

THE NEW ERA OF MOBILE INTELLIGENCE: THE CONVERGENCE OF MOBILE COMPUTING AND BUSINESS INTELLIGENCE

A REVOLUTION IN INFORMATION DISSEMINATION AND CONSUMPTION

Computing is entering its fifth generation with desktop Internet applications giving way to a new generation of Mobile Internet applications. The use of the Internet on smartphones and other mobile devices has changed the way people communicate and consume information, creating an exponential rise in the acceptance, adoption, and usage of data. With the ability to access information at any time, in any location, on a hand-held device, consumers can now make more and more decisions quickly and easily.

As consumers capitalize on the power of mobile devices, the same transformation is occurring in business. Business applications that were mildly successful when used on a desktop, have suddenly become highly effective and valuable when consumed on the go, whenever and wherever business is conducted.

Mobile business information access will likely eclipse desktop information access in the near future, leading to a new era of Mobile Intelligence. The convergence of business information and analytics with mobile technology is empowering business people in a way that was never possible, until now. Mobile Intelligence delivered through smartphones and other mobile devices has the potential to revolutionize business processes across every industry.

Mobile Computing: The 5th Major Technology Cycle of the Last Half Century

Since the 1960s, there have been four major cycles of computing: mainframes, mini computing, personal computing, and desktop computing. Mobile computing, the 5th technology cycle, is predicted to have a far greater impact and adoption than any of the previous cycles.

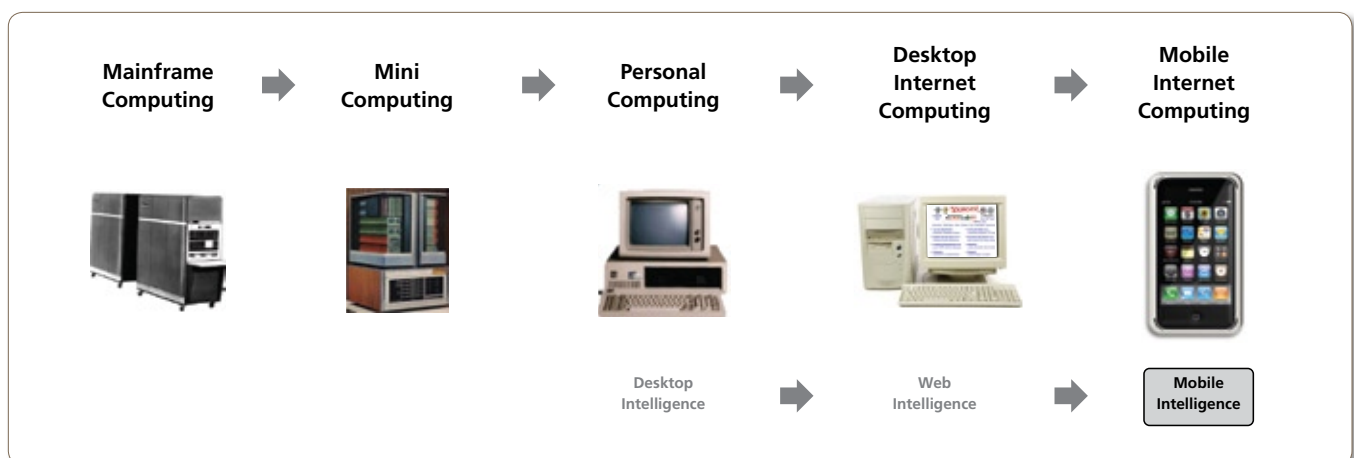


Figure 1. The Mobile Internet is the 5th major technology cycle of the last half century

Today's mobile computing is best epitomized by use of the Internet on smartphone devices, including the Apple iPhone, Google Nexus One, and RIM BlackBerry. Smartphones are exploding in popularity and technical capabilities. The adoption rate of smartphones is far outpacing previously observed adoption rates of Internet or desktop-based technologies. The reasons are simple: these mobile devices provide constant connectivity and are convenient to carry, extremely powerful, and easy and fun

to use. Unique capabilities aside, the number of people that can carry a smartphone is significantly greater than the number of people that take a laptop with them when away from the office.

