

# NEXIT MOBILE INSIGHTS



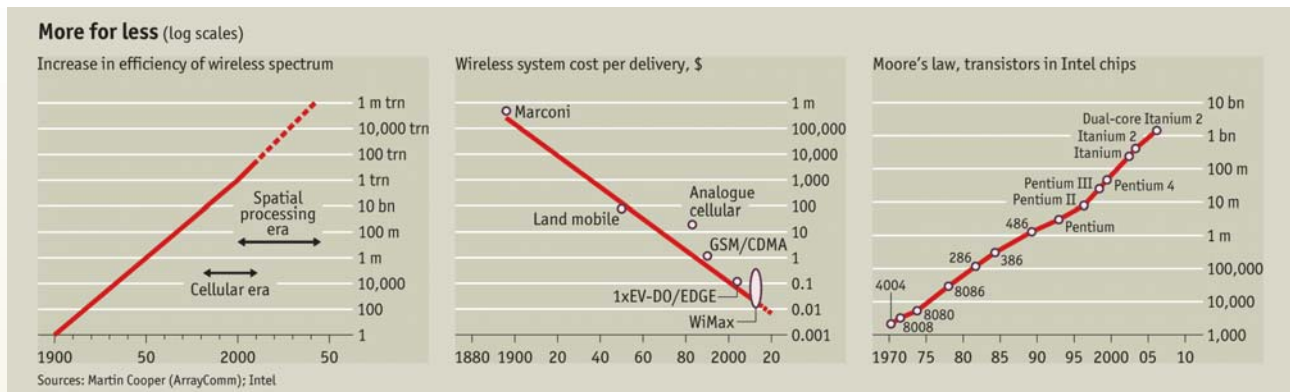
The electronic revolution continues to surge us forward. Moore's Law forecasted the doubling of the number of transistors on a chip at the same cost every 18-24 months, which roughly translates to the doubling of the processing power for the same cost every 18-24 months. This has held true, primarily for digital circuits, leading to the explosive growth of computing.

Wireless radios consist largely of analog components, which have been more difficult to implement in integrated circuits (ICs). Strong investment and development efforts over the past decade, have resulted in increasingly complex devices (like

controls for your TV or garage door. Security and monitoring systems, now driven by wireless sensors or cameras, avoid the huge expense of cabling windows, doors, rooms, buildings and campuses. Granted that cable replacement applications are not always innovative or particularly exciting – but they do represent a very large business opportunity!

Some of the newer innovations using wireless technologies include RFID (Radio Frequency Identification), WSN (Wireless Sensor Networks) and NFC (Near Field Communication), to introduce a few new TFLAs (Three and Four Letter Acronyms).

## LESS WIRES **More opportunities**



Wireless technology is advancing by leaps and bounds – end there is much more to come. Picture courtesy of The Economist

radios) now can be implemented cost effectively and reliably on ICs. The result? A cost-effective blend of computing and communications capabilities, at low cost, into very small and efficient packages.

This computing-communication combination inherently creates new business opportunities by making existing products cheaper and more efficient, and by enabling new products and services. Familiar examples of where cables are being replaced by wireless transmissions include WiFi, wireless networking between computers or even such mundane tasks as remote

### RFID is everywhere

RFID has already made its way into different kinds of supply chain and asset management applications, and it has become a defined market by itself. Each one of us has come in contact with a RFID tag at some point in the last few years, whether we recognized it or not. RFID tags are found on upscale consumer goods (for tracking and theft prevention); on many passports; in payment cards for trains and highway tolls; on library books; even implanted in pets or people for ID purposes, to name just a few. >>

**Collecting data**

Wireless Sensor Networks consists of autonomous sensor units that can communicate with each other, or at minimum relay communications forward to a gateway or computer. They are used to monitor, track or control things in many different applications. They play a key role in agriculture by monitoring temperature, irrigation, and other important parameters. In construction, WSNs monitor the structural health of buildings or bridges, or seismic activity that might affect these structures. WSNs even can be deployed to monitor movement, light, sound, and vibration for various civil and military applications. WSNs have made it possible, at relatively low cost, to monitor and hence optimize processes, ultimately resulting in economic gain.

