

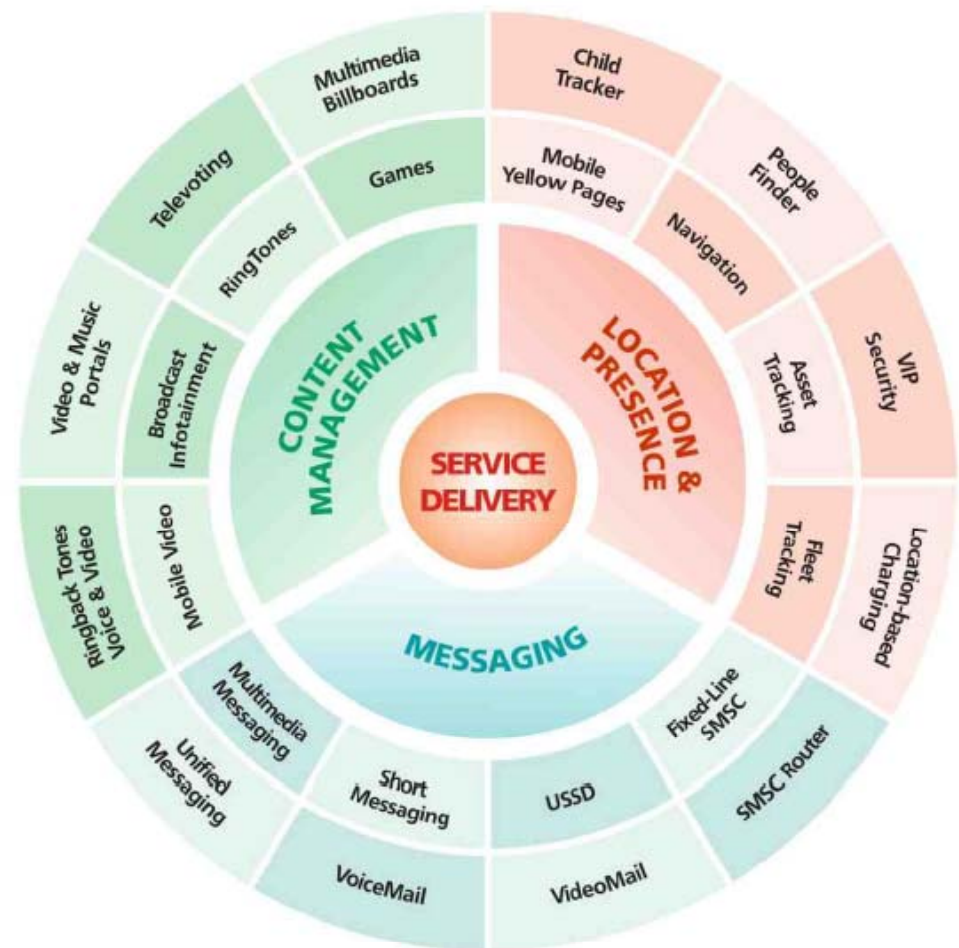
Emergence of SDPs:From SaaS to CaaS

Basavaraj Hooli

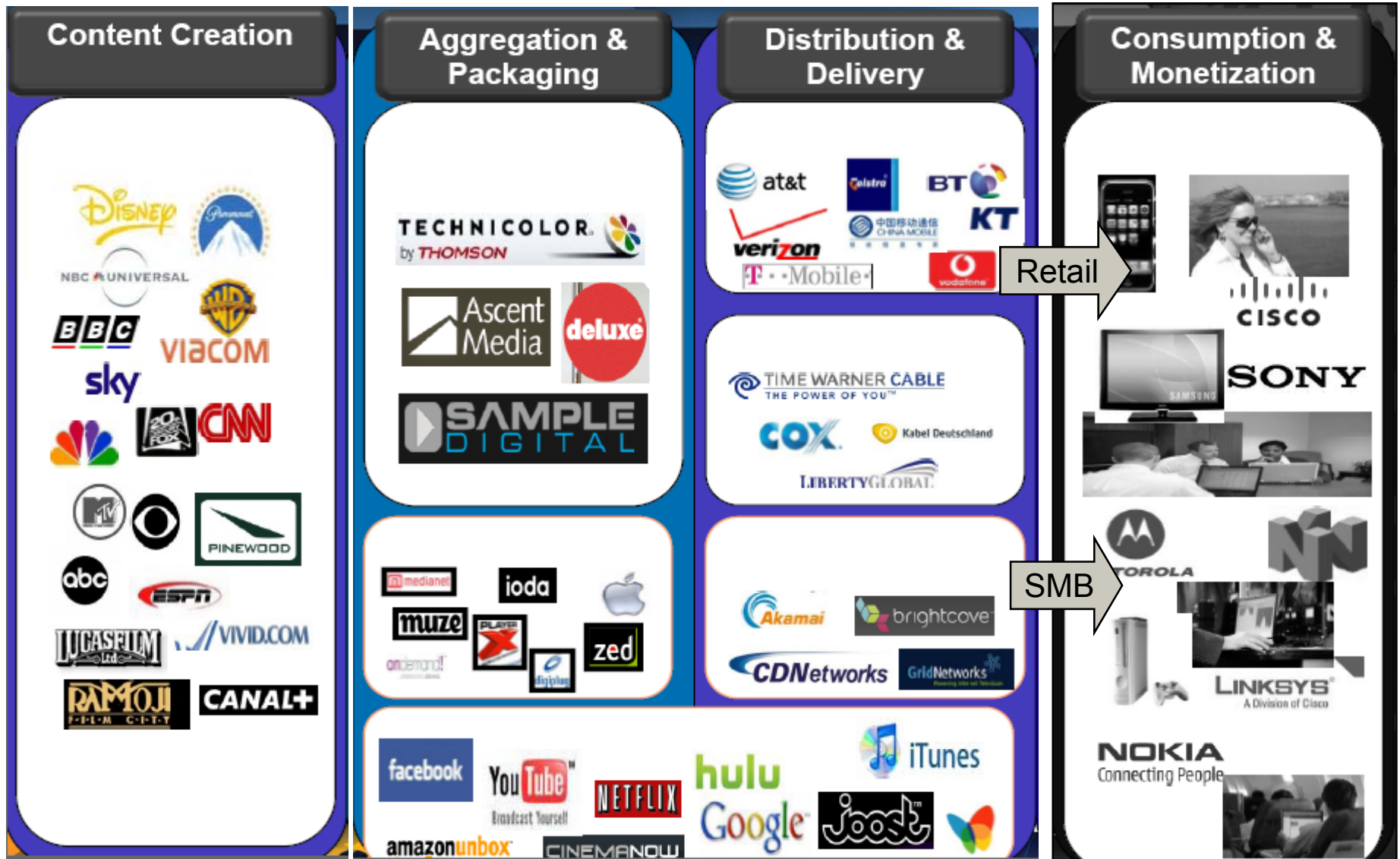
February 2010

Profiting from Value Added Services

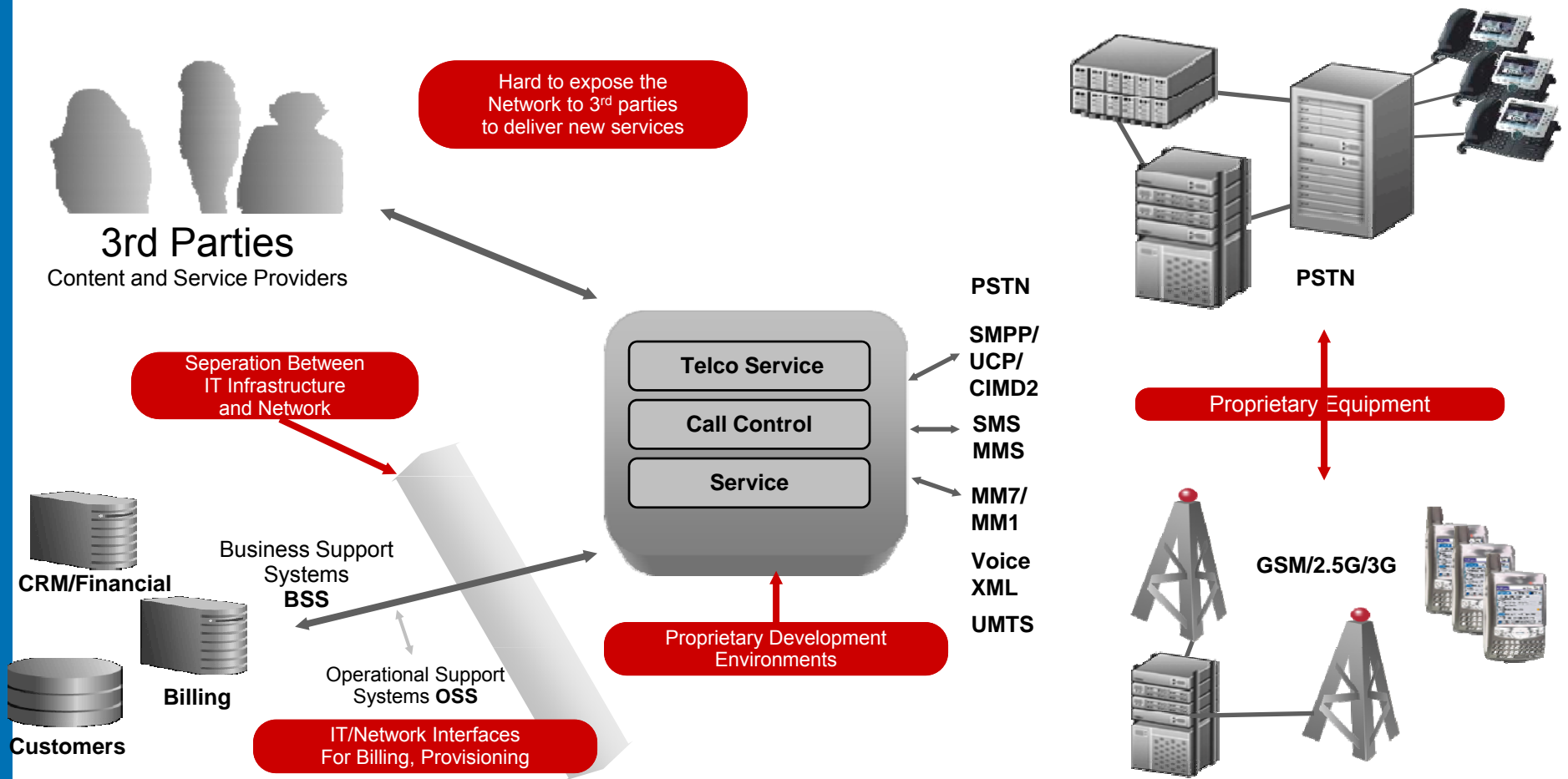
- Faced with declining average revenue per user (ARPU), Telecommunication service providers are exploring various avenues including VAS to stem the decline
