Business opportunities for local 5G operators

Petri.Ahokangas@oulu.fi

uO5G Final results seminar, Dec 18, 2018
The business model approach

Antecedents:
- Value
- Advantage
- Opportunity

Outcomes:
- Sustainability
- Replicability
- Scalability

Contents/processes

BUSINESS MODEL AS AN APPROACH
Micro operator business opportunities

![Diagram]

Local operations’ PROBLEM SPACE
- Spectrum
- Core network
- Access network
- Business opportunity?
- Business model?

Local operations’ SOLUTION SPACE
- Who adopts the role?
- Sharing / owning?
- Verticalization?
- Horizontalization?
- Oblique = Hyper-localization?
# Coopetition at campus

<table>
<thead>
<tr>
<th></th>
<th>Efficiency in resource utilization</th>
<th>Improving the firms' competitive position</th>
<th>Increasing the size of the current markets</th>
<th>Creating new markets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context</strong></td>
<td>Management of availability of people, places and things</td>
<td>Tailored services</td>
<td>Exploiting marketplaces and optimizing the use of premises</td>
<td>Remote learning</td>
</tr>
<tr>
<td></td>
<td>Smart Campus</td>
<td></td>
<td>Location and recognition</td>
<td>Exploitation of AR/VR</td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>Use of robotics</td>
<td>Development</td>
<td>Data management</td>
<td>Remote/ virtual participation</td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td>AR/VR</td>
<td>Protection and storing of confidential data</td>
<td></td>
</tr>
<tr>
<td><strong>Connection</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Context and platform driven business models

Conclusions

VERTICAL BUSINESS MODELS AND ECOSYSTEMS
- Opportunity in service approach
- Low scalability and replicability > project business
- Advantages through turn-key solutions

HORIZONTAL BUSINESS MODELS AND ECOSYSTEMS
- Opportunity in supplementary services
- Scalability in MNOs’ cost-saving potential
- Replicability to and advantages in niches

OBLIQUE BUSINESS MODELS AND ECOSYSTEMS
- Opportunity in special needs
- Scalability and replicability through platform thinking
- Advantages in two-sided markets

Conclusions: Micro operator business models’ solution space

Modularization of everything
Conclusions: Future business opportunities in local operations

- Edge cloud BMs
- Network Slicing BMs
- Service modularization for "realtime or dynamic" and "shop-in-shop" BMs
- Data BMs
- Verticalization of BMs
- Platform BMs
- Context BMs
- "Plan, Build & Manage" BMs


Thank you!