**Contactless transactions**

NFC is a short-range wireless technology mainly targeted at extending the use of mobile phones in new applications. Converting the average consumer's mobile phone into an electronic wallet is one goal high on the agenda of companies like Visa, with NFC at its core. When the phone comes in close proximity to a specialized NFC reader, and following the entry of a PIN or other authorization, a payment or transaction is initiated, verified and cleared. Or consider NFC for other uses, such as the secure entry "key" to buildings and offices, or to start your car.

The business opportunities for RFID, WSN and NFC are of course not restricted to the actual devices themselves, but to the complete systems and services they enable. The above is just a glimpse of some of the exciting opportunities ahead in the wireless world.

**When everything connects**



For those who want to read a bit more on the state of the wireless revolution, we found the special report on Wireless in The Economist issue April 28th, 2007 very interesting and thought provoking. See full article at <http://www.economist.com/printedition/index.cfm?d=20070428> ■

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**Nexit Team**

As a global, but tightly technology and market focused venture capital firm, Nexit has its finger on the pulse of innovation in mobile and wireless. Investments are made primarily in Nordic and US based companies, with products and services for a global market.

Using its relevant operational experience, the Nexit team supports the growth and development of the portfolio companies with a pragmatic, hands-on approach. With knowledge and contacts across the wireless ecosystem, the Nexit team opens up and creates opportunities for its portfolio companies.

Nexit's transatlantic bridge is a significant value-add, linking together the technology hotbeds in Nordic and Silicon Valley. For Nordic companies, Nexit's network of business contacts in Silicon Valley provides a bridge to markets, partners, experienced management and investors at an early stage. US-based ventures get an opportunity to profit from Nordic's market-leading wireless network infrastructure, technology, insight, and advanced user base.

For further information, please visit [www.nexitventures.com](http://www.nexitventures.com).

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*The One-Button iPhone (Courtesy Apple)*

**“Keep it Simple”...uh, maybe not.... make that “Keep it Usable”;**

There is no such thing as the “right amount of features” for a mobile phone. Faced with many choices, consumers invariably pick a phone with more features than the next one, even though many such features will often stay unused: Bluetooth connections, mobile email, digital zooms, folders for media cataloguing/archiving., etc. Therefore, “feature creep” is inevitable. To make things worse, a majority of product returns are then prompted by consumers not being able to figure out how to use the features they were attracted to, even though they spend an average of 20 minutes trying the product before giving it up<sup>1</sup>.

Winning handset makers will be those who make their products easy to use and manage to hide from human beings the complexity that they are so busy cramming their products with. It is all about making phones much better at interacting with the sensorial capabilities of human users.

On the output side, presenting visual and audible information to users in the most optimized ways requires hugely researched and cleverly written software,

TRENDS IN

# Mobile Handsets

*Patrice Peyret  
Venture Partner, Nexit Ventures*

which most handset vendors are unable to produce. Breakthroughs are likely to come from either large computer software makers with deep resources, or from highly specialized vendors with deep usability and even anthropology expertise.

On the input side, most innovations will be “3D-based” in an unusual way. Amazingly, we are just starting to acknowledge that user input should not be limited to 1-D buttons and scroll-wheels laid out on 2-D surfaces: human beings have multiple fingers that they can use simultaneously; they can pick up a phone, turn it around, bring it to their ear, and their intentions are often expressed by the way they move their hands or fingers even before they touch the phone. Multi-dimensional input detection is therefore essential to understanding a user. This is where Apple’s iPhone shines, with multi-touch capabilities, surface gestures, device orientation and face proximity detection. Expect also smaller innovators to leverage the “3D” nature of human beings even further, bringing interactions that will initially seem “magic”, until everyone takes them for granted. A great definition of the ultimate success for entrepreneurs.

**“Over The Air” versus “Side loading”:  
a battle for content downloads into  
phones is brewing.**

The respective merits of Wireless Operators on the one hand and of Internet Portals on the other hands are not in the balance. Instead, this will be decided by the end users themselves, almost entirely motivated by the “convenience/price” ratio.