- All major analysts like IDC, Gartner Group and others are predicting that VAS revenues would reach 30% of telecom revenues world wide which is close to 160 Billion USD
- SDP spending to reach \$5.31 billion in 2012 with a CAGR of 23%
- Content will be the king. Content will be name of the game (ABC in Indian Context)



Managing a complex value chain



Typical Telecom Infrastructure



Market Needs Analysis

- **Telecom Carriers' Needs**

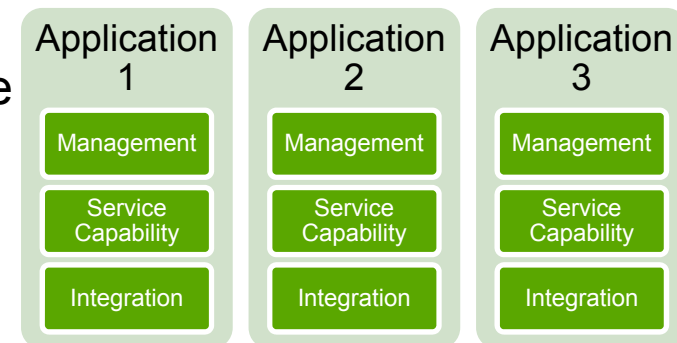
- VAS Penetration: Need for increased VAS penetration by Telecom Operators.
- Device independence: Delivery of VAS services to multiple types of devices whether residing in GSM or Hybrid or 3G networks
- Need to leverage investments in their existing GSM, Hybrid or 3G networks and maximizing VAS revenues
- 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

