

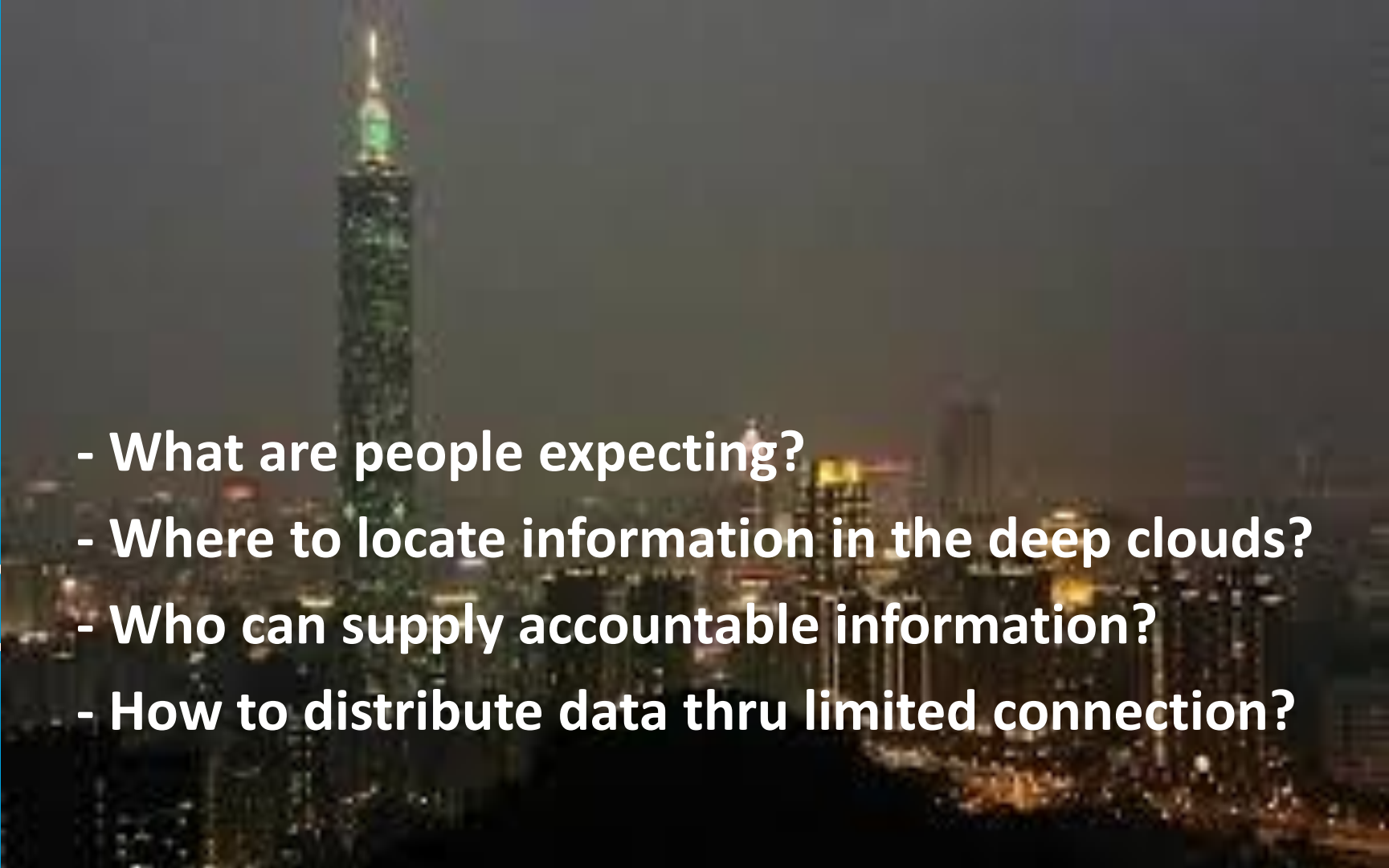


Smart Mobile Broadcasting Technology, Inc.