Here is your typical user experience when downloading a piece of music or video over the air into your phone:

- First the “discovery” phase of browsing through hopefully large catalogs of content is seriously limited, to the point of being painful, by a tiny screen and a limited (if any) keyboard;

- Second, the cost of bandwidth over the cellular network airwaves far exceeds that of broadband Internet over wires (cable or ADSL);
- Third, once the content is in your phone, you had better synchronize it with a PC anyway to back it up in case you lose the phone, or switch to a new phone soon;



By contrast, “side loading”, i.e. the download of digital music, pictures or videos into a mobile phone through USB, WiFi, or BlueTooth via a local PC or a Set Top Box:

- Provides you with a bigger screen and better user interface to search for, browse, and try content;
- Costs you less, as content itself is priced lower (than in Wireless Carriers catalogs) and the transmission costs are less;
- Ends up automatically copied either on a remote server account or on your local PC or Set Top Box in the process;

Starting from a favorable convenience/price ratio, start-ups and major players alike are working hard at increasing even further the convenience numerator through more seamless and quasi spontaneous connections between phones and content servers, interrupt & resume protocols, automated library backups, etc. Expect also some initiatives, not necessarily targeting the price denominator, but addressing the adjacent field of consumer billing, where Wireless Operators currently have an edge. ■

<sup>1</sup> Source: study by Elke den Ouden, of Philips Electronics

# THE NEXIT PORTFOLIO



[www.bitfone.com](http://www.bitfone.com)

Bitfone provides innovative software solutions for customer care automation and mobile device management to wireless operators and handset providers. Bitfone's products improve the usability of mobile devices by diagnosing and repairing software problems and by delivering updates and configuration settings over the air. Bitfone is headquartered in California, with offices in Canada, China, Korea and the UK.



HP (NYSE: HPQ) acquired Bitfone in February 2007.



[www.conformiq.com](http://www.conformiq.com)

Conformiq Test Generator is a solution for dynamic model-based test generation and automatic test execution. The technology is based on test cases generated from high-level system models enabling automated, thorough and cost-effective testing of complex software systems. In addition to quality improvements and increased test case maintainability, this also results in direct savings in development costs. A special version has been released for Symbian environments.

Other investors: erVentures.



[www.ecrio.com](http://www.ecrio.com)

Headquartered in Cupertino, California, Ecrio is the leading vendor of next generation communication software for mobile phones. Ecrio provides interoperable and standards-compliant software to Mobile Phone Manufacturers and Mobile Operators. Ecrio offers mainly client solutions for IMPS, IMS compliant and SIP based Push to Talk, Push to Show and Push to VoiceMail modules. The company has also introduced its MoBeam solution for mobile barcode applications. Ecrio's customers include mobile industry leaders such as DoCoMo, Visa, NEC and Panasonic.

Other investors: CIR Ventures, Pantheon, Mitsubishi UFJ Capital, DoCoMo, Visa and Aplix.



[www.ekahau.com](http://www.ekahau.com)

Ekahau, Inc. is the industry leader in providing Wi-Fi based RTLS (Real Time Location System) solutions. Ekahau's customers, including several Fortune 500 companies worldwide, are realizing the benefits of Wi-Fi-based location services. Ekahau's distribution partners include companies like McKesson, 3M, Siemens, Nortel and Fluke who develop and market wireless applications to the healthcare, enterprise, industrial and other markets. Ekahau is a US-based corporation, with its headquarters located in Saratoga, CA, and other offices in Reston, VA; Helsinki, Finland and Hong Kong, China.

Other investors: Sampo, 3M Corporation and Finnish Industry Investment.



[www.exidio.com](http://www.exidio.com)

Exidio Oy is dedicated to combining extensive, first-hand treasury expertise with enabling technologies to provide treasury service tools. Trezone is a web-based system that opens up treasury bottlenecks and ensures automatic information flow throughout corporations. It widens the reach of treasury management to give tools to internal customers, such as controllers and subsidiaries, with substantial cost savings and improved forecasting services.

Other investors: CapMan and Metso Corporation.



