

# An Overview of Indian VAS Industry: Regulatory Perspective

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## ABSTRACT

The Telecom Regulatory environment of India seems to be promising after the approval of NTP 2012 by the Union Cabinet. One can look at things afresh regarding Indian telecom sector which is one of the fastest growing markets at an expected growth rate of 10.6%<sup>1</sup> & contributing to around 3%<sup>2</sup> of Indian GDP. With a huge subscriber base of around 930 million<sup>3</sup>, unprecedented growth in teledensity & fast mobile penetration, India Inc presents itself as one of the lucrative options for investment.

However the flip side of this is the complex regulatory framework, policy paralysis, mismanagement of funds & lack of government initiatives. This can be substantiated by the facts like cancellation of 122 2G licenses, fixation of reserve price in 1800 MHz band at a staggering amount of 14,000 crores for a mere 5MHz block, uncertain future of the numerous foreign players like Telenor, unjustified revenue sharing model towards the VAS players, uncertain roaming agreements & inefficient allocation of spectrum.

The end customers are the only stakeholders in the entire telecom ecosystem who have to bear the brunt as the cost gets ultimately passed on to them.

VAS industry is one of the key areas facing the unending loop of uncertainties & lack of recognition by the government. This paper primarily deals with the critical analysis of its current scenario, bottlenecks & their impact followed by recommendations & underlying future opportunities to revive its growth.

**Keywords:** VAS Industry, Telecom Regulations, Telecom Policy.

1 Economic times

2 TRAI Consultation Paper on MVAS, 2011

3 VOICE & DATA

## 1. REGULATORY SCENARIO OF VAS INDUSTRY

The \$ 68.81 billion<sup>1</sup> dollar telecom market with an annual growth rate of 12-13%<sup>2</sup> has reached the maturity phase thanks to the stagnating revenues from the commoditized voice market. The market was expected to get rejuvenated through the introduction of 3G & 4G-LTE services by changing the landscape of data delivery & user experience but failed to get realized.

Post the Supreme Court judgment about license cancellation, the telecom regulatory environment seems to have got entangled in a vicious circle of uncertainties leading to an impregnable status-quo which is driving the market nowhere.

1 Business Review India, 2012

2 Voice & Data

In the meantime, the ambitious NTP-2012 got a green signal from the government & it discusses about “putting a regulatory framework for VAS to ensure its delivery at affordable prices & promote innovation, entrepreneurship & provision of multilingual region-specific content” (NTP, 2012, p.12).

The Indian VAS industry which is currently at a nascent stage is expected to reach \$15 bn by 2015<sup>3</sup> with mobile penetration expected to reach around 100% by 2015<sup>4</sup>. The next hope for growth comes from data services & VAS plays the role of a prominent growth catalyst.

However it currently contributes only around 15%<sup>5</sup> of total operators' revenues against the global average pegged at approximately 23%<sup>6</sup>. In spite of the rollout of 3G services & BWA, the uptake of VAS is very poor

