

Breakout Session 16

Summary of Key Findings and Lessons Learned

- Data collection is a key value hidden beneath the aftermarket device's basic value proposition—challenges remain to OEMs in cost of collection, liability for data and finding effective ways to monetize. “Free” data plan in exchange for vehicle data?
- Camera is sensor with highest growth – driven by regulations and by multi-functional applications (even if not perfect solution) with software updates. V2X is the only other sensor that is likely to be integrated as an aftermarket device. V2X, unlike sensors, provides information, not just data
- Aftermarket systems that can predict crash and prevent them (Waycare and Banjo startups) are “faster to dashboard” and can bring latest in wireless connectivity. Path to market may be through government (local DOTs) or fleets to address local problems with fast solution. Insurers will give reductions to fleet for ADAS devices, but don't for private users with personal automobiles
- Should aftermarket system be standalone or “embedded” with vehicle's infotainment system as a refinement? It goes both ways, with standalone aftermarket devices addressing the 90% of vehicles that aren't new
- AI should learn from best drivers (20% of driver population), not just “obey rules of the road” e.g. crossing middle line to pass a cyclist. Humans don't have applications like FCW, LDW – we think holistically of “danger” and AI should evolve the same way.
- Premium SW + Commodity HW (smartphone, USB or wi-fi camera) = Disrupted Market
- DSRC in smartphone is challenged because wi-fi radio has to be 10 times more powerful (and being so close to ear)
- Current wireless infrastructure ill-suited to transport 1TB/vehicle per day from connected vehicles (may need wi-fi and DSRC in certain locations, to minimize cellular usage, as most data can be delay-tolerant); telecom operators may be willing to install DSRC in RSUs to offset traffic loads. V2V mesh software updates can be 10x cheaper than using 4G
- Most aftermarket devices are single function and rely on cellular (dictating only small amounts of data) and not upgradeable

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Recommended Action Items

- Optimization of wireless network based on likely data uploading/downloading requirements
- Addressing business and technical challenges with data collection
- Aftermarket devices need to be multi-functional, multi-network capable and upgradeable