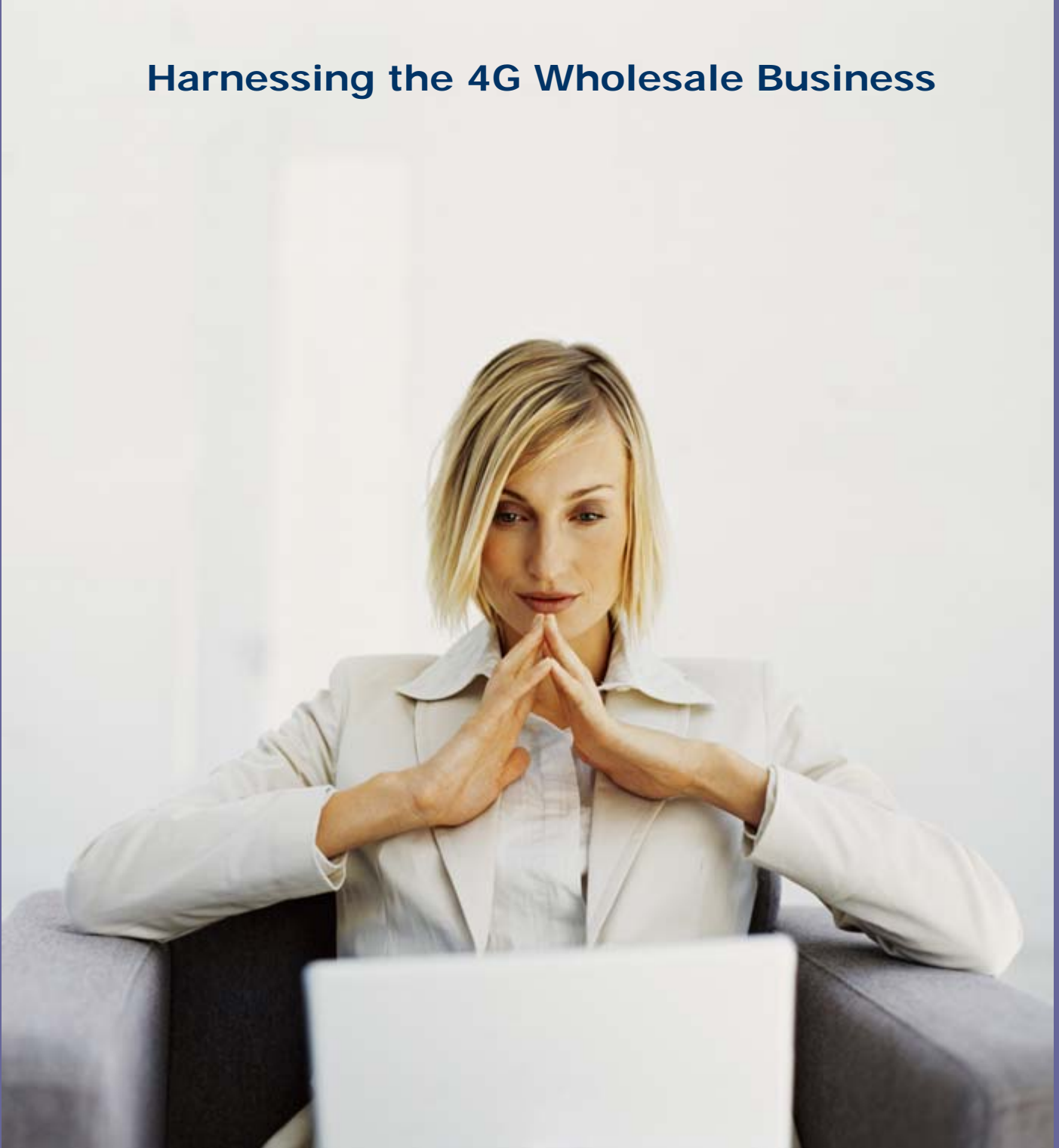


Harnessing the 4G Wholesale Business



Overview

Our 4G wholesale seminar is the most comprehensive and the only seminar of its kind in the world. It contains 3 sessions and 2 workshops. The first session provides an insight to 4G wholesale business fundamentals. The second session provides a complete overview of the key elements of the 4G MVNO go-to-market strategy. The third session contains 40 current and potential 4G MVNO case studies as well as 6 current and potential 4G HNO case studies from the US. The strategy workshop will review our client's mobile broadband strategy, partner's selection, competitors, and their service offering. The final workshop provides our clients how to build a compelling 4G MVNO business case with market based assumptions. Our ultimate goal is to maximize your knowledge and answer all of your 4G MVNO questions. Depending on your needs, we can also customize the seminar or the workshop to fit your situation.

Definitions

- **MNO:** It is a mobile network operator that owns its mobile network infrastructure and allocation of spectrum. It does not open its network to MVNOs, MVNEs and MVNAs.
- **HNO:** It is as a mobile network operator that owns its network infrastructure and allocation of spectrum. It opens its network to MVNOs, MVNEs, MNOs, MVNOs and MVNAs.
- **MVNO:** It is an organization that offers mobile and mobile data services with or without spectrum. Note that the spectrum can be licensed or unlicensed.
- **MVNA:** It is an organization that combines multiple MVNOs and may work with multiple MNOs, HNOs, and MVNEs.
- **MVNE:** It is an intermediary organization that offers managed services.

Session I: 4G Wholesale Business Fundamentals

- **Mobile Networks & Convergence & Spectrum**
 - Defining the strategic importance of the 4G wholesale business and the current and potential market size
 - Examining the 4G wholesale business models and partnerships as well as key drivers for 4G MVNOs
 - Determining the MVNOs' mobile network architecture and developing its technology roadmap
 - Identifying and analyzing licensed and unlicensed spectrum bands and their impact in the industry
 - Assessing TV white space rules, opportunities, implications and requirements for mobile broadband