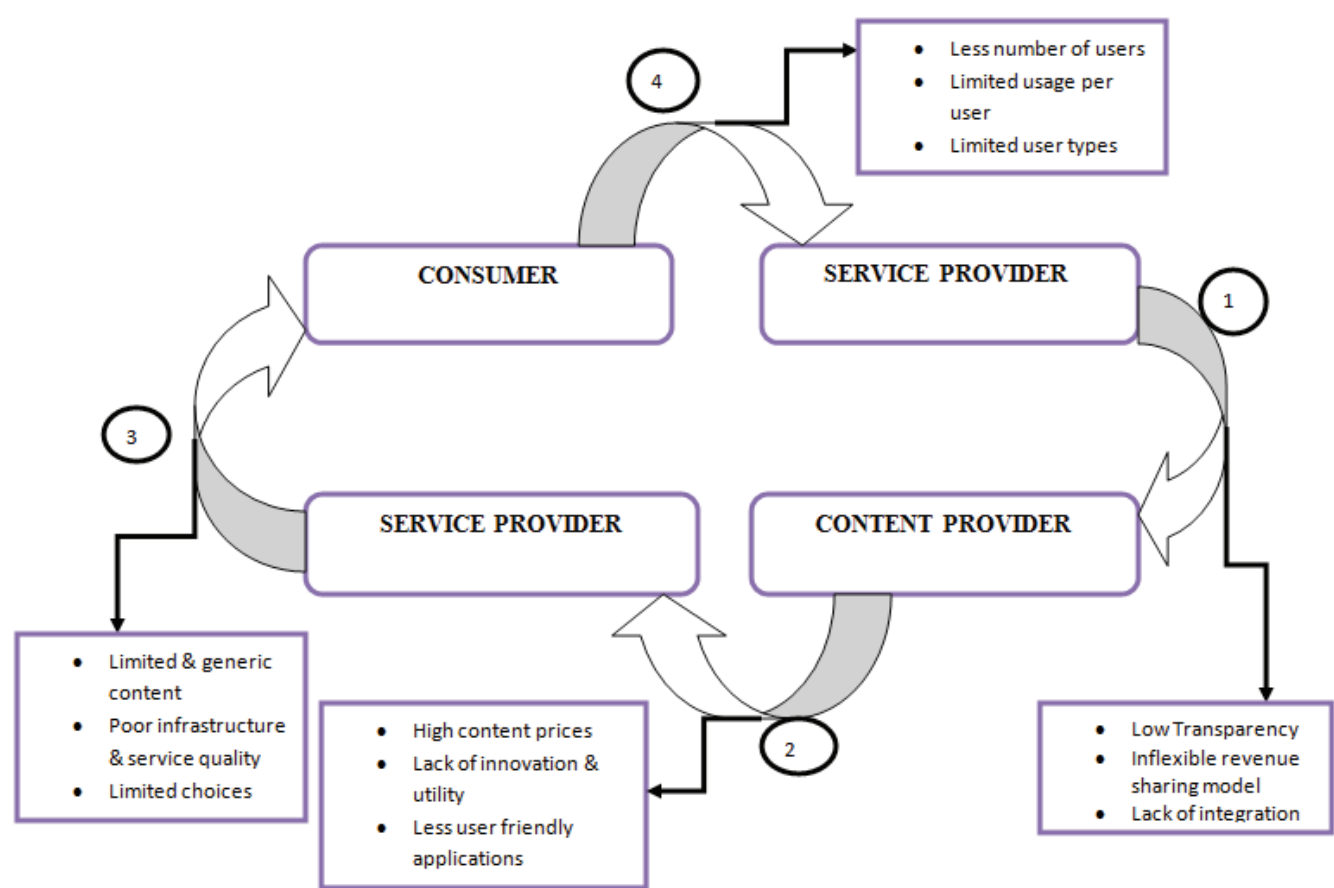
3 Voice & Data

4 Trai

5 Voice & Data

6 Assocham-Deloitte Study, 2011

Figure 1: The Vicious Circle of VAS Industry



Source: IAMAI

due to numerous challenges spanning across regulations, ecosystem, innovation, pricing, customer awareness etc.

The telecom regulations don't specifically define the guidelines related to value added services & the guidelines have been prepared with the Telecom Operator considered to be responsible for the conduct of the VAS provider as there is no provision of VAS license as of now. This is one of the key factors that are acting as hindrances in driving the growth in the VAS industry(MVAS-TRAI paper, 2010).

The following figure explains the impact of uncertain regulations on the stakeholders of the VAS ecosystem which is like an endless "vicious circle" where each issue follows the other.

**1.1. Current Market Scenario & Challenges Faced- The "Vicious Circle of Uncertainty"**

**1.1.1. Lack of Recognition & Government Initiatives**

There are no specific & uniform provisions for VAS among the licenses like UASL, CMTS and ISP

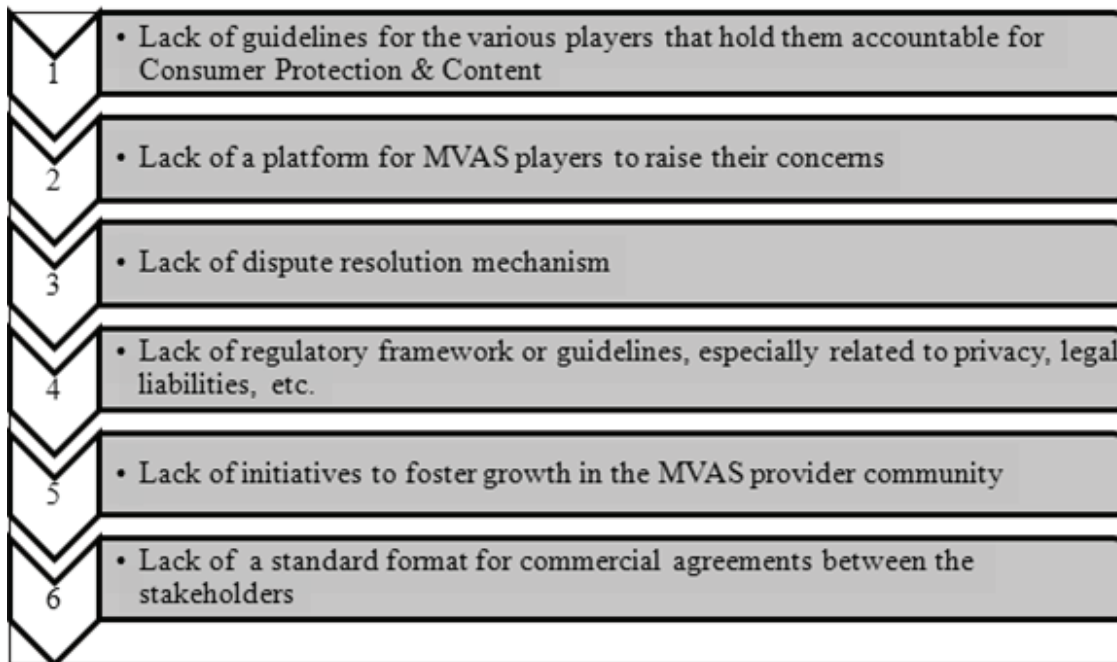
The main issues are:

