

World War I Saw More Advances



This Caudron G.3 was an improvement



The Allied Powers flew over 2800 of these models, flying faster and higher than airships

The added features did not ensure safety



Flying battlefield assessment, this G.3 pilot (my grandfather) had his tail shot off (friendly fire)

USG Response: Go Higher and Faster

After WWII, The Cold War Drove New Platforms



The Lockheed U-2 went higher than ever



While it flew successfully for years, the Russians eventually shot one down

Solution: Higher and Much, Much Faster



The SR-71 went to 85K' and Mach 3.2 and was never shot down – but it was costly

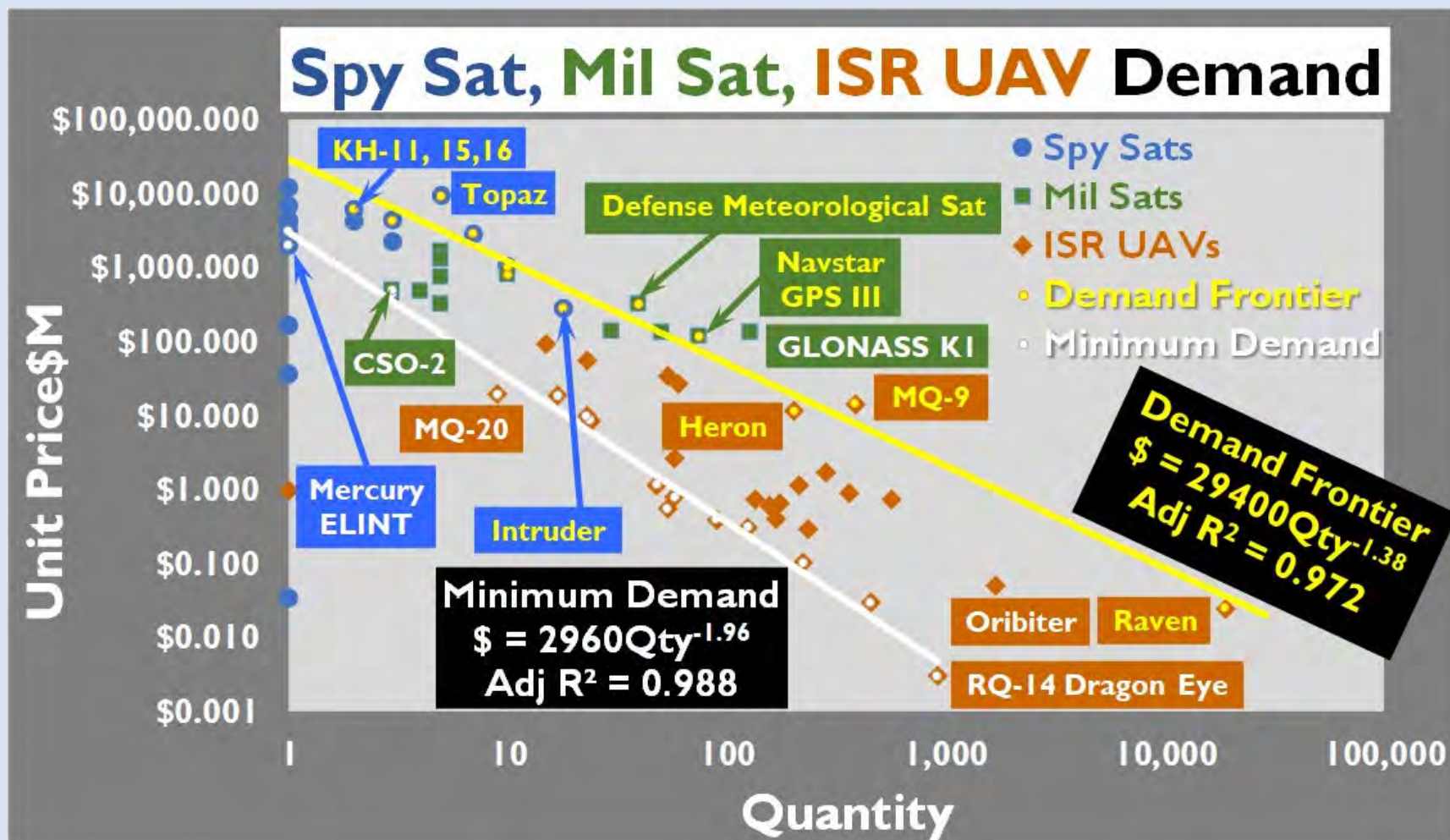
An Evolved Response: Go Unpiloted

Partial Move to Satellites And UAVs



Satellites and UAVS share Steep Demand slopes, revealing more money at the top of the market

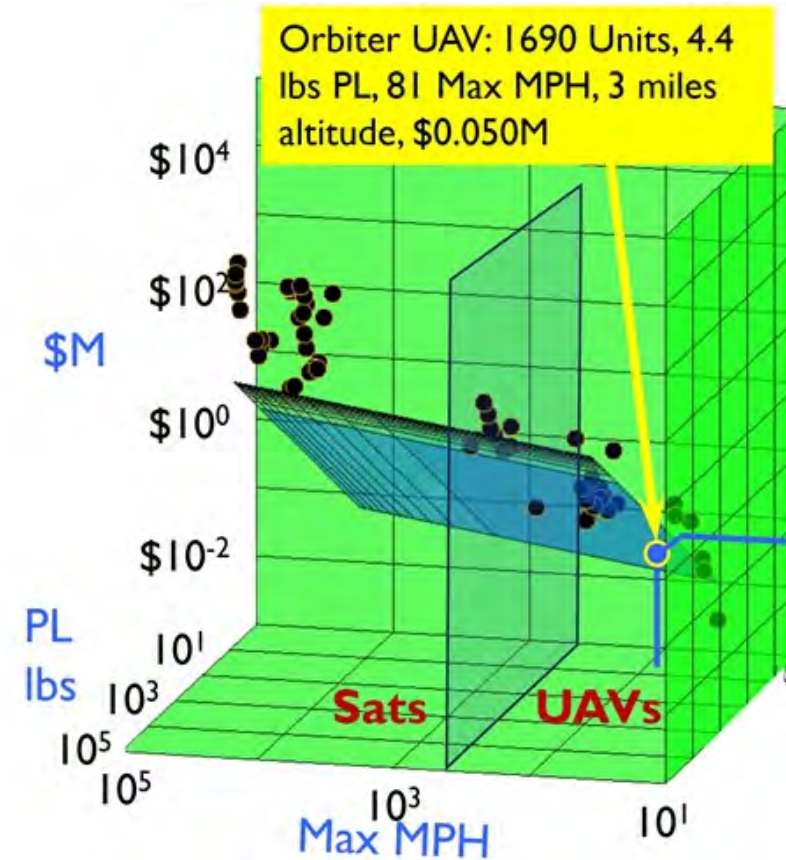
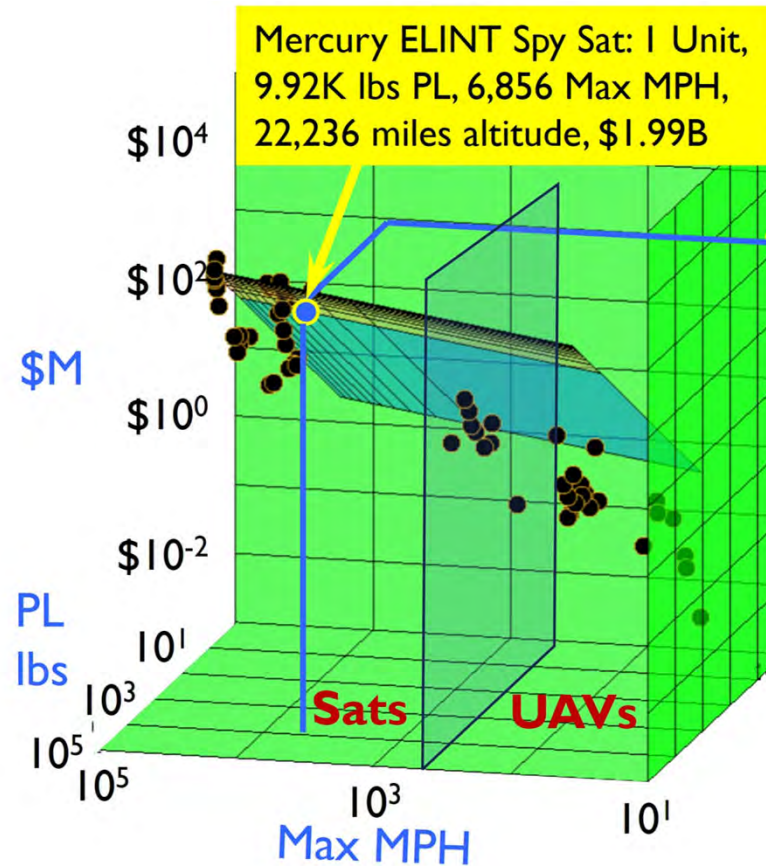
The market minimum suggests that if you can build one good unit, you'll have a baseline expectation set by the Minimum Demand



