

Sondergaard-McNutt Template for Critical Time Line [CTL] Analysis

Embed KPIs into the CTL
**Use share price and the pattern of
observations**

For each game dimension, defined by geography and product (technology, service or innovation) there will be an observed CTL

$$CTL_{i.\text{across } n \text{ games}}$$

The Objective is to find a correlation between

ΣCTL_i and share price or KPI performance

Step 1: Outline Game Dimension

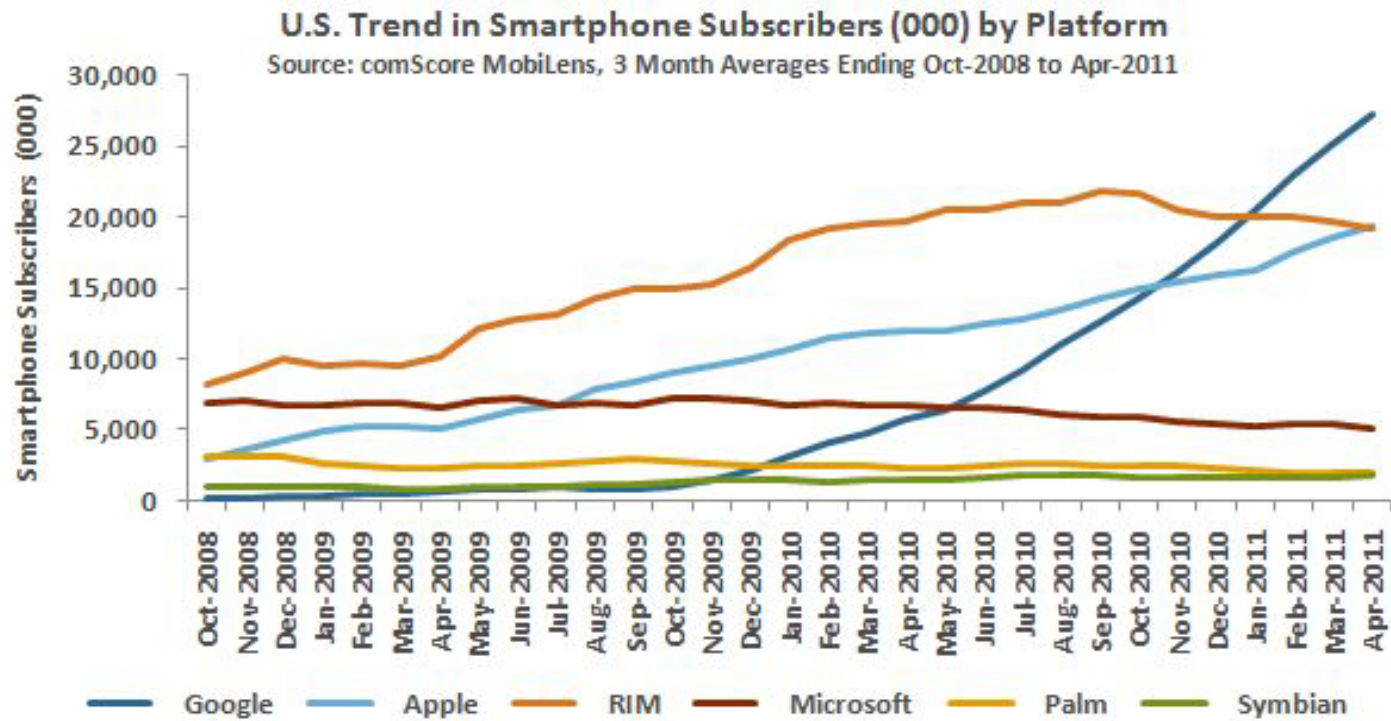
Apple Inc and ecosystems

- *Smartphone market-as-a-game
 - * Begins 2007 launch of Apple iPhone
- *Who are in the sum of competitors?
 - * Signals and pattern of reaction to find near-rival
- *Frozen markets and spherical competitors
 - * Technology and time-dependent consumers

Game is evolving: Play to win or play not to lose?.



Step 2: Entropy & Sum of Competitors



Step 3: Game Dimension Analysis & Assumptions

Analysis:

- *Cournot until January 2007
 - * Output signals on design specifications
- *Bertrand game January until June 2007
 - * price signals between Apple and BB
- *Cournot game June 2007 onwards
 - * Output signals on design specifications

Sequence: CCBCCC

Game is changing every time players level out on specs.

Assumptions:

- ✓ Apple created inelastic demand by advertising in brand



Step 4: July 2011: Financial and KPIs

current data:
check *yahoofinance*

- 2011 6m sales – **\$51.4b**
- 6m sales growth – **76%**
- 2011 6m Net Income **\$11.9b**
- 6m Net Income growth - **86%**
- 6m 2011 eps - **\$12.83**



5 July 2011
Apple, Inc.
Share Price
\$348.00

*Share Price has risen 500%
in the past 5 years.*



Step 5: Embed the Share Price
Pattern into the Signals Pattern

Embed KPIs into the CTL

Step 6: Observe Critical Timeline & Signals

