



Cloud Computing

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Today's presentation

- ▶ What is Cloud computing?
- ▶ How does it work?
- ▶ Service models
- ▶ Pros/Cons
- ▶ Cloud mobility scenario



Life before cloud computing

- ▶ Complicated
- ▶ Expensive
- ▶ Hard to scale
- ▶ Configure, test, run, secure, update



What is Cloud Computing?

- ▶ "Services offered through a network which is located in an unknown place for the user"
- ▶ Replaces the existing information technology model of capital investment with a pay as you go philosophy



You have been using Cloud for a long time...

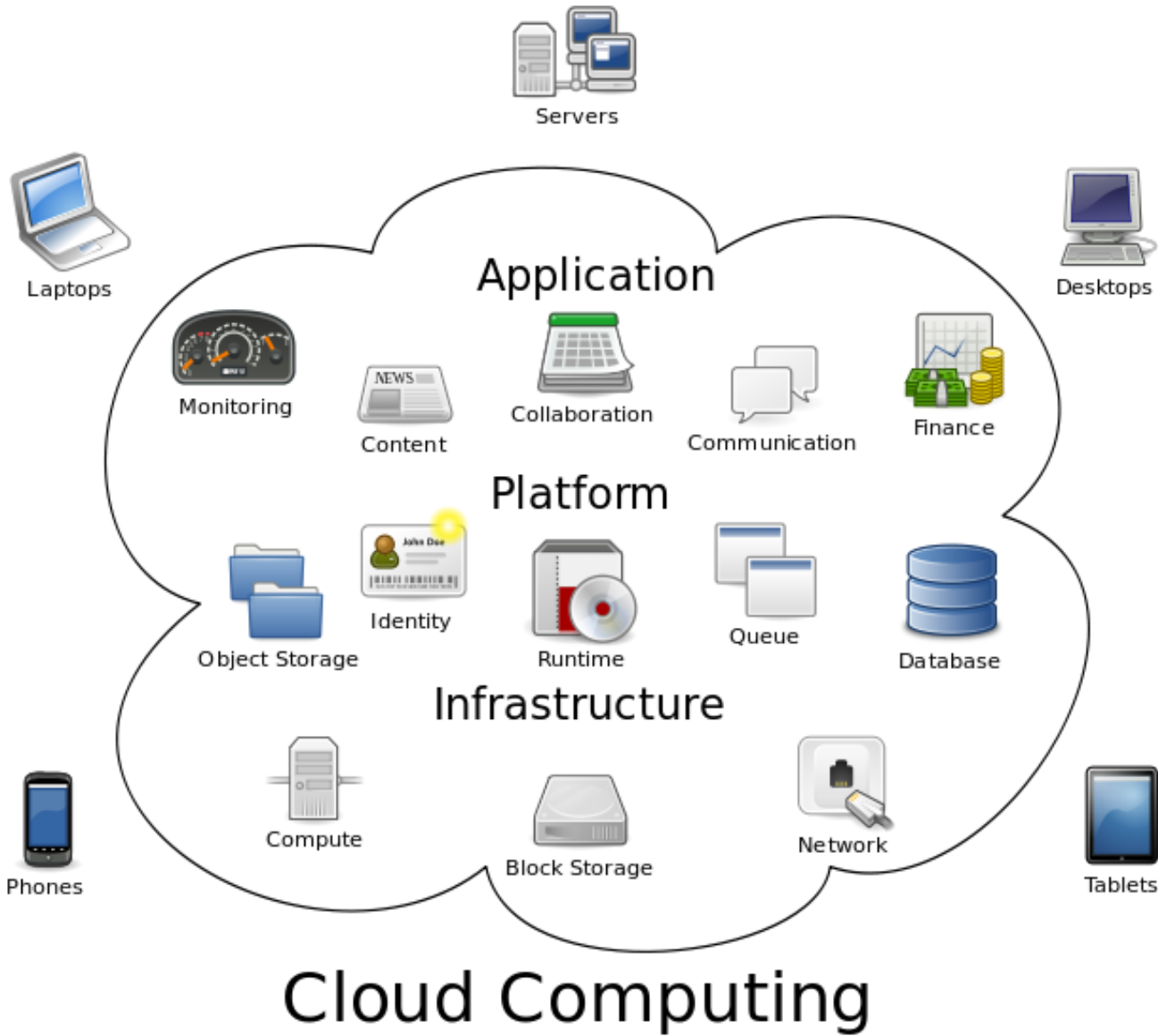


How does it work?

