

**THINK TANK SESSION**

**MOBILE VIRTUAL NETWORK OPERATORS & THE FUTURE OF MOBILE BUSINESS:  
OFF TO THE RACES OR BACK TO THE STARTING GATE?**

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**SUMMARY**

The Silicon Valley World Internet Center held a Think Tank Session on the future of mobile business, addressing specifically the emergence of Mobile Virtual Network Operators (MVNOs) and whether MVNOs are capable of moving forward the mobile service business in the United States. At this Session, twenty-two participants discussed this movement and its impact on telcos.

For the purpose of the day's discussion, the following was used as the MVNO working definition:

“In its simplest form, a MNVO is a mobile wireless service provider of voice and data services that uses (or leases capacity of) the wireless communications network of a third-party carrier.”

Participants identified both the facilitating factors and the challenges for MVNO business models. Overall, the group agreed that highly focused branding and marketing are key to successful MVNO adoption along with a clear understanding of consumer needs and their wireless usage patterns. The participants emphasized that the first to market will have a competitive advantage and be in the best position to take advantage of opportunities for revenue generation through marketing and sales of products associated with highly known brands, including Virgin, CNN, and MTV. Participants at the Session currently working with large telcos in Europe, Asia and the U.S. reinforced that telcos are committed to the MVNO model with or without brand-related partners. As is well known, telcos have crossed the proverbial Rubicon (Julius Caesar) in the costly purchases of capacity, especially 3G, and are committed to recouping these investments. The opportunities that arise from entering the MVNO market provide an alternate to telcos to generate revenue and cash-flow, for instance, by leasing infrastructure capacity and revenue-sharing from service-partnering. Overall, telcos have an incentive to enter this space from a customer perspective. As customers move from MVNO to MVNO (for example, from Virgin to MTV), the telco retains that customer through the services of the MVNO.

**A PERSPECTIVE ON GLOBAL DEVELOPMENTS**

Think Tank facilitator Robert Noakes opened the Session, including a brief discussion of the MVNO working definition. Although the MVNO working definition was based on 2.5G and 3G broadband networks, the group touched upon the incorporation of other networks such as 802.11. The ubiquitous development of the wireless space will involve the interoperability of networks along with a device capable of accessing all of these networks. For the purpose of the Session, 2.5G and 3G remained the underlying assumption for the day's MVNO discussion.

Patric Carlsson from Research|Strategy|Business sparked off the day's discussion with a presentation on MVNO global developments, starting off with aspects of the MVNO business model(s) and concluding with current market developments in Europe, Asia and the United States. (Refer to Carlsson's powerpoint presentation for full details.) While the European market is not homogenous, it can be characterized with at least 10 highly penetrated mobile markets, four to five infrastructure carriers, the incorporation of standards (GSM/GPRS) with international roaming and interoperability, and from 2 to 6 MVNOs in each of the 10 mobile markets. Voice and data are the main markets in Europe. In Asia, the MVNO market development is not as visible as in Europe. For the most part, Virgin Mobile is the pioneer in the Asian market. The opportunity for customer churn is low. There is, however, high potential for new markets, but in some areas there is no infrastructure in place which creates the challenge. In the U.S., WorldCom can be considered a MVNO as it does not own any of its infrastructure, but leases it from carriers. The MVNO market in the U.S. is purely data with providers such as GoAmerica, Motient, Palm.net and OmniSky.

Carlsson emphasized that U.S. carriers are, indeed, upgrading their networks. The latter is especially true on the East Coast, however, devices are yet to be marketed.

### **VIRGIN MOBILE: THE CASE STUDY**

Carlsson presented a case study of Virgin Mobile. Virgin has received most attention in United Kingdom by reselling services of Orange and Vodafone and becoming the fastest growing provider of wireless services in that country last year. The company was launched in 1999 in the United Kingdom utilizing Points of Presence (POPS) targeted at the younger generation of trend setters, reaching 1 million customers this past summer with 50 percent of its customers coming from churn. Overall, Virgin Mobile's business model incorporates pre-paid services, targets 18-33 yr. olds, and incorporates a low Average Revenue Per User (ARPU) target, allowing more flexibility for roaming.

