

Computing Everywhere

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Presentation to
School of Computing, National University of Singapore

Computing Evolution



Mainframe
Computing

Client/Server
Computing

Internet

Cloud/Mobile
Computing

Computing
Everywhere

IBM
Unisys
DEC

Microsoft
Novell
Intel
DELL

Yahoo
Google
Cisco
EMC

Apple
Google
Amazon
Oracle

TBD

Physical and Virtual Integration

- Special Ingredients:
 - Device Advancement - Low power consumption and commodity pricing
 - Data Center Scalability – Server, Network and Storage
 - Broadband Everywhere - Ubiquitous Delivery
 - Common Standard and Loose Coupling in Programming and UI – HTML, Web Services, LAMP stack
 - Ubiquitous Mobile Computing Platforms -- IOS, Android, W7
 - Business Model Innovation: Cloud Computing - Computing Power for Rent
- Mobile represents the first wave of “computing everywhere”: iPhone is not a phone, it is a simplified PC
- Integration and proliferation of computing everywhere: Digital Home, Smart Grid, EV car, integrated commerce, Education

Impact from Everywhere Computing

- There is no separation between computing and day-to-day life – We are in it, creating data and consuming data constantly – think facebook and beyond
- There is no separation between personal and business life
- Constant and non-stop information overflow
- Significant opportunities for IT professionals since it drives a new wave of innovation beyond browser and phone

Next Generation Learning Services

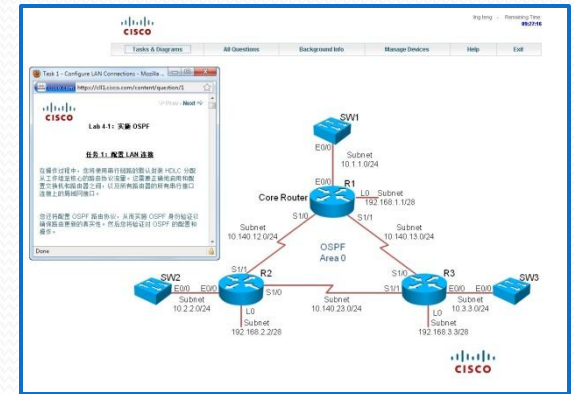
Social Learning



Video Solutions



Lab as a Service



Physical and Online Seamless Integration



Any Time, Anywhere Cloud Delivery Model

Digital Classroom



Computing on the Move

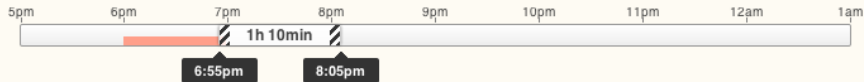
to:
Starbucks coffee

at:
**6:55pm
for 1h 10min**

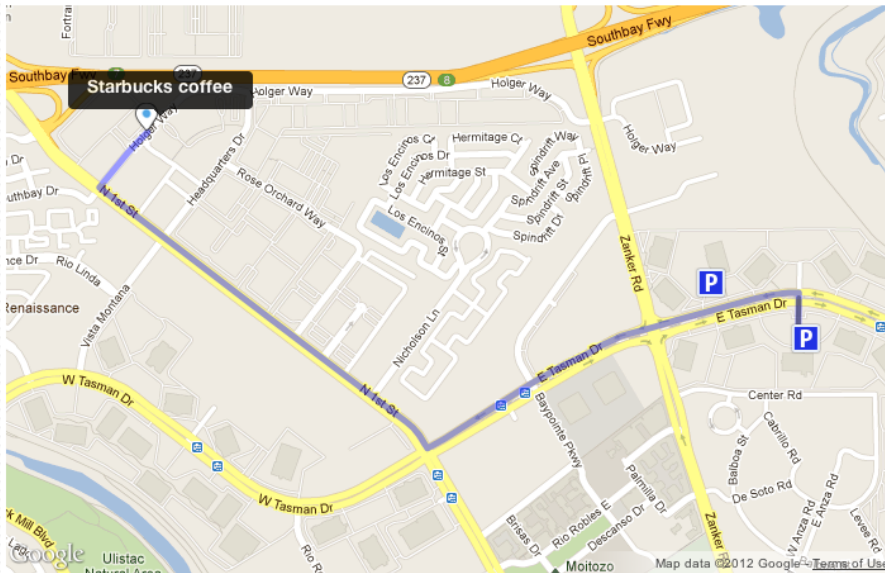
with:
**Invite
your friends**

[Book Now](#)

Today (Saturday, October 8th)



[Next step »](#)