- ▶ Compare to building a house or renting an apartment

- ▶ Cloud computing (= rent an apartment)
 - ▶ Scalable
 - ▶ No/little customization
 - ▶ Host provide high quality
 - ▶ Don't have to worry about maintenance
 - ▶ Pay for what you use!





3 types of services in the cloud

- ▶ IaaS
- ▶ PaaS
- ▶ SaaS

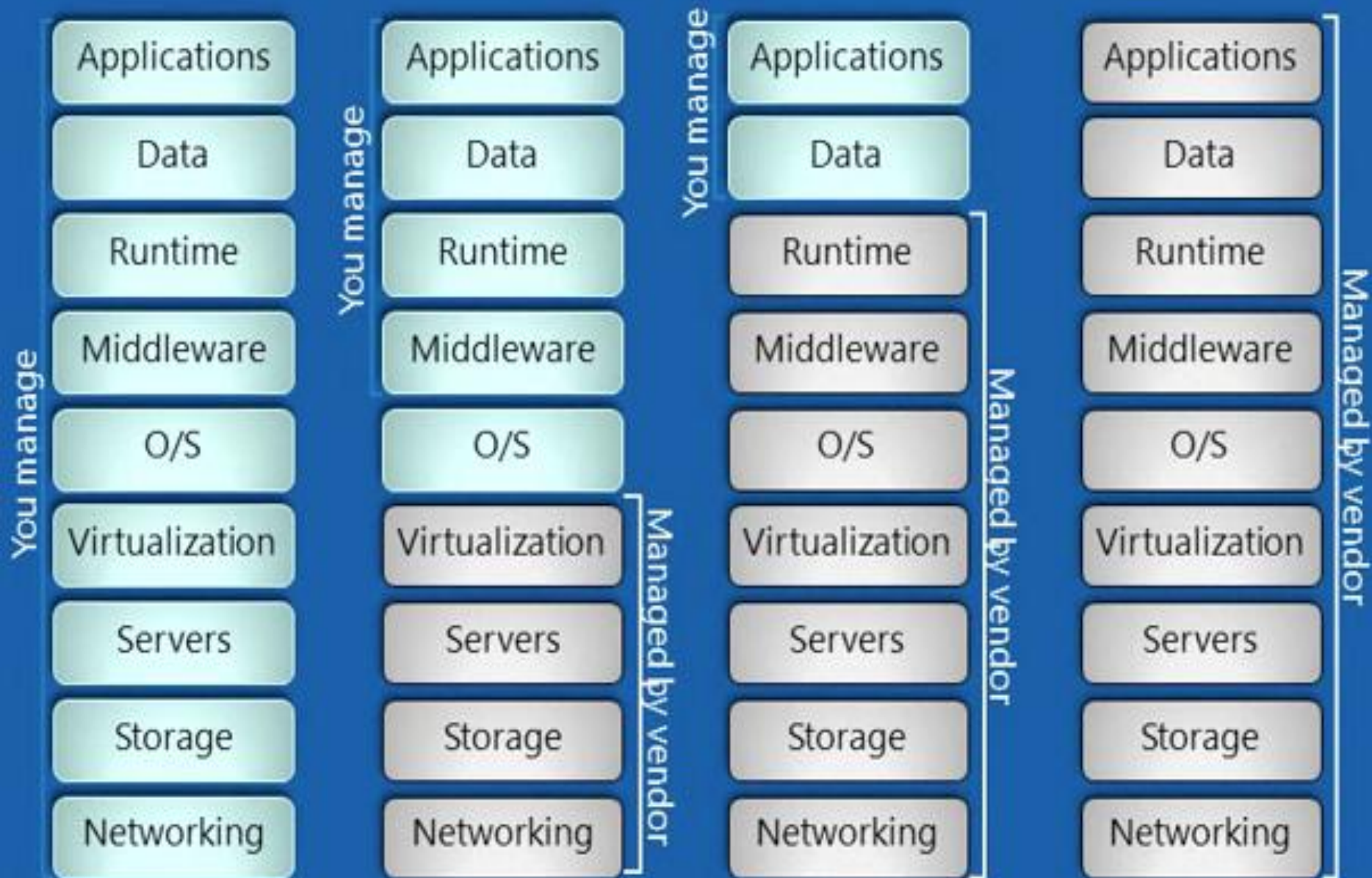


Packaged Software

Infrastructure (as a Service)

