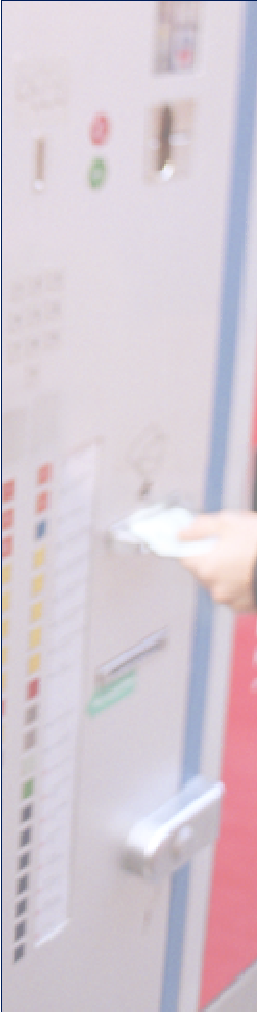




Ubiquitous–Mobility – delivering value to the enterprise

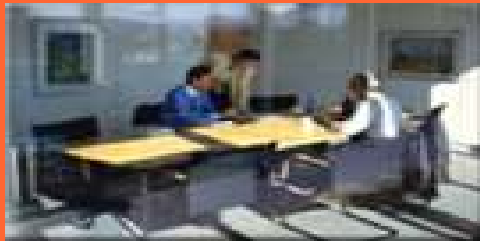


Mobile Paradigm shift



We are currently living through a transition from a product-centric economy to a service-centric—even a services-led—economy

the human need to communicate drives mobility.



at home
and at
work

on the go!



public venue

- coffee shops
- libraries

hospitality

- hotels
- airports



in transit

- airplanes
- trains
- automobiles

Waves of Wireless Evolution

Wireless specific applications and technologies will emerge with bandwidth



•Wave 1:

- Existing applications are enabled over wireless
- E-mail
- Messaging
- PIM tools
- Simple information services (sports, news, weather)
- Wireless connection of proximate devices

•Wave 2:

- New wireless specific applications take hold
- Location-based
 - Interactive city guides
 - Proximate-people finders
 - Instant coupons/ promotions and push advertising
- Personalized
 - Control contacts based on phone state and location
 - Phone as wallet/ATM card
- Time-based
 - Pushed calendar updates
 - Perishable information

•Wave 3:

- Innovative applications appear that exploit added bandwidth
- Rich media web browsing via wireless-enabled PC or tablet PC
- Streaming audio and video
 - Camera phones
 - Integrated MP3 players
- Real time multi-player games



Web server	Apache
Product	Apache/Alphaworks, CPAN

Leveraging mobility for real business value

Wireless Networks – how it all fits together



hp enterprise mobility portfolio for Asia Pacific

hp mobility strategy services

mobility strategy services

- art of the possible strategy services
- mobility architecture services

...for those customers who need help

templated repeatable solutions that reduce risk and speed time to business benefit

mobile office solutions

- mobile field service
- mobile field sales
- mobile messaging
- mobilized enterprise applications

wireless LAN solutions

- public wLAN
- enterprise wLAN

...for those customers with known business process enhancement objectives

mobile vertical industry solutions

- mobile financial services
- mobile manufacturing
- mobile pharma
- mobile healthcare
- mobile government