**1.1.2. Over-dependency on the "Low Hanging Fruit"**

The consumption of VAS is primarily driven by entertainment & information VAS like CRBT, astrology, bollywood, SMS alerts etc. There is hardly any innovation & utility in terms of content & regional variety in areas like m-commerce, m-health, m-agriculture which can digitally empower the people through inclusive growth & access to basic information (Kale, S., Bhandari, L. (2008). MobileVAS-IAMAI).The market is thus characterized by the predominance of generic content as the costs of development; digitization & conversion are low.

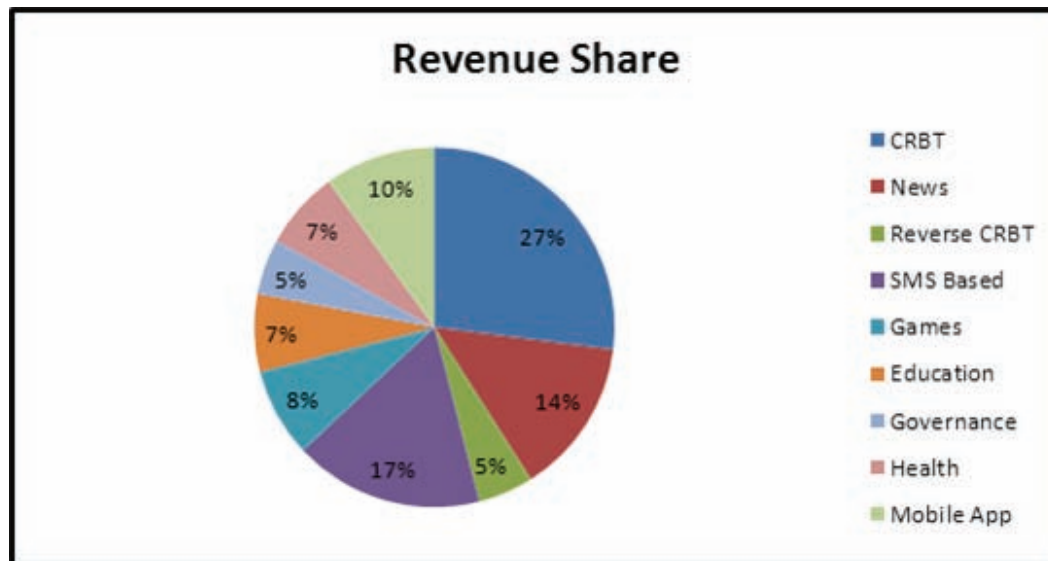
Also the operators don't adequately distinguish between the types of content thereby applying standard rates on all & they hardly provide performance based reward models

**Figure 2: Issues Related to Regulations**



Source: TRAI

**Figure 3: Revenue Share Break-up for VAS**



Source: IMAI REPORT 2012

which lead to opaqueness.