Mobile computing will further expand its footprint with the arrival and adoption of mobile tablet devices. Static, at-your-desk computing using a mouse and a keyboard is quickly becoming outdated. Almost everything about today's computers, for the majority of daily tasks, is obsolete. The future is mobile computing on light-weight, connected devices that use a Natural User Interface (NUI) and deliver information and applications in the palm of your hand.

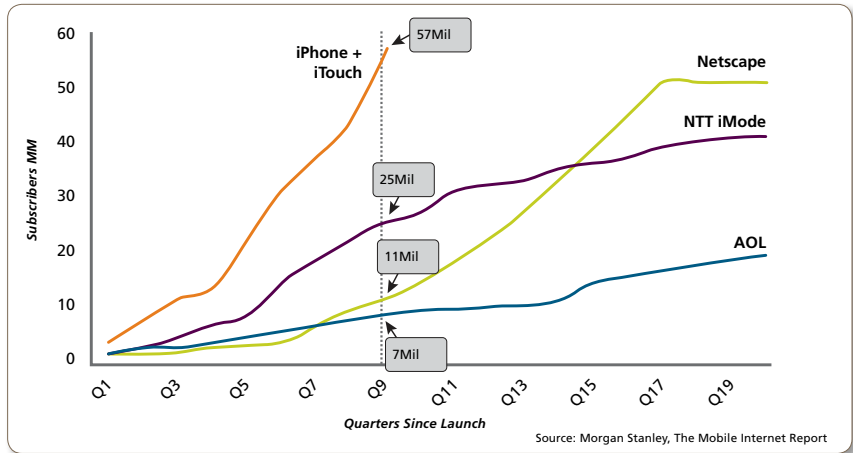


Fig 2. The Mobile Internet has outpaced desktop Internet adoption. Compared nine quarters after launch, the number of iPhone and iPod Touch users is 8 times as large as the number of AOL users.

Mobile Information and Mobile Applications

Mobile Intelligence is poised to revolutionize the way organizations deliver, consume, and act on information. Carrying stacks of business reports to meetings and conferences no longer provides the depth of insight needed for timely, smart decision-making. Without convenient access to business information, actions are postponed until workers return to their desks, introducing organization-wide bottlenecks and delays. These restrictions and delays are erased with Mobile Intelligence, which allows heuristic analysis and decision-making wherever a decision is required.

Decision Sweet Spot – Decision sweet spots are locations such as the aisle in a store, the line in a factory, or the warehouse floor. Business people need to be able to make data-driven decisions in the sweet spot, rather than delay due to a lack of information.

Decision Window of Opportunity – Decisions have a window of opportunity when a choice or action can be made to maximize the impact. The longer it takes someone to get to the information and completely evaluate the situation, the greater the chance of missing the opportunity. This delay could result in the loss of a sale or even a customer.

Increasing the Velocity of the Transaction

The convergence of business information and analytics with mobile technology is empowering more and more people to make hands-on, immediate decisions. Users can sift through enormous volumes of data on their handheld devices and convert this data into actionable insight.

In less than a few seconds, whether in a noisy restaurant, an airport terminal, an aisle of a retail store, or a conference room, information is accessible without sitting down and finding a place to plug in a laptop.

Rapid decision-making is key to accelerating the profitability of business. In today's fast-changing, competitive business environment, it is imperative to provide immediate answers to both internal and external customers. With Mobile Intelligence, decision makers now have the power to make these decisions immediately.

Mobile Intelligence is 400 Times More Powerful than Desktop Internet Intelligence

The revolutionary impact of Mobile Intelligence is evidenced by three major drivers.

