

Mobile Device & Communication Technologies Evaluation and Assessment

CPET 565

HOMEWORK 1

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1. What effect will smart mobile devices have on mid-sized (service) enterprises in the next 5 years?

Networking

- Wireless and other network infrastructure planning
- Bandwidth Effects

BYOD Policies

- Decrease purchases of traditional desktops
- Mobile devices will outnumber desktop and laptop computers
- Mobile Device Management (MDM)

Security

- Increased security risks from mobile data across networks
- Lost or stolen devices

Web-Enabled Applications

- Mobile workspace expected with cloud services and web connected ERPs



Mobile Computing SWOT Analysis



<p>STRENGTH</p> <ul style="list-style-type: none"> • Agile Workforce • Productivity Enhancements • Always Connected • Optimized for specific tasks • Lower costs than traditional computers 	<p>WEAKNESS</p> <ul style="list-style-type: none"> • Software application limits (i.e. Java applets) • Data breaches more likely • Storage capacity, computing power, battery power • Network connection dependent
<p>OPPORTUNITY</p> <ul style="list-style-type: none"> • BYOD policies to reduce capital • Lower management and support costs • Sensor integrations for process improvements 	<p>THREAT</p> <ul style="list-style-type: none"> • Target of theft (data and device) • Security



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Strategic Plan

1. Increase capabilities of the wireless infrastructure and server architecture (including mobile device management).
2. Develop the device policies and standards.
3. Train end users on devices and policies.
4. Increase the number of web-enabled applications.
5. Review security and policy and adjust as needed.



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Decision cost effect



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Decision cost effect

I.T infrastructure Cost

- Cost of Link speed upgrade cost
- Network devices such as switches and routers upgrade cost
- Server Machine upgrade cost
- Server software cost

Client Mobile Device consideration cost (Sale Device automation)

- Manufacturing Cost
- Client side software cost
- Device communication cost



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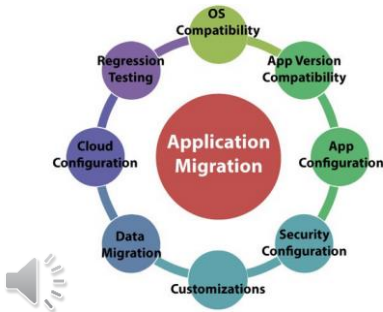
Decision cost effect

Migration Cost

- Logistic Cost
- Implementation cost
- Personnel Training cost

Operational Cost

- Operator salary
- Maintenance/Repair cost
- Emergency replacement cost
- IT overhead cost



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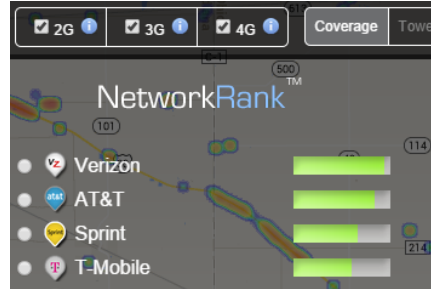
Technology, Services and Business



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Comparison

-  • [Verizon Wireless](#): 123.5 million (2014 Q2)
-  • [AT&T Mobility](#): 116.6 million (2014 Q2)
-  • [Sprint Corporation](#): 54.3 million (2014 Q2)
-  • [T-Mobile US](#): 50.5 million (2014 Q2)



NOW EVERY WI-FI CONNECTION WORKS LIKE A T-MOBILE TOWER
It's like adding millions of towers to your network in a single day.