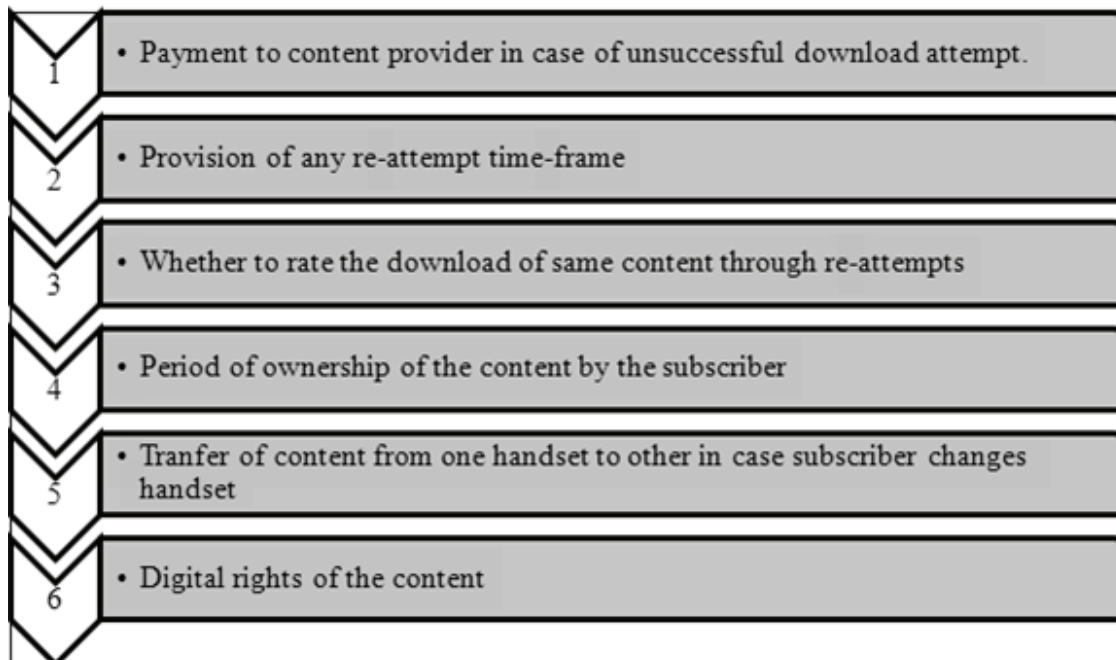
**1.1.3. Abuse of Dominance:**

The revenue share in MVAS market is significantly

dominated by the operators on the basis of three types of costs-

- Cost of market entry in terms of license & spectrum charges, marketing & branding costs and customer acquisition costs.

Figure 4: Issues Related to Integration



Source: TRAI & IAMAI

- Cost of infrastructure usage & interconnection
- Cost of billing & collection (Kale, S., Bhandari, L. (2008). Mobile VAS-IAMAI).

Consequently they try to dominate the market by controlling the MVAS services fees, service portfolio to be offered to customers, service content, billing etc. & retain around 60-65%<sup>7</sup> of the total revenues while the remaining gets shared among the technology enablers(15-20%), content developers/aggregators(15%) & content owners(10%)<sup>8</sup>(MVAS-TRAI paper, 2010).

This leads to insufficient RoI (Return on Investment) to promote innovation & entrepreneurship in VAS followed by fewer investments for the growth. On the other hand even operators need to retain their share to fill the revenue gap created from stagnating core services & attract network investments.

But performance in other countries clearly indicates that operators are not shortsighted to ignore the potential of VAS in spite of their market dominance, hence this cannot be the causal factor.

<sup>7</sup> Trai Mvas Paper, 2011

<sup>8</sup> Trai Mvas Paper, 2011

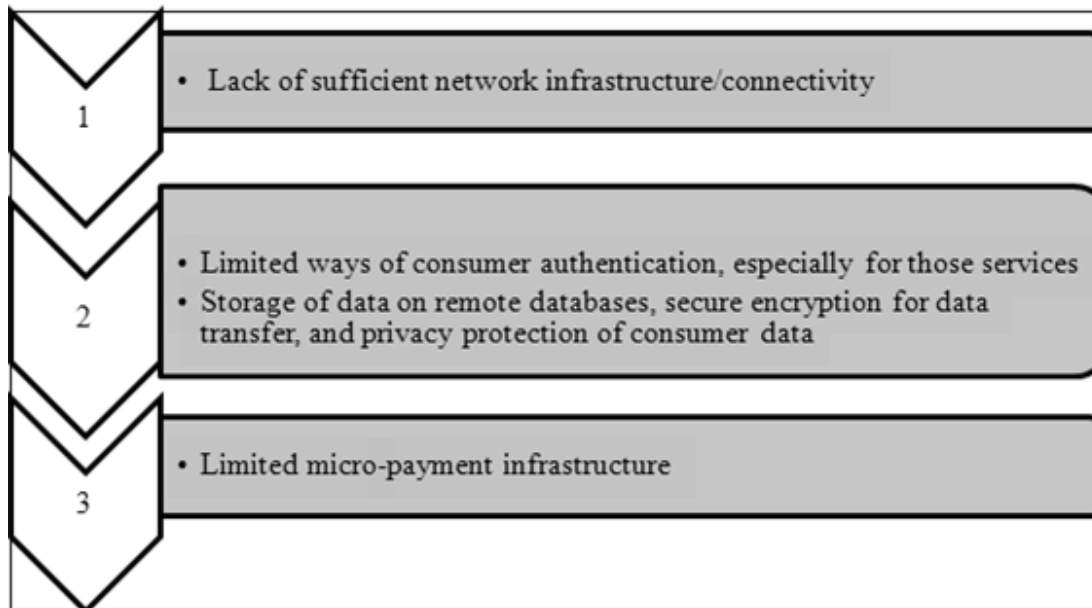
Hence revenue sharing should be based on the type of VAS depending on the level of innovation & utility involved in it & not a single model. Also it should not be left open & adjustable based on commercial negotiations. If VAS providers were license holders, the TRAI would have issued a Reference VAS Offer similar to what it does in case of interconnection with Reference Interconnect Offer (RIO).