hp managed solutions

managed mobility solutions

- managed pilots
- managed mobility services

...for those customers who want us to manage it

finding and prioritizing mobility opportunities



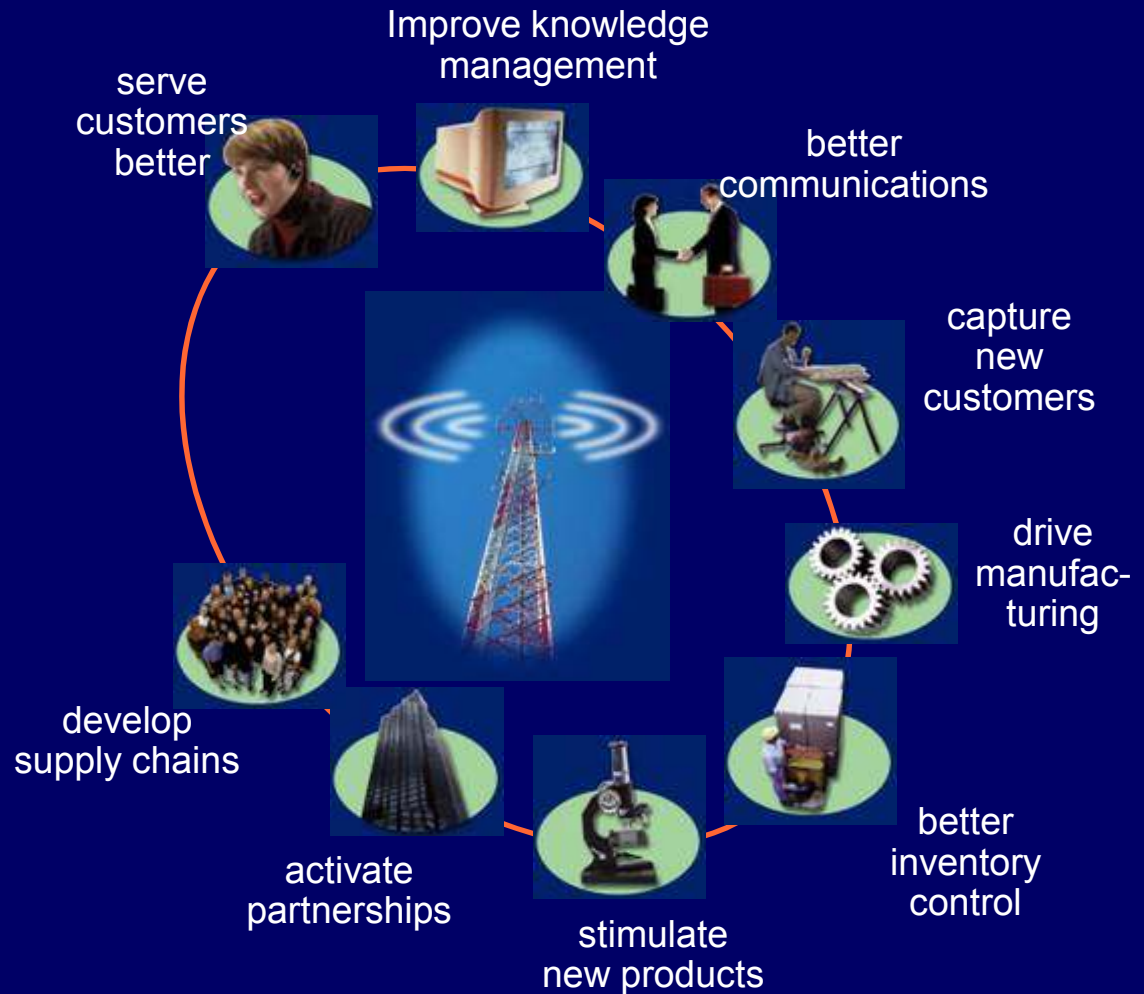
what are your business goals?

what information needs to be shared?

what actions are taken on information?

impact of reducing information latency?

categorize business value



Determine your mobile business value



fiscal ROI, e.g.