Challenges of Existing Approaches

- No unified user
 - user information spread out in many different systems with no view on customer
- No unified data
 - data about billing, usage, partners, system management spread out in many different systems
- Time to market
 - developing a new Telecom service on average takes 12-18 months
- Inflexibility towards new business models
 - multiple business processes need to be used, tried and refined
- Silo Systems
 - high cost of integration and maintenance
- Proprietary Environments
 - hard and expensive to develop and deploy new services



What are the next “killer applications” and models?

We do not know which applications or business models will prevail

Messaging

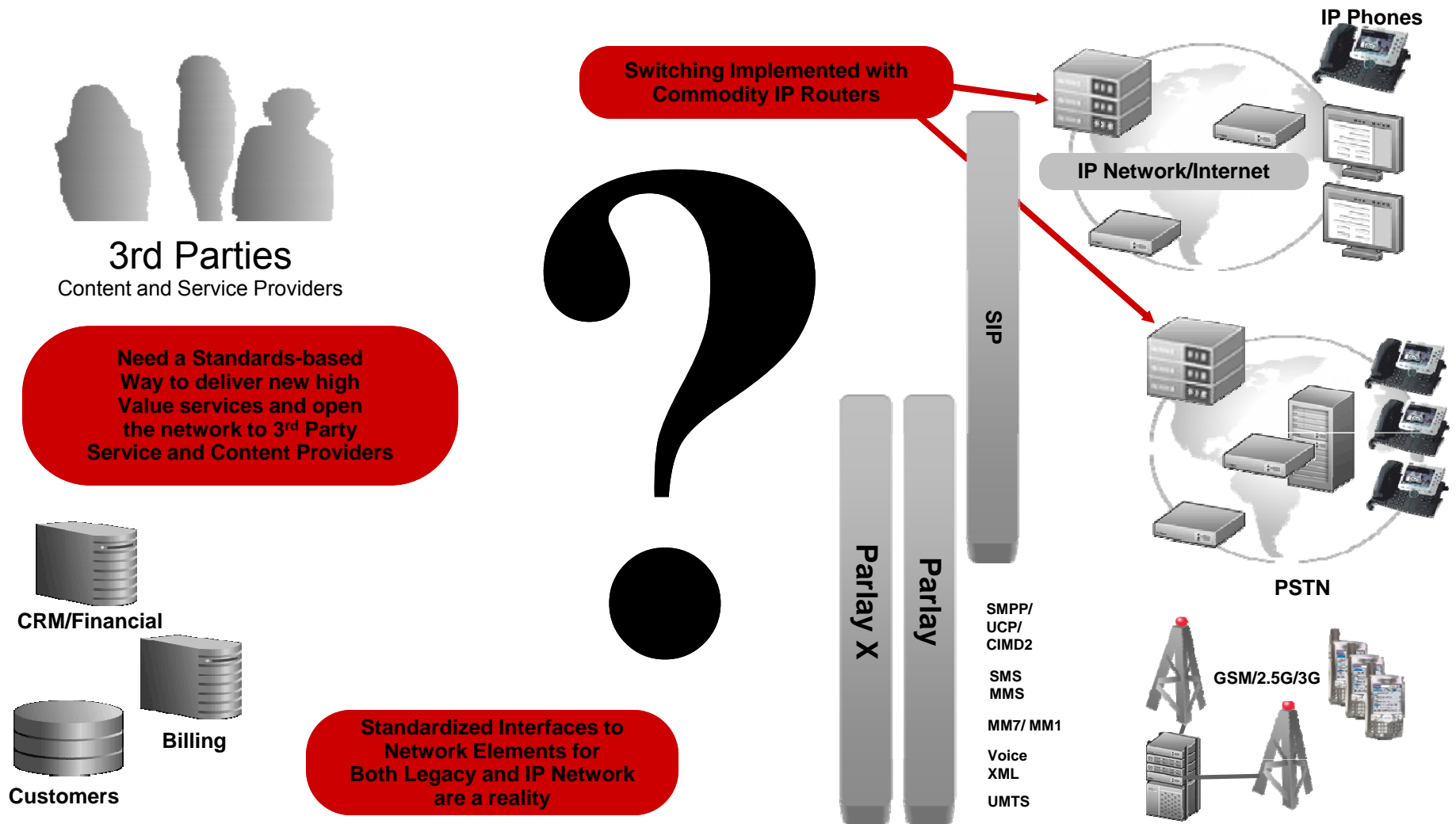
But we do know successful Service Providers will need “killer environments”.

