Monitoring behavior intelligently – a new focus on self-monitoring and choice architectures, Bent Egberg Mikkelsen, Professor, Aalborg University

Customer journey – case of LEGO

Applying FS in Kgs Enghave

- Investigating six different types of “meaningful places”
- Explore the feasibility of urban songlines as a method needs assessment
- Two end-users were asked to map places from their daily in SV
- Places were appointed a certain colour
## Applying FS in Kgs Enghave

Table 6: Socio-demographic and socioeconomic factors of the end-users.

<table>
<thead>
<tr>
<th>Factor</th>
<th>End-user 1</th>
<th>End-user 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
<td>35</td>
<td>42</td>
</tr>
<tr>
<td>Civil status</td>
<td>Married</td>
<td>Married</td>
</tr>
<tr>
<td>Children</td>
<td>Two children aged five and six</td>
<td>Two children aged 8-10 months and a one year old</td>
</tr>
<tr>
<td>Education</td>
<td>Food technologist</td>
<td>Food, Science, Tech</td>
</tr>
<tr>
<td>Work</td>
<td>Lead responsible in a current project</td>
<td>Taking care of the (grand) child in the house</td>
</tr>
<tr>
<td>Residence</td>
<td>Apartment</td>
<td>Flat</td>
</tr>
<tr>
<td>Usual time when walking the walkways route</td>
<td>Afternoon</td>
<td>Mornig</td>
</tr>
</tbody>
</table>

(Appendix 15; Appendix 13)

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**LC-FAT - Local Community Foodscape Assessment Tool.**

Template 2: How to choose WEOs to include. This template maps a local foodscape approach-based method for measuring urban multifunctional opportunities in a local community food environment.
LC-FAT - Local Community Foodscape Assessment Tool
Aboriginal mythological foundation

- Assumes that the world is created by singing it alive (Marling, 2003).
- Each of the places where a new experience occurred represented a sacred place for the ancestors descendants to revisit and use.
- These sacred places and the lines that can be drawn in between them, including the distance, represents a "song line".
- The walkabout illustrates a path across the land and ancestors would go for walkabouts and follow these songlines.

**Foodscape Songlines**

**Conceptual foundation 1**

- As places and artefacts in the land can be considered **sacred**, places of importance in a foodscape context can be considered at as **potential hotspots** = action or hotspots
- Hotspots/touch points are places with affordances = action possibilities

---

**Foodscape Walkabouts**

**2 parts**

1. **Unstructured.** The first exploratory situational analysis. The initial wandering, the curious go looking tour of the place in question. It results in maps of the place
2. **Structured.** Participatory walks with mediators or end users with visually assisted **data collection** and with emphasis on **hotspots** and **touch points**

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**F-Songlines approach step by step**

- FW 1. Get a first impression. Snapshot
- Plan next steps. How to engage with citizens
- Mapping: how things appear = “food reality”
- FW 2. Structured, v-assisted and participatory
- Draft stories. How the foodscape COULD be
- Do a moodboard. Present visually
- Create storyboard. Present visually

---

**Customer Journey Mapping (CJM) key benefits**

- Provides a single cross “business unit” view of the experience delivered by all customers
- Defines key enabling requirements (skills, data, processes, measures, etc.)
- Highlights areas of importance where effort should be applied (Critical, Positive, Core, Peak or End)
- As well as areas NOT valued by customers (costs can be optimised)
Preventive strategies
three levels

<table>
<thead>
<tr>
<th>Type</th>
<th>Content</th>
<th>Examples</th>
<th>Theoretical foundations</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Counselling</td>
<td>Behavioural modification</td>
<td>Modelling, Vicarious learning, Rewarding etc</td>
<td>High costs</td>
</tr>
<tr>
<td>Mass strategies</td>
<td>Campaigns</td>
<td></td>
<td>Marketing, ELM, KAB</td>
<td>Only affecting those already in low risk</td>
</tr>
<tr>
<td>Structural prevention</td>
<td>Menu board Labelling.</td>
<td>Explicit, regulation Implicit, nudging</td>
<td>SEM, SCT, Dual process theories</td>
<td>Affecting a broad audience. Politically sensitive. Revenue AND Benefits</td>
</tr>
</tbody>
</table>
Prevention and health promotion
Downstream or upstream?

