NFC Momentum: From Killer Apps to Communities of Interest

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NFC has achieved critical mass ...
... now what?
What Critical Mass Means

- Growing momentum
- Greater acceptance
- Global interoperability
- The force of inevitability
The Proof
Requirements for NFC Success

1. Specifications and Compliance
2. Device Availability
3. A Vibrant Ecosystem
4. Commercial Solutions ("Killer Apps")
5. Consumer Demand
NFC Forum Mission

To advance the use of NFC technology by:

- Developing standards-based specifications that ensure interoperability
- Encouraging the development of products using NFC Forum specifications
- Educating the market globally about NFC technology
- Ensuring that products claiming NFC capabilities comply with NFC Forum specifications
- Promoting the NFC Forum N-Mark
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17 NFC Forum specifications approved and adopted spanning core functions:

- Data exchange formats
- Tag types
- Record type definition
- Protocols
- Reference applications
Compliance Program Components

- Certification Program
- Certified Device
- Plugfests
- Interoperability Program

Compliance Program
Enhancing Compliance

The NFC Forum is:

- Preparing to launch Wave 2 of the Certification Program
- Exploring joint certification efforts with other organizations (EMVCo)
- Expanding the number and frequency of Plugfests around the world
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Available in the market…

Acer Cloud S500
Acer Liquid Cloud S500
Acer E320 Liquid Express
BlackBerry Bold 9790
BlackBerry Bold 9900/9930
Blackberry Curve 9350/60/70
BlackBerry Curve 9380
Cmii 1/3
Casio DT-X8
Casio Ruggedized IT-800RGC 35
Fujitsu Arrows μ F-07D
Google Galaxy Nexus
Google Nexus S
HTC Desire C
HTC Droid Incredible 4GLTE
HTC Evo 4GLTE
HTC Incredible
HTC One X
More NFC Phones Available Now

- HTC Ruby / Amaze
- Huawei Sonic / Turkcell T20
- Lenovo K800
- LG Optimus 3D Max / 3D Cube
- LG Optimus Elite
- LG Optimus L5 / L7
- LG Optimus LTE / 2
- LG Optimus Net
- LG Optimus Vu
- LG T530 / Ego
- LG Viper
- Mobiwire Cosyphone
- Motorola Droid Razr
- Motorola MC75A HF
- Motorola Photon Q 4G LTE
- Nokia 603
- Nokia 700
- Nokia 701
More NFC Phones Available Now

Nokia 801T
Nokia 808
Nokia C7 / Astound
Nokia N9
Nokia Oro
Orange San Diego
Pantech Sky Vega LTE
Pantech Sky Vega Racer
Porsche Design P’9981
Prada by LG 3.0
Samsung Galaxy Mini 2
Samsung Galaxy Note
Samsung Galaxy S Advance
Samsung Galaxy S Blaze 4G
Samsung GALAXY S II
Samsung GALAXY S III
Samsung S5230/S5260
Samsung SHW-A170K
More NFC Phones Available Now

Samsung Wave 578
Samsung Wave M / Y
Sonim XP3300 Core NFC
Sonim XP and NFC
Sony Xperia S/P/Ion/Sola
Turkcell MaxiPRO5
Turkcell T11 Maxiphone
Xolo X900
ZTE Turkcell MaxiPLUS5

And more being released…
NFC Tablets

A fast-moving new segment, with several models recently announced and put on the market with more rumored to be in the works:

- The Sharp RW-T110 NFC Tablet announced in March expands on the NFC capabilities of the RW-T107 Tablet from 2011.
- TazPad from TazTag aimed at retail was launched in France.
- Google Nexus 7 was announced in June 2012, and is now available in the US, UK, France, Germany, Spain, Canada, and Australia.
- Samsung Galaxy Note II phone/tablet with NFC – release and launch dates coming soon. Samsung also is rumored to be prepping a new tablet with NFC functionality.
A fast-moving segment, there are many NFC enabled tablets on the market now, with more rumored to be coming from Samsung, Asus, Lenovo, and more.