#### 1.1.4. Information & Coordination Asymmetries

There is lack of coordination & integration among the information systems of operator & VAS providers thereby leading to differences in billing, difficulty in keeping track of revenues earned & accrued, lack of transparency in transaction data like number of downloads & absence of systems to address grievances.

The lack of credibility & greater bargaining power of the operators affect the content providers from investing significant amount in content innovation(MVAS-TRAI paper, 2010).

There are other issues like:

**Figure 5: Issues in Authentication & Infrastructure**

Source: TRAI & IAMAI

### 1.1.5. No Provision for Independent Price Discovery-“Walled Garden Approach”

The customers can access the content only on the operators’ platforms. The content selection & transfer over the network is fully controlled by the operator who also fixes its prices. VAS providers need to host their content separately with each service provider & connectivity is to be made with each operator separately for routing the content. Separate agreements should be made with each operator.

Hence content providers cannot fix the prices & directly sell to the customers. This leads to low growth equilibrium.

### 1.1.6. Tied Situation

The DoT assigns the short codes to the Telecom Operators who then assign them to VAS providers & content providers. Since the shortcodes are assigned to a telecom operator, it may not get uniformly accepted by all the telecom operators. Hence, the customer experience of the VAS will differ from telco to telco(MVAS-TRAI paper, 2010). So, the VAS provider needs to tie-up with all telcos so that the allotted shortcode gets recognized across all the networks thereby decreasing the difficulty, costs & efforts of the VAS/Content providers to reach large masses through multiple operators.

### 1.1.7. Lack of Consumer Authentication & Micro-Payments Infrastructure

In the absence of adequate infrastructure, the VAS players collect the charges through the operators. The access & carriage charges get deducted by the operators whereas the content charges directly go to the VAS providers.

The issues are summarized below:

## 2. Breaking the “Vicious Circle”

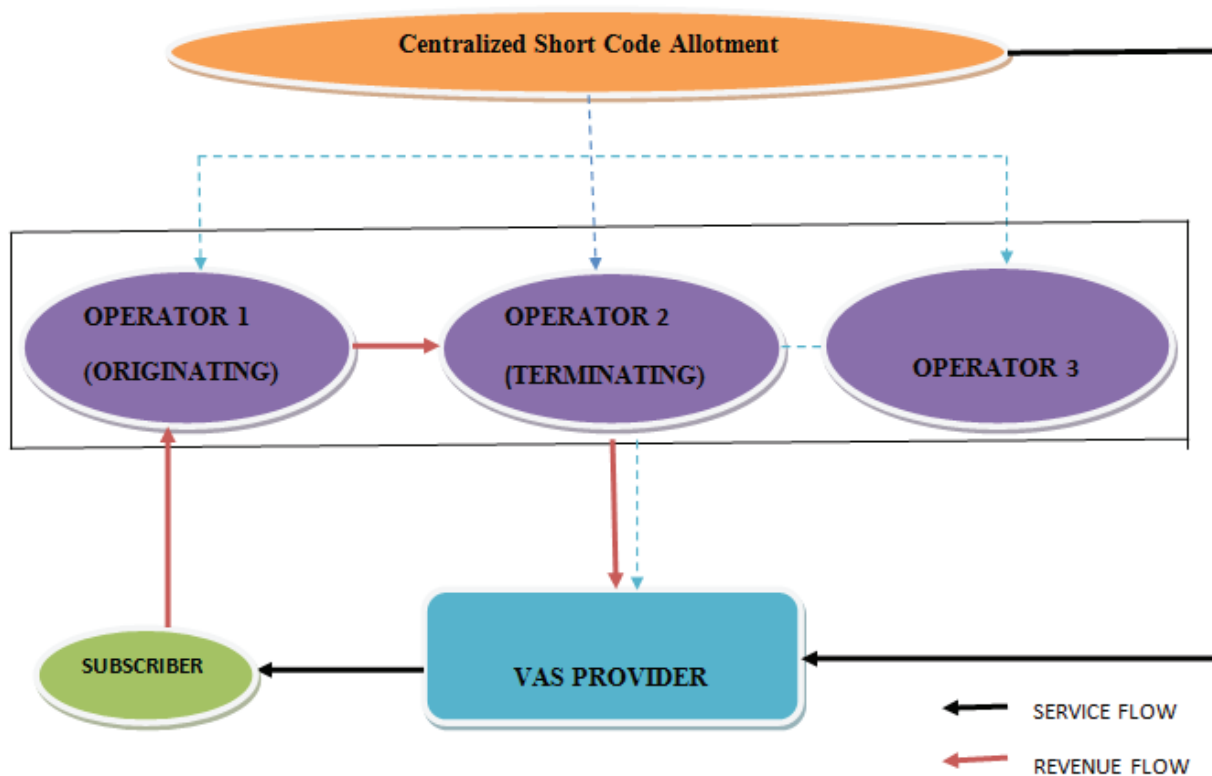
Three key areas have been identified for growth. They are:

- Revamping the business model of VAS industry
- Comparing its performance with other countries
- Identifying the solutions for the regulatory gaps
- Phased implementation of the solutions

### 2.1. Proposed Model

In this the user has open & unrestricted access to the content developed by the VAS providers (VASPs) without any intervention from the operators. The content can be accessed either through a web browser, SMS, third party content providers’ links etc.