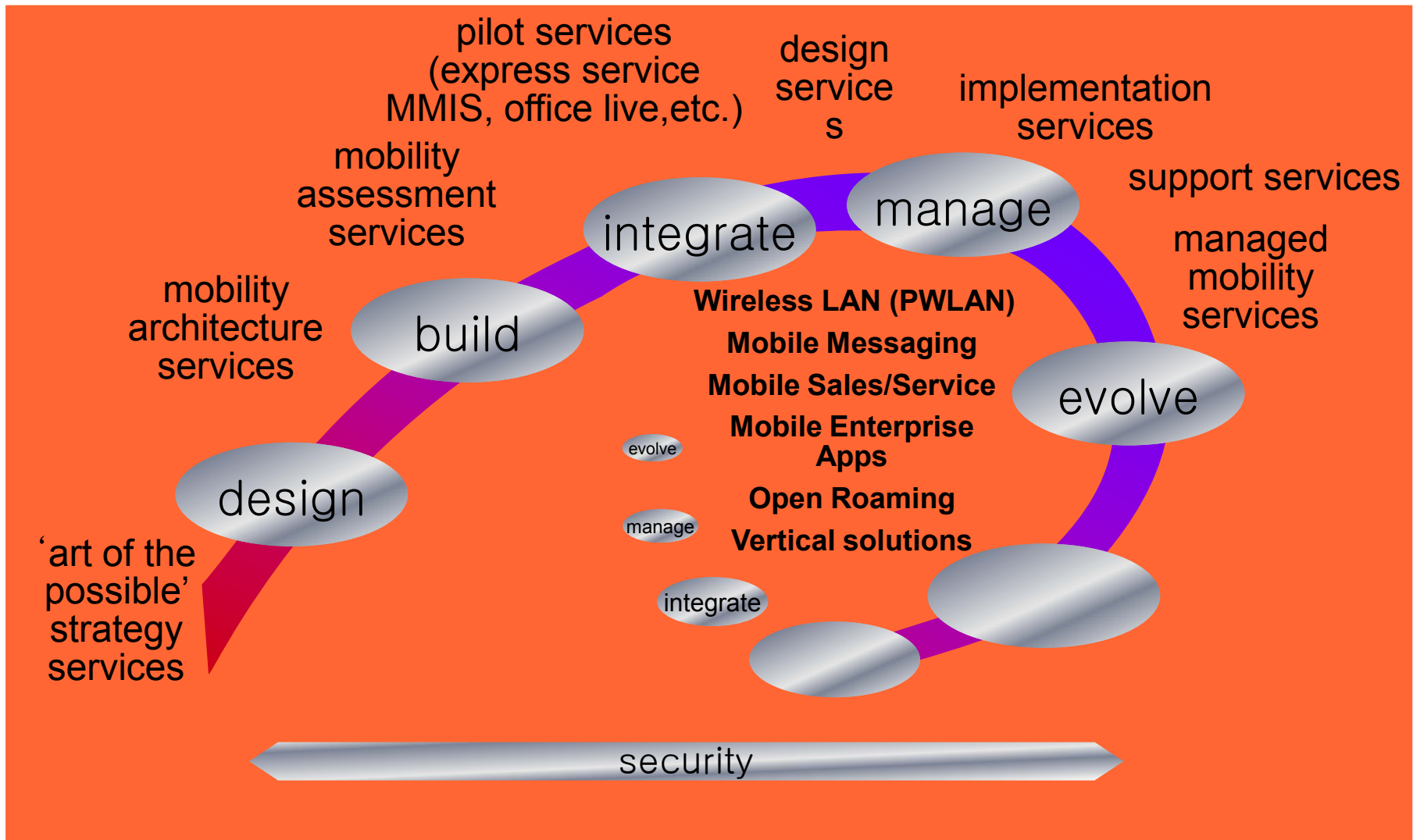
- productivity
- revenue/sales
- reduced inventory
- cost reduction

strategic ROI, e.g.

- customer satisfaction
- faster service
- better decisions
- new business models

Source: Meta Group

hp mobility and wireless services for comprehensive lifecycle support



Delivering on the promise of mobility



Innovation at work – Productivity gains



Hospitality Go Mobile (Singapore)

Several restaurants and hotels in Singapore equip their services personnel with iPaq PocketPC to send orders wirelessly, eg. One Restaurants – 7 Eateries.



Hi-Life Ltd (Taiwan)

Mobile Inventory Management system with bar-code scanner using Chinese PocketPC to track/update on 3000 products items



eLearning (Singapore)



Higher learning are no longer bound by four walls classrooms. Trainers, Students cohesive interaction is enhanced by wireless iPaq PocketPC.

TD Waterhouse (Australia)

TD Waterhouse distributes iPAQ Pocket PCs to customers, so they can conduct wireless stock transactions wherever



they are.

Innovation At Work – Convenient & Efficient



Hospital Wards (Taiwan)

Doctors, Nurses use iPaq PocketPC to provide a better medical care to patients; working closely with the laboratory members.

Shui On Construction and Materials (China)

China's Shui On Construction and Materials optimises its construction processes with the iPAQ Pocket PC, improving speed and eliminating hundreds of paper forms.



Sembawang Shipyard (Singapore)

Thousands of shipyard workers are managed by few supervisors; work/job are well identify and assigned via wireless iPaq PocketPC.



Transnational Logistic (Singapore)

With an wireless iPaq PocketPC, despatch delivery job make easy to their service man.



CMG Asia (Hong Kong)

Enabling insurance agents & financial consultants to serve clients better, real time

*Enabling Wireless for business solutions
from innovative vision to business reality.
What an Interactive Lifestyle.*



Innovation At Work – In Customers' Hands



Niao-Ning Securities

Niao-Ning Securities in China, implements On line Stock Trading



BRITISH AIRWAYS

British Airways, JFK Airport Check-in, log-on and surf

While relaxing in the Terraces lounges at New York's JFK Airport, British Airways passengers use an iPAQ Pocket PC and Compaq wireless network to connect to online services.