PUSH TO TALK

What is the killer environment?

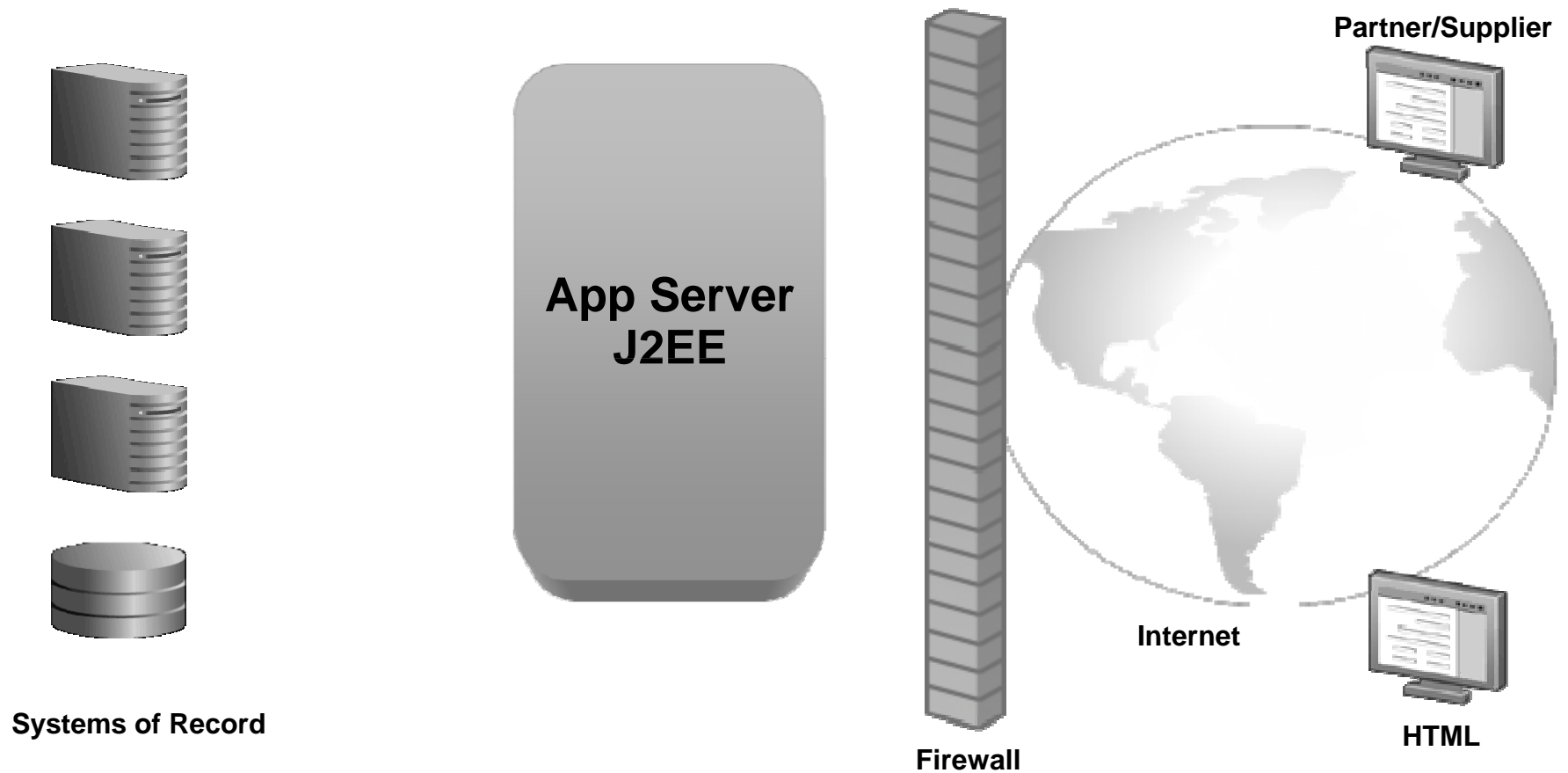
- Flexible
 - New services
 - New providers } No restrictions on innovation
- Managed
 - Open but controlled access to network capability
 - Service Level Agreement definition and enforcement
- Carrier Grade Execution
- OSS Integration
 - Standards based
 - Carrier Grade elements
- BSS Integration
 - Revenue streams
 - Customer Lifetime Management