 - Evaluating the mobile broadband market, consumer devices, applications and disruptive business models

Session II: 4G MVNO Go-To-Market Strategy

- **MVNO Market Entry Evaluation & Strategy Planning**
 - Understanding the potential of becoming a 4G MVNO and identifying the key success factors
 - Evaluating multiple MVNO business models and determining the next steps to move forward
 - Examining the risks and benefits of becoming a data centric MVNO with or without spectrum
- **Market & Customer Segmentation**
 - Identifying new and untapped consumer groups for specific mobile data services and applications
 - Segmenting the market for mobile data services and devising a product portfolio for each segment
 - Determining how much consumers are willing to pay for mobile data services and its impact for ARPU

Session II: 4G MVNO Go-To-Market Strategy

■ HNO Evaluation & Analysis & Contract Negotiation

- Selecting a Host Network Operator (HNO) and evaluating network sharing solutions
- Determining the criteria HNOs look for hosting MVNOs and selecting MVNEs and MVNAs
- Negotiating a win-win deal with HNO(s) and examining the types of wholesale pricing

■ MVNE Identification & Evaluation & Analysis

- Evaluating the costs and benefits of working with an MVNE and understanding the selection process
- Negotiating a win-win deal with an MVNE and examining the pricing models and current market prices
- Determining the business operations an MVNO should outsource to an MVNE and telecom vendor

■ Partnerships & Alliance Development

- Determining the criteria an MVNO should use to select its partners
- Examining how to structure revenue sharing arrangements with partners
- Understanding the MVNO partnership process and development of Service Level Agreements (SLAs)

■ Distribution & Service Development

- Establishing distribution channels to offer mobile broadband services based on specific target segment
- Developing tariffs to enable the success of mobile broadband services and mobile data applications
- Understanding pricing models an MVNO should use for its services (i.e. content based, volume, duration)
- Defining service definition, roles, responsibilities and using innovative customer promotion strategies

Session III: 4G MVNO & 4G HNO Case Studies

■ 4G Mobile Virtual Network Operators (MVNOs):