[www.telcogames.com](http://www.telcogames.com)

Telcogames is a publisher, developer and distributor of mobile games. The company targets high end smart phones, and publishes games developed in its own studios as well as Java games licensed from developers and publishers around the world. The company is headquartered in London and has other offices in Liverpool, Paris, Seoul, Norrkoping, Tokyo, Helsinki, Düsseldorf, Tel Aviv and Taipei. The development studio Fathammer is in Finland and Magic Productions in France. Fathammer was merged with Telcogames in July 2006.

Other investors: 3i and Capital Fund.



FUTUREMARK CORPORATION

[www.futuremark.com](http://www.futuremark.com)

Futuremark is known around the world for its PC and smart phone benchmark products and value-added services. The 3Dmark benchmark is used by more than 250 computer magazines and major PC hardware manufacturers (including AMD, ATI, Intel, nVidia) and recognized as the world de-facto standard. SPMark has become the industry's most widely used benchmark for Symbian OS based smart phones and is rapidly becoming the de facto performance measurement standard for mobile platforms.

Other investors: Conventum Oyj.



[www.hantro.com](http://www.hantro.com)

Hantro is the leading provider of hardware and software based MPEG4, H.263, H.264 and VC-1 video solutions specifically tailored for handheld devices. The product portfolio also includes video applications for video capturing, playback, messaging, streaming and telephony. By combining these offerings, Hantro is uniquely positioned to provide complete solutions for silicon providers, device manufacturers and network operators.



On2 Technologies, Inc. (AMEX:ONT) has signed a definitive agreement to purchase Hantro Products in May 2007. The acquisition by share exchange is expected to close before mid-August 2007.

# THE NEXIT PORTFOLIO



[www.hybrid.fi](http://www.hybrid.fi)

Hybrid develops graphics technology solutions for consumer devices and is the leader in embedded graphics standards. The new 3D API's such as OpenGL ES and M3G are bringing advanced visual capabilities enabling even more compelling games, entertainment and other content. Hybrid's clients include Acrodea, Bitboys, Ericsson, Mtekvision, Samsung, Symbian, ACT Software, Aplix, Esmertec, Pathway, Philips, Renesas, Tao, TTPcom and Nokia.



Nvidia Corporation (Nasdaq: NVDA) acquired Hybrid Graphics on March 2006.



[www.mobile365.com](http://www.mobile365.com)

Mobile 365 is the global leader in the delivery, billing, and settlement of mobile messaging services delivering reliably messages, premium content, and value-added services for the leading mobile operators, content providers, brands, and media companies. Mobile 365 can reach 700 mobile phone networks worldwide and has over 250 bi-directional direct operator links; it delivers over 3 billion SMS, MMS, WAP and IM messages per month.



Mobile365 was acquired by Sybase Inc. (NYSE: SY) in November 2006.



[www.skypilot.com](http://www.skypilot.com)

SkyPilot Networks is the leading provider of carrier-class wireless mesh solutions that enable service providers, municipalities, and public safety agencies to rapidly deploy cost-effective broadband access, voice over IP, Wi-Fi access, video surveillance, and other wireless applications. The SkyPilot solution utilizes a patent-pending synchronous mesh architecture, which results in a highly scalable, reliable mesh network and dramatically reduces equipment and operating costs. SkyPilot has proven scalability and reliability with over 15,000 units shipped to more than 200 customers in 40 countries.

Other investors: Mobius Venture Capital, Invesco Private Capital, AOL Time Warner Ventures, Softbank Asia, Selby Venture Partners, and Palo Alto Investors.



[www.thetamicro.com](http://www.thetamicro.com)

Theta is a fabless RF semiconductor company focusing on the next generation of cost-effective multi-band and multi-mode wireless systems. Its products and services will facilitate cost-effective, high-performance Wi-Fi and WiMAX implementations for customers worldwide. Theta is deploying its unique design IP and specialized local knowledge of the diverse requirements of US and European markets, to provide products for emerging volume wireless applications.

Other investors include: Horizon Ventures, Telos Venture Partners, NBG Technology Fund, Cadence Design Systems, and Band of Angels.