Platform (as a Service)

Software (as a Service)



Deployment models

- ▶ Public cloud
- ▶ Community cloud
- ▶ Hybrid cloud
- ▶ Private cloud



Pros

- ▶ Fast up and running
- ▶ Cost reduction
- ▶ Scalable
- ▶ Levels the playing field
- ▶ Easier collaboration



Cons

- ▶ Data mobility and ownership
- ▶ Privacy
- ▶ Control



Cloud mobility scenario



iMessage

VS.



SMS (Short Message Service) - GSM

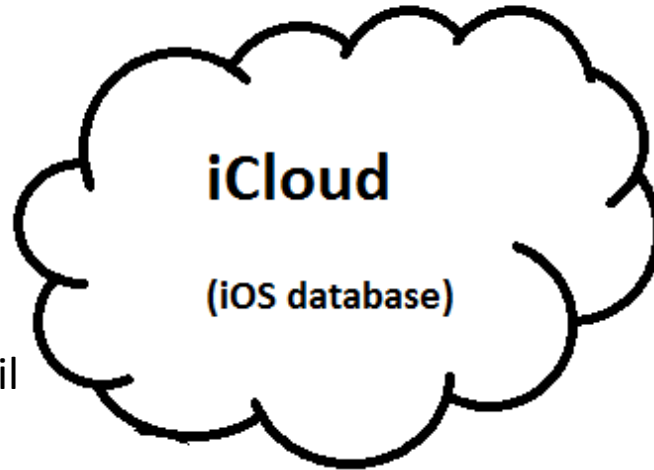


iMessage

- ▶ 2011 – ios5
- ▶ iPhone, iPad, iPod touch, Mac (OS X mountain lion)
- ▶ Texts, photos, videos, contact information, group messages
- ▶ 28000 imessages/sec
- ▶ Based on Apple push notifications (APNS)
- ▶ Transport Layer Security



iMessage (iCloud)



1. iCloud account info
2. UDID
3. Phone number/email



912 34 567

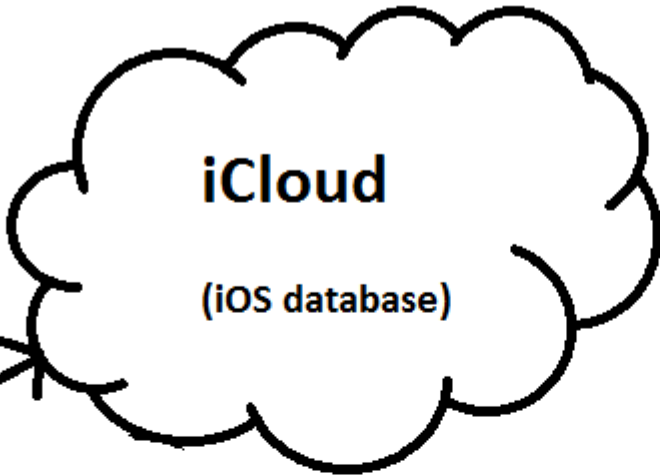


412 34 567
(or my@email.com)



to: 412 34 567

hi!

