



ITU Asia-Pacific Centre of Excellence Workshop

Implementing e-application strategy for telecom sector in the Pacific



Platforms

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What is a platform?



A Platform business model builds value for both the platform owner as well as its ecosystem which typically is $> 7-8x$ that of the owner. This helps in aggregating the customers, simplifying the processes, opening up the market through APIs, and rewarding each participant in the value chain commensurate to the value they bring to the ecosystem. Typically, the owner of the platform will have a service or product that leads in revenue but hundreds or other apps and services are created to enrich the platform ecosystem.





Why Platforms?

- For Scale.
 - For Network Effects
- For Attracting developers to continue innovation
- For Time to Market
- For Cost Synergies
- For Entering new markets, new services



Platform Value Creation

- Platform sponsor gives away platform value
- Ecosystem partners build apps and services for the installed base thus adding new layers of value
- Platform creator benefits from increased sales and royalties
- Partners benefit from cost savings and access to market/new customers



Framework for Planning



	Core	Adjacent	Experimental
Operators	IP Network – Data and Voice Services	Billing, Cloud, Location, Messaging, Security	Connected Homes, Cars, Enterprise Apps
Google	Advertising Engine	Google Apps, Android, Play, Chrome	Glasses, Loon, Car
Facebook	Advertising	Messaging	Oculus Rift, Internet.org
Ericsson	Networking Gear, Managed Services	Cloud, Payments	Internet.org
Samsung	Chips, Devices, CE	OS (Tizen)	Messaging, Content Services, Security and Enterprise Services
Apple	Devices	iTunes, iCloud, Appstore	Apple TV
Uber	Taxi, Carpooling	Delivery	Logistics
Amazon	Commerce	Kindle, Marketplace	Drones, Phones

- **Adjacent** supports Core or adds incremental revenue stream
- **Experimental** could become adjacent in the medium term and Core (rarely) in the long-term but can be Strategic for the company





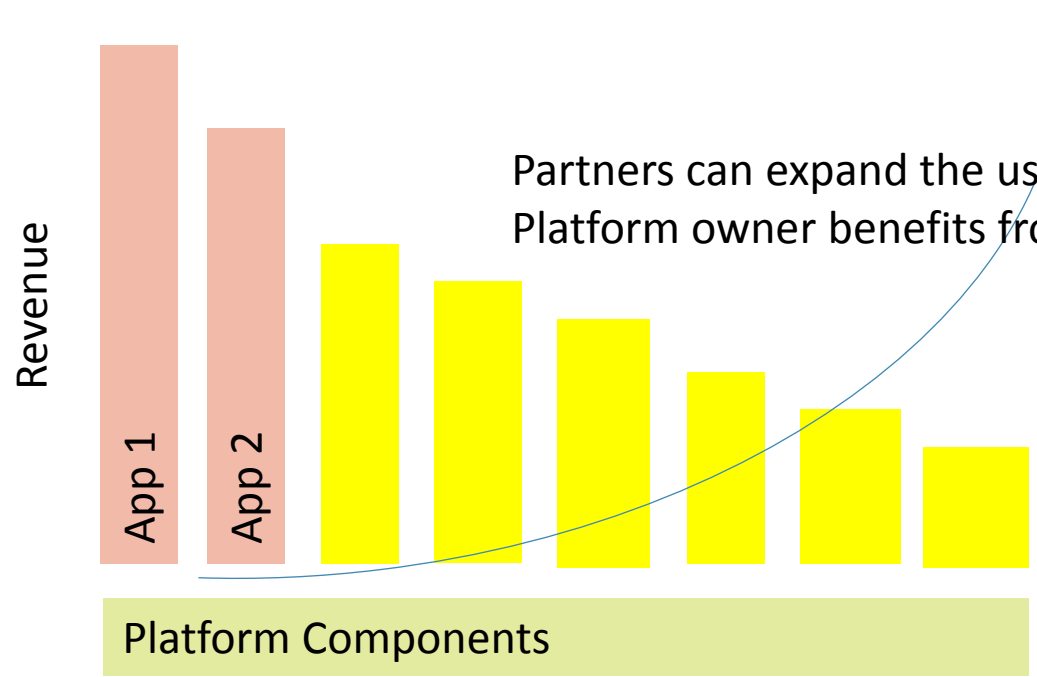
Platform Development Process

- Use the platform as-is
- Use the platform with some modifications (modifications done by the owner)
- Use the platform with some modifications (modifications done by the consumer)
- Use the platform for new applications
 - For e.g. mobile money platform can be used for public transport, agriculture, retail



Platform Value Creation

Platform Owner can only focus
On a few apps or limited geographies



Number of Users

Partners can expand the user base
Platform owner benefits from increased user base

Ecosystem flourishes
Consumers get access to new services

Platform is a creation of ecosystem of shared incentives



Components of a Platform

- How is the platform created?
 - Hardware, Software
- How is the platform packaged for user consumption?
 - User experience (UX), Customization
- What's the business model?
 - Pricing, governing principles, legal agreements