Figure 6: Proposed Open Access Model



Source: TRAI

The access charges will be paid to the operator whereas the content charge will directly go to the VAS provider. In case payment infrastructure is unavailable, the VAS provider can host its contents with only a single operator rather than hosting it with each operator.

Customer can access the content by the help of a uniform short code from any operator's network. The originating operator will pass the revenue after collecting billing, interconnection & customer-care charges; similarly the terminating operator will pass the revenue to VAS provider after deducting transit charges (MVAS-TRAI paper, 2010).

This model ensures increased competition among VAS providers to provide better services thereby ensuring higher efficiency.

## 2.2. India Vis-À-Vis Others

Different countries have adopted different licensing regimes, in some countries like Australia there is no need for licensing; the VAS provider simply needs to submit intimation to the industry register.

However VAS models have been successful in many places like Kenya where M-PESA remittance services offered by Safaricom & Vodafone are used by more than 27% of the population (Deloitte-ASSOCHAM, 2011). The following table indicates that success models have been derived on the basis of multiple factors like business model, government initiatives, market force, customer demand & awareness. It also gives a detailed analysis of the performance of VAS market across different countries as a result of regulatory recognition.

In India, there is a huge scope lying in Utility VAS services like m-commerce, m-health, m-education etc. They are in nascent stage & lack government control & initiatives, customer awareness & user-friendliness, support infrastructure & strong coordination among the stakeholders to form a high equilibrium ecosystem.

Currently various players have taken the initiatives by partnering with government & operators to launch services like "m-Gurujee" which provides alerts & updates about exam details like results.

**Table 1: Comparison among the performance of different countries**

Country	Business model adopted	% of non-voice revenues	Licensing	Impact
Singapore	On-deck	32	Yes	Fast growth in m-commerce mainly in areas like shopping, movies, fashion, food etc.
US	Open-garden	30	Yes	Strong market for “Premium VAS” services like “CreditEX”-an m-payment solution
China	Joint venture or through contract	27	Yes	Highly popular IM service “Fetion” from China Mobile with more than 100mn users, weather forecast & crop information services
Japan	Off-deck	27	Yes	m-wallet service “Felica” is a huge success, others like m-tv, m-game-concierge
Brazil	On-deck	14	Code of conduct	Fast growth in social networking, SMS & MMS services
Malaysia	On-deck	18	Yes	Growth in location based GPS enabled mobile applications
South Africa	On-deck	30	Yes	Strong presence in social networking services like “Mxit” for chat, education, “Please Call me” messaging service from MTN

Source: Deloitte-ASSOCHAM Study

**Table 4: Current scenario of Utility VAS in India**

#	Service	Scope	Main Players	Initiatives Taken	Proposed Initiatives
1	M-COMMERCE	Payments, Banking & Retail Transactions like P2P Payments, bill payments, ticketing & alerts. Important for financial inclusion	Spice, Oxycash, MChck, NGPay, ICICI’s iMobile	Banks like SBI, ICICI, HSBC are providing SMS based alerts New channels like CNBC giving stock updates	Collaboration between RBI & TRAI for laying the guidelines Using the UID infrastructure Introducing MNO led or Hybrid models Tightening the KYC norms Increasing customer awareness through advertising
2	M-EDUCATION	Providing training & learning content through applications using SMS, WAP, USSD etc.	Spice, EnableM, Tata Docomo, Deltics	mGurjee & IGNOU applications which provide exam alerts & results	Lead involvement of government Coordination among the stakeholders for smooth content delivery Promoting distance education Affordability
3	M-HEALTH	Health alerts, updates & patient monitoring systems	AIIMS, Apollo, Dr. Batras	TeleDoc allows village health workers to communicate with doctors	Tie-up between operators & health-care providers Government driving the application developer Focus on voice based applications
4	M-GOVERNANCE	Improving the delivery of government services	Bihar & Kerala governments	Film ticket booking from handset	Widespread connectivity & collaboration between operators & government

Source: Deloitte-ASSOCHAM Study

### 2.3. Solutions for the Gaps

Based on the above learning, the following table gives a comprehensive overview of the regulatory & business

model gaps prevalent in India, solutions proposed to fill them & their potential implications on the market & concerned stakeholders in the ecosystem. 2.4 Recommendations for VAS Industry