In Australia, Virgin Mobile has partnerships with Optus and Cable & Wireless and with Singtel in Singapore. Virgin has just entered into the U.S. market and is currently considering its partner options.

Much of the following group discussion centered around Virgin's strong brand. Given Virgin's strong branding and 'lifestyle' trend, Virgin Mobile is used to push existing Virgin services and products, including travel, music and banking. Virgin understands its customers and the importance of marketing; their services and products are all about branding. Brand loyalty programs in the United Kingdom are so hot that some consumers carry two to three devices for separate loyalty programs. The watch words for this discussion are "profile and communicate." First, find out what the customers want and then communicate that to them. Some participants noted that this sort of lifestyle development is not incorporated in the marketing strategies in the United States.

### **BUSINESS CUSTOMER VS CONSUMER**

Discussion ensued around U.S. enterprise adoption versus the rampant consumer adoption in Europe and Asia. Some participants opined that the big dollars for getting the MVNO concept off the ground in the U.S. are in the business sector, while others argued that American teenagers and young adults have an abundance of discretionary income available for use in the MVNO arena for branded products and services.

The group was in full agreement, however, that the industry is in its infancy with blatant indicators of this in both services and products. Downloads in the form of wireless advertisements are generally very unsophisticated, hard to read and do not communicate the message well to the consumer. Also, telecommunications and data communications have not yet converged in the psyche of the companies producing devices. Companies have yet to market a single device to handle all consumer needs.

The consumer versus the business customer discussion continued into the breakout group activities. In the breakouts, participants were asked to put together a business model for the U.S. market capable of successfully penetrating at least 60% of a given target group. Each group was responsible for identifying the target group, the profile of this target group, services, a branding strategy, necessary partnerships, and revenue-sharing options. Three of the groups focused on consumer markets (and interestingly, two of which were related to products and services branded around sports) and the fourth group focused on the enterprise customer. (Refer to the Session proceedings for further detail on the results from the breakout groups.)

### **THE MVNO IMPACT ON TELCOS**

The group consensus was that telcos are committed to the MVNO market, with or without the existence of independent MVNOs in the marketplace. Telcos have spent tremendous amounts on licensing and infrastructure to leave the market to chance. If MVNOs do not rush into this market space, telcos will develop their own market-brandd portals for selling products and services as Telia has done in Sweden. But, in most case, the telco may need to subvert its brand to the better recognized brand of a MVNO. Will telcos do it? The group agreed that they will, indeed, give up brand position for revenue generation to recoup past investments . The customer wants services; they do not care about how they are delivered. Just as imode never mentions the Internet, Virgin will never bother the consumer with the fact that it leases capacity from Vodafone or One2One. After all, consider the most widely asked question on mobile phone: "Where are you?" not "Who is your carrier?"

### **BUSINESS MODEL COMPONENTS FOR THE U.S. MARKET**

As a group exercise, participants brainstormed a list of components that could be incorporated into successful MVNO business models.

- Sponsored services subsidized by brands

## **BUSINESS MODEL COMPONENTS FOR THE U.S. MARKET, cont.**

- Single device that can access all applications. Carriers will leverage their infrastructure for profit mod
- One that “splits the pie” fairly and safely
- Access to desktop applications such as email
- Vertical market opportunities include 1) field services support, 2) sales support for mobile users, and 3) access for specific vendor applications such as Oracle, SAP & Sybold
- Bell Curve thesis: Within the next 24 to 48 months, the curve will rise on proliferation and fall on consolidation. If this proves true then 1) there may be a limited term opportunity to set up a business as a provider of custom MVNOs, 2) they may be near term business opportunities in the enabling space for MVNOs, and 3) the long-term prospect may suggest that the carriers should focus more energy on this opportunity
- Hands-free mobile telephony – most Americans access their mobile phones in the car
- Loyalty programs w/MOUs as the currency for use of the phone and accompanying credit card; bill and rewards come from one brand/bill
- MVNO is a VAR that owns a customer’s customer base; it will sell services from multi-types of networks run by multi-operators
- Focus on and understand WHO is your customer and what he/she wants; THEN adapt the service offerings
- Free phones
- Short Messaging Services (SMS)
- Location-based
- Info-entertainment
- Co-branding
- VAR services
- A two- and three-tier delivery model which was very unsuccessful for DSL wholesalers may apply here
- Group data content for each specific “Interest Group” and bundle an adequate (price, volume) plan with it into a package; focus on the “identity and psyche” of the group
- Ability to spread customer acquisition cost & relationship management cost across multiple “product/service” areas
- Possible business models: 1) multi-channel consumer – Example: Geneva & Virgin, 2) hybrid – Example: Nokia, 3) UPN Analog – Example: Enterprise Defense, and 4) Panisitic – Example: Nomadic, HighlyTuned, 3Com Park