Technology Support: Move Toward IP-Based Telecom Network

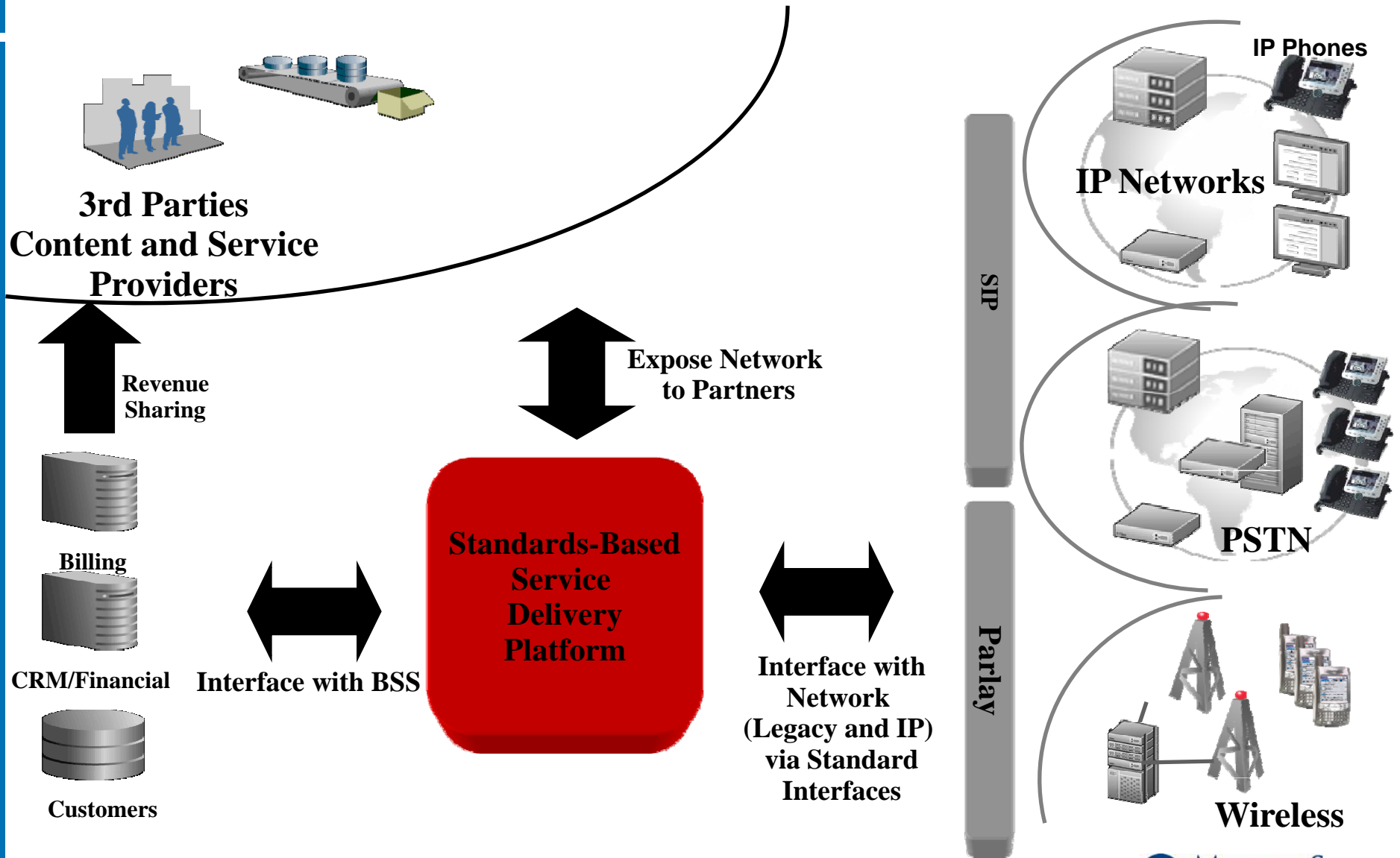


We Have Seen this Before: In the Internet World

Created the Need for Application Servers and J2EE



Enter SDP .. For the Mobile World



Demystifying SDP

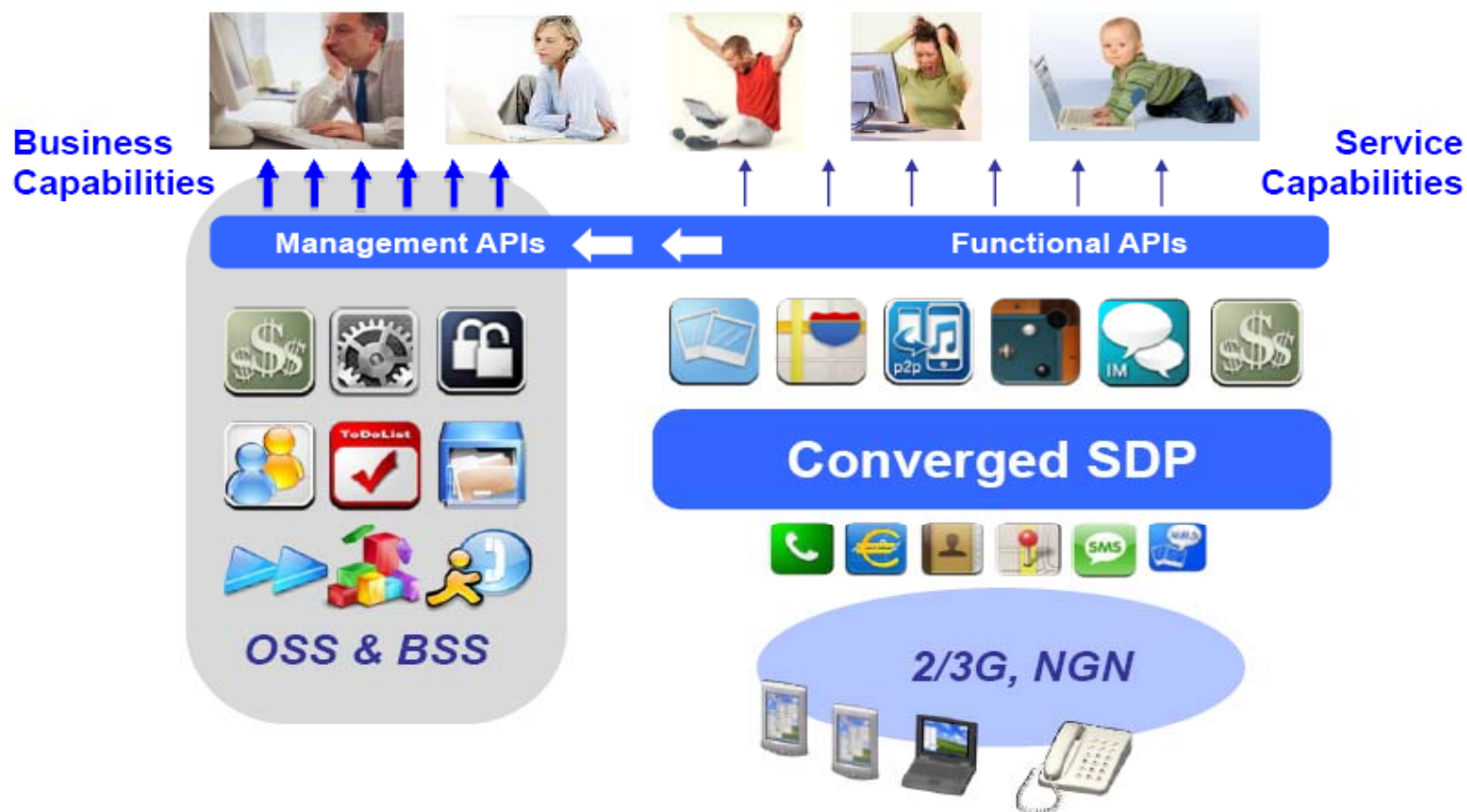
- SDP as a concept exists for more than 10 years now
- Unfortunately, there is no standard definition for the term, or the components that constitute an SDP
- The term implies that there is a single system – a hardware/ software platform that addresses all the technical and business issues
- This vagueness allows vendors to provide 'solutions' that address individual market segments while still promoting their solution as an SDP
- The deployment of an SDP is usually a major project for a CSP
It requires integration with network enablers, mobile portals, billing systems, customer care systems and OSS
- It often requires a major marketing effort to define and launch the package of services that the SDP supports
- It sometimes involves new business models and strategic partners that require careful strategic analysis
- Most CSPs have been through this process a number of times to support different services and in different business units
- As a consequence, there is already a legacy of custom-built and product-based SDP infrastructure

