



Mobile Computing Trends: Europe in 2008

Over the past year, online social networking has gained momentum thanks to companies like Facebook* and Linked-In,* while online video consumption has increased by 80 percent from September 2006 to April 2007 as movie-lovers downloaded more digital files than ever before¹. In 2008, people are likely to continue to access their favourite Web sites but increasingly they will want to do that ‘on-the-go’, as part of a dynamic, mobile lifestyle. Advancements in mobile computing will continue to support the increasing popularity of notebooks as people opt to make their PCs as mobile as they are.

Notebook PCs are expected to represent more than 50 percent of the value of PCs shipped worldwide during 2007, and more than half of the global volume by 2009.² For the first time during the third quarter of 2007 sales of notebook PCs overtook sales of desktop PCs in Europe, Middle East and Africa (EMEA)³. Notebook manufacturers are fuelling this demand by tailoring their products so they appeal to a wider audience - from fashionistas to students, from gamers to outdoor types. As a result, in 2008 notebooks will feature more options for customisation and technology innovation will deliver a more vivid multimedia experience, as well as wider connectivity options and improved energy-efficiency. As notebook innovation progresses, people’s computing experience will increasingly be defined by what they are doing, not where they are doing it.



Notebooks’ popularity on the rise: The demand for notebooks continues to rise, particularly in Europe, Middle East and Africa (EMEA) – a traditional stronghold for mobility adoption - where notebook shipments exceeded expectations in the third quarter of 2007, recording over 45 percent growth year-on-year.⁴ This trend is likely to continue as notebooks become faster, lighter, and more energy-efficient, and more people experience the benefits of mobile computing.

¹ Source: Jupiter Research, European Online Video Use, July 25, 2007: European online video use grew by 80 percent from September 2006 to April 2007.

² Source: IDC Worldwide Quarterly PC Tracker, September 2007.

³ Source: IDC EMEA, Quarterly PC Tracker, Q3 2007 Preliminary Results.

⁴ Source: IDC EMEA, Quarterly PC Tracker, Q3 2007 Preliminary Results.

- ***Did you know?** Notebooks powered by Intel® Centrino® processor technology have been enabling new levels of mobile computing since they entered the market in 2003 - offering consumers and business users high performance, energy efficiency and wireless connectivity in light and sleek designs.*

Faster, wider wireless connectivity: In 2008 and beyond, consumers and businesses will take advantage of faster, more widespread wireless connectivity for easier ways to access the Internet on-the-go. Most cities across Europe already offer a variety of wireless connectivity options through both chargeable and free Wi-Fi hotspots. The European mobile broadband market is expected to grow at an annual compound growth rate of 22.9 percent during the next five years to reach USD \$4.1 billion⁵.

- ***Did you know?** Intel has certified 90,000 Intel Centrino processor technology verified wireless hotspots worldwide. Intel's technology solutions support a variety of wireless standards – including Wi-Fi⁶, 3G⁷, and WiMAX⁸ – allowing people to achieve anytime, anywhere connectivity.*

Mobile WiMAX comes of age: WiMAX is the next giant step in wireless network evolution that mobilizes your Internet - miles from the nearest Wi-Fi hotspot. Mobile WiMAX blankets large areas - wide area networks (WANs), be they metropolitan, suburban or rural - with multi-megabit-per-second mobile broadband Internet access. WiMAX frees broadband from location, transforming it into personal mobile broadband that moves with you. As technology innovation advances in 2008 and demand for broadband is fuelled by high consumption of multimedia content like high-definition (HD) video, music and photos, WiMAX will gradually gather momentum and become more widespread.

