Around the World in LBE

@JoannaPopper
What is Location Based Entertainment?
Why it’s Taking Off

Retail Sales in U.S. Decline After Decem
Revised Down

U.S. Retail Sales Unexpectedly Fall for Third
Straight Month

Millennials are prioritizing
‘experiences’ over stuff

Down 0.3% in January, retail sales suffer broad decline

Comfiest Seat in the House: Struggling Movie
Theaters Go Upscale to Survive
NAB: Location-Based Entertainment Could Be $12 Billion Industry in Five Years
How Many Have Gone to a LBE?
Locations We Find VR Today

- Arcades
- Hyper reality
- Museums
- Airports
- Film Festivals
- Marketing

Images may be subject to copyright.
Why Wearables in LBE?
Consumer, Retailer, Content Creator POVs

• Enhanced Sensory Experience
• Drive Retail Traffic
• Seen as Innovative
• Increase revenue and customer satisfaction
• Smaller Footprint Needed to Deliver Experience / Decrease Costs for Enhanced Experience
• Focus in VR Switched Gears from Consumer to Out of Home
Largest US Roll-Out
Largest US Roll-Out: Video
Jack Ryan
Jack Ryan
Jack Ryan Video
Success of Beat Saber: Video
Beat Saber: Video
LBE in China
LBE in Korea
Monsters, Rafts and More....
Video
When a Roller Coaster Isn’t Scary Enough.... Video
Demographics/Post-Wearables Moments
Dubai
What’s Next?

• Biometrics / Analytics
• In-Headset Advertising
• Shrinking Down of tech/ New Form Factor
• Headset with VR/AR/MR/XR
HP VR HARDWARE PORTFOLIO

DESIGN 3D CONTENT

CREATE VR

EXPERIENCE VR

Workstations

Mobiles

Backpack

HMDs
Appendix
LBE Projections

Other includes: internet cafes, library setups, retail experiences, restaurants/bars, and any type of location that doesn't fit the other categories.

Figure 7: Projected Number of Global LBE VR Venues by Type, 2018 - 2022

<table>
<thead>
<tr>
<th>Types of Venues</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>VR Arcades (Standard)</td>
<td>704</td>
<td>1,060</td>
<td>1,494</td>
<td>1,963</td>
<td>2,391</td>
</tr>
<tr>
<td>VR Arcades (Hyper)</td>
<td>327</td>
<td>530</td>
<td>802</td>
<td>1,133</td>
<td>1,482</td>
</tr>
<tr>
<td>Cinemas</td>
<td>84</td>
<td>157</td>
<td>251</td>
<td>363</td>
<td>481</td>
</tr>
<tr>
<td>Amusement Parks</td>
<td>70</td>
<td>102</td>
<td>138</td>
<td>175</td>
<td>211</td>
</tr>
<tr>
<td>Pop-Ups / Kiosks</td>
<td>810</td>
<td>1,052</td>
<td>1,262</td>
<td>1,452</td>
<td>1,628</td>
</tr>
<tr>
<td>Tourist Venues</td>
<td>388</td>
<td>504</td>
<td>605</td>
<td>696</td>
<td>780</td>
</tr>
<tr>
<td>Other Venues</td>
<td>3,277</td>
<td>7,291</td>
<td>14,010</td>
<td>24,515</td>
<td>38,434</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>5,659</td>
<td>10,695</td>
<td>18,564</td>
<td>30,296</td>
<td>45,407</td>
</tr>
</tbody>
</table>