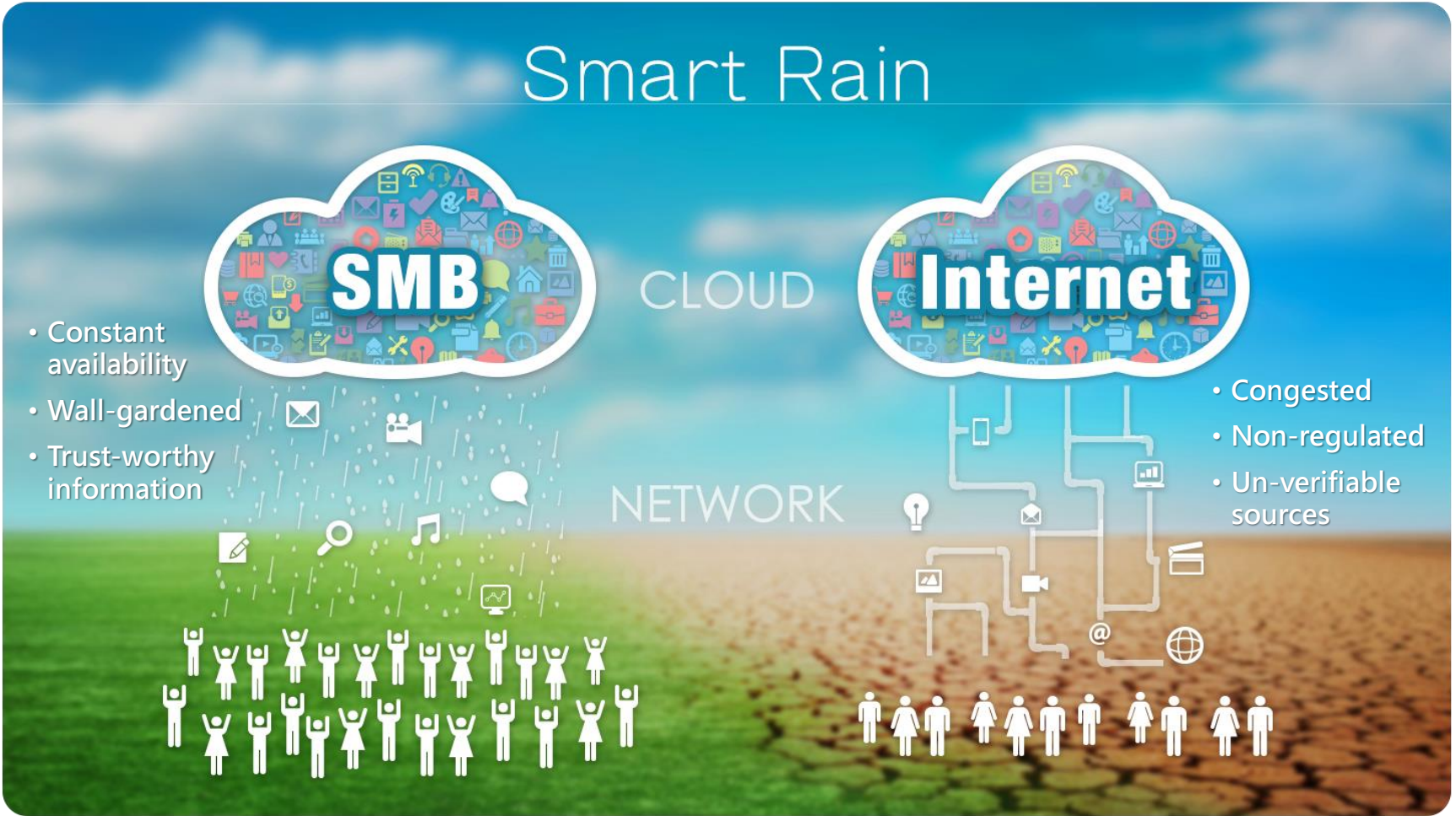
Smart Rain and SMB

Reach your mind
Rich your life

Prelude — The Myth of Smart City

- 
- A nighttime photograph of a city skyline, featuring the Taipei 101 skyscraper prominently on the left. The city lights are visible in the background, and the sky is dark. The image is used as a background for the text.
- What are people expecting?
 - Where to locate information in the deep clouds?
 - Who can supply accountable information?
 - How to distribute data thru limited connection?

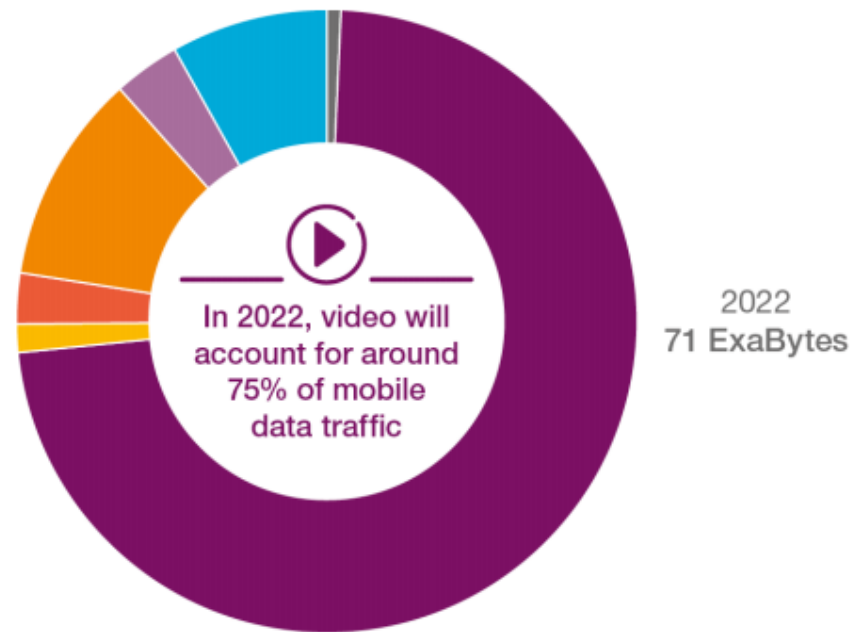
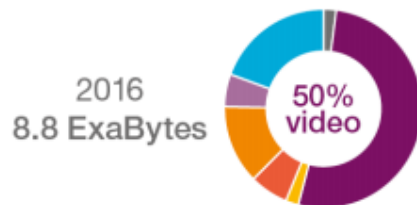
Smart Rain – Not Only Cloud