**Table 2: Recommendation Model for filling Regulatory & Business Model Gaps**

#	Business Model/Regulatory Gaps	Proposed Solutions	Potential Implications
1.2	Absence of licensing regime for the value added service providers(Regulatory)	Provision for licensing terms under UAS License	Positive Impact: It will protect the interests of consumers & VASPs, Ensure unbiased interconnection from operators, Enable them to go to TRAI for dispute resolution It will define the standard terms of agreement between CSPs & VASPs The TRAI can issue a Reference VAS Offer Negative Impact: It will affect the small MVAS players as they need to fulfill obligations-paying license fees thereby hampering innovation & growth thereby burdening them financially
1.3	Lack of standardized revenue sharing model among the involved stakeholders(Regulatory)	Developing standard revenue sharing models based on innovation & utility for different VAS categories. Operators should separately specify charges for platform & marketing. Content provider should have the flexibility to adequately price product	It ensure attractive RoI mainly through innovative services like m-commerce, m-health, video applications for VASPs Also help the operators cover their revenue gaps from core services & attract higher investments
1.4	Lack of standardization in short code services & related fee payments(Regulatory)	Centralized allotment of short codes to the MVAS providers without involving the operators, the codes should remain uniform & active across all operators. Also the fee payment process should be standardized.	Fast development & deployment of innovative applications across all regions irrespective of the operators' networks.
1.5	Lack of an open access model for content delivery to the customers(Business Model)	Providing open unrestricted access to content of choice irrespective of the operators' platforms. Also the VASP should be able to host its content with only one service provider & the revenue will be passed to the VASP after distributing the charges among the involved operators.	It will promote innovative applications. It will increase healthy competition among the VASPs to deliver appropriately priced content & among the operators to provide most economical rates for content hosting. Thus it will boost the growth of VAS market by working in collaboration with operators.
1.6	Lack of transparent regulatory framework, government initiatives, payment & authentication infrastructure & dispute resolution mechanism for Utility VAS(Regulatory & Business Model)	1.Provision for regulations for m-banking by collaborating with TRAI & RBI 2.Development of ecosystem for providing affordable solutions 3.Ensuring interoperability of applications across operating system	Faster proliferation of innovative applications for m-commerce, m-health, m-agriculture, m-education etc. which will promote financial inclusion for the unbanked population & further boost-up the VAS market.
1.7	Lack of integration & coordination among the stakeholders' information systems(Business Model)	Provision for reconciliation & integration guidelines to allow information sharing on content specific usage. The IMAI can play an important role by asking its members to proactively adopt standards as a part of self-regulation.	1.Increase in transparency regarding content transactions, earned revenues & dispute resolutions 2.Decrease in billing errors for customers
1.8	Lack of standards related to piracy, intellectual property, authentication etc.(Regulatory)	1.Authentication standards for content download should be set-up 2.Content piracy control & IPR monitoring should be put in place 3.Option to the customer for receiving promotional content 4.Industry standards for local language specific content	1.Promotion of favorable environment for VAS 2.Protection of customer rights & content ownership

**Table 3: Proposed Framework for VAS industry**

Measure	Impact	Should be adopted immediately	Should be adopted in long term	Concerned stakeholder
Developing a custom-built revenue sharing model for each service	Long-term	×		Government & regulator
Slashing the data service tariff rates / discount plans	Medium-term	×		Cellular Service Providers (CSPs) & VASPs
Availability of cheap smart phones (<₹5000)	Medium long term	×		OEMs
Developing multi-lingual region specific applications	Long term	×		ASPs, content developers & aggregators
Innovative content based on contextualization	Long-term	×		Content developers & aggregators
Innovative plans like service bundling & usage based pricing	Short-term	×		VASP
Consolidation of the market	Long-term		×	VASP
Deploying self-service solutions	Medium-term		×	CSP & VASP
Licensing of the VAS players	Long-term		×	Government & regulator
Adopting “PULL” strategy for the customers	Medium-term	×		CSP & ASP
Adopting an open-access “OFF-DECK” business model	Long-term		×	CSP & VASP
Seamless network coverage with uninterrupted connectivity	Long-term	×		CSP
Standardization of content delivery platforms & formats	Long-term	×		Content developers & aggregators
Hiving-ff VAS business into separate entities	Medium-term		×	CSP
Financial inclusion(Utility VAS)	Long-term	×		Government & regulator
Centralized allotment & uniformity in short codes	Long-term	×		OTT Players
Transparency in data sharing with the content providers	Long-term	×		Regulator & CSP

‘×’ Indicates Affirmative

## 4. THE WAY AHEAD

The VAS industry in spite of its multiple challenges seems promising substantiated by the fact that the customer spending on the services is increasing gradually thanks to the fast proliferation of smartphones & launch of more friendly applications.

