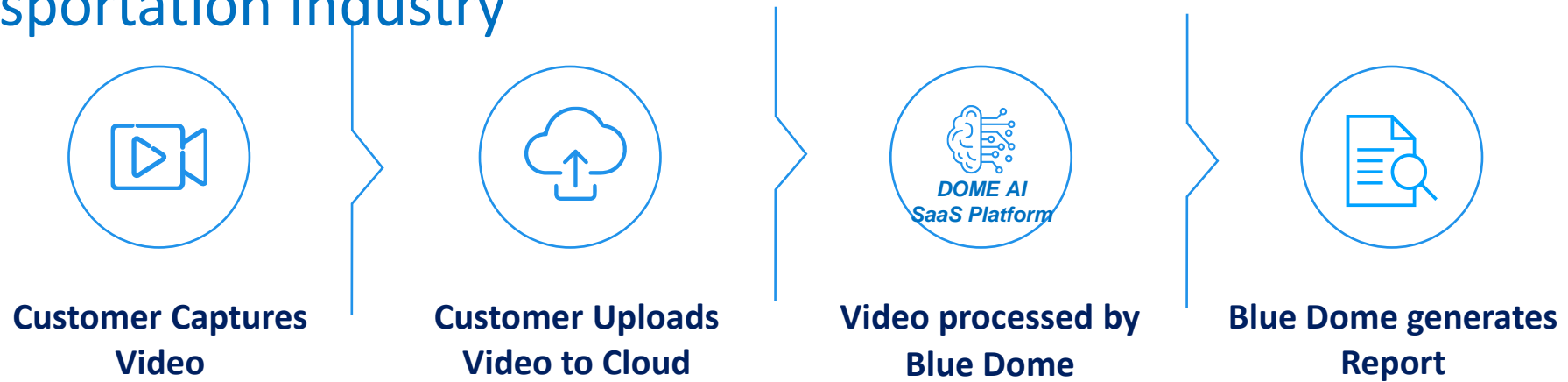


ASSESSMENT OF TRANSPORTATION ASSETS UTILIZING AI/ML

San Joaquin County in Partnership with Blue Dome
Technologies Corp.

November 2024

Blue Dome Solution: Bringing Artificial Intelligence and Machine Learning to the Transportation Industry



Use an off-the-shelf camera mounted on vehicle to capture video and uploaded to Blue Dome platform.

Blue Dome platform processed video and identified and accessed Pavement Condition and Guardrails

Provided reports on GeoDB, KMZ, CSV – Location, Guardrail type, End Terminals, Length, Offset from road, Condition, Distress Type, Severity, Area

Frequent data capture allows for predictability.....lower maintenance cost, improves safety

Blue Dome
AI SaaS
Platform



Camera Mounting for Data Capture



MOUNTING THE CAMERA

- Mounted outside the vehicle for improved image quality
- Installed four off-the-shelf Camera
- Captured during turns and backside of signs



ACCESS FROM PHONE

- Phone App used to preview and start/stop the Cameras
- Captured continuously for long hours
- Preview mode used to review position of Camera

Inventory and Assessment of Pavement Condition



Inventory and Assessment of Pavement Condition



Inventory and Assessment of Guardrail



Road Sign Assessment – Improving Safety, Monitoring Change

- Identifies obstructions and variations in asset conditions
 - Damaged, Faded, Cracked, Tree/Object Covered
- Provides report on Google Earth or client specific tools for repairs or suggested actions
- Report provided in client specific format
- Data stored for audit



Pavement Marking Assessment – Improving Safety, Monitoring Change



Asset Collection and Assessment



- Sign, Pavement and Curb location, Identification, Condition Assessment and suggested recommendation
- Retro analysis of Signs, Object Markers
- Provided area of Legends, Lane, Pavement and Curb Markings



Questions?

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