Starbucks

Starbucks' customers will use iPAQ Pocket PCs to access broadband content and services from their company stores.



TD Waterhouse

TD Waterhouse distributes iPAQ Pocket PCs to customers, so they can conduct wireless stock transactions wherever they are.



Japanese Tourism

The Ministry of Land, Infrastructure and Transport in Osaka provides comprehensive guidance to tourists on the iPAQ Pocket PC in Asuka, an area rich in historic sites.



SENTIERI VIVI

Sentieri Vivi is a futuristic project providing conceptual and operational innovation to optimize the Madonna di Campiglio tourist offering including its rich natural and wildlife attractions.



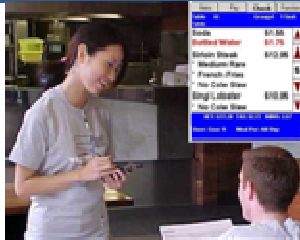
Personal Shopping Assistant

Using a iPAQ Pocket PC with Personal Shopping assistant, shoppers access services like self-checkout, nutrition details, recipes and personalized discounts.

Innovation At Work – Convenient & Efficient

Burgermaster

Servers at Burgermaster take customers' orders using a wireless iPAQ Pocket PC and Geac AdvanTouch software.



Total Rooms in Hotel	127
Out of Order Rooms	0
Rooms to Rent	127
Out of Service Rooms	0
Res Type 1	20
Res Type 2	14
Res Type 3	0
Res Type 4	0
Res Type 5	0

Rooms	Prs	VIPs
Departments Expected	11	11
Departments Actual	9	8
Arrivals Expected	42	47
Arrivals Actual	4	4

Carlson Hotels

Carlson hotels deploys Wirelessly enabled iPAQ Pocket PCs to give managers greater mobility and personal interaction with guests.

Architects

Australian Architect Fred Kasperek has created 3-D models of proposed developments to show customers on the iPAQ



Fairmont Château Montebello

The exclusive Fairmont Château Montebello, nestled along the Ottawa River, uses Wirelessly enabled iPAQ Pocket PCs to better manage room availability, maintenance, and guest requests.

Los Angeles Lakers

World Champion Los Angeles Lakers scouts track, store and wirelessly send player information on the iPAQ Pocket PC.



America's Thanksgiving Parade

Using iPAQ Pocket PCs and wireless equipment from Compaq, Flicker the Dragon's is controlled remotely during America's Thanksgiving Parade.



Red Diner

Wait staff at Red's take orders using iPAQ Pocket PCs, by touching the screen. The order is immediately sent wirelessly to printers in the bar, kitchen and cashier.

SportsPilot

SportsPilot furnishes coaches and scorekeepers with an iPAQ Pocket PC and SportsPad software allows them to pinpoint the exact location of an event.





Disney World

Disney World uses wireless technology to provide captioning and translation services so hearing-impaired visitors can use iPaqs to read text versions of, for example, the conversation between Winnie the Pooh and Tigger during the "Many Adventures of Winnie the Pooh" ride in its Magic Kingdom.



2002 Winter Olympics

Australian Olympians kept in touch with events and activities, as well as family and fans back home with iPAQ Pocket PCs with wireless expansion. Due to safety concerns regular mail was restricted during the Games.



Arizona State

Students in the two-year, internationally ranked Arizona State MBA program use Compaq iPAQ Pocket PCs as personal productivity tools, and as a means to better communicate and collaborate on projects.

Davos

In Davos, 2,200 iPAQ Pocket PCs were utilized in one of the largest WLAN installations linking World Economic Forum delegates to information and to each other.



Marathon

iPAQ Pocket PCs are part of a network allowing spectators & sponsors track Marathon runners' status during races.



National Education Association

Students at Maryland's River High School use Wireless iPAQ Pocket PCs to do homework, research and manage and track projects.



one of largest campus wLAN implementation in the world

hp campus wLAN solution

- network hardware procurement services
- overall network infrastructure assessment & design services, from the WLAN to core network
- overall project planning & management
- rapid installation & integration services
- plan and implement WLAN security features
- flexible support services
- network monitoring & management svcs

customer challenges

- need quick, cost effective, flexible, easy to manage, secure network
- coverage of large area - 200 hectares, > 50 buildings, 15 residence halls, all lecture theaters, all labs & workshops, admin & annex buildings, auditorium, all libraries, staff & sports recreation centers, all canteens for student population of 21,000 and staff population of 3,000

customer benefits

- payback in <12 months post-installation
- increase speed of completion of tasks that requires real-time data access
- reduce errors and improve accuracy with direct data entry
- more efficient communication (email, peripheral sharing, file transfer, etc.)
- minimize cabling cost within buildings
- future expansions will cost less