Mobile Traffic Demands

MOBILE VIDEO TRAFFIC IS INCREASINGLY DOMINANT

Mobile data traffic by application category per month (ExaBytes)



Source : ERICSSON MOBILITY REPORT NOVEMBER 2017

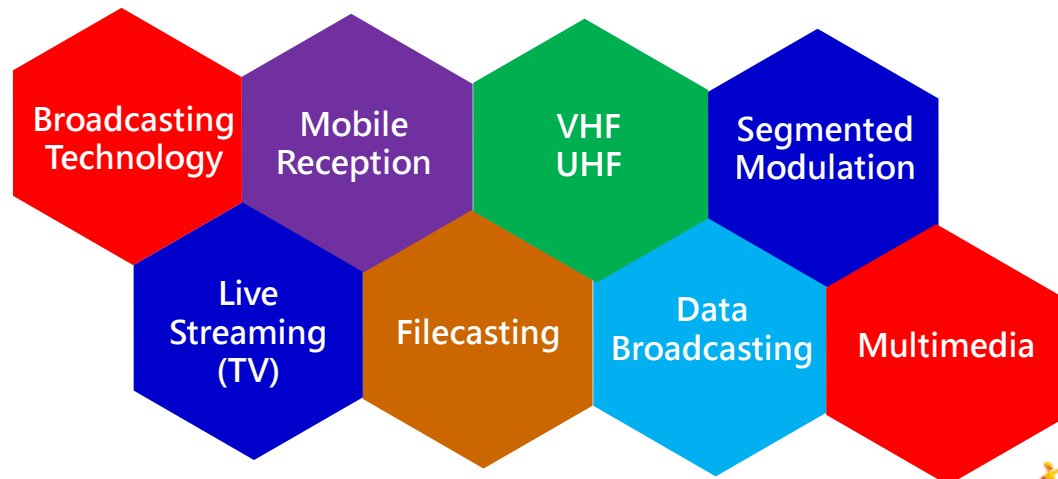
The Benefits of Smart Rain via SMB

- Anytime and anywhere
- Real-time service
- Unlimited connections
- Lower-cost infrastructure
- Wall-gardened information

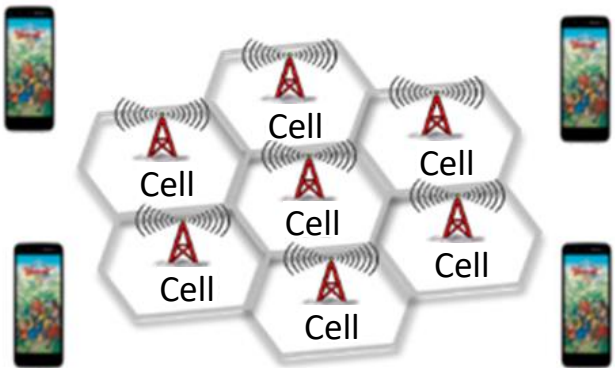
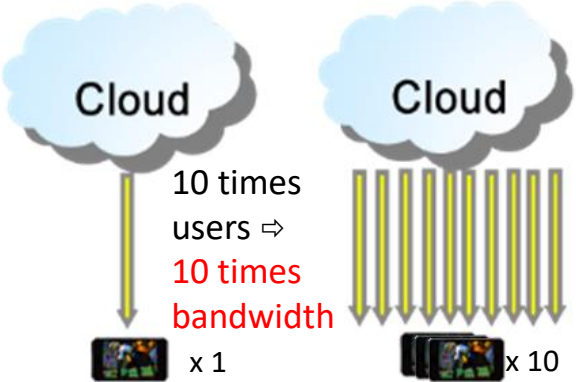