Platform Examples

Platform	Provider	Beneficiaries
Windows	Microsoft	Application Developers, OEMs
Android	Google	OEMs, Application Developers
Search	Google, Microsoft	Advertisers
Netflix	Netflix	Content Providers
Uber	Uber	Spotify, Starbucks
Payment	Starbucks	Affiliates
Digital Life	AT&T	Sensor manufacturers, App developers (tentative)
Facebook, Twitter	Facebook, Twitter	Application Developers, Advertisers



CONSUMER ELECTRONICS	Fitbit, GoPro, Watch
AGRICULTURE	Fitbit, Withings, Watch
SMART HOME	Samsung, August, Sentri, Nest
HEALTH	iRhythm, Owlet, GE
RETAIL	Euclid, Place meter
INDUSTRIAL	Siemens, Rethink Robotics, GE

CONNECTED CAR	Tesla, GM, Google, Apple
SMART CITY	Telefonica, Intel, MS
ENERGY	Ecobee, Enertiv, Phillips

UX/TOOLS/APIs	Helium, Sensorcloud, Crowsnest
APPLICATION AND SERVICE	Domain dependent
RULES & ANALYTICS ENGINES	IBM, Oracle, Pivotal, MS
APPLICATION PLATFORM	PTC, Xively, Jasper, Bosch
DATA MANAGEMENT	Pubnub, Oracle, Splunk, MS
DEVICE MANAGEMENT	RedBend, PTC, Bosch
NETWORK CONNECTIVITY	Cellular, WiFi, BT, Zigbee, Zwave, Wired
PRODUCT SOFTWARE	Fitbit, Tesla, Nest, Aircraft Engine
OS	Android (Brillo), iOS, Windows, Linux, QNX, RTOS
PRODUCT HARDWARE	Offtheshelf, Product specific

Cloud	AWS, Google, Azure
Security & Identity Management	Wind River, Secure Inside, Mocara, Bastille
Data from external sources	
System Integration into existing processes	Accenture, IBM
Distribution	AT&T, Best Buy