UAVs and Sats Have The Same Value Proposition



Buyers pay more for Payload, Miles per Hour, and Altitude, and pay less for each succeeding unit (that is they have a Product Demand Curve)

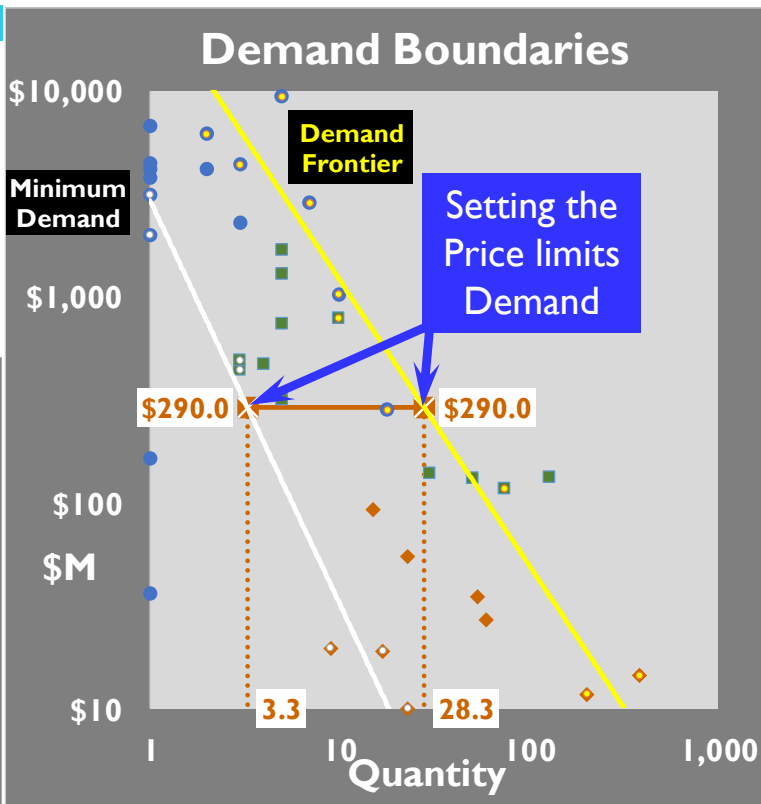
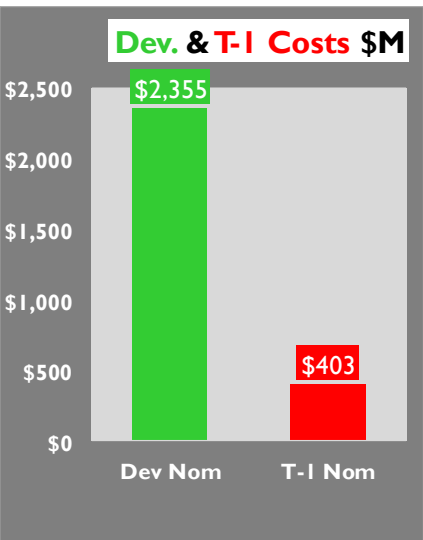