Driver Number 1: Mobile Intelligence Expands the User Population by a Factor of 10

Mobile devices will significantly surpass the impact and number of desktop Internet devices. The range and number of mobile devices is showing explosive growth and the boundaries between these devices is blurring. Mobile computing devices now range from smartphones and NUI-infused tablets to handheld game consoles and fully functional in-car computers. For all their differences, these mobile device types harmonize across themes of connectivity, mobility, and information delivery.

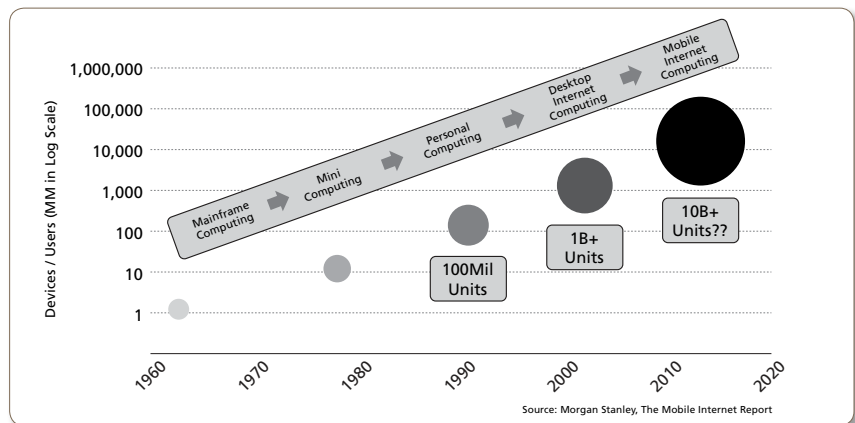


Fig 3. Mobile Intelligence will expand the user population

Driver Number 2: Mobile Intelligence Expands Information Opportunities by at Least a Factor of 10

As mobile computing becomes pervasive in both personal and professional lives, people are discovering more and more opportunities to make complete use of these powerful devices. From the moment they wake, they can use applications that not only enhance their personal lives but also make them more productive and effective at work.

The ability to access information at anytime in any location, easily in the palm of your hand, allows immediate decision-making.

A typical retail store manager may spend only a few hours working at a desk. With Mobile Intelligence, the manager can process decisions and analyze the latest information at any hour or location.

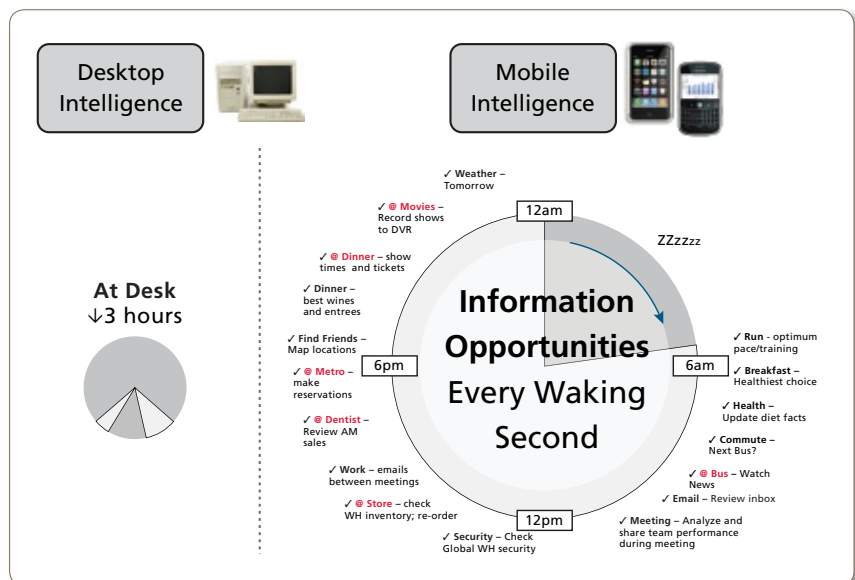


Fig 4. Mobile Intelligence expands information opportunities

Driver Number 3: Mobile Intelligence Expands Personal Query Relevance by a Factor of 4