- ***Did you know?** Intel has been very active in driving further development around WiMAX in Europe, and in 2008, Intel will announce the industry's first integrated Wi-Fi / WiMAX module solution codenamed Echo Peak - which will be offered as an option for notebooks based on next-generation Intel Centrino processor technology - codenamed Montevina - in 2008.*

Notebooks go Hollywood: European consumers are expected to spend €90 million on movie downloads by the end of 2010, a massive increase from less than €10 million in 2005.⁹ To meet HD demands, future Intel Centrino-based notebooks will be equipped with integrated HD-DVD*/Blu-ray* support and High Definition Multimedia Interface (HDMI) connectivity to HD TVs.

- ***Did you know?** Intel has been very active in will launch the next generation of Intel Centrino processor technology, codenamed Montevina, in late 2008. This next-generation technology will deliver considerable improvements in multimedia performance as well as integrated WiMAX for greater wireless broadband access.*

Wide screens for notebook PCs: In response to growing demand for HD entertainment, notebook PCs with wide-screen liquid crystal displays (LCD) are likely to become more popular and widespread. This will present particular benefits for gamers and anybody using graphics-

⁵ Berg Insight, Mobile Broadband adoption, June 28, 2007.

⁶ Wi-Fi (short for "wireless fidelity") is a term for certain types of wireless local area network (WLAN) that use specifications in the 802.11 family.

⁷ 3G refers to the third generation of developments in wireless technology, especially mobile communications.

⁸ WiMAX is defined as Worldwide Interoperability for Microwave Access. It allows greater high-speed access to the Internet over a much larger range (more than 30 miles) than its predecessors.

⁹ Source: Screen Digest, Broadband Digital Movies: European market assessment and forecasts, 2006.

intensive applications, who will enjoy a more immersive experience without the need for auxiliary display screens.

- ***Did you know?*** Gamers can enjoy the ultimate mobile gaming experience on with Intel Centrino-based notebooks, built on the Intel® Core™2 Extreme dual-core mobile processor – for lightning-fast responses and an immersive user experience.

Notebooks get smaller: In response to today's dynamic lifestyle requirements for improved portability we can expect notebooks to continue their trends towards thinner and lighter designs in 2008. An innovative range of Ultra-Mobile PCs (UMPC*) will lead the way for those in need of extreme portability. UMPCs will provide full PC capability in ultra light and small form factors for on-the-go business users.

- ***Did you know?*** In the first half of 2008, Intel will introduce a platform codenamed Menlow, which will deliver 10x lower power compared to the first UMPCs in the market.

Internet in your pocket - the advent of Mobile Internet Devices (MIDs): Fixed mobile convergence (FMC) will mature in 2008, enabling people to have one device offering high-quality voice and data capabilities for both personal and professional use. The increased adoption of FMC will lead to the emergence of MID, offering a full Internet experience that can fit in your pocket - enabling users to communicate, entertain, access information, and be productive while on the go. The worldwide FMC market is forecast to grow to USD\$46.3 billion by 2010, while the number of worldwide FMC subscribers is expected to increase from 188,000 in 2006 to 38.2 million in 2010.¹⁰

- ***Did you know?*** The upcoming Intel MID platform, codenamed Menlow (scheduled for launch in the first half of 2008) will deliver energy efficient performance and can fit in a motherboard the size of an average photograph (74mm x 143mm or approximately 3in. x 5in.).

Getting personal - customisation is the new king: Whether you are a gamer or fashionista, a speed demon or a film enthusiast, PC manufacturers offer an increasing range of notebooks to suit your usage model and personality in 2008. Notebooks are now available in a rainbow of colours and a variety of sizes – but the personalization does not stop there. For instance, Polish designer Luxis* (www.luxis.pl) customizes notebooks with luxurious designs of your choice and Dell* produces 'skins', enabling users to design their own notebook skins or choose from an existing extensive range.

- ***Did you know?*** You can find notebooks based on Intel Centrino processor technology in a variety of cutting-edge designs from PC manufacturers. For some examples see: <http://www.intel.com/personal/shopping-assistant/laptop-buying-tips.htm>.

About Intel

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¹⁰ Source: Infonetics Research, FMC Equipment, Phones, and Subscribers Market Outlook 10/07 report