Cappuccino and wLAN



coffee retailer will become one of largest hotspots networks in USA with completion of expansion to 2,500 stores

hp hotspots solution

- alliance between hp, Starbucks, and network provider Voicestream T-Mobile
- hp is implementing the networks
- hp is providing wireless connection manager software for subscribers to automatically configure wirelessly-enabled notebook computer or Pocket PC for relevant network

customer challenges

- provide access to high speed, wireless internet services
- extend Starbucks coffeehouse experience about making connections over a cup of coffee
- help mobile professionals stay connected between home and office in familiar and widely available locations

customer benefits

- flexibility of wireless access combined with Starbucks experience
- convenience for road warrior with instant access to info
- heavier traffic should generate more revenue for Starbucks
- visibility helps with Starbucks brand

Reducing downtime in Manufacturing

ST Assembly Test Services (STATS)

leading provider of full turnkey
semiconductor test and assembly
services

hp mobile mfg solution

- iQlook allows real time access of shop floor equipment status
- iQmove helps operators in daily tracking of WIP using barcode reader on iPaq Pocket PC
- iQknow gives managers and engineers up-to-date reports from online database via GPRS

customer challenges

- reduce complexity and errors due to managing and tracking info between multiple workstations
- readily track equipment and WIP to make critical production decisions
- reduce manual data entry which cause production errors and subsequent costly downtimes

customer benefits

- reduce costly production downtimes due to data entry errors
- saves costly clean room real estate by reducing number of workstations
- more effective control of equipment utilization with access to real-time status
- more informed decisions with precise cycle time reports on WIP

Transportation with a wireless edge

Transnational Supply Chain Logistics Pte. Ltd.

consortium of Singapore
companies providing innovative,
specialized logistics solutions

hp logistic mgmt solution - LogiQ

- field personnel equipped with iPaq Pocket PC to access assignment details
- data transmitted to back end system using GPRS
- access to GPRS, GSM, wLAN through Gismo wireless jacket
- location-based services available through GEO Millenium Road Pilot

customer challenges

- track field personnel in real time
- ensure timely execution of assignments
- quickly detect, respond, recover service failures during the day
- facilitate communication and coordination between company, field personnel, customers

customer benefits

- optimize delivery schedules by readily identifying and resolving gaps
- increase productivity per routing
- provide better customer service through access to real time info
- better estimate real cost of delivery

Mobile workforce tracking in Singapore

Sembawang Shipyard Pte. Ltd.

one of the largest integrated ship
repair facilities in a single location
in Southeast Asia

hp resource mgmt solution

- supervisors on vessels and in workshops equipped with iPaq Pocket PC
- download job related data and scan id bar codes of workmen
- data transmitted to back end system using wLAN for immediate processing
- Wireless Bridge enables high-speed long range outdoor links through antennas

customer challenges

- track deployment of 3000-5000 tradesmen onboard vessels in real time
- move data entry to frontlines for instant processing and analysis
- streamline current manual batch processing of job sheets

customer benefits

- manage labor costs and provide efficient staffing through optimized deployment
- more informed and timely decisions through access to real-time data
- increase productivity by reducing manual admin work