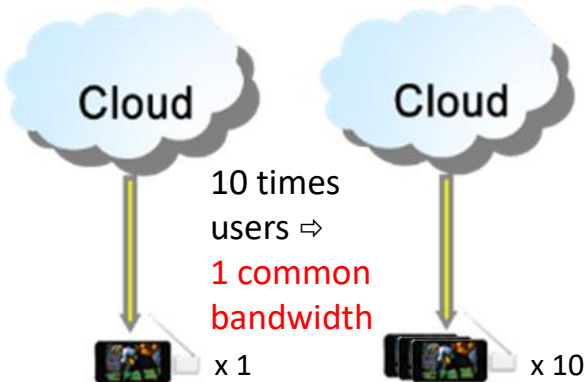



What is SMB

- SMB, short for Smart Mobile Broadcasting
- A mobile broadcast technology based on ISDB-T and ARIB standards
- VHF or UHF transmission with wide coverage, good signal-noise ratio, good in-door reception
- Most suitable for live video distribution with low latency (think of TV!)
- Not entirely TV but also file-casting and data broadcasting
- Targeting smartphone reception via external dongle, WiFi gateway, or built-in tuner



Differences in Methodology

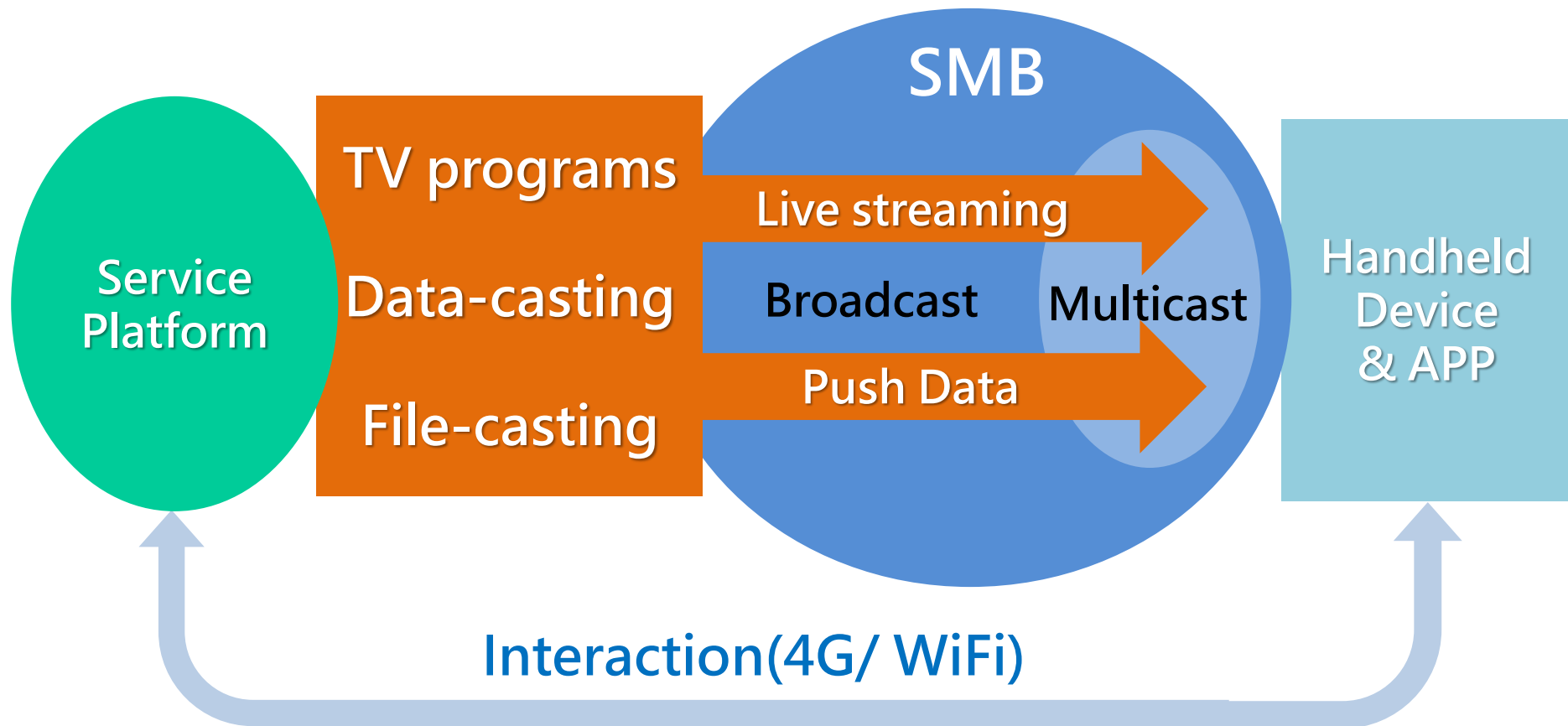
	Signal Coverage	Bandwidth Occupation	
Wireless Broadband			 <p>one-to-one connections, finite capacity</p>
SMB			 <p>one-to-many broadcast, unlimited connections</p>

