



# Rob Hodgkinson, Director FD Pty Ltd



First Derivatives plc

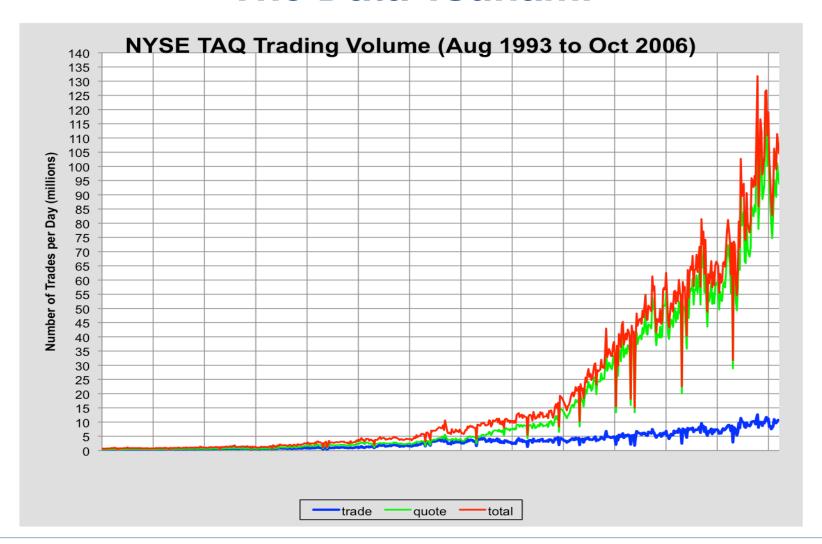
Combining Domain Knowledge and Technical Expertise







## The Data Tsunami

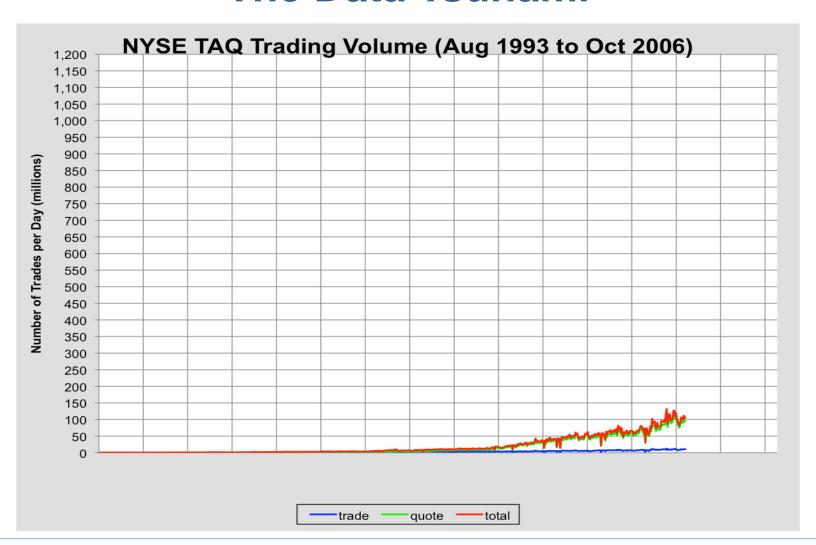








## The Data Tsunami





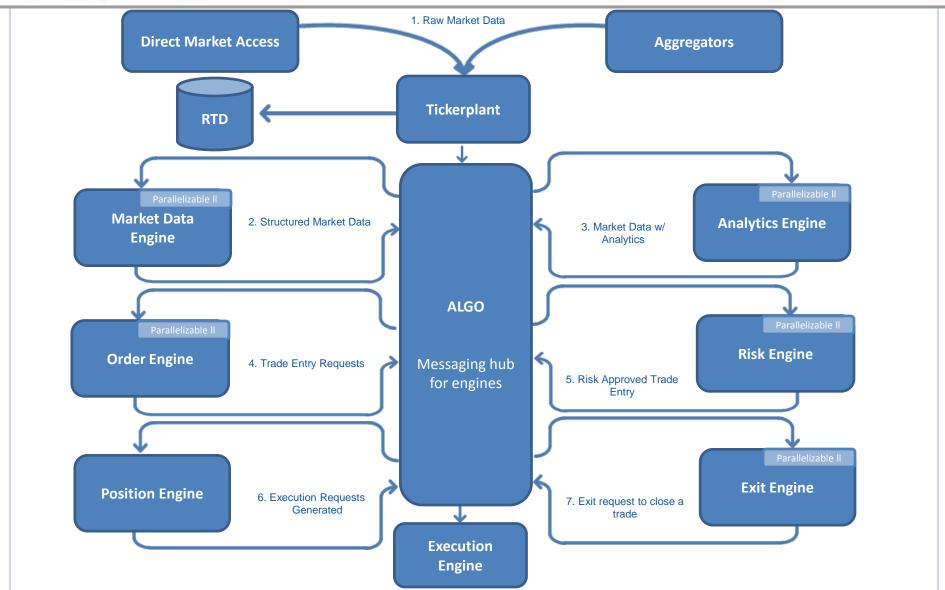


## The Data Tsunami











# Technology requirements...

### Exchange feeds ... (exchanges direct, data vendors ...)

✓ Becoming more commoditised

### **Technology Solutions ...**

- ✓ High performance
- √ Table based solutions (moving from proprietary solutions)
- ✓ Fast, in memory, column splayed tables
- ✓ Scalable platform (add more servers to combat volumes)
- √ 64 bit architectures, massive memory (entire day in memory at once)
- ✓ Powerful languages, shorter code, shorter time to market a new algorithm
- ✓ Overall latency turnaround <40 microseconds</p>

### **Execution Engines**

- ✓ Becoming more commoditised (Fix)
- ✓ Smart Order Routing required (move venue selection to order routing box)
- ✓ Colocation