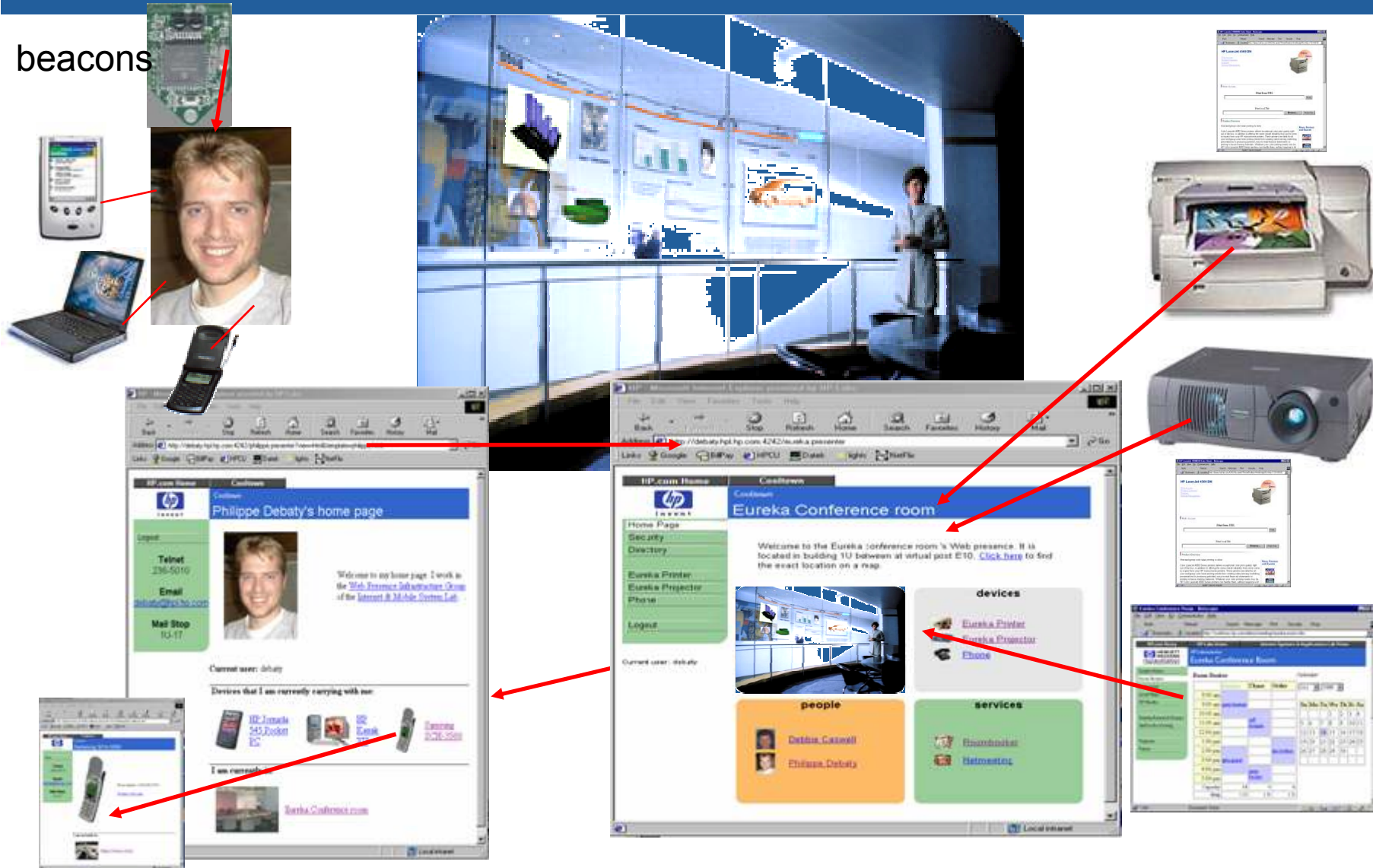


Welcome to the future of Mobility
Cooltown Innovation Singapore

people, places & things



beacons



The future is closer than you think



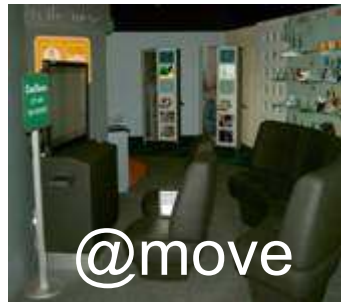
Cooltown is an interactive customer experience centre located in Singapore.

Cooltown provides focused customer briefings for:

- Web services / pervasive nomadic computing
- Mobility and Wireless
- eGovernment
- CoolSchools
- Business Discovery workshops
- Mobile eServices Bazaar



what is cooltown?



Cooltown is HP's vision for the future of pervasive nomadic computing – where People , Places and Things are interconnected in seamless web services.

It's about smart appliances, printing on the go and a scalable adaptive enterprise to drive next generation mobile solutions



Just some of the leading mobile solutions



MEB & Cooltown



History of Innovation



Cover Story in Civil College Publication



Themed Tours



Cool Office



Smart Library Mobility@School
Cool School



Media Center PC Experience



e-Museum Kiosk



e-Govt Kiosk



Hotspot Café Printing



e-Survey



Discovery Workshop



Virtual Receptionist



Hotspot Printing & Infopilet

Mobile eServices Bazaar – partnering for mobile success in AP



Bluetooth mobile printing application



Mobile professionals will now be able to produce outstanding quality printouts ranging from photo stickers, passport-size prints, thumbnail-size up to A6-size and A4 sizes. This wireless printing solution offering is the first to be introduced in the Asia Pacific market and is the first in Singapore, with regional rollout in the next six months.