Today's mobile computing devices are revolutionizing how information is deposited into applications. Using a keyboard and a mouse is now outdated. A natural user interface allows users to point at what they want, touch where they want to go, and move the

device to indicate how they want to explore the information. Mobile computing devices respond to how users move their fingers and arms, and understand their location, the direction they are moving, and how fast. Mobile devices use these natural actions as inputs. Touch screens dynamically change into convenient input controls to meet the user's needs, such as a keyboard, a calculator, a map, and a data visualization control. As a result, the user's inputs are faster and cover a greater range of options, all while being more intuitive. Why enter a house number, street name, city, and zip code when the device can locate the user automatically?

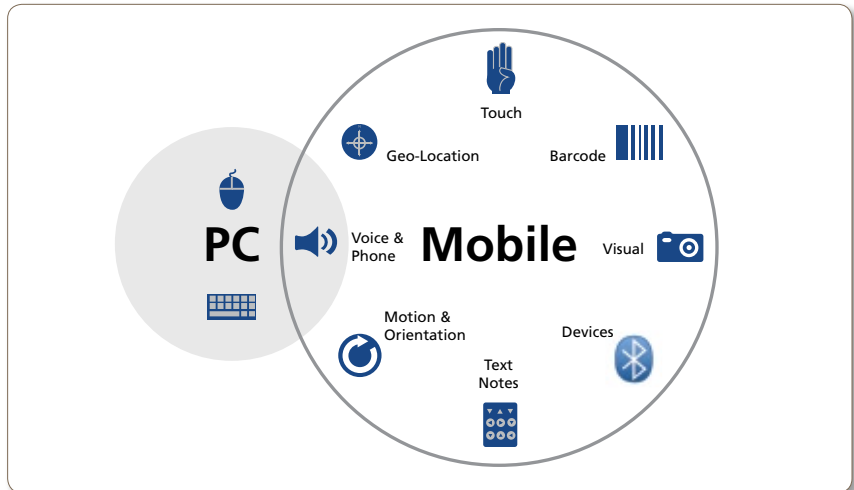


Fig 5. Mobile Intelligence expands personal query relevance

Query speed and query relevance are further enhanced with other rich capabilities such as visual inputs via a camera or audio inputs via a microphone. Technology is playing catch-up and already converts images into data inputs from barcodes, fingertips, fonts, and facial recognition.

The ongoing impact of the evolution in device inputs and natural interfaces is to make applications faster, easier, and more natural to use, leading to greater usage and a higher user adoption rate.

The Impact of Mobile Intelligence will be Greater than what is Currently Imaginable

In the new era of Mobile Intelligence, businesses that presently don't exist may evolve into industry leaders. Applications that are moderately valuable with the desktop Internet may be billion dollar applications when fully applied to the mobile Internet. The next YouTube or Facebook hasn't been invented yet, but will be designed as a mobile application. Organizations that stay with today's desktop-based information distribution models may become obsolete, outpaced by those organizations that choose to thrive on the mobile Internet.

Organizations that embrace Mobile Intelligence will become leaner, faster, smarter decision-making machines resulting in more business, more revenue, and greater competitive advantage.

MicroStrategy 9: Designed to Meet the Challenges of Mobile Intelligence

MicroStrategy 9 is well-suited to support the emerging and demanding needs of the new generation of Mobile Intelligence applications. Mobile Intelligence applications demand much faster performance and serve much larger user populations than traditional wired Internet applications. MicroStrategy offers Mobile Business Intelligence capabilities for the Apple iPhone and iPad, the BlackBerry Smartphone, and the Kindle DX, with an architecture that is engineered for the speed and performance required to rapidly deliver information on a mobile device.