Source: Greenlight Insights analysis

Primary focus due to Larger scale
## LBE by Region

### Figure 8: Projected Global LBE VR Venues by Region, 2018 - 2022

<table>
<thead>
<tr>
<th>Region</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia-Pacific</td>
<td>2,361</td>
<td>4,725</td>
<td>8,509</td>
<td>14,226</td>
<td>21,638</td>
</tr>
<tr>
<td>Europe</td>
<td>1,019</td>
<td>1,738</td>
<td>2,780</td>
<td>4,247</td>
<td>6,060</td>
</tr>
<tr>
<td>North America</td>
<td>867</td>
<td>1,471</td>
<td>2,348</td>
<td>3,579</td>
<td>5,095</td>
</tr>
<tr>
<td>Middle East, LaAm &amp; Africa</td>
<td>1,412</td>
<td>2,761</td>
<td>4,928</td>
<td>8,244</td>
<td>12,614</td>
</tr>
<tr>
<td><strong>Global</strong></td>
<td><strong>5,659</strong></td>
<td><strong>10,695</strong></td>
<td><strong>18,564</strong></td>
<td><strong>30,296</strong></td>
<td><strong>45,407</strong></td>
</tr>
</tbody>
</table>

*Source: Greenlight Insights analysis*

### 2018:
- 41% Asia
- 18% Europe
- 15% N Am
- 25% ME, Latam, Africa

### 2019:
- 44% Asia
- 16% Europe
- 14% N Am
- 26% ME, Latam, Africa
## VR Revenue Breakdown by Region

**Figure 6: Projected Global LBE VR Revenues by Region, 2018 - 2022**

<table>
<thead>
<tr>
<th>Region (in $millions)</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia-Pacific</td>
<td>$306.2</td>
<td>$564.0</td>
<td>$983.2</td>
<td>$1,647.2</td>
<td>$2,638.2</td>
</tr>
<tr>
<td>Europe</td>
<td>$332.4</td>
<td>$571.9</td>
<td>$926.2</td>
<td>$1,430.5</td>
<td>$2,104.4</td>
</tr>
<tr>
<td>North America</td>
<td>$362.3</td>
<td>$611.6</td>
<td>$969.7</td>
<td>$1,455.8</td>
<td>$2,073.0</td>
</tr>
<tr>
<td>Middle East, LatAm &amp; Africa</td>
<td>$173.8</td>
<td>$302.6</td>
<td>$501.7</td>
<td>$810.4</td>
<td>$1,269.7</td>
</tr>
<tr>
<td><strong>Global</strong></td>
<td><strong>$1,175</strong></td>
<td><strong>$2,050</strong></td>
<td><strong>$3,381</strong></td>
<td><strong>$5,344</strong></td>
<td><strong>$8,085</strong></td>
</tr>
</tbody>
</table>

*Source: Greenlight Insights analysis*

2018:
- 26% Asia
- 28% Europe
- 31% N Am
- 15% ME, Latam, Africa

2019:
- 28% Asia
- 27% Europe
- 30% N Am
- 15% ME, Latam, Africa
Projected Free-Roam locations

Free roam experiences aren’t as numerous as non-free roam, but these experiences may drive more bulk deals.

While some locations are standalones or single player, with current footprints and game structures locations have ~20 backpacks on average.

TAM would be 4-6k in 2018 and 2019.

<table>
<thead>
<tr>
<th>Types of Venues</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>VR Arcades (Standard)</td>
<td>35</td>
<td>52</td>
<td>82</td>
<td>108</td>
<td>131</td>
</tr>
<tr>
<td>VR Arcades (Hyper)</td>
<td>33</td>
<td>53</td>
<td>92</td>
<td>130</td>
<td>170</td>
</tr>
<tr>
<td>Cinemas</td>
<td>5</td>
<td>10</td>
<td>18</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>Amusement Parks</td>
<td>44</td>
<td>65</td>
<td>89</td>
<td>112</td>
<td>135</td>
</tr>
<tr>
<td>Pop-Ups / Kiosks</td>
<td>97</td>
<td>126</td>
<td>174</td>
<td>200</td>
<td>225</td>
</tr>
<tr>
<td>Tourist Venues</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Other Venues</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grand Total</td>
<td>217</td>
<td>310</td>
<td>458</td>
<td>579</td>
<td>699</td>
</tr>
</tbody>
</table>

Source: Greenlight Insights analysis

©Greenlight Insights | Reproduction Prohibited

March 13, 2018  | Updated: March 22, 2018