Amazon Kindle (www.amazon.com/kindle), AMC (www.amctheatres.com), Apple (www.apple.com), American Express (www.americanexpress.com), Best Buy (www.bestbuy.com), BMW (www.bmw.com), Canon (www.canon.com), Cablevision (www.cablevision.com), Cbeyond (www.cbeyond.com), Comcast (www.comcast.com), Dell (www.dell.com), DIRECTV (www.directv.com), EA (www.ea.com), Facebook (www.facebook.com), Ford (www.ford.com), GE (www.ge.com), GM (www.gm.com), Google (www.google.com), Hilton (www.hilton.com), HP (www.hp.com), Hulu (www.hulu.com), Intel (www.intel.com), Kodak (www.kodak.com), LG (www.lg.com), Leap (www.leapwireless.com), Marriott (www.marriott.com), Medtronic (www.medtronic.com), MetroPCS (www.metropcs.com), Netflix (www.netflix.com), Nintendo (www.nintendo.com), Panasonic (www.panasonic.com), Philips (www.philips.com), Radio Shack (www.radioshack.com), Sega (www.sega.com), Siemens (www.siemens.com), Sony (www.sony.com), Starbucks (www.starbucks.com), Time Warner Cable (www.timewarnercable.com), Volvo (www.volvo.com), Zynga (www.zynga.com)

■ 4G Host Network Operators (HNOs):

ATT (www.att.com/wireles), Clearwire (www.clearwire.com), Dish Network (www.dishnetwork.com), LightSquared (www.lightsquared.com), Sprint (www.sprint.com), Verizon (www.verizonwireless.com)

Workshops: Strategy & Business Case Development

- **Revenue Structure:** Market Sizing, Take-Up Usage, Service Selection and Pricing
- **Capex (Capital Expenditures) Structure:** Network Related and Non-Network Related Expenses
- **Opex (Operating Expenditures) Structure:** Direct and Indirect Expenses
- **Revenue Sharing Arrangement:** MVNO, MVNE, Content Providers, ASPs
- **Financial Indicators:** Internal Rate of Return (IRR), Net Present Value (NPV), Payback

About The Presenter

Alex Besen is the Founder & CEO of The Besen Group LLC. He provides advisory and training services to corporate executives in the mobile data industry.

Alex has over 18 years of hands-on experience in the mobile industry working for operators and vendors in North America and Europe in numerous roles including business development, marketing, project management and finance. He has been working with mobile network operators in developing their wholesale business models, advising MVNOs to launch their mobile and mobile data services as well as helping MVNEs with their services portfolios.

Previously, Alex worked at Ericsson with mobile operators on MVNO and UMTS projects in the EMEA (Europe, Middle East and Africa) region. He was also responsible for identifying potential partners and hosting workshops at Ericsson Mobility World (a mobile data laboratory) where developers create, optimize and commercialize mobile applications. Prior to Ericsson, Alex was employed at T-Mobile USA (Omnipoint Communications) where he was responsible for partnerships, joint ventures and provided billing, customer care, marketing and financing solutions to mobile operators. Alex began his mobile career with Pocket Communications based in Washington DC where he managed the company's auction activity for C-block spectrum licenses as well as other activities associated with market research, market segmentation, pricing plans and market distribution strategies.

He holds a BS degree in Management and an MBA degree in International Business from the American University. He has delivered a 4G wholesale business presentation to FCC in October 2010, RCA in December 2010, and CTIA in January 2011. In addition, he has spoken at MVNO Industry Summit 2011, MVNO Industry Summit Latam 2011, LTE North America 2011, LTE North America 2010, MVNO Industry Summit 2010, Eurasia Com 2009, Mobile World Congress 2008, MVNO Summit 2008, MVNO Summit 2007, MVNO Congress 2007, Emerging Mobile Partnerships & MVNOs Conference 2007, CTIA Wireless 2006, CTIA Wireless 2005 and is also quoted frequently in the leading telecommunications and media publications.