AMERICA'S FASTEST 4G LTE NETWORK
FiOS just got better with **FASTER UPLOAD SPEEDS**

THE DATA STRONG NETWORK



Overview



OPERATOR	Voice Technology	Data Technology	Subscriber	Coverage(Excluding Roaming)	Ownership
Verizon Wireless •Including hosted virtual operators	CDMA2000	EVDO, LTE	123.5 million (August 2014)	Contiguous US; AK, HI	Verizon
AT&T Mobility •Includes Cricket Wireless, GoPhonePre paid and hosted virtual operators	GSM, UMTS	EDGE, HSPA+, LTE	116.6 million (August 2014)	Contiguous US; AK, HI, PR, VI	AT&T
Sprint Corporation •Including hosted virtual operators	CDMA2000, IMS Wi-Fi calling	EVDO, WIMAX, LTE	54.3million (August 2014)	Contiguous US; HI, PR, VI	SoftBank Corporation (80%)
T-Mobile US •Including hosted virtual operators and affiliates •Subscriber count includes MetroPCS	GSM, UMTS, HD Voice, IMS Wi-Fi calling	EDGE, HSPA+, LTE	50.5 Million (August 2014)	Contiguous US; HI, PR	Deutsche Telekom (67%)

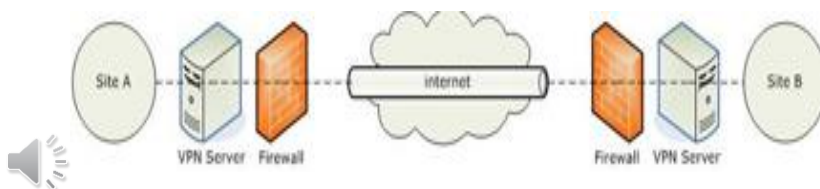


3. What technology should a company provide, with their headquarters in Chicago, in order to maximize their employees productivity and efficiency...

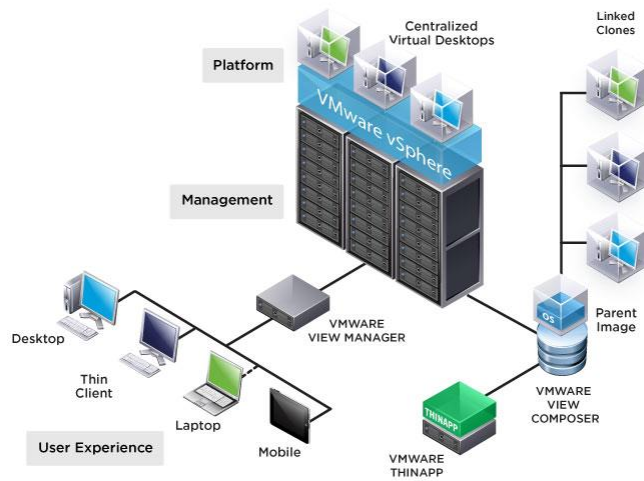
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A. Employees who perform their office work at home most of the work week?

- VMware
- VSphere
- InfoBlox
- VPN
- Active Directory
- Laptop
- SmartPhone
- Personal Computer
- Tablet
- Virtual Machine



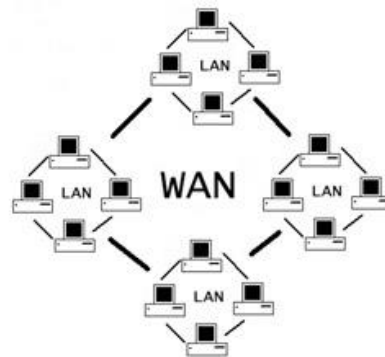
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B. Technical staff who spend most of their work time at a client site in New York city (commute weekly from Chicago to New York city)

- Laptop, PC or Tablet
- Routers
- Switches
- Fiber-Optics
- ISP
- Active Directory
- WAN



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References

1. "AT&T Digital Media Solutions and Content Delivery | AT&T." [Online]. Available: <http://about.att.com/mediakit/digitalmedia>. [Accessed: 18-Sep-2014].
2. A. 8 and 2014, "Grading the top U.S. wireless carriers in the second quarter of 2014," *FierceWireless*. [Online]. Available: <http://www.fiercewireless.com/special-reports/grading-top-us-wireless-carriers-second-quarter-2014>. [Accessed: 22-Sep-2014].
3. "United States Cell Coverage Map." [Online]. Available: <http://opensignal.com/coverage-maps/US/>. [Accessed: 22-Sep-2014].