

Introduction

The telecom industry is witnessing the supremacy of VAS as the key factor influencing loyalty of subscribers, increase in ARPU (Average Revenue per User) and bottom lines of telecom operators amidst growing competition and change in market dynamics.

This tremendous growth is going to make VAS as a USD 160 Billion Dollar market by 2009 attributing to more than 30% of the total telecom operator's revenues.

Key Drivers influencing better VAS offerings

Technology Innovation - Networks: It is the maturity in standards proposed by industry organizations like 3GPP and OMA (Open Mobile Alliance) both for emerging GSM and CDMA Networks that are evolving into 3G and 3.5 G (HSDPA) Networks & supported by initiatives adopted by them involving IN (Intelligent Networks) and IMS (Internet Multi-media Subsystems) on the Network Side. These standards and initiatives are paving ways for offering VAS solutions that were not possible earlier.

Technology Innovation – Mobile Computing: Evolution of advanced mobile computing platforms based on J2ME, mobile Linux, advanced JAVA for mobile applications, Symbian OS platforms (UIQ & S60), Windows Mobile, BREW, streaming technologies like RSS, XML, ATOM, NewsML and integration concepts like SOAP etc. powered with enhanced battery life and handset technologies are fueling the adoption of advanced mobile entertainment services.

Market Transition: Depletion of basic telecom revenues to increased competition and in some markets it is the cessation of monopolies paving way to competitive and complex market space.

Contribution of VAS: Provisioning of creative and innovative VAS services has become the key differentiator in terms of increasing customer loyalty, market share and spicing up the ARPU (Average Revenue per User). While all major analysts like IDC, Gartner Group and others are predicting that VAS revenues would reach 30% of telecom revenues worldwide by 2009.

Market Needs Analysis

Telecom Carriers' Needs

- *VAS Penetration:* Need for increased VAS penetration by Telecom Operators.
- *Device independence:* Delivery of VAS services to multiple types of devices whether residing in GSM or Hybrid or 3G networks
- *Need to leverage investments* in their existing GSM, Hybrid or 3G networks and maximizing VAS revenues
- Meeting the *content requirements of subscribers* belonging to diverse cultures and nationalities
- *Support all subscribers:* Telecom Operators always look for solutions on multiple content delivery platforms like SMS, USSD, WAP gateways, PAP push, and MMS gateways either on GSM or Hybrid or pure 3G networks.
- *Need for branded & customized dynamic UI* for operator's 2.5G or 3G phone users, which will serve as a one-stop solution for all VAS needs of Subscribers
- Telecom Carriers are unable to generate repeat purchases of the content because of poor browsing experience
- *Alternate Content Delivery Channels:* Innovation in the delivery of the content to the mobile subscribers to reduce the number of clicks to locate the content.
- *Shifting of VAS offerings from Text to Voice:* With the emergence of VoiceSMS delivery platforms, content that is now being offered on Text Messaging is deployed over the Voice Platforms.

Mobile Subscribers' Needs

- *Need for alternative delivery platforms:* Like Voice based content services delivered as VoiceSMS (Voice Short Message Service) instead of SMS or MMS.
- Need for fresh and updated content being available on the devices (2.5G and 3G Handsets)
- *Browsing experience:* 78% of young subscribers abort their content downloads due to slow response times such as more than 5-10 seconds.
- *Locating Content:* It is difficult for subscribers to find what data services are offered by the Telecom Operator.
- *Personalization of the content:* Customization as per subscriber's needs

What should Telecom Operators ideally look for in a strategic VAS Solution Partnerships?

Well, the carriers need to identify VAS solution companies that have a strategic roadmap on their product line, which can meet the VAS needs of 2G, 2.5G, 3G and 3.5G carrier networks. These companies have right technology partnerships and a positive attitude to understand the present and future needs of the Telecom Operators while they have already made inroads to address such needs well in advance.

Also, most of the times, the telecom operators have to address challenges like, whether to increase the subscriber penetration by making strategic investments into the telecom infrastructure or make investments to retain the subscriber loyalty and enhance subscriber stickiness by providing advanced value added services. The answer to such a situation would be to provide such advanced VAS services to the subscriber base by a way of revenue sharing partnerships with the VAS solution providers.

