



# Technology Brief...

February 26, 2007

J.Gold Associates LLC, 6 Valentine Road, Northborough, MA 01532

www.jgoldassociates.com 508-393-5294

Research, Analysis, Strategic Consulting

## Dell Takes On Wireless?

### INSIDE THIS ISSUE

- 1 Dell Takes On Wireless?
- 2 Cisco and Apple: A Win-Win?
- 3 The Death of Carrier Supplied (and Subsidized) Devices?

In a bid to resurrect its success of the past, Dell, which has been slipping of late, especially to competitor HP, is reorganizing and making changes in its executive ranks. Recently, Dell lured Ron Garriques away from Motorola. Garriques was in charge of Motorola's handset division, which is currently feeling some pain of its own. He will be in charge of Dell's consumer division and given his significant experience, we believe this is a good choice. But is this just part of Michael Dell's re-architecting the company to renew its luster, or something deeper?

Dell needs Garriques for its consumer division, especially since he has extensive international experience, an area in which Dell has been weak. If Dell is serious about consumer markets (e.g., large screen TVs, multimedia, gaming, etc.) it will need a more experienced hand at the helm. But Garriques also brings another unique capability which we believe Dell is on the verge of utilizing. He has extensive wireless experience, an area Dell will have to become a player, and soon, as HP and Apple push into this key market segment.

We believe that within the year, Dell will exit the stand alone PDA market (where overall sales of its Axim have fallen drastically over the past 2 years along with the PDA market in general), and instead fill this niche by offering a smart phone device that has all of the features both business and high end consumers would want (e.g., push email, office document viewing/editing, media capability). We believe Dell will aim at both consumers and enterprises with slightly modified and/or differentiated products, but we expect the products to be Windows Mobile powered, maintaining the relationship Dell currently has with Microsoft for its handhelds. But to be successful, it will require not only good products, but also partnerships with carriers that will power these devices - another area in which Garriques has extensive experience, and where the existing Dell organization has virtually none. We would expect him to fill the ranks of what would be a new carrier group to initiate and maintain these coming relationships.

---

*"... within the year, Dell will exit the stand alone PDA market .... and instead fill this niche by offering a smart phone device...."*

---

Although it is likely Dell will use an ODM to source the products (e.g.,

HTC), it could chose to buy an established player (e.g., Palm) to fulfill this need, and get not only devices but carrier partnerships as well. This is a real possibility and bears watching, as it would give them an installed base and instant credibility in the market. Dell could jettison the non-strategic components of Palm's business and concentrate on its strengths.

Once Dell enters the wireless smart phone market, Lenovo will be the only major North American enterprise PC supplier without a smart phone device, although they do offer such a device in the Far East. We expect this device to be quickly brought into the US market (subject to testing and local approvals), but Lenovo will face the same challenges of building a carrier organization as Dell faces. Nevertheless, we believe Lenovo must do this to stay competitive. Several of the consumer-oriented PC vendors (e.g., Toshiba, Fujitsu, Sony) could also compete in the smart phone market by bringing in products from their Far East organizations. However, these devices are probably not sufficiently oriented towards the growing business market to initially be competitive.

**Bottom Line:** We believe the market for business oriented smart phone devices will change dramatically in the next 12-18 months as the PC vendors move into this potentially lucrative market where millions of devices are sold each year (we estimate about 200M per year by 2010). However, it is likely not all will be successful, as building a good smart phone device is a difficult task. We do not believe that any of the current smart phone device leaders (e.g., RIM, Nokia, Motorola, Palm) are particularly threatened in the short term. But the entry of new players will give business users a new breed of devices attuned to there unique needs and offer increased competition, ultimately driving down prices and increasing features/capabilities.

## Cisco and Apple: A Win-Win?

Cisco and Apple recently settled there iPhone dispute. Before the dust has even settled, many commentators are saying that Apple won, and Cisco lost, primarily because their settlement was centered around a vague promise that the 2 companies would work together in the future on security as well as consumer and enterprise communications products. Although most of the commentators believe this will never happen, we believe it will. Both companies are considered difficult to work with and have major league egos that hampered partnering with what they may perceive as lesser entities (or at least it has in the past). But if the agreement really is substantial and ultimately does hold, and if Cisco and Apple can work together and share the iPhone label, this will represent a major competitive shift in the market.

---

*“...if Cisco and Apple can work together and share the iPhone label, this will represent a major competitive shift in the market....”*

---

Each company would benefit greatly if they indeed can make this arrangement work over an extended period of time. There is no question that Apple wants to be a major contender in the highly competitive mobile phone market. It is attempting to do so by leveraging its brand

ubiquity in the portable entertainment area (e.g., iPod). Entertainment capability is becoming a key component (and major selling point) of newer, flashy cell phone models. Cisco, on the other hand, is using its brand (e.g., Linksys) and marketing muscle to try and dominate the consumer side of the VoIP telephony marketplace (of course it is also doing so in the enterprise with Cisco branded products for IP telephony).

