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Broadband of the Future

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Outline

- Broadband today
- Broadband of the Future: Expectations and Challenges, and thinking



Broadband today

- Wide Band width
- Convergence of Telecom, Broadcast and Internet
 - Abundant services
- FMC concept & technology
 - Optimized space and time coverage of service
 - Optimized rate of performance to price
 - 80/20
- Issues
 - Address scarce
 - QoS in a large scale network infrastructure
 - Band Width of Mobile
 - 3G/3.5G experience differently
 - Security
 - Bandwidth black hole and return for CAPEX and OPEX for infrastructure



Broadband tomorrow: what we want

- Subscribers
 - Multi services in one network
 - Ubiquitous -anytime, anywhere
 - Quick respond: always on + Push to get everything done
 - Good price for high values
 - Security/privacy protection
- Service providers
 - Platform for any kind profitable service or business
 - Platform supporting any form of industry chain or business model (win-win eco system for sustainable operation)
 - Profit: Good return of investment to support the sustainable operation and innovative development
- Government
 - Infrastructure for economic and social development





Challenges

- Network capability
 - Bandwidth (Mobile and wireless)
 - Ubiquitous
 - Address, Security, QOS
 - The capability to support any kind business model
- Successful business to adequate CAPEX and OPEX for infrastructure
 - Fixed operators
 - Decrease of ARPU, the income increase speed \square the rate of the consumption of band width
 - Operators are worrying about the return of the infrastructure operation and the sustainable development
 - Mobile operators :
 - move to mobile broadband
 - Start flat rate price
 - Who and whether can the cost of infrastructure be bore



Broadband tomorrow: what should it look like

Business Idea & model

Supply and demand prosperity in Service application
& a Win-Win industry chain eco

Technology

Network Control level can support any kind of win-win business
model and the operation of the whole value chains

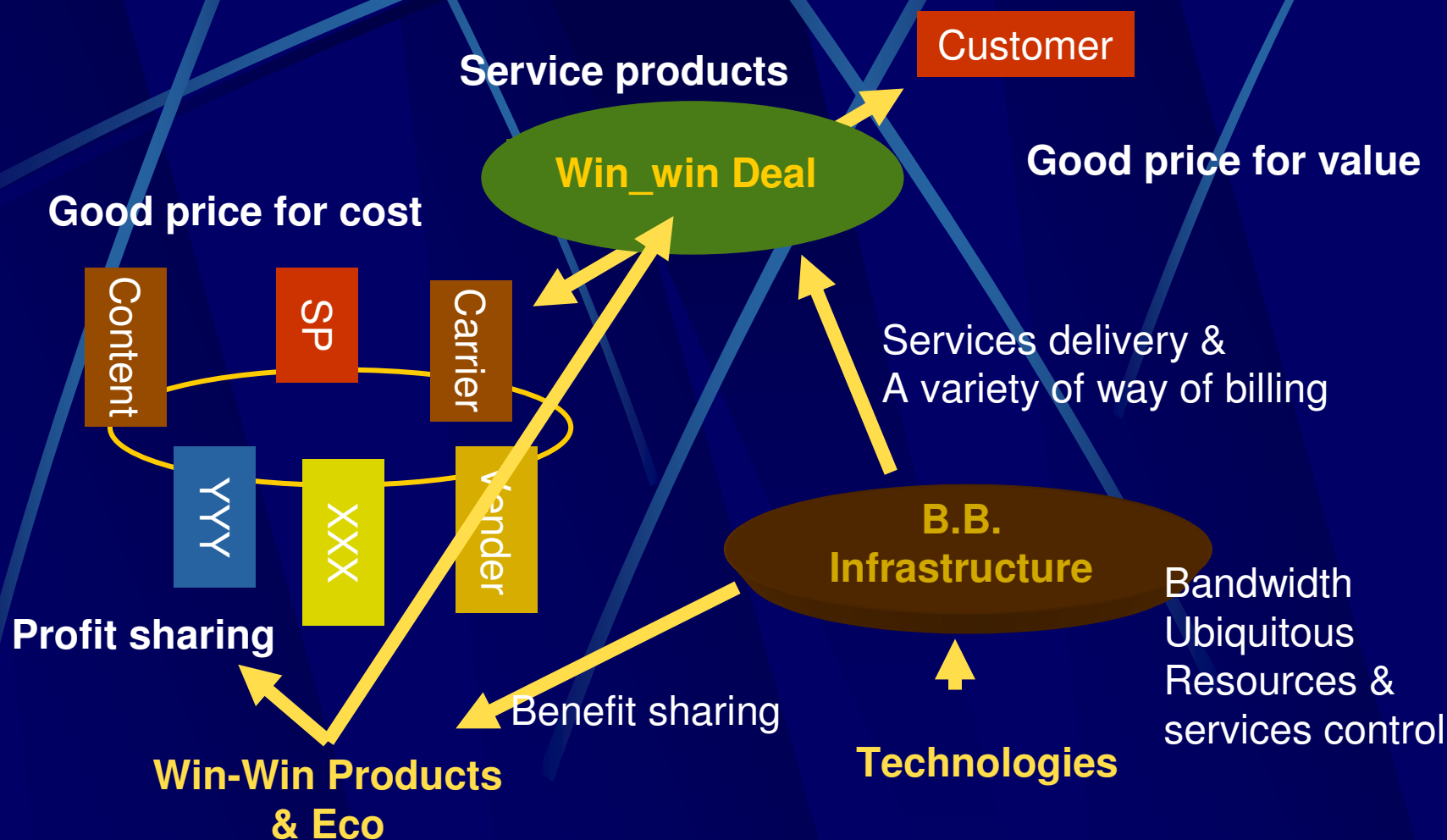
IP Core network can support multi application

Access and coverage can be optimized by FMC

Abundant kinds of Terminals



Success Broadband Business



Great wisdom & effort



Great wisdom for doing business

- Telecom operators
 - To transform, provide more services, optimize usage of resources in network, subscribers and chain, thus to create more values
 - To provide an open and comprehensive infrastructure in carrier, management, service level to support all applications and all business model
 - To help the SPs to promote their services, share the interests as well
- SPs
- Buffet like flat rate payment
 - Customers have very much diversified appetites :Huge capacity consuming for movie download compared with searching, MSN, etc;
 - Capacity waste disobey the buffet rules: tens of download vs. few minutes of watch
 - Technology must support the ability of knowing, managing and billing
 - Business wisdom for a new win-win model?
- Government: If huge positive externality



Closing remarks

- The successful broadband business will relay on:
 - The infrastructure enabling service products delivery
 - Plenty of service products with high value
 - Win-win Idea and the nice way to share profit among the hole chain
- We have seen human's great effort to figure out technical issues one after another . Now the mythic god for market is looking upon us and judging the way we do our business. The prize is in her hand!



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Thank you !