## US vs. EU Exits

The success of a Venture Capital fund is highly dependent on its ability to create high valuation exits. A recent study (by Hege et al, 2006), based on 508 exits of US and EU based VC funded companies found that:

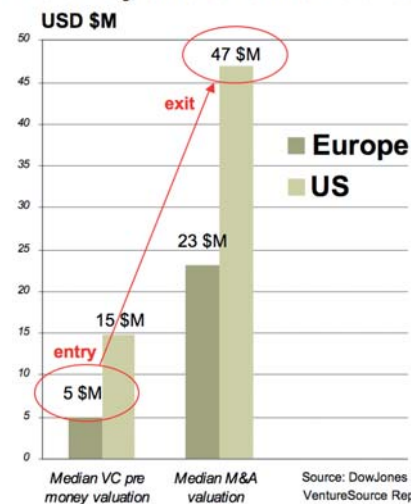
- US based companies generally generate higher returns to the investors than their EU based counter parts
- EU IPO exits yield returns similar to those in the US!
- The median valuations in M&A transactions are three times higher in the US compared to those in the EU.

One consideration for the higher US valuations, as well as higher number of transactions in M&A exits is that over 60 percent of the market capitalization for publicly traded technology companies world wide, resides in North America.

### The Nexit Experience

The Nexit Bridge offers a method of utilizing the arbitrage between the lower venture capital valuations in the Nordic region and higher M&A exit valuations in the US. To date Nexit Ventures has produced four trade sale exits, all of them have taken place in the US, with the P/S (Price per Sales ratio) varying from 4 to 11, and the one with the highest return multiple, being 10, was a Finnish company. In regards its current portfolio, Nexit has had discussions with potential acquirers from the US, Asia and Europe including Israel, as well as serious discussions regarding potential listings on public markets on all three continents. Having the network and industry insight to find buyers globally, is necessary for maximize returns.

VC entry and exit market 2005



### Europe / US arbitrage

1. Median pre money valuations are substantially lower in EU in all VC investment stages
2. Median M&A exit valuations are substantially higher in US

The Nexit Bridge offers a method of utilizing the arbitrage between the lower European venture capital valuations and the higher M&A exit valuations in the US.

## RECENT NEWS FROM NEXIT PORTFOLIO COMPANIES

### Nexit Ventures Exits Hantro; Shares Acquired by On2 Technologies

Nexit Ventures has agreed to sell its share of Hantro Products, a provider of video technology for mobile devices, to On2 Technologies, Inc. (AMEX:ONT), the world's premier developer of video compression technology.

On2 is a leading technology firm at the forefront of digital video compression. The company revolutionized digital media delivery with the creation of its advanced full-motion, full-screen On2 Video compression and streaming technologies. On2 Video codecs are widely used in the Internet, video-on-demand, VoIP, and mobile media markets. On2's software is used by such leading global companies as Adobe/Macromedia, AOL, Skype, XM Satellite Radio, Sony, CTTNet, VitalStream, and Tencent. Located in Tarrytown, NY, the company has R&D offices in Clifton Park, NY, and Cambridge, UK.

The acquisition accelerates the deployment of On2's technology on semiconductor chipsets for mobile and embedded devices. Hantro's technology has been implemented on more than 200 million devices to date and in mobile phones produced by five of the world's top six handset manufacturers. Hantro is recognized as the market leader in wireless video intellectual property as measured in revenue, number of shipped devices, and number of customers.

HP has completed its acquisition of Nexit portfolio company **Bitfone Corp.**, a mobile device management software company headquartered in Laguna Niguel, Calif. The acquisition is part of HP's strategy to grow its mobile enterprise business. It will strengthen HP's ability to accelerate customers' management of their mobility infrastructure in a reliable, secure and cost-effective way.

**Ecrio** announced that NTT DoCoMo has made a strategic investment in Ecrio. The funding will help Ecrio expand the breadth and depth of 3G mobile applications it delivers to the market, including VideoShare, Voice over IP (VoIP), IMPS, Push-to-Talk (PoC), and more.

**Ekahau** has been selected as Nortel's provider of location tracking solutions. Ekahau's turn-key Wi-Fi-based RTLS will enable Nortel to offer its customers in industries such as healthcare, education, retail, hospitality and others, a way to easily and cost-effectively deploy location-based applications while maximizing investment in their Wi-Fi networks

**Telcogames** has announced an exciting partnership with Sony Pictures to distribute eight of Sony's award-winning games. Included in the distribution deal is the game based on the movie blockbuster Spiderman 3.

