Strategic Options at Nokia

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Nokia Faces A Major Transition

Performance

Selling products

Selling (parts of) interconnected systems

Time
**Selling Products**

- Customers who care about products “on their own terms”: is this the right product for me?

- Build the “best” product
  - Best designed
  - Lowest cost
  - Most reliable

**Selling Interconnected Systems**

- Customers who care about the total system experience: will this connect with the rest of my world?

- Control the architecture
  Or

- Influence the architecture and build the best products within it
Such a transition raises both organizational and strategic questions.

- What strategy should we pursue?
- How do we execute it?

Performance vs. Time Chart:
Our Agenda:
Thinking through Nokia’s strategic options

- Mapping the terrain
- Competitive views and likely actions
- Nokia’s options
Will the market tip?
Tipping dynamics differ with the strength of network effects.

- **Products with extensive N.effects**
- **Products with “threshold” network effects**
- **Conventional product**

*Graph showing the value to the consumer against the actual (or anticipated) size of the installed base.*
With no network effects, market share tracks consumer preferences

Probability the next consumer chooses to buy A

30% of the population Likes cornflakes

Cornflakes gets a 30% share
Tipping with moderate network effects

Probability the next consumer chooses to buy from Firm A

Firm A’s actual or anticipated share of installed base
Tipping with large network effects

Probability the next player chooses to buy from Firm A

Firm A’s (actual or projected) share of market
The world seen from Redmond, WA (1)
The world seen from Redmond, WA (2)
Exploring Nokia’s Options
Nokia’s options: Key Questions

- Competing as a vertically integrated firm in a systems business
  - How costly will it be to build every element of the offering?
  - How aggressively does Nokia need to play?
  - Will other players embrace MS/Q standards?

- Competing as a set of “horizontal” firms:
  - How many businesses to play in?
  - How much control to retain over IP?
    - Software stack & OS?
    - Chipsets?
What has to be true for the fully vertically integrated firm to succeed?

- Either Nokia must be able to drive competition – e.g. the Chinese, Motorola, Siemens, Microsoft to a relatively small share
  - Can Nokia gain this much share this fast?
  - How will competition react?

- Or multiple systems must be able to coexist
  - Will Nokia be able to set the architectural agenda competing against a MS/Q block? Or will competitors remain fragmented: go to eg Linux/Palm, Symbian etc
  - If not, can Nokia continue to successfully differentiate itself?
Horizontalizing the technology:
The key strategic decision

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<th>Control is:</th>
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<td>Private</td>
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Software & Chipsets

Those adopting software must use proprietary chipset: no integrated offering: who do others buy chipsets from and which s.w. will those sets be optimized for?

Encourages others to build on Nokia IP: keep control of architecture Value capture through superior devices, systems offering enabled by superior knowledge of architecture, low costs, scale & execution

Chipset design proprietary

Will players who buy Qualcomm chipsets port Nokia software over MS? Must spinout software Co: but standalone software company may not be credible: Palmsource?

Chipset design Licensed widely

Those adopting chipset must use Microsoft, Nokia, Linux or Palm: Why do third parties choose Nokia over others? Will MS let the market tip to Nokia?

Software Mostly proprietary (Nokia APIs, Nokia control)
A Decision Tree

Nokia and its ecosystem win, value preserved for devices, Microsoft <10%, Qualcomm <10%, operators aligned

Nokia leads, market split across standards, some margin foregone for higher share

Nokia OK, market split across standards

Nokia marginalized playing catch up, Microsoft wins in OS and apps, Qualcomm wins in chipsets
One Vision:

Market Share

Value Share

Service Provision
Network Operation
Applications
UI
Operating Systems
Device Design
Device Manufacture
Chipset Design
Chipset Manufacture

T-Mobile
Orange
NTT DoCoMo
Vodafone

Series 60-90
Series 60-90
Symbian
Symbian

Nokia
Motorola
Siemens
Samsung
Sony Ericsson
EMS Players

Motorola
Infineon

TI
I-250 and beyond

Clones and Asians
Microsoft
Qualcomm