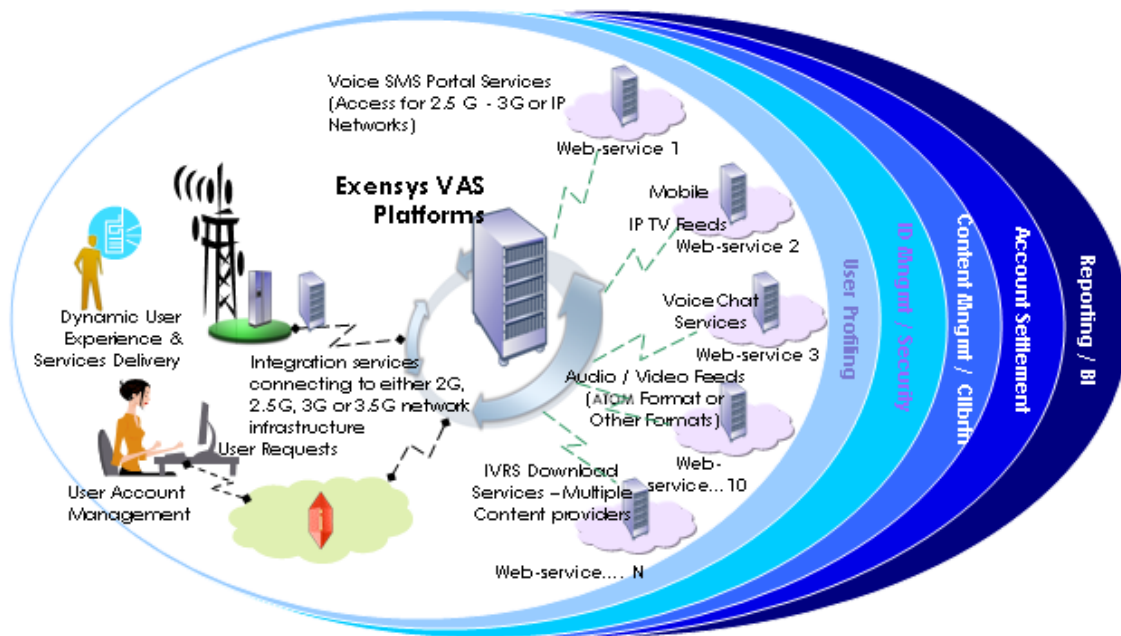
How can Exensys help Telecom Service Providers

Exensys provides VAS Solutions as per the needs of various telecom carriers (GSM or CDMA) covering almost all the network deployments from 2G to 3.5G.

Exensys VAS offerings Grid for Telecom Networks						
		2G	2.5G	3G	3.5G	
Solutions	Call Management Suite - CRBT - Missed Call Alert - Smart Call Manager - Voice Mail System					
	Prepaid Solution - Prepaid Charging Server - E-Top up Solution					
	Roaming Solution - Welcome SMS - Local Roaming Number - Preferred Roaming					
	Voice Based Solution - Voice SMS - Anonymous Voice Chat - Voice Portal					
	USSD - USSD Portal, Call me, Call back service					
	Converged Billing Integration					
	Mobile Data Services - On Device Portal (ODP)					
	Enterprise Solutions - Mobile ERP Integration - Lawful Interception Solutions for Internal Security Organizations (Defense, Police, Intelligence etc.) - CLVM					
	Location Based Services					
			Mobile IP TV Solutions			
Unified Messaging Platforms and Gateways						
Content Aggregation and Service Delivery Platforms (SDPs)						

Exensys has leveraged its Telecom VAS initiatives on standards proposed by 3GPP, OMA (Open Mobile Alliance) etc. These telecom initiatives are based on J2ME, Brew, Symbian OS, Symbian UIQ, Windows Mobile, RSS, XML, News ML, ATOM and SOAP technologies. Exensys relies on the proven carrier grade OEM partners like **INTEL**, **NMS** and **HP** while deploying its Telecom VAS Solutions.

The following architecture is an ideal example of how telecom operators can leverage their telecom investments in providing VAS services to their subscribers through Exensys VAS Platforms.



Benefits to Telecom Service Providers:

- Multiple revenue streams for the operators from various VAS services
- Increased subscriber loyalty, subscriber retention and increase in ARPU
- Telcos can introduce basic VAS services initially and then scale up the offerings later
- Competitive differentiator
- Deployment flexibility of the solutions as a managed services or a service within the network