**Futuremark** has reached a distribution agreement with Aplix Solutions to provide a wide range of benchmarking software and services to operators and handset manufacturers in Japan and Asia Pacific.

**SkyPilot** has surpassed 25,000 units shipped and has mesh networks deployed by more than 300 customers in 50 countries. This milestone occurred less than a year after SkyPilot reached its 10,000 unit goal, which took 18 months to achieve.

**Ekahau** Wi-Fi-based Real Time Location Systems (RTLS) technology has been selected by 3M. 3M will market the Ekahau RTLS solution to customers in a number of segments, including healthcare, transportation, government, oil and gas, and mining industries.

**Exidio's** workflow solution Trezone for cash flow forecasting has been chosen by Finland Post Corporation for global use. The Trezone Cash module enables Finland Post to gather real time cash forecasting and accuracy data from all its subsidiaries through an easy-to-use web browser interface.

**Telcogames** was listed the UK's Seventh fastest growing Digital Media business in the GP Bullhound's prestigious Media Momentum Top 100 recognizing Digital Media Companies across the UK who have shown a significant sales growth over a two-year period.

**Theta Microelectronics** research generates significant reductions in average power dissipation in wireless receivers, using circuits that only dissipate the minimum power needed. The research paper, Dynamic Power Dissipation in Wireless Receivers, describes several circuit techniques that make power savings of 50% or more possible.

**Ecrio** announced a strategic alliance with Visa International including an investment in Ecrio. Ecrio will expand its offerings in two growing areas of mobile commerce: Near Field Communications and MoBeam technology for 'beaming' barcodes from mobile handsets to laser point-of-sale terminals.

**Futuremark** has signed a representation agreement with Alliance Digital providing business development, sales, technical support, and representation services for Futuremark's mobile business customers in China.

**SkyPilot** introduced version 1.5 of the SkyControl™ mesh management system, which integrates seamlessly with the Google Earth™ mapping service. Combining these

two powerful tools provides more flexibility in designing, building and operating wireless mesh networks.

**Ekahau** has been selected by CVRD Inco, a premier mining company and the world's second largest producer of nickel, to provide underground asset tracking technology. With the real-time location capabilities, Inco employees will easily be able to find their equipment during shift changes and will gain better visibility into operations in order to improve productivity.

**Futuremark** went live today with the beta version of **YouGamers™**, the World's First Intelligent Gamer Website. www.YouGamers.com is a new destination site for PC gamers offering original game content, previews, gaming industry news, exclusive interviews, and full game reviews.

**Telcogames** scooped the award for Most Innovative Mobile Game in the annual Game Developer Conference. Competing against 15 other talented mobile game developers, SiL not only won the judges approval but also got the vote from the audience, culminating a double whammy award win.

**Ekahau** has been selected by The London Clinic, one of the UK's most established independent hospitals, to safeguard valuable medical equipment. A standard Wi-Fi network from Trapeze Networks will provide the backbone to run Ekahau's Real Time Tracking Solution (RTLS) to track high value medical equipment that is easily lost, or worse, stolen from the hospital's premises.

**Hantro** and Austriamicrosystems has announced a licensing agreement for Hantro's 7100 VC-1 video decoding technology on Austriamicrosystems' new Mobile Entertainment platform. Hantro's 7100 VC-1 decoder conforms with Microsoft's PlaysForSure V2.0 specification and delivers QCIF+ Windows Media Video decoding performance.

**Ecrio** announced that its IP Multi-Media Subsystem (IMS) client software has been selected for deployment by ASUSTeK. The software includes Instant Messaging (IM), VideoShare, Push-to-Talk over Cellular (PoC) and Voice over IP (VoIP) with Voice Call Continuity (VCC) solutions. The software will first be deployed in Taiwan on ASUS mobile phones.

**Ekahau** announced that Risto Siilasmaa, chairman and founder of F-Secure Corporation (HEX:FSC1V) and Nexit Ventures advisor, has been named chairman of Ekahau's Board of Directors. With more than 20 years of IT industry experience, Mr. Siilasmaa is one of the most respected high tech entrepreneurs in Europe. ■