Solution: Enable users to print wirelessly directly from their Nokia 3650 Symbian phones to HP Deskjet 450 bluetooth enabled mobile printers

Customer: Nokia Service Centers, Singapore

URL: <http://www.hp.com/apac/phone2print>

Platform & Services: HP Mobile Printer DJ450

Key Features:

- Produce outstanding quality printouts
- Ranging from photo stickers, passport-size prints, thumbnail-size up to A6 and A4 size



Wireless 3D applications

Mobile e-Services Bazaar partner



InterGrafX, Inc. is an emerging leader in multimedia visualization solutions, including 3D and panoramic imaging applications and extensions for Java and other software environments on mobile devices.

Wireless applications that can leverage InterGrafX technologies include mobile commerce, gaming, MMS, entertainment, digital photography, telematics and many others.

Solution: Multi-platform based 3D animation engine that allows content provider and carriers to develop and port their applications onto access devices

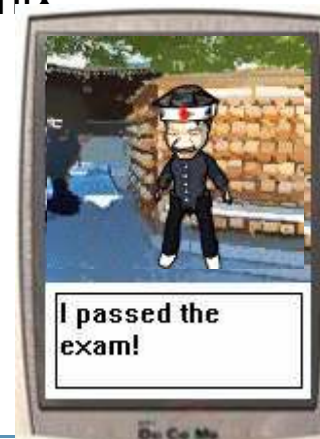
Target Customers: Handset manufacturers, Carriers

URL: <http://www.intergrafx.com>

HP Platform & Services: HP Proliant Servers, HP Unix

Key Features:

- Enhance telco revenues
- Improve branding
- Greater customer reach
- Realistic visual qualities



SMS Mobile Printing application



Solution allows network & service operators to earn more revenue by extending value added services such as printing of personal and public information/documents from their mobile phones via sms keywords

Solution: Utilizing SMS function available on all mobile phones to print documents loaded on the servers directly to available wireless hotspots printers.

Target Customers: Wireless Hotspot Operators, Telcos, Print Media, Tourist Promotion Boards

URL: <http://www.hp.com>

HP Platform & Services: HP Proliant Servers, HP Printers, IPG Managed Services, Storage

Key Features:

- Ease of use
- Integrated with location-based features to search for nearest printer in the vicinity
- Secure documents could be sent directly to target user as a sms keyword
- Allows print-on-demand



Wireless Hotspot Printing application



Wireless Hotspot operators today are not able to provide essential features such as printing of personal documents while customers are surfing and accessing information. With this solution managed by HP Services, wireless hotspot operators will be able to provide such service with just a one-time downloading of HP universal print driver from the operator's log-in website.

Solution: Enable end-users to be able to wirelessly print documents with a universal print driver to all HP managed print hotspots

Target Customers: Wireless Hotspot Operators, Café chain stores, Banks

URL: <http://www.isdata.co.kr>

HP Platform & Services: HP Proliant Servers, HP IPG Services

Key Features:

- Integrated billing with hotspot operators'
- Allows forwarding of documents to mobile phones via sms, fax or email
- Location-based features of locating printers in the vicinity



Mobile 2D Barcode application



2D Barcode features anti-forgery, anti-copy modules that can hold up to 3000 words including double byte characters in a barcode either on or off-line. Consumers can now download their 2D barcode via MMS or WAP over GPRS from their network & service providers before printing their secure documents in designated hotspots

Solution: Enabling secure documents to be coded into 2D barcodes. Barcodes are sent via MMS or WAP over GPRS to end-users

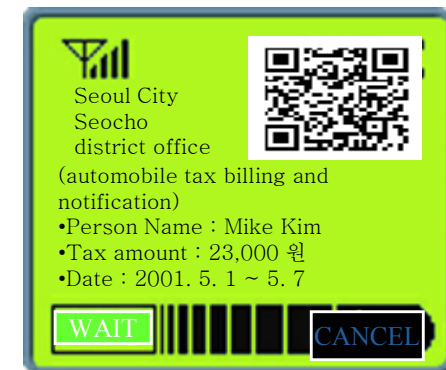
Customers: Seoul City Tax Department, Kang Dong Province (Confidential)

URL: <http://www.sunwoo.com>

HP Platform & Services: HP Proliant Servers, HP Unix Servers, HP Storage Services