It is too late to change the terminology



SDP is not a platform. It is an architectural philosophy. It states how a modern service architecture should be built using a layered architecture

Standardization opportunities (Take Aways)



- Can we create something called SDP/J ?
- Can anyone take up the job of building the CaaS Environment for consumer market in the Indian Context?




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References

- TM Forum
- Evolving SDPs: Essential Plumbing for Smart Pipes - **Kristofer Kimbler** head of Azouk Network Ltd
- Service Delivery White Paper : NOKIA
- Telecommunication Platform for Service Delivery - Andy Deller Technical Director, Oracle EMEA
- SDP 2.0 - HP



It evaluates the potential for SDP as a dependable, scalable and flexible platform for core business functions, next generation applications, and independent services. SDP is examined within the context of its relationship to the Service Oriented Architecture (SOA) and the objectives to respond more rapidly to shifts in market conditions, customer demands, new revenue opportunities, and competitive threats. The report includes revenue forecasts by geography, function, and media type from 2009 through 2015.

Recognizing the view that the future of telecom applications will be driven by IP Multimedia Subsystem (IMS), yet IMS is expensive and will take much longer to implement than SDP, we also provide forecasting and analysis into the market for IMS applications.

This publication will also help the reader understand the basics of SDP and IMS architecture, functionality and capabilities.

Service Provider Requirements

- Ability to Rapidly Develop and Launch Innovative Data and Multimedia Services
 - To Both Consumers and Enterprises
- Rapidly Monetize the Investment in Services and Infrastructure
 - Short lived, highly profitable services (consumers)
 - Retain the Loyalty of highly profitable enterprise customers (and consumers)
- Opening up the Networks to 3rd party Service and Content Providers
 - Who knows what the killer application is (going to be)?
 - Retain customer relationships and billing
 - To target enterprises
- Simplify Complexity
 - The Stove Pipe approach won't cut it
- Need for a new highly available, carrier-grade horizontal environment
 - to develop, test, deploy and manage converged data services and applications