Successful programs balance Cost, Value, and Demand

An Interactive Estimator Helps Bound The Problem

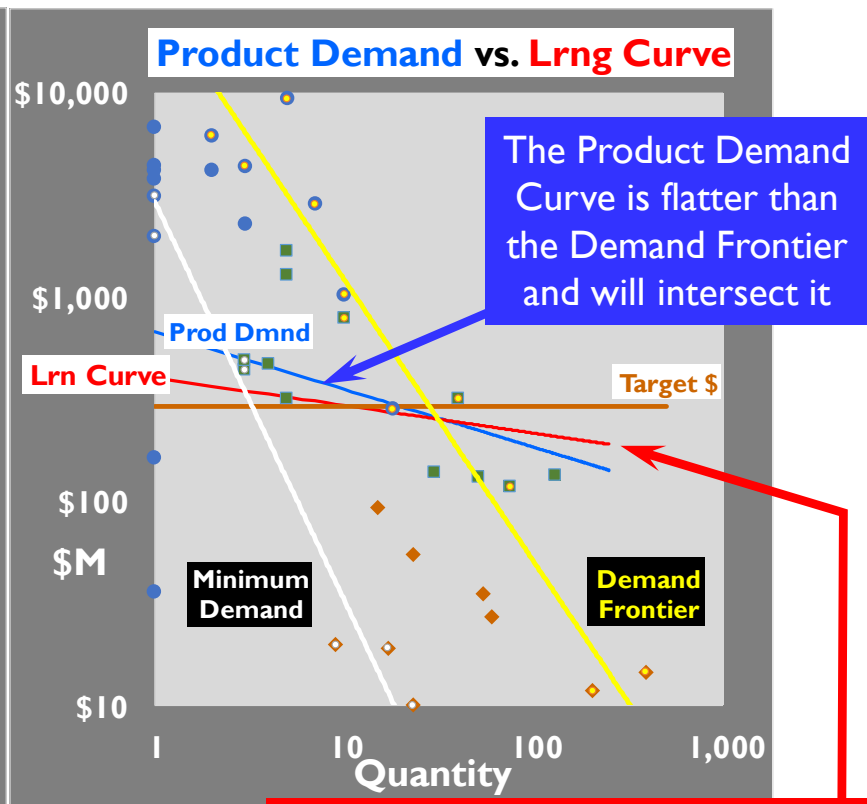


Feature	Qty	Units
Altitude	500	Miles
Payload	4,000	lbs
Max Speed	17,000	MPH
Quantity	20	Units
Empty Wt	32,000	lbs
Lrn Curve	91.0	%



New Product Estimator

$$\$M = 0.0291 * PL \text{ lb}^{0.766} * \text{Max MPH}^{0.301} * \text{Alt Miles}^{0.169} * \text{Qty}^{-0.283}$$



2022\$

\$290.0

If your Learning Curve is > 82.4%, it will intersect Product Demand

Every addition to the market changes it; analysts should follow its movement

Summary



- All Markets work in 4D according to the Law of Value and Demand
 - Features drive Value
 - Value sets Price
 - Price limits quantity sold
 - Quantity sold is a feature
- We can combine any number of markets into a single view
 - Each market slice is their GDP
 - Markets evolve over time
 - Ever-evolving Reconnaissance has been part of GDP since the beginning of humanity
- Viable products balance Cost, Value, and Demand

