

San Francisco, USA:

Speaking on stage at the AI Summit in San Francisco, SenSat CEO James Dean announced plans to cut the price of drone data by over 90%, enabling better access to revolutionary information for commercial and civil government use.

Like the internet and GPS before them, drones are evolving to become powerful business tools. Today they're being put to work in commercial and civil government applications, creating a market opportunity estimated at \$100bn by 2025. However the value created is not in the machine but in the data insights they produce.

"We're really beginning to see the digital impacts this data can have on business" said Dean. "By removing another barrier to entry - cost - we're helping businesses achieve the results they need".

SenSat focus on enterprise drone applications, supporting over \$1.5 billion in infrastructure projects since the company launched in 2015. Their data is used to create 'smart infrastructure', digital replicas of roads and rail assets that link embedded data about condition, materials and usage. This type of data can help save over \$1.5 trillion in maintenance costs by 2025 according to the Boston Consulting Group.

SenSat have been awarded Pathfinder status, the regulatory support to fly Beyond Visual Line of Sight (BVLOS). "BVLOS is often cited as a turning point in our industry, it is the beginning of the journey for true applications of this data as it allows us to capture more data efficiently and safely" comments Dean. "At SenSat we are using that advantage to make data more available, more accessible".

A 90% cost reduction in a core product is not an easy feat. His full description of the math is summarised below:

Today engineering grade drone data sells for approximately \$15,000 per km². To reach a target of just \$700 per 0.5 km², SenSat proposes a series of technical and operational steps.

First, fly a tighter line. Replacing a typical linear scan (about 200m across) with one half that size (100m across) reduces the area by a factor of four (since area = $\pi \times \text{radius}^2$). Since most linear projects are priced on area, reducing the waste area will eradicate unnecessary costs.

Second, speed it up. Drones today work half the time and spend the other half in take off/landing routines or changing batteries. Dean proposes continuous flights without changing batteries (longer endurance), cutting costs in half again. A hypothetical tunnel would then cost about \$125 million.

Finally, fly further. Today's drones are nowhere near their "efficiency or technical limits." That, he estimates, would cut costs by as much as five-fold. Now a \$15,000 data bill costs something more like \$1,500 (or even sub \$1,000 in an optimistic scenario).