Evaluation for QR Codes in Environmental Museums

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Alborania Museum

Updated facilities
Broad age spectrum of participants
Economic, social, educational, and accessibility diversity
Bilingual information
Museums & Tech

Interest → Knowledge → Interest
Adapting to connectivity
Audioguide
Websites
Virtual Visits
Podcasts & Informational QR
QR Codes

1994 - Denso-Wave.

QRコードは漢字/かなを効率よく表現できます

(QR code can express kanji / kana efficiently.)
QR Codes

~30 → 7089 digits

2D + Colors.

Restore information.

Geolocalization, links, contacts...
Aim of study

Has the QR code system of the Alborania Museum been satisfactory?
Methodology

Contribution Analysis (Mayne, 2008)

Define **Causes** through **Effects**

Causality defined by:

- Reasoned Theory of Change
- Activities already implemented
- Theory of change verified by evidence
- Controlled external factors
Contribution Analysis

1. Phase 1
   Establish specific Cause - Effect problem

2. Phase 2
   Develop Theory of Change (ToC)

3. Phase 3
   Gather evidences of ToC

4. Phase 4
   Evaluate the ToC draft and test it

5. Phase 5
   Search for additional evidence

6. Phase 6
   Review & reinforce the ToC draft
## Results

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of the visit</td>
<td>30-45 min</td>
<td>45-60 min</td>
</tr>
<tr>
<td>Question’s type</td>
<td>&lt;10%</td>
<td>~30%</td>
</tr>
<tr>
<td>Satisfaction (Questionnaires)</td>
<td>3.2 (sd 0.4)</td>
<td>4.1 (sd 0.8)</td>
</tr>
<tr>
<td>Casual questions</td>
<td>17%</td>
<td>35%</td>
</tr>
<tr>
<td>Request of Internet</td>
<td>65%</td>
<td>70%</td>
</tr>
</tbody>
</table>
Conclusions

The methodology is appropriate to the context.
QR usefulness to inform.
Environmental sustainability.
Thank you.