Within 3-4 years, fixed mobile convergence (FMC) will be a key component of virtually all wireless and VoIP providers' playbooks. Users will carry devices that can connect over cellular networks when they are on the street, but connect over WiFi when they are at home (or in the office). The need for vendors to become proficient at both cellular and VoIP will become a key attribute for any company wanting to make phones, whether packed with entertainment capability or not. By sharing the iPhone brand, Cisco could leverage its VoIP experience while Apple could leverage its entertainment oriented cellular phone experience. The two together could be greater than the sum of its parts. It is highly likely that Apple would configure an iPhone with VoIP in addition to cellular (they already have the WiFi components). And we envision Cisco selling an FMC device (they are already working on such products) that also has entertainment features embedded in it that it would obtain from Apple. Indeed, we expect Apple and Cisco to ultimately cross-sell each other's products and share their engineering strengths to address the FMC market, as well as leveraging each other's complimentary distribution channels. This would benefit both companies.

**Bottom Line:** We believe this agreement is a win-win situation for Cisco and Apple, provided both sides take a longer term view of the market. Of course agreeing to work together, and actually working together are two different things and agreements often fall apart. But in this case, both companies have much to gain if they are able to cooperate, and much to lose if they can't. Only time will tell if they can make it work.

## The Death of Carrier Supplied (and Subsidized) Devices?

---

*“...carriers often “lock” a phone to its network ... this may be set to change in North America in the next 1-2 years as phone vendors of primarily high end devices begin to sell direct to end users ....”*

---

North America is currently dominated by cell phones which are acquired by users from their carriers (e.g., AT&T, Verizon, Sprint, T-Mobile, Rogers) at a highly subsidized price (e.g., as little as \$0 with a 2 year service commitment). This has been the case since the early days of cellular communications as carriers use this tool to lock in customers and reduce churn. In return, carriers often “lock” a phone to its network, thus requiring the user to obtain the phone from them, but also not allowing the phone to operate on any other network. However, most of the world does not adhere to this model, and users are free to buy a device wherever they chose, and then simply provision it to the network of choice via a SIM card (which is only available on GSM based phones, not the CDMA systems which accounts for about half of the North American

market).

However, this may be set to change in North America in the next 1-2 years as phone vendors of primarily high end devices begin to sell direct to end users. Indeed, Apple, which recently announced its iPhone, has indicated it will market directly from its web site (as well as through its designated carrier, AT&T). We believe this is the start of a wave, as many vendors of devices are now beginning to feel empowered to go direct to consumers. Initially this will be primarily a phenomenon of the high end of the market. This is also standard practice for enterprises who are increasingly buying smart phone devices for their workers in the hundreds and thousands, and who are more interested in working with the supplier (e.g., HP, Palm, Nokia) and secondarily choosing a carrier.

From the perspective of the individual buyer, this "buy it anywhere" phenomenon has been accelerating in most parts of the world, except for North America where the vast majority of handsets still go through the carrier channel. Indeed, in some parts of the world there is a significant market in resale of used devices (e.g., India). In much of the world, users can take their SIM card out of one device, plug it into another and be on the air (although certain carrier specific features may not work without over the air provisioning). However, CDMA is more difficult, as there is no SIM card to replace and must be provisioned directly by a carrier. Carriers in North America still exert enormous influence over device vendors, getting them to modify each device to specific carrier specs (which generally raises the cost and limits the cross-network capability - a feature carriers are keen to protect).

But we believe several things will change this over the next 1-2 years. First users will demand more choice, especially high end users who are more willing to forgo subsidies and buy what they want. Second, new competition to the current networks will emerge, particularly in urban areas where Mesh WiFi and WiMax are becoming available. Third the higher end purchaser will demand cross network support (e.g., 3G+, WiFi, WiMax, etc.) and will go with a provider (or providers) that can assure all the connections needed especially as the world of Fixed-Mobile Convergence takes hold.

**Bottom Line:** The lock that carriers have had on phone devices is easing and we expect to see more choice in the near term. Users will be able to buy a phone anywhere, and put it on the network at will. We believe this will be accelerated by 2 additional factors: carriers, who are looking to increase profitability, will gradually reduce and in some cases eliminate their subsidies, and in North America, the ability of CDMA devices to ultimately (2-3 years) be provisioned as easily as a GSM SIM-based device.



**J. Gold Associates, LLC**

6 Valentine Road  
Northborough, MA 01532

**Phone:**  
508-393-5294

**Web:**  
[www.jgoldassociates.com](http://www.jgoldassociates.com)

*Research, Analysis,  
Strategic Consulting*