Highest value capture in the value chain

These layers are likely to collapse

IoT Marketecture

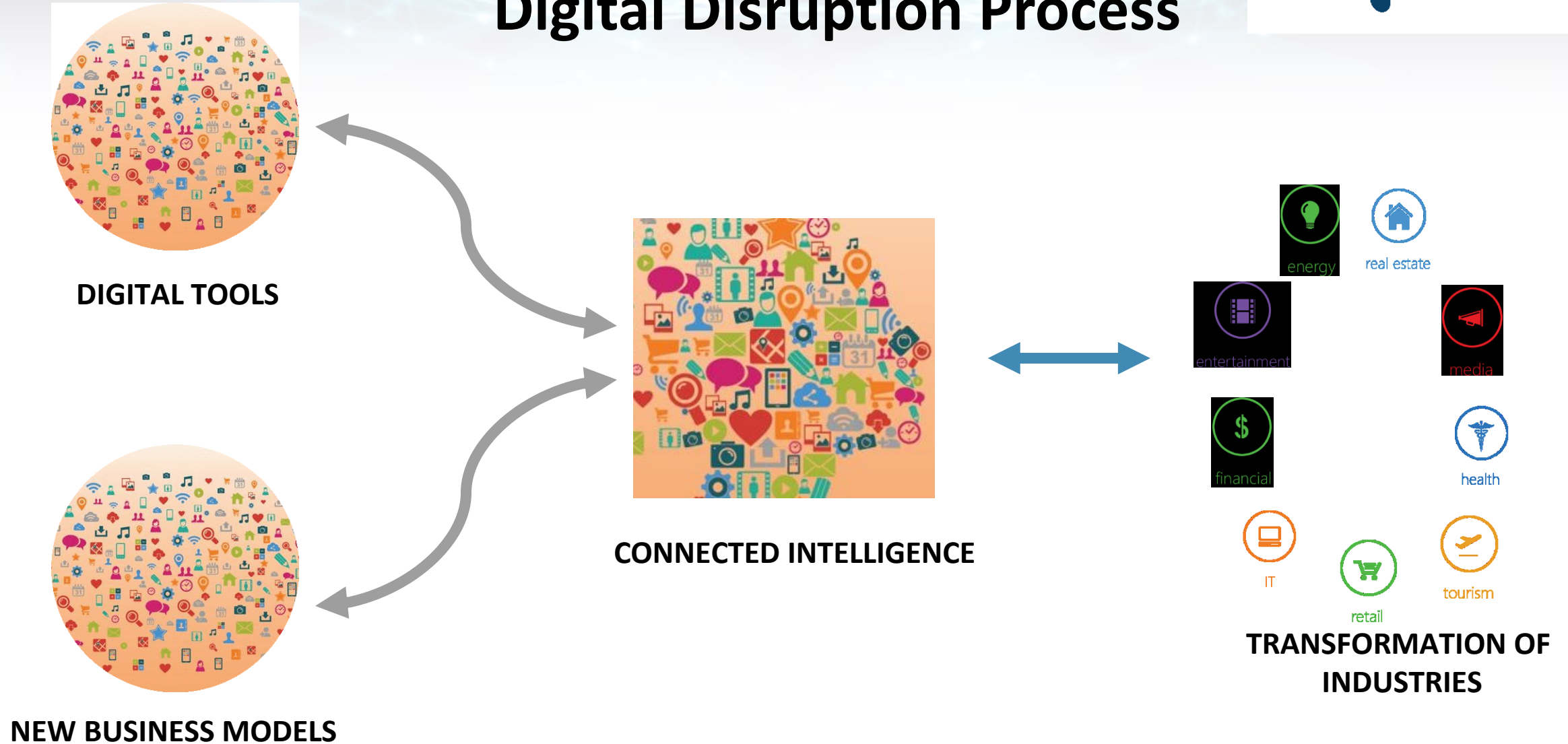
Free

High Volume, Low Margins



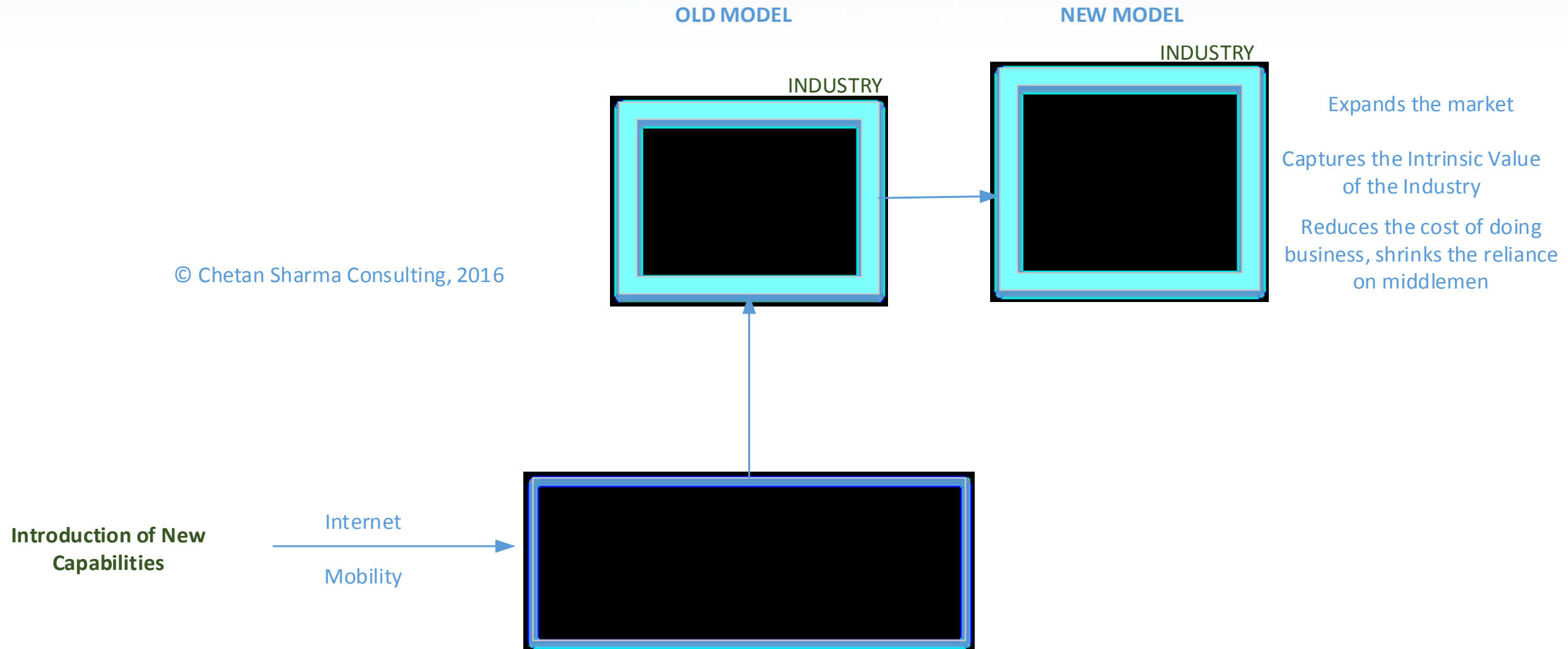


Digital Disruption Process





Digital Disruption Process



What does this mean for 5G?



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- We are likely to see similar platform, applications, and services disruptions due to 5G capabilities:
 - Low Latency – Manufacturing, healthcare, robotics, transportation, gaming, VR
 - Network Slicing – Enterprise, B2B2C, transportation
 - Massive IoT – Manufacturing, smart city, AI
 - Broadband – Entertainment, transportation, Internet and Video consumption, Commerce, Healthcare, Education
 - Edge Computing – AI, Verticals that generate TBs of data



Thank You