Coherence of SMB and Broadband

Content

Network

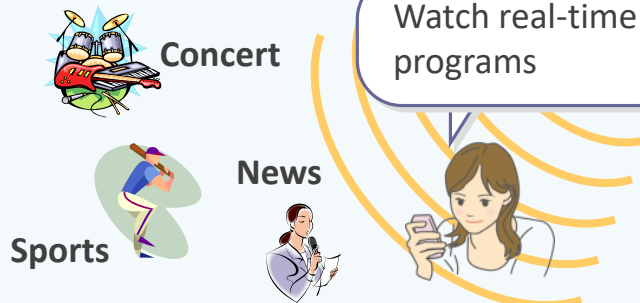
Device



SMB Services Basic

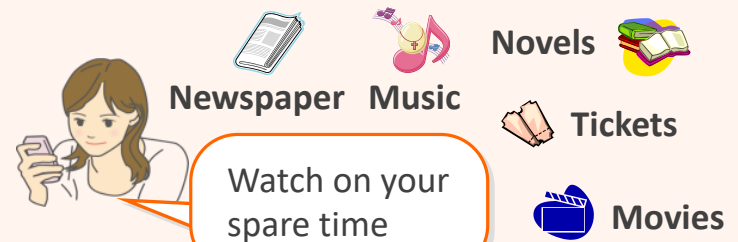
1. High-quality Real Time Service

Providing high quality original live contents and licensed drama/movie programs

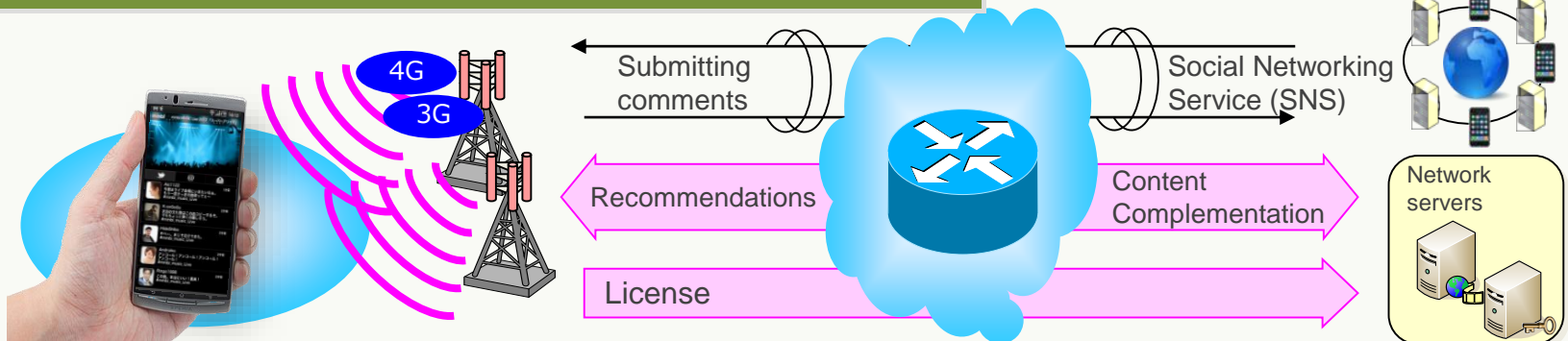


2. File-based Broadcasting Service

Audio visual contents as well as digital contents by broadcasting channels are stored in mobile terminals temporarily. Subscribers are able to watch their favorite contents at their convenient timing.



3. Use of Communications and Broadcasting Channels



Real-time Emergency Warning

- SMB with EWBS (Emergency Warning Broadcasting System) is a proven real-time emergency warning technology during 2011 Tōhoku earthquake and tsunami in Japan.
- Information including early warning, evacuation instructions, rescue status, ration distributions, etc., are broadcasted to wide area from distances.
- Warning signal can wake-up mobile phone even in stand-by mode (if supported).
- In addition to mobile phone, various devices can also be used for warning such as public digital signage, home security system, emergency exit lights, PA systems, etc.



EWBS



Warning Notices
Warning, evacuation
instructions, rescue status,
ration distributions



