

You've probably heard the quip about how to identify pioneers -- they're the ones with the arrows in their backs. Unless you've previously navigated that technical path, building an MVNO support system has a lot in common with pioneering; you're bound to lose your way on occasion, taking more time, spending more than necessary, and increasing the likelihood of a kludgy (clumsy or inelegant), or patchwork solution.

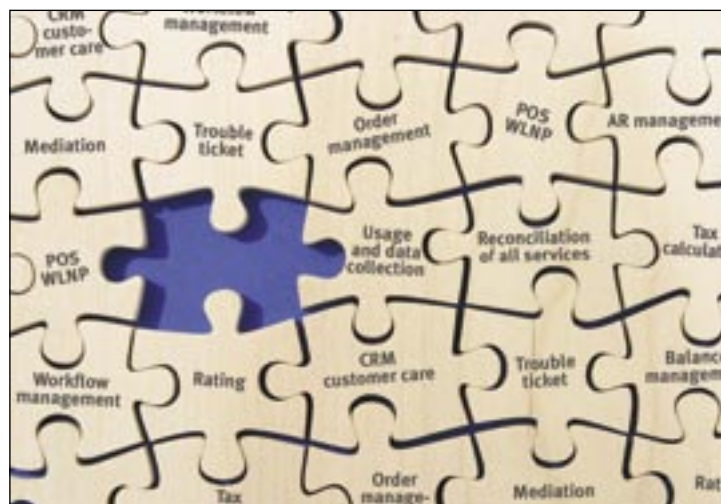
In the first article in this series, 'MVNO - The Next Big Reseller Opportunity' (March 15 issue), the acronym 'MVNE' for Mobile Virtual Network (Operator) Enabler, was described as a provider of an integrated suite of support systems and solutions designed specifically for MVNOs. MVNEs are the technical equivalent of wireless outfitters; they've already blazed a trail and can guide MVNOs from concept through launch and beyond, faster and often cheaper than MVNOs can do it on their own. MVNEs are technology companies providing telecom back office OSS (Operational Support System) and BSS (Business Support System) or the combo BSS/OSS. Until their advent, it took considerable IT resources, significant capital, and a steep learning curve to build the underlying infrastructure to support an MVNO. Experienced MVNEs are bringing down these barriers to entry to the lucrative wireless market. In the name of disclosure, this author works for an MVNE.

MVNO infrastructure often appears to newcomers as a big jigsaw puzzle where it's difficult to identify all the necessary pieces and understand how they all fit together. When MVNOs ultimately grasp the scope of their support requirements and realize how many balls they need to juggle, outsourcing to a firm experienced in building and supporting MVNOs may be an attractive alternative.

MVNEs are quick to point out that by leveraging their experi-

What's an MVNE *and What Can It Do for Me?*

By David Grigg



ence, they minimize start-up risks and hasten profitability. In addition to enabling a quicker time to market and a faster ROI, outsourcing the construction of MVNO infrastructure keeps internal resources focused on sales, marketing, distribution, and brand building. Joe Gensheimer, COO of the recently launched MVNO Movida, expects to reach 1 million subscribers with fewer than 50 in-house employees thanks to outsourcing most of Movida's infrastructure, development work and customer care.

How many necks do you want to strangle?

Many U.S. telcos, mobile operators included, utilize 3rd party service bureaus for their billing applications, and engage outside consulting firms to build, integrate, and enhance their infrastructure. By using an MVNE, multi-vendor element services with disparate architectures will be integrated and supported by a single vendor. Using an MVNE is analogous to using a general contractor to

build your home or office building. You approve the blueprints and the general contractor makes your dream come true. If you're sufficiently intrepid, you can act as your own general contractor, directly coordinating and managing all the subcontractors yourself. But there's no guarantee you can do it faster, better, or cheaper than by using a general contractor. In addition to numerous headaches, going it alone may incur higher risk and mixed rewards. It takes a venturesome CTO with a healthy budget and a talented development staff with the time to focus in order to buck the outsourcing trend and build a back office MVNO platform entirely with in-house resources.

What specifically does an MVNE bring to the table?

In the fractured MVNO market, few MVNOs are typical, each having a unique set of requirements. Recognizing this, MVNEs tailor their service offerings to the specific wants and needs of

individual clients. However, if any MVNO/MVNE relationship could be considered typical, the MVNO provides the branding, carrier contract, business rules, pricing structure, marketing, sales and distribution channels, and the MVNE provides the software and systems integration to create an automated solution with minimal human touchpoints. This scenario requires that the MVNE utilize a flexible, easily configurable application suite and can apply a broad set of technical abilities, especially systems integration skills to get the job done. You don't want to 'dumb down' your business model or limit your marketing offers because your systems can't support them. For example, can your support system tell a consumer how much a download will cost ahead of time and whether he/she has sufficient prepaid balance to cover it?