However the focus of the industry should immediately shift from infotainment VAS towards utility VAS as it can only assure sustained revenue generation for the ecosystem. The following figure depicts the upwards trend in VAS currently in the market:

ALL FIGURES IN-₹ PER USER PER MONTH  
SOURCE: IMAI-IMRB REPORT 2012

### 4.1. Scope for Financial Inclusion

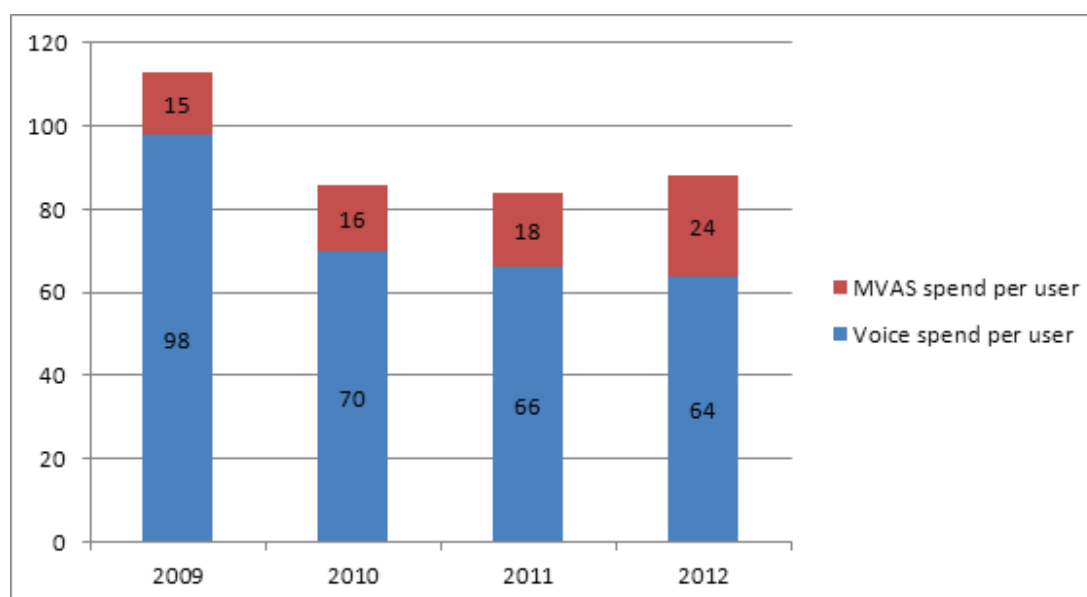
“M-banking” is one of the promising tools of financial inclusion for the unbanked population. However in May 2012, close to 3.34 million transactions were concluded for ₹2.86 billion through mobile as against 1.28 million transactions of ₹0.91 billion in May 2011<sup>9</sup>. This growth rate is significantly low as compared to the number of bank accounts & vast mobile subscriber base of 930 million<sup>10</sup>.

This can be attributed to the issues like lack of coordination between RBI & TRAI, absence of online cyber security laws & regulatory framework for m-governance,

<sup>9</sup> Economic Times

<sup>10</sup> Voice & Data

Figure 7: Customer usage trend



ownership of the customers, control of the transactions & appropriate revenue-sharing models (Kale, S., Bhandari, L. (2008). Mobile VAS-IAMAI).

A win-win situation can be achieved if operators & banks seek for a collaborative approach taking into consideration the KYC (Know Your Customer) related security concerns, quality of service, customer experience & diversity of operators. RBI has proposed a bank-led model where it will take care of KYC & transaction volume while TRAI will deal with the interconnection issues & setting tariffs for the customers. This approach with clear demarcations seems to be successful in future.

In addition to all these, customer awareness & friendliness is very crucial for the success of any business model. Models like M-PESA in Kenya & G-CASH in Philippines were primarily successful because of this reason.

## 5. CONCLUSION

The Indian VAS industry is growing at a snail's pace. One of the primary reasons behind it is the lack of regulatory framework & licensing for the VAS players thereby leading to multifold secondary reasons like biased revenue sharing models, over-dependency on basic services, lack of innovation & multilingual content, inefficient information sharing, dependency on operators for supporting infrastructure etc. All these reasons have initiated a vicious circle of uncertainties in the telecom

ecosystem leading to paralysis in growth due to which the industry is unable to replicate its growth trajectory from voice for the data services.

However there lies a huge scope for growth for the sector provided certain measures are implemented like suitable collaborative business models among the stakeholders to foster innovation, coordination among the regulators to promote services like m-banking & M2M & creating customer awareness about the services (MVAS-TRAI paper, 2010).

In a nutshell the success of this industry lies heavily on the way the inter-dependencies among the stakeholders are controlled to benefit the end customers & the economy in the long-term.

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