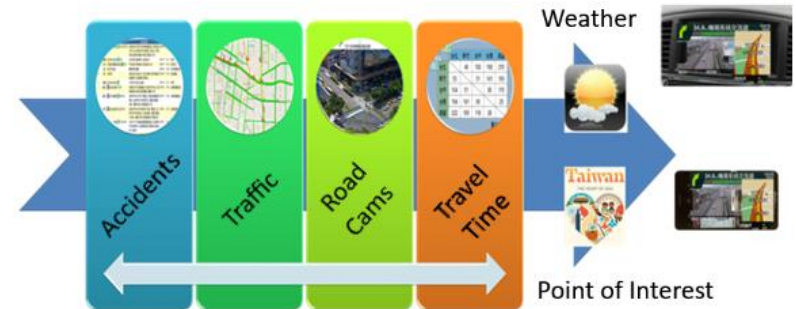
Niche Applications

➤ On-site live broadcasting for event



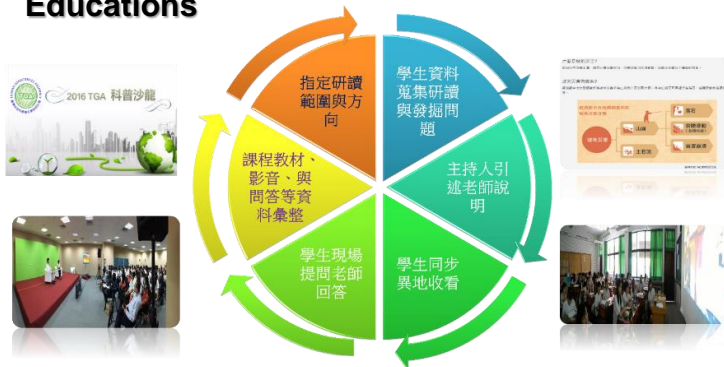
- Enhanced and immersive experiences at the scene of sport games, concerts, festivals, conferences, etc.

➤ Traffic information broadcasting



- Live traffic CAMs
- Real time traffic data
- Alternative routing information

➤ Educations



- MOOCs
- Flipped classrooms
- Smart Campus

➤ Small area data broadcast

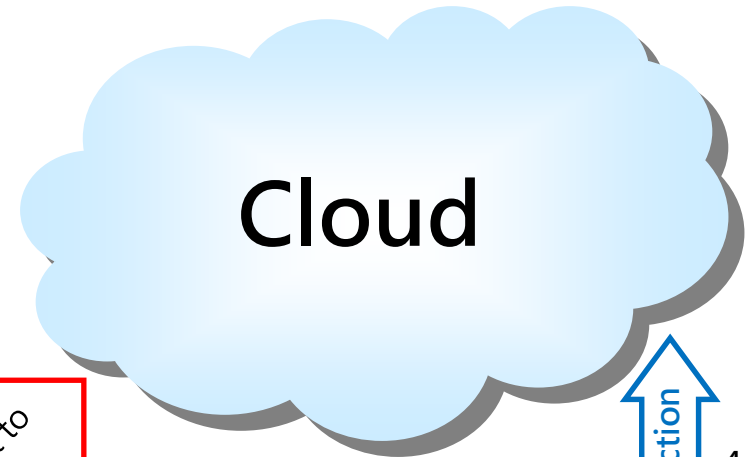
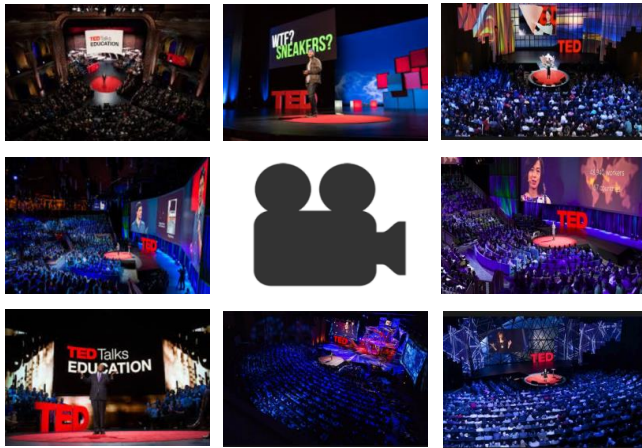


- Smart guide for museums, theme parks, shopping malls, conventions, hospitals, etc.