## **KEY ENABLERS TO MOVE THE MVNO MARKET IN THE U.S.**

The group also provided ideas for key enablers to move MVNO market in the U.S. over the next 12 to 18 months.

- Pre-paid data, such as SMS
- Carriers changing their mindset that they must own the customer relationship
- Mobile data applications offered from other Internet applications will allow carriers to sit between customers and their information
- MiddleWare: API Gateway interface between desktop application and mobile devices such as PDA, cell, pager
- Bandwidth technologies – new ways to utilize bandwidth to deliver rich content without the need for 3G infrastructure.
- New devices & products for push & pull strategies
- Marketing / lifestyle message through brands (Nike, AOL, Microsoft)
- Infrastructure
- Proliferation of network-enabled devices
- Roaming & billing and other support services
- Providing people with ability to attach one identity to all services and devices
- Excess capacity from carriers
- Brand owners participation
- Ability to provide more value added data services that the carriers can. Will show unique value
- Location (GPS, enhanced 911)
- Receiving & storing data while “off”
- Low-cost barrier to entry; phones are still very expensive when you add all of the accessories; larger subsidies to kick start the market
- Strong, competitive wholesalers of the communications infrastructure, analogous to what generic eCommerce backends offered to retailers
- Improved user interface methods to interact with a device in a digitized way
- Privately sharable location-based services

## **CHALLENGES FOR MVNO ADOPTION IN THE U.S. MARKET**

The participants identified some of the key challenges to the successful launch of the MVNO market in the next 12 to 18 months. These challenges, in turn, provide market opportunities.

- The “control” mentality of the carriers
- The lack of network and device capabilities
- Lack of a “Killer Application” (though some participants believed two-way text messaging was THE killer application)
- U.S. networks not compatible/interoperable with one another
- Build out of U.S. infrastructure for 3G
- Allocation of frequency, specifically, military use and application in the range that business and enterprise needs
- Meeting consumer expectations of acceptable performance and customer intimacy in a cost-effective way
- Cost
- Technology
- Quality of service
- Lack of better functioning connectivity will help get people to use wireless communications more in the U.S.
- Competing U.S. standards / lack of standards for bridging communications across a hybrid of carrier networks
- Wireless coverage
- MNO & MVNO 50/50 models assume brands are constant; impacts flexibility of VNO brand to move
- Technology-driven mind sets and solutions
- Ability of an MVNO to reach a significant market size based on their “affinity” factor for brand-driven customer acquisition

## **THE LAST WORD**

At the end of the Session, participants were asked to identify one word considered key to MVNO market adoption. The results are below and include an asterisk for each vote that concept received from the group. Brand and identity topped the list as these two concepts were much introduced into the Session’s discussions during the day.

- Brand \*\*\*\*\*
- Identity \*\*\*\*\*
- Applications \*\*
- Services \*\*
- ARPU (Average Revenue Per User) \*\*
- Syndication \*\*
- Revenue \*\*
- Loyalty \*
- Profit
- Speed
- Focus
- Standards
- Access
- Cash Flow
- Churn
- Leverage

## **FOR FURTHER INFORMATION**

The full proceedings from this Think Tank Session will be available within 3-4 weeks. The proceedings will be posted on the Center’s Web site. For further information please contact:

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