- Google Nexus 7
- Samsung Galaxy Note
- Sharp RW-T107/T110
- LG Optimus Vu
- Panasonic BizPad
- TazTag TazPad
- DLI 9000
- Asmaitha Sruta 7” Tablet
- Kuoziro FT701W
More NFC Devices

Examples of additional types of NFC devices, available now and on the way…

- Landis+Gyr
- Moneto: NFC microSD for the iPhone & Android
- NFC “Digital Gum Goods” by Razorfish
- Nintendo Wii U controllers
- Payment wristbands
- Smart Meters for utility companies
- Sony RC-S380 reader/writer
- ViVOtech NFC payment terminals
- Glidepoint NFC trackpad
- Revosys V5 interactive taxi terminal/tablet
- RhythmTrak Heart Monitor
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Ecosystem Development

- NFC Forum/WIMA Global Competition
- NFC Forum Plugfest events
- Alliances
- Industry events
- Speaking engagements
- Media outreach
- Membership recruitment
# Members – September 2012

## SPONSOR MEMBERS

- Barclaycard
- Broadcom
- Inside Secure
- Intel
- MasterCard
- NEC
- Nokia
- NTT Docomo
- NXP
- Renesas
- Samsung Electronics
- Sony
- STI
- Visa

## PRINCIPAL MEMBERS

- American Express
- AT&T
- CSR
- Canon
- DNP
- Google
- HP
- Infineon
- LG
- Marvell
- PayPal
- Qualcomm
- RIM
- Rogers
- Texas Instruments
- Yahoo! Japan
Momentum is Building

- **Berg Insight**
  - 100 million cell phones using NFC technology predicted to be sold this year alone

- **Deloitte**
  - In 2013 there may be as many as 300 million NFC smartphones, tablets and eReaders sold

- **Frost & Sullivan**
  - By 2015, NFC will be the most-used solution for mobile payment, enabling worldwide transactions totaling about $151.7 billion

- **Gartner Research**
  - 50% of smartphones will have NFC capability by 2015

- **Juniper Research**
  - By 2017, 1 in 4 US consumers will use NFC-enabled devices to pay for goods in-store

- **Yankee Group**
  - Global mobile transactions predicted to grow to more than $1 Trillion by 2015
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Mobile Payment is to NFC Adoption....

....as Spreadsheets were to PC Adoption
The Power of the Killer App

- A killer app can:
  - Transform a cutting-edge technology into a mainstream tool
  - Drive momentum
  - Create an air of inevitability

But....
No Killer App Can Do it Alone

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<th>PC Adoption</th>
<th>NFC Adoption</th>
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<td>Email/Internet</td>
<td>Peer-to-Peer Applications</td>
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Consumer Non-Payment Opportunities

- Advertising
- Consumer Electronics
- Gaming
- Healthcare and wellness
- Hospitality
- Retail (POS tag reading)
- Social media

...and many more
Pairing NFC Devices
- Home computer components
- In-car devices
- Home entertainment systems
- Headsets and handsets
- Cameras and printers / digital frames

Connectivity
- Quick and secure Bluetooth and Wi-Fi setup
- Fast data transfer
- Audio handover

Information Gathering
- Read product history from smart tag to NFC phone
Business Non-Payment Opportunities

• Access control
• Distribution
• Healthcare
• Mobile workers
• Security
• Utility metering
• Workforce management
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Easy, intuitive use …

... then adoption and preference

... then greater demand
NFC Provides a Unique Bridge

Virtual World ↔ Physical World
Consumers ↔ Retailers
Consumers ↔ Marketers
Consumers ↔ Manufacturers
NFC Users ↔ NFC Users

This will weave NFC into the fabric of people’s lives and drive greater use and demand.
Accelerating the Momentum
Building Communities of Interest

Increase focus on:

- Promoting best practices
- Encouraging vertical industry solutions
- Exploring common interests
- Enabling opportunities for shared solutions
Vertical SIGs

- 2-way communication makes this work
  - Obtain business requirements for possible specifications and certification implications
  - Jointly work on education and guidelines for each industry (e.g., white papers, demos, best practices, how-to guides, etc.)
  - Look at NFC from the consumer perspective and make sure the value proposition is there

“First Generation NFC”
Requirements for NFC Success

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Thank you!

and

Join us!