Conference Event Scenario

Multiple Camera Feeds

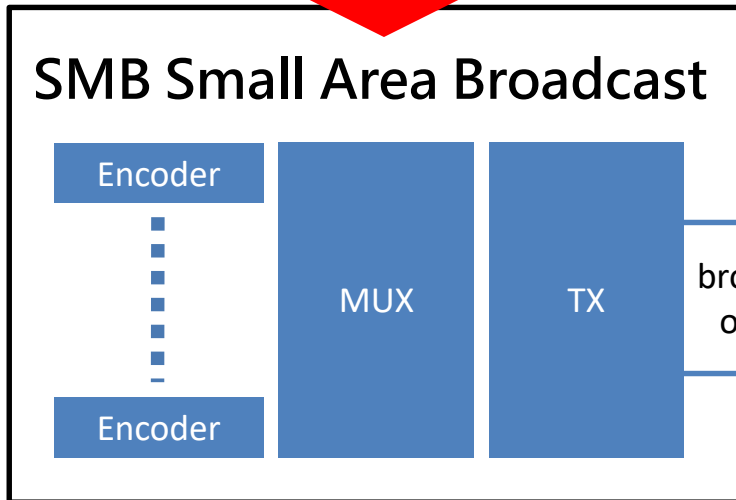


simulcast to
Internet

Interaction

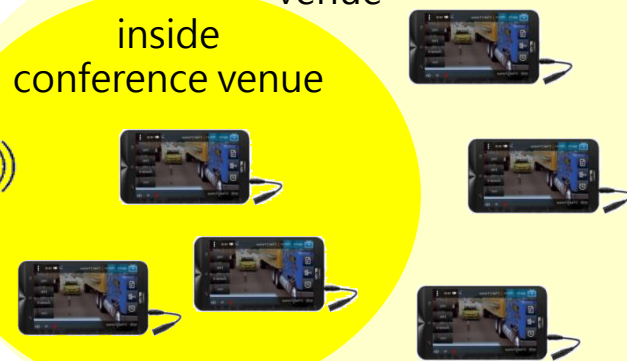
4G/WiFi

SMB Small Area Broadcast



inside
conference venue

around
venue



Variety of Receiving Devices

- **Built-in receiver terminals**

Smartphone, tablet, in-car head unit, radio with EWBS

- **External plug-in dongles**

For iOS and Android devices

- **WiFi transceivers**

Can be built with 3C products such as WiFi AP/routers, Power banks, etc.

- **Special applications**

Vending machines, digital signage, Kiosk, security and alarming devices



Network Deployments

Nation-wide (SFN)

- National DTV/DAB Service
- **Emergency Warning Service**
- Public information(news, push data...)
- Multimedia Service(live streaming, VOD...)

Region-wide (MFN)

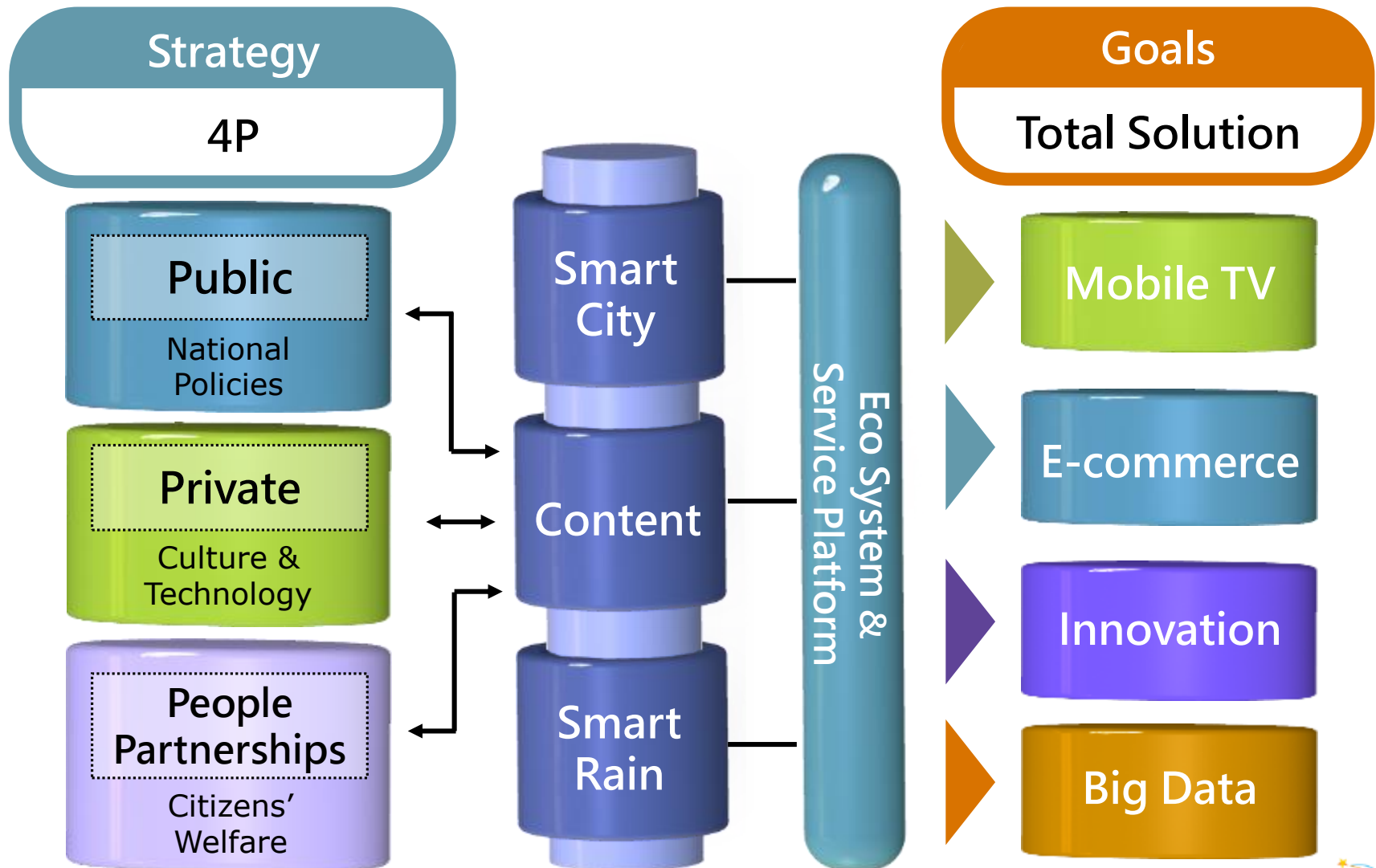
- Regional DTV/DAB Service
- **Smart City application**(government push data, traffic, travel, security, education...)
- Multimedia Service(live streaming, VOD...)

