Digitally co-developed urban politics & policies

Bringing sustainable mobility solutions to life

Alexandra Bensler, Michael Ortgiese, Mandy Dotzauer

RGS-IBG - Annual International Conference 2021

2021/09/01
Research question

How to fuel cooperation between stakeholder groups to pave the way for innovative and sustainable mobility development solutions…

To what extent can a digitally implemented Harvard negotiation technique contribute to identifying accepted mobility development solutions?
1. Introduction & framework
   Project – Theoretical framework

2. Research design
   Data collection & participants – Analysis

3. First results: Agreeing on solutions for mobility innovations online
   Online Harvard style negotiation

4. Discussion & outlook
1. Introduction & framework
Research project ‘Reallabor Digitale Mobilität Hamburg’

- **goals**: to develop, test, and improve digital mobility solutions in and around Hamburg, Germany
  → urban living lab concept

- funded by the German Federal Ministry of Transport and Digital Infrastructure (04/2020-12/2021)

- **26 project partners from different backgrounds**
  - **industry**: BMW, Continental, Siemens Mobility
  - **services**: DB Systel, DEKRA, DB FuhrparkService, EasyMile, ioki, moovel, S-Bahn HH, Rewe Digital, Sixt, T-Systems, Urban Software Institute
  - **cities and municipalities**: city of Hamburg, municipality of Storman, municipality of Harburg, city of Ahrensburg, VHH, Hamburger Hochbahn
  - **science**: Fraunhofer FOKUS, TU Berlin, TU Hamburg, TU München, HPI
1. Introduction & framework

Negotiating according to the Harvard concept

Main ideas (Fisher/Urry 1981)

- maintain good relationships, stay firm concerning goals
- focus on interests instead of positions
- develop options by/for everyone
- develop (minimal) framework/criteria that have to be met for the solutions to be acceptable
1. Introduction & framework

Theoretical approach to Harvard negotiation

FRAMEWORK & CONDITIONS

Structural characteristics
- gain (kind and extent)
- sanctions?
- number of parties

Situational characteristics
- negotiation experience
- negotiation resources (time & costs)
- trust

INTERVENING CONDITIONS

- cultural background
- upbringing
- personal character traits

NEGOTIATION PROCESS

OUTCOME

Objectively
- gains
- required negotiations resources (time & costs)

Subjectively
- satisfaction with results
- satisfaction with process

based on Crott, Kutschker & Lamm (1977), Kelley & Thibaut (1978)
1. Introduction & framework

Theoretical approach to Harvard negotiation

FRAMEWORK & CONDITIONS

Structural characteristics
- gain (kind and extent)
- sanctions?
- number of parties

Situational characteristics
- negotiation experience
- negotiation resources (time & costs)
- trust

INTERVENING CONDITIONS
- cultural background
- upbringing
- personal character traits

OUTCOME

Objectively
- gains
- required negotiations resources (time & costs)

Subjectively
- satisfaction with results
- satisfaction with process

based on Crott, Kutschker & Lamm (1977), Kelley & Thibaut (1978)
## 2. Research design

### Data collection (1/2) & participants

<table>
<thead>
<tr>
<th>WHEN?</th>
<th>07/-08/2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHERE?</td>
<td>large German cities (&gt; 1.4 million inhabitants) and their surroundings</td>
</tr>
<tr>
<td>WHO?</td>
<td>mobility stakeholders (n=17)</td>
</tr>
<tr>
<td></td>
<td>public administration 11,8%</td>
</tr>
<tr>
<td></td>
<td>industry 19,4%</td>
</tr>
<tr>
<td></td>
<td>(mobility) services 17,6%</td>
</tr>
<tr>
<td></td>
<td>science 17,6%</td>
</tr>
<tr>
<td></td>
<td>representation of interests 23,5%</td>
</tr>
<tr>
<td>HOW?</td>
<td>- simulation game: <strong>digital mobility workshops (5)</strong></td>
</tr>
<tr>
<td></td>
<td>- + ex-post surveys</td>
</tr>
</tbody>
</table>
2. Research design
Data collection (2/2)

a) remote approach

b) simulation game: workshop concept
3. First results: Agreeing on solutions for mobility innovations online
Online Harvard style negotiation (1/3)

- TRUST & PERSONAL RELATIONSHIP
  - collectively accepted goals tended to be reached when participants knew each other beforehand (cf. WS3, 4)
    - development of teamwork dynamics beyond Harvard concept
      - „Can we just begin exchanging views and developing a solution together right away?“ (cf. WS3)
    - despite different interests: heated exchange of arguments to find a mutually accepted solution (cf. WS4)
  - challenge: maintain personal relationship despite different levels of knowledge (cf. WS1)
3. First results: Agreeing on solutions for mobility innovations online
Online Harvard style negotiation (2/3)

- INTERESTS vs. POSITIONS
  - challenge to apply negotiation technique when furthering a certain technology \(\rightarrow\) position motivated an organizations‘ negotiation (cf. WS4)
  - focus back on interests via firm moderation led to subjectively accepted goal (cf. WS4)
  - raises question: potential of negotiation concept beyond simulation setting?
3. First results: Agreeing on solutions for mobility innovations online
Online Harvard style negotiation (2/3)

- DEVELOPING OPTIONS BY/FOR EVERYONE
  - … for all WS (1-5): hardly brainstormed beyond their own interests
  → to encourage brainstorming phase: solo breakout sessions useful (using own writing material, no talking)
  - ensuring mutually accepted solution corresponds to everyone’s idea/interests: live visualization (esp. cf. WS1, 5)
4. Discussion & outlook (1/3)

CHALLENGES: SIMULATION GAME EFFECT

- challenge to limit broad range of mobility development possibilities to a level of complexity corresponding to a one-time simulation game (esp. cf. WS2, WS5)
- partial lack of willingness to negotiate (cf. WS1, WS5), possibly due to fictional negotiation setting (→ solely fictional gains)
4. Discussion & outlook (2/3)

PRACTICALLY

- create & strengthen **trust**: 
  - make sure participants get to know one another (personally), e. g. incorporate digital lunches into (beginning of) negotiation process

- **interests vs. positions**
  - need for strong strategy representing public interest
  - possible need to validate/adapt negotiation strategy according to stakeholder culture (cf. Wenzlaff 2008), e. g. for technologically or financially driven stakeholders
4. Discussion & outlook (3/3)

- developing options by/for everyone
  - strengthen trust & creative and open working atmosphere
  → further testing

**SCIENTIFICALLY**

- understand *negotiation process* and its influence on negotiation success based on
  - workshop video data
  - retrospective expert interviews
- increase number of participants to deepen understanding of *framework & conditions*‘ and *intervening conditions*‘ impact on negotiation outcome (cf. survey)
Thank you for your attention.

German Aerospace Center, Institute of Transportation Systems
Alexandra Bensler alexandra.bensler@dlr.de
Michael Ortgiese michael.ortgiese@dlr.de
Mandy Dotzauer mandy.dotzauer@dlr.de