

Tech-to-Market Innovation Challenge: LTE Direct

Disrupting Conference Networking

-Samarth Agarwal, Siddharth Agrawal, Saurabh Goel, Keith Sinclair



Market Needs

“In the exhibition industry **face-to-face interaction** is very important. It’s what makes the industry go round.”

Tradeshaw News

“it’s **not** just **random** window shopping”

CEIR Blog

“ ‘secret sauce’ is delivering the right mix of content and **people**”

ICCA Study

“having a chance to interact with the **people** behind the products”

CEIR Attendee Blog

“achieve multiple learning objectives... from their peers through **networking**”

CEIR Study

“**quality of networking** (76%) was the biggest factor that would encourage delegates to attend events”

Convention 2020 Study

State of The Art



Painful !!!

Use Cases

Bob and I had agreed to meet at the conference. Is he at the conference? Where is he?

Please connect me with someone who is interested in LTE-D

These people in front of me seem to be free. Which of the two should I initiate a conversation with?

I hope someone from Orange is here at the conference



Proximity Discovery Using LTE-Direct



Technological advantages

Conference Environment

Indoors:

- Poor/no GPS
- Proximity facilitated networking



LTE-D



OTT
(GPS)



D2D
(BLE)



Large Venues:

- Multiple building blocks (0.25-0.5km)
- Requires long range



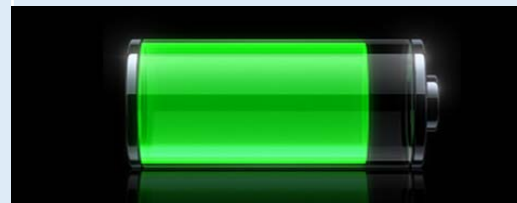
High User Density:

- Often '000s of attendees
- Unreliable at large events



Long usage duration:

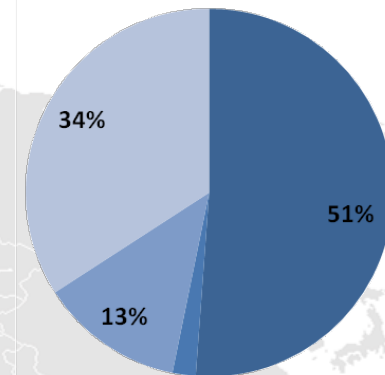
- All day events
- Requires power efficient solution



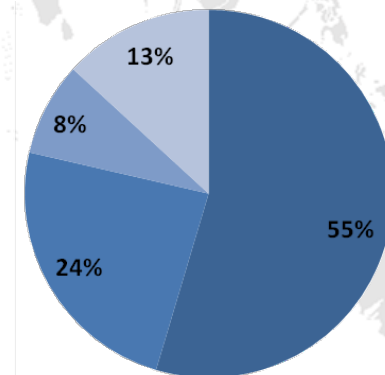
Professional Events Market Size

- Wide variation and range of events
- Global industry
 - ~7M Meetings w/ ~1.5B Participants
 - 6% Annual Growth Worldwide
- Average fee per delegate per meeting is ~ US\$550
- Revenue Potential (estimate) –
 - \$7.5B to \$35B globally

Number of Meeting Events in US '12
535 Thousand



Number of Meeting Participants in US '12
111 Million



■ Conventions/Conferences/Congresses ■ Trade Shows
■ Incentive Meetings ■ Other Meetings

Value Chain



Network Operators



Integrator



App Developers



Conference Organizers



Conference Attendees

Foundation to enable the service

Enables cross-carrier platform

Enables conference networking

Conference, Trade-shows, Exhibitions

Reaps the benefits

Per event per conference key from organizer

Shared between App Developer, Integrator and Network Operators

Increased Attendance

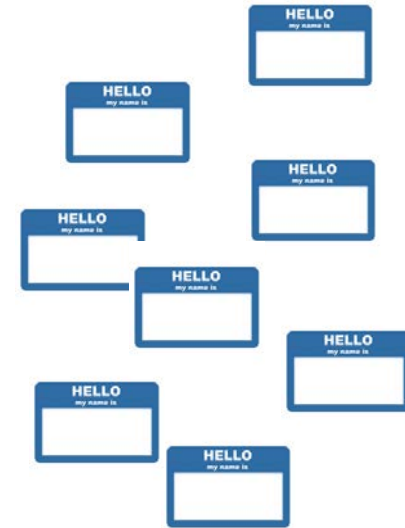
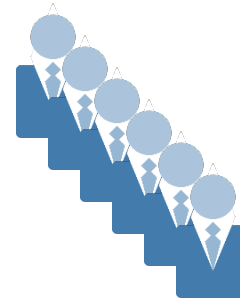
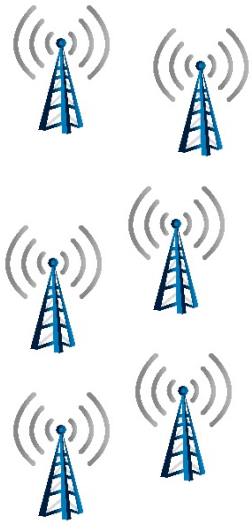
Additional utility and better networking

Capture Conference Key Revenue

Value Prop

Revenue

Business Model



Risks

Slower adoption:
Controlled B2B channel

Reliant upon success of app developers

Network Operators and integrator capture bulk value

Value dependent on user participation – network effects

Minimal risk for trying the service

Business Model

- **Advantages:**

- Activation based repeat revenue for LTE-D to MNO – WTP is high for end users
- LTE-D adoption driven by app developer and event organizers
- Maintains normal business processes for all stakeholders

- **Challenges:**

- Mass adoption may be a slower process
- Network effect required to make it useful for other attendees

- **Strategic Considerations**

- Usage dependent price discrimination applied (5 successful connections through expressions charged less than 100 connections through expressions)
- Freemium for consumer – Free app download but additional services charged for revenue split per conference key
- Carrier has an option of LTE-D monthly subscription fee in future

Demo



Questions??