About The Besen Group

The Besen Group LLC is an international management consulting practice to the mobile data industry headquartered in the Washington DC area, with representatives in Paris and Tokyo.

The Besen Group brings global perspective and an open approach to client engagements, where the transfer of our mobile data knowledge, hands-on experience, and strategic thinking become part of our clients' ongoing competitive strength.

Its mission is to provide mobile data players with tools, knowledge, and services enabling them to perform optimally in their mobile environment. The Besen Group's competitive edge is based on practical experience with mobile operators, mobile vendors, and a mobile data laboratory.

Our references include Avea, Banque Populaire, Clearwire, Cosmote, Ericsson, Fenerbahce, Leclerc Mobile, LightSquared, Mportal, Mpower Labs, SpeechPhone, and T-Mobile USA.

The Besen Group offers the following four (4) service portfolios: [Mobile Data Service Portfolio](#), [MVNO Service Portfolio](#), [MVNE Service Portfolio](#) and [HNO Service Portfolio](#).

All of our services are tailored to ensure that each of our clients' needs are met and surpassed. We work on a project basis or retainer basis with mobile operators, MVNOs, MVNEs, mobile vendors, law firms, investment banks, venture capital and private equity firms from all around the world.

Channel Partners



Pricing

MVNO Seminar includes:

- Session I: 4G Wholesale Business Fundamentals
- Session II: 4G MVNO Go-To-Market Strategy
- Session III: 4G MVNO & 4G HNO Case Studies
- Workshop: Strategy & Business Case Development

For pricing information, please send an email to: seminar@thebesengroup.com.

The seminar price is for unlimited number of participants. The seminar price will vary for a customized seminar.

The duration of the seminar is one day. Per customer request, the seminar can be extended to additional days.

Customers will be responsible for all travel related expenses including air, transportation, and lodging for the presenter. In case, customers will need a training facility, all Regus business center expenses will be billed additionally.

Payment

Full payment is required prior to the scheduled seminar date.

All payments should be made by check or wire transfer.

To arrange for a wire transfer, please contact us at +1.703.981.8168 or by email to: seminar@thebesengroup.com.

Scheduling

To schedule a seminar, please send your request to: seminar@thebesengroup.com with your contact details and availability.

For a customized seminar, please contact us at +1.703.981.8168 or by email to: seminar@thebesengroup.com.

Cancellation

All cancellations must be in writing. Cancellations received two weeks prior to the scheduled seminar date won't be responsible for any service charge.

A service charge of \$1,000 will apply to cancellations received less than two weeks prior to the scheduled seminar date within North America and a service charge of \$2,000 for all other international countries.

Legal Notice

No part of this publication may be reproduced by any means in whole or in part without the express written consent of The Besen Group LLC and may not be changed or modified in any way. The Besen Group LLC does not accept any legal responsibility for any actions taken on the basis of the information provided in the seminar.

All opinions, assumptions, estimates and recommendations cannot be guaranteed and participants to the seminar use this information at their own risk. This seminar is provided as is without warranty of any kind, express or implied, including, but not limited to, the implied warranties or merchantability, fitness for a particular purpose, or non-infringement.

The Besen Group LLC reserves the right to cancel the seminar, modify, alter or otherwise edit the content of the seminar and change the price for the seminar at its discretion at any time. Furthermore, The Besen Group LLC accepts no liability for any loss or damage or unforeseen consequential loss or damage arising from the use of the information contained in the seminar. The seminar presentation is the exclusive property of The Besen Group LLC.

Certain images and/or photos on the cover page are the copyrighted property of JupiterImages and are used with permission under license. These images and/or photos may not be copied or downloaded without permission from JupiterImages.

No part of the seminar may be reproduced, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written permission of The Besen Group LLC. A limited version of the seminar presentation will be provided to seminar participants.

All trademarks are the property of their respective owners. This seminar is for informational purposes only.

THE BESEN GROUP LLC MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS SEMINAR.

© Copyright 2012. The Besen Group, LLC. All Rights Reserved. Published: January, 2012.