Small Area (White space)

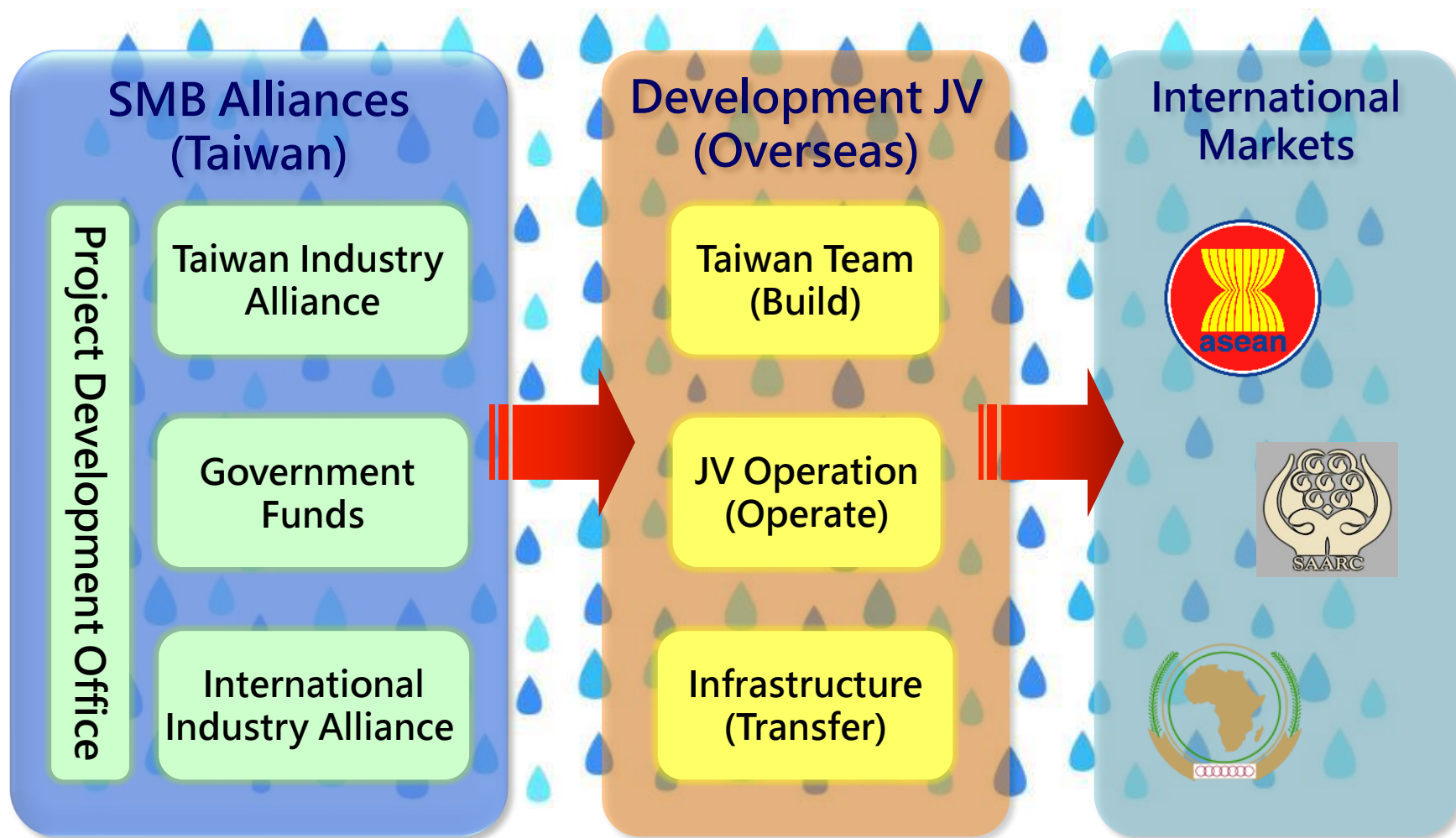
- Smart campus, smart hospital, smart park, smart exhibition ...
- Live events(sport, e-sport, event party, concert, seminar...)



Business Strategy and Goals



Business Collaboration Structure



Thank You !

Reach your mind
Rich your life



Smart Mobile Broadcasting Technology, Inc.