Some providers of individual MVNO infrastructure components are touting themselves as MVNEs, which is muddying the MVNE moniker. A true MVNE is able to provide a complete end-to-end MVNO solution, not just a single piece or two of the puzzle. There are two types of master MVNEs - the first having their own internal resources including software applications, web-services, software developers and systems integrators, and a second type that outsource part or all of their services, including software applications, to 3rd parties. This is similar to general building contractors; some have minimal equipment and almost no tradesmen of their own, subcontracting virtually all their services, while

others have their own crews and the equipment needed to perform most of the construction. MVNEs with in-house technical resources and their own software may offer more aggressive pricing and a faster time to market, but it's their experience and systems integration skills that sets them apart. A flexible core application suite handling postpaid, prepaid, voice, data, and other converged services is an essential starting point, but an MVNE's ultimate value is their ability to electronically bond the numerous infrastructure components together in a single automated end-to-end solution.



In addition to self-care, some MVNEs provide web services supporting CRM, PIN management, order entry, POS, top-up, dealer/partner self-care, and reporting. Speedy configuration and customization of all these MVNE services is key to fully supporting the unique requirements of each individual MVNO. Call centers, data centers, and handset sourcing and logistics are optional components; NOC (Network Operations Center) and hosting of MVNE services can be provided by the MVNE, MVNO or outsourced to a co-location facility.

Experienced MVNEs help refine their client's blueprints and improve business processes. They also provide insights and options for many of the value added services and 3rd party relationships required for a custom platform. Some MVNEs also offer expertise in marketing, wholesale contract negotiation, and business plan consultation. Be sure to fully check their experience and fees before engaging these types of services.

Network operators appreciate competent MVNEs because they offload much of the carrier's hand-holding duties, minimizing the overhead needed to get fledgling MVNOs up and running and in providing ongoing support. Some wireless carriers have fostered relationships with proven MVNEs and are an excellent starting point to begin your MVNE search.

Just as a potential homeowner retains an architect prior to employing their general contractor, it's not uncommon for new MVNOs to engage a consulting firm specializing in wireless to help define their business model, facilitate their MVNE selection, and provide guidance through their initial start up period. Recent signs indicate some in the invest-

ment community favor engaging an experienced MVNE to reduce risks.

Not only valuable during start up

The wireless market is dynamic. The evolution of predominantly voice/SMS-centric MVNOs who embrace a wide variety of premium content, bundled multimedia, e-commerce and other 3G/4G services along with wireless WiFi and VoIP options is exciting, but presents ongoing infrastructure demands. Wireless operators and their networks are far from static. Sprint's recent switch of wholesale billing vendors, for example, requires all their MVNOs to deal with new usage files/CDR formats. MVNOs regularly modify their pricing model to respond to customer wants and needs. Along with enabling entrepreneurial MVNOs to turn on a dime, fielding these ongoing technical changes is a big part of an MVNE's value proposition.

MVNE selection -- performing your due diligence and doing your homework

What makes a good MVNE? Along with being competent and affordable, the short answer is one that makes things easy for all parties - the MVNO, network operator, and all 3rd party vendors. They're responsive, solve problems, and eliminate finger pointing. Good MVNEs have excellent references, a solid track record, technical competence, a minimum of marketing-speak, and zero fairy-dust (too technical or obscure to understand).

Just as certain general contractors are faster and better suited to a homeowner's wants and needs than others, particular MVNEs may be better suited to an MVNO's needs. You don't want to engage an MVNE with only postpaid experi-

ence to support a prepaid model.

Ask the important questions. What is the experience and history of the MVNE? How long does it take to launch? How many of their services are outsourced? Can they fully support every detail of your business model? Are all their services ready for prime time?

Some MVNOs may prefer a formal selection process based on an RFI (Request for Information). A sample RFI for MVNE selection is available at www.prepaid-press.com/mvnotools, or from www.prepaid-press.com, click the MVNO Tools link in the left pane.

The proliferation of MVNOs is not without its detractors and naysayers and the same is true of MVNEs. Some question the long-term value of this relatively young industry. MVNEs may never be more than boutique consulting services with specialized applications and interfaces, but if you found yourself venturing into the frontier of MVNO infrastructure, wouldn't you appreciate an experienced guide to lead you through the wilderness?

This is the third of a three part series on how to become an MVNO. This article, as well as Part I and Part II can be found on *The Prepaid Press* website, www.prepaid-press.com.

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Do you have questions about MVNOs? Send them to mvnocorner@prepaid-press.com.

The devil is in the details

In the US, service offerings of master MVNEs - those offering a full portfolio of MVNO managed services - are often comprised of integrated software applications supporting:

- Customer acquisition/sales order management
- POS, WLN
- CRM/customer care (including call center application, web self-care and IVR)
- Usage and data collection
- Mediation
- Rating
- Telecom tax calculation
- Balance management
- AR management, reporting and financials
- Wholesale/retail reconciliation of all services
- Trouble ticket
- Workflow management

And a suite of interfaces for:

- Network provisioning
- Mid-call teardown switches
- 2.5G (SMS) and 3G data gateways
- OTA (Over The Air) activation
- Handset logistics
- PIN and SIM distribution and activation
- POS, top-ups, payment clearing-houses
- 3rd party IVR Systems