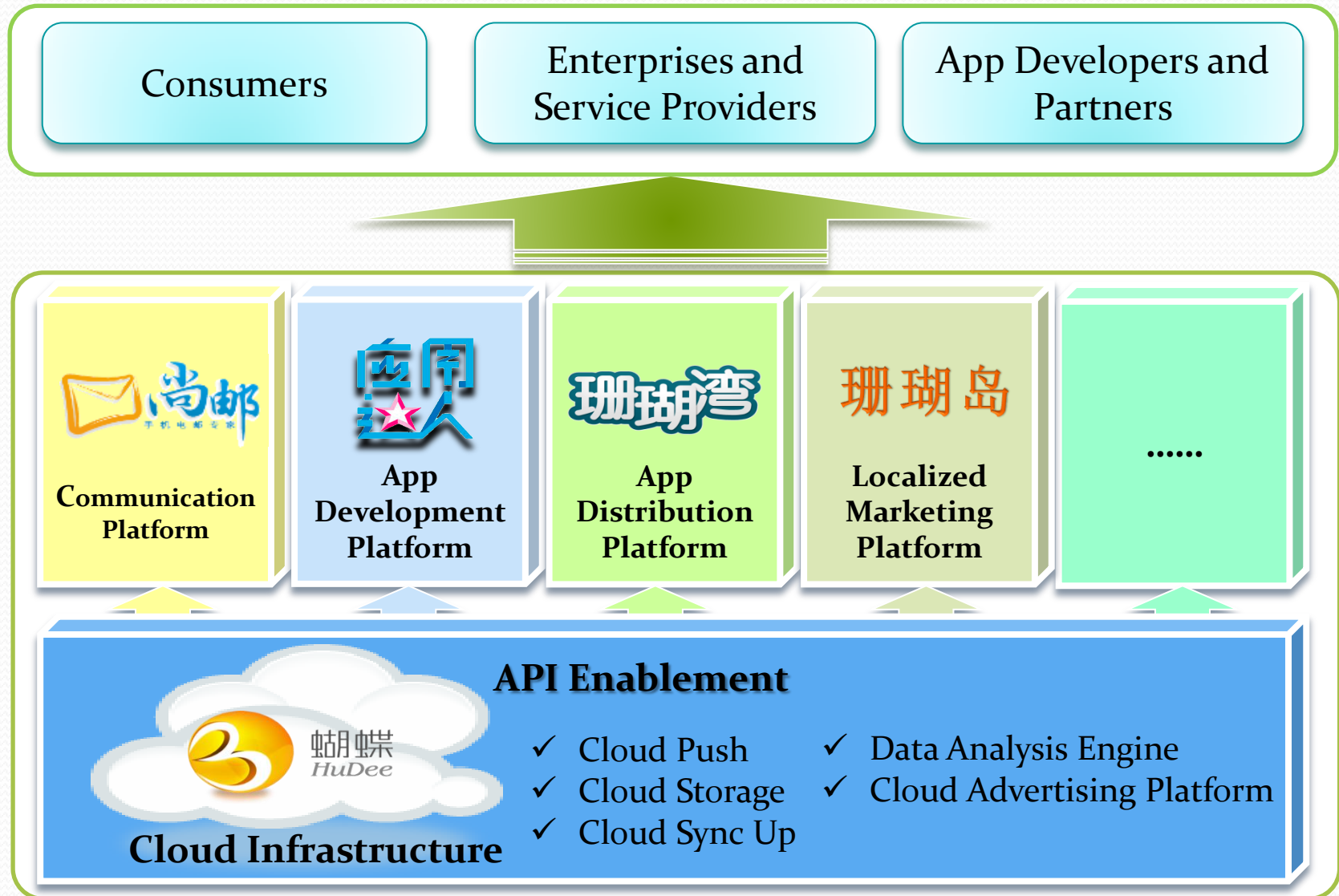


Weng Motors

Google Autonomous Car



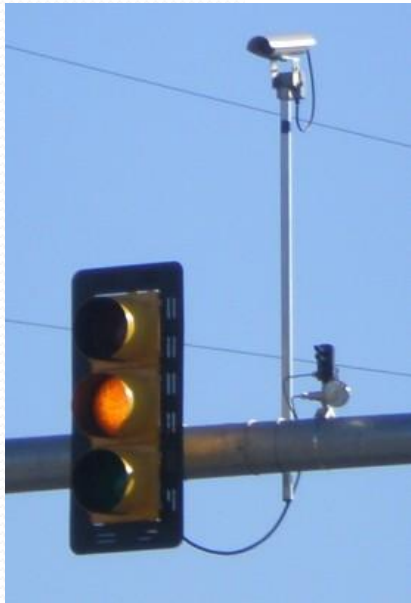
Babeeta – Mobile Commerce Enablement



Location Based Services



Computing Everywhere



Smart Traffic



Smart Watch



Smart Refrigerator



Smart Bed



Smart Wallet

What's Coming Up?

- Cloud Computing Expansion – Service Aggregation, Management, Automation
- Connectivity and Remote Management become standard part of everyday appliance
- Security becomes a bigger visible problem – Power station, automobile, home, health record etc become hack-able
- Computer knows more about you than yourself – every bit of data about you are collected from everywhere, aggregated, correlated, monitored – Privacy?
- Blurs between reality and “perceptive reality”

Boundary Free Ventures

- Global venture advisory, incubation, investment and buyout
- Help great people build impactful long-lasting companies that can leverage best from US, Canada and China
- Invest in the next generation of possibilities
- Focused Areas: Computing Everywhere
 - Mobile
 - Technology Enabled Services
 - Clean Tech
- Incubation Media

Boundary Free Ventures

- Current Portfolio

- LianLian Pay: Leading mobile payment service provider in China
- Babeeta: Leading Mobile Infrastructure Provider in China
- Astronergy: Leading PV and Thin Film Solar Module Developer in China
- SVG Capital: Credit products and financial solutions to SMEs in China
- Weng Motors: Electric vehicle solution dedicated to local
- JudoBaby: Console/Social game development studio

- Exits

- Focused Photonics: China Leading CleanTech Instrumentation Provider [IPO in China]
- Allegro Systems: Security [Acquired by Cisco]
- Viacore: Supply Chain Management Infrastructure Provider [Acquired by IBM]
- Relicore: Data Center Infrastructure Management Software [Acquired by Symantec]
- Digital Fountain: Content Delivery Infrastructure Technology [Acquired by Qualcomm]
- MyBookmark.com [Acquired by NetBeyond]

Conclusions

- Tremendous excitements in the computing space
- Online and Offline Integration is the next trend in computing
- A lot of areas need to be addressed
 - Security
 - Reliability & Scalability
 - Simplicity
 - Legal
- We enjoy working with ethical, hardworking and smart entrepreneurs