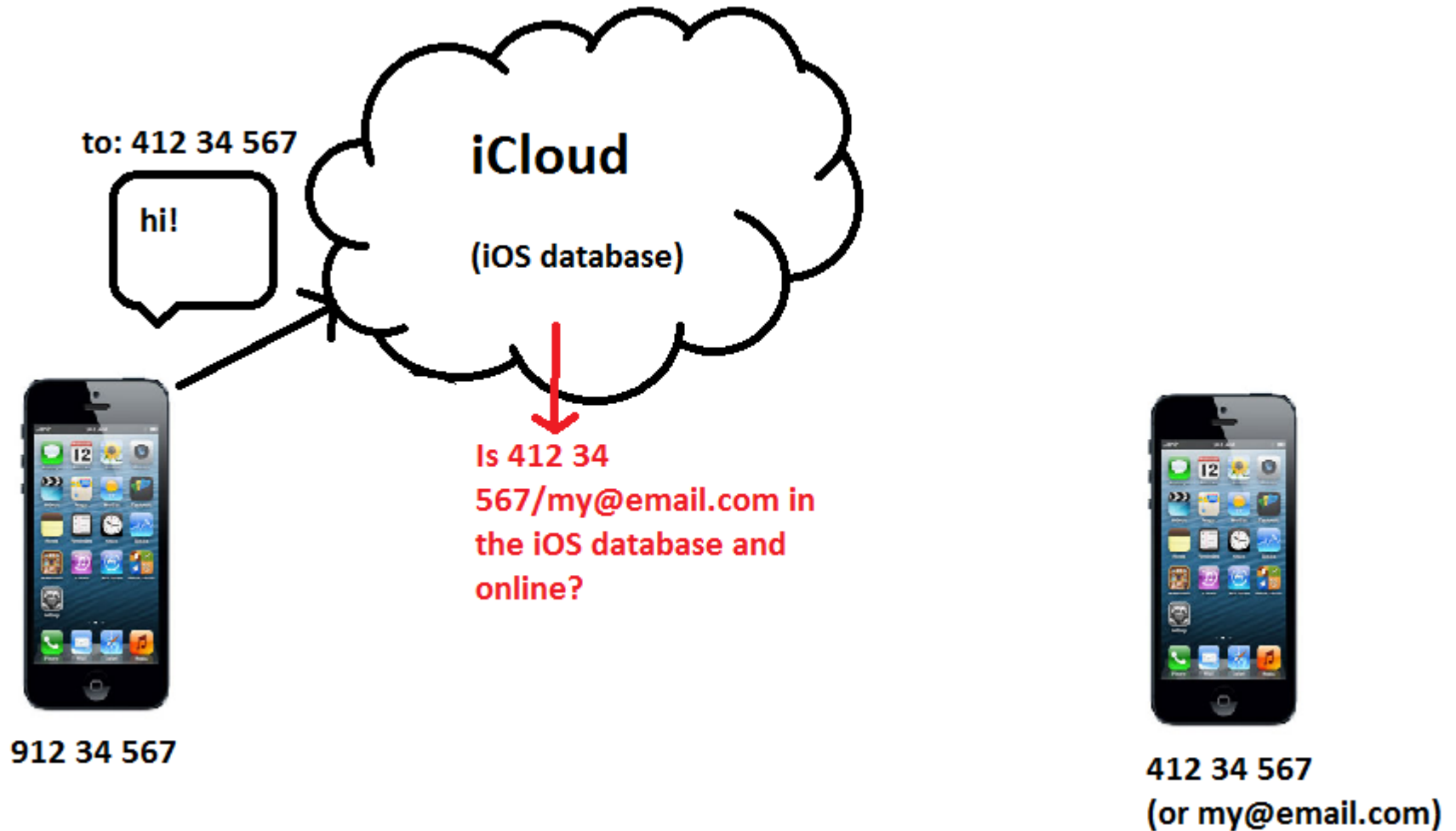


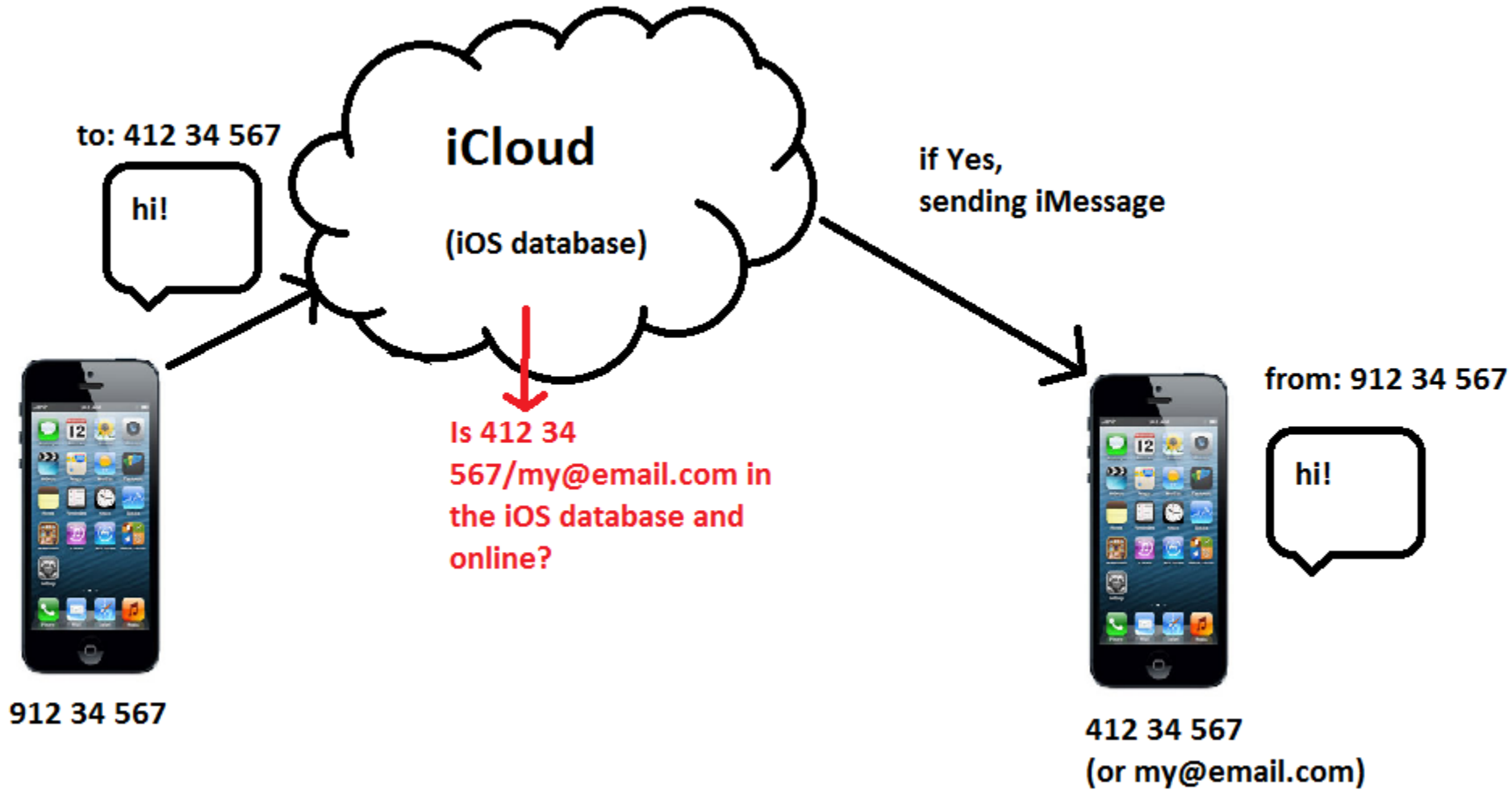
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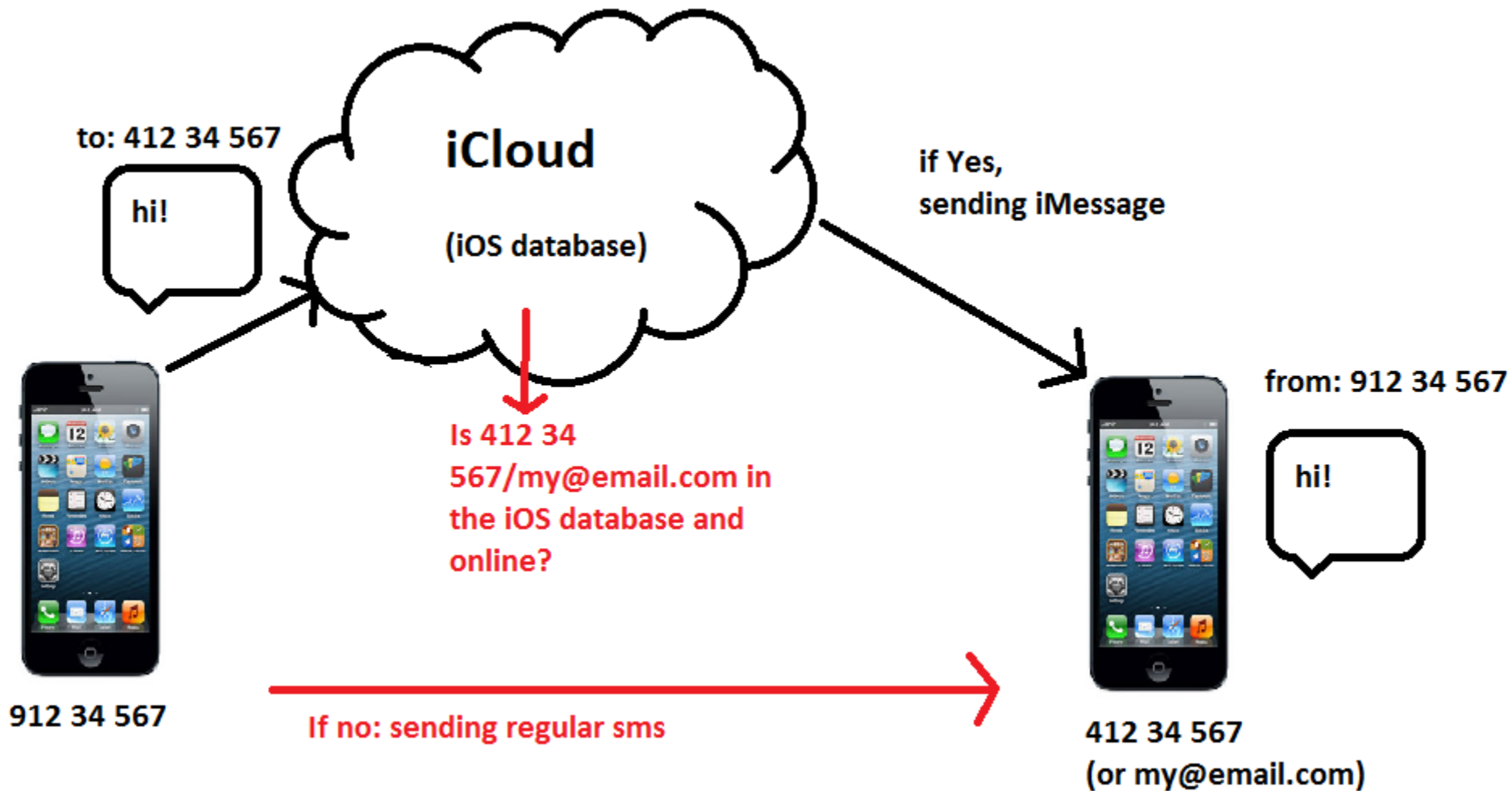


412 34 567
(or my@email.com)









912 34 567

to: 412 34 567

hi!

iCloud

(iOS database)

if Yes,
sending iMessage

Is 412 34
567/my@email.com in
the iOS database and
online?

If no: sending regular sms

from: 912 34 567

hi!

412 34 567
(or my@email.com)



Pros for the consumer compared to SMS

- ▶ Cheaper
- ▶ Faster
- ▶ Control
- ▶ No size limit
- ▶ Sending of multimedia
- ▶ Delivers even though you are out of cell coverage



Conclusion

- ▶ Bright future for Cloud computing
- ▶ Declining revenue for mobile network operators (MNO)





Done.

References

- ▶ Cloud computing, a presentation by William Mann
- ▶ <http://www.thebeckon.com/pros-and-cons-of-cloud-computing/>
- ▶ <http://www.silverlighthack.com/post/2011/02/27/laaS-PaaS-and-SaaS-Terms-Explained-and-Defined.aspx>
- ▶ <http://www.anandtech.com/show/4956/apple-ios-5-review/3>