Key Features:

- Stores up to 3000 words in a single document
- Allows online and offline printing of document
- Highly secure way of disseminating important information



Sales Force Automation Solution



Solution allows companies to maximize their ROIs by pushing critical information and empowerment to the sales force with increase accuracy and speed of orders, and updated information about stock availability, price changes and new promotions

Solution: Avaya sales mobile modules on the IPAQs together with barcode readers allow field sales force to maintain updated information on stock and pricing when approaching customers

Customer: Guinness Australia, MasterPet, Flanagoon

URL: <http://www.empriseit.com>

HP Platform & Services: HP Proliant Servers, IPAQs

Key Features:

- Multi-channel delivery
- Operates in an online, offline environment
- Integrated to back-end ERP, CRM systems



Wireless Manufacturing application



Wireless applications were used to streamline and expand the information flow between a back-end manufacturing execution system and the different user groups even when they are on the move. It provided timeliness and accuracy of the data stored in system with increased visibility and speed at which decisions could be made

Solution: Enable managers, supervisors and engineers to wirelessly access the manufacturing execution system anytime, anywhere

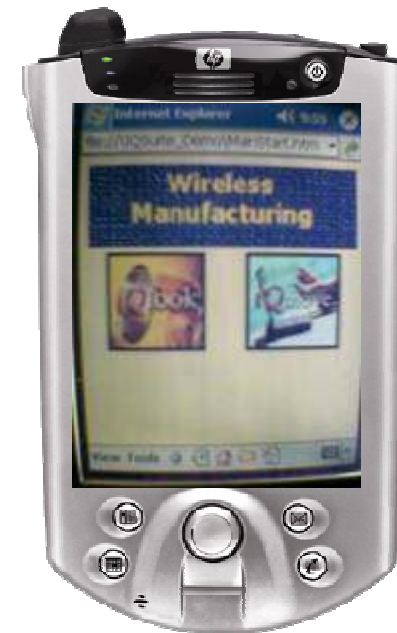
Customer: ST Assembly Test Services Ltd

URL: <http://www.hp.com>

Platform & Services: HP Proliant Servers, IPAQs

Key Features:

- Enabled with barcode readers for specialists to update to system without walking to common desktops
- Eliminated double entry of data
- View real-time status of the equipment across various levels
- Self-generated mini-reports



Mobile Payment Solution



TeleMoney Universal payment infrastructure is unique as it supports multiple access channels - internet, mobile-commerce and proximity-commerce and multiple payment methods - credit and debit cards, bank account debit, telco billing, stored value accounts and even loyalty programmes.

Solution: Enabling secure 'card not present' mobile payment solution for both on and offline transactions

Customers: Suntec City Parking System, CityCab, FujiFilm Singapore

URL: <http://www.telemoneyworld.com>

HP Platform & Services: HP Proliant Servers, HP Itanium Servers

Key Features:

- Integrated to international credit cards such as AMEX, JCB, VISA, Master
- Applied to other payment transactions such as online payment
- Additional features includes peer2peer payment via mobile phones



Cooltown just gets cooler!



CoverStory

10

Possibly the coolest experience in town



△ These "intelligent" display posters can make shopping hassle-free. Simply point your FDA at the device at the bottom corner of a particular poster, and details on what is available in that section of the store will be downloaded into your FDA. This way, you can shop wirelessly without having to physically visit that section of the store. Similar technology has been deployed in an art museum in Brazil to enable visitors to enjoy personalised tours of the place.

Learning from best practices

Impressed and inspired by what they had seen, the tour participants naturally wanted to know what motivates HP's employees to innovate.

According to HP's Business Development Manager Alvin Chan, who had led the tour, the spirit of invention is deeply entrenched in HP's philosophy and culture. Moreover, HP's staff believe in sharing ideas and information, and collaborating with one another. Encouraging the public officers to embark on innovation, he said, "Never be afraid to take the first step. Never be afraid to share and collaborate. Never be afraid to invent."



Lessons for the Public Service

One of the tour participants,



We have had over 3 400 customers through the centre.

We share our innovation power with our customers and partners.



**“even if you’re on the right track, you’ll get
run over if you just sit there.”**

– will rogers

www.cooltown.com



i n v e n t

www.hpbaazar.com



Insert slide title in this space Do not exceed 2 lines

New concepts in smart handhelds



Concept #1



Concept #2



Concept #3



Concept #3 - top view