A new paradigm
in preventive strategies

Societal responsibility
Upstream

Same the victim
Downstream

National regulation

Local action

Mile High Nudging

Air NZ

- [https://www.youtube.com/watch?v=qOw44VFNk8Y](https://www.youtube.com/watch?v=qOw44VFNk8Y)
- [https://www.youtube.com/watch?feature=player_embedded&v=3iaTEgoezNQ](https://www.youtube.com/watch?feature=player_embedded&v=3iaTEgoezNQ)
Virgin

- [https://www.youtube.com/watch?v=eyygn8FTCo&feature=player_embedded](https://www.youtube.com/watch?v=eyygn8FTCo&feature=player_embedded)

United

- [https://www.youtube.com/watch?v=WqAAQ0ZZMyw&feature=player_embedded](https://www.youtube.com/watch?v=WqAAQ0ZZMyw&feature=player_embedded)

Delta

- [https://www.youtube.com/watch?v=FZm4gqgrIVs](https://www.youtube.com/watch?v=FZm4gqgrIVs)

Large plate size more intake

- Wansink et al
- Bucher et al
Plate size

IMG_0723.MOV

Consumer decision journey

The four 4 P’s

- Product
- Price
- Promotion
- Placement


Science of persuasion

- Reciprocity. Tendency to return favors
- Commitment. Likelyhood of honoring agreements
- Social Proof. Do things that others are doing
- Authority. Tendency to obey authority figures/modelling/vicarious learning
- Liking. Persuasion by people we like.
- Scarcity. The "limited time only" trick

Science of persuasion

Two routes

- Elaboration likelihood model (ELM) a model of how attitudes are formed and changed
- The idea of an “elaboration continuum” is introduced
- Ranges from low elaboration (low thought) to high elaboration (high thought).
- Peripheral route: Emotional appeals—fear, humor, and sex—and compared their impact with. Uses preexisting ideas and superficial qualities to be persuaded
- Central route: Central, rational, logic, information. Rational appeals such as comparison, gain/loss, and one or two sided (Hornikx and O’Keefe 2009).

Richard E. Petty & John Cacioppo in the early nineteen eighties

Nudging as a third way?

- Soft and hard paternalism

Degree of regulation


Philosophy Department, Earlham College

Paternalism

“Paternalism” comes from the Latin pater, meaning to act like a father, or to treat another person like a child. (“Parentalism” is a gender-neutral anagram of “paternalism”). In modern philosophy and jurisprudence, it is an act for the good of another person without that person’s consent, as parents do for children.

Dual brainprocesses

<table>
<thead>
<tr>
<th>Traditional</th>
<th>“Nudging”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflexive</td>
<td>Non reflexive</td>
</tr>
<tr>
<td>Explicit</td>
<td>Implicit</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Non cognitive</td>
</tr>
<tr>
<td>Slow</td>
<td>Fast</td>
</tr>
<tr>
<td>Non automatic</td>
<td>Automatic</td>
</tr>
<tr>
<td>Brain based</td>
<td>Bodily embedded</td>
</tr>
<tr>
<td>Rational</td>
<td>Non rational</td>
</tr>
<tr>
<td>Self-aware</td>
<td>Unconscious</td>
</tr>
<tr>
<td>Controlled</td>
<td>Non-controlled</td>
</tr>
<tr>
<td>Effortful</td>
<td>Effortless</td>
</tr>
<tr>
<td>Deductive</td>
<td>Associative</td>
</tr>
<tr>
<td>Rule-following</td>
<td>Skilled</td>
</tr>
</tbody>
</table>
More dualism

Table 4.1 Two cognitive modes of thinking

<table>
<thead>
<tr>
<th>Automatic thinking</th>
<th>Reflective thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled</td>
<td>Controlled</td>
</tr>
<tr>
<td>Effortless</td>
<td>Effortful</td>
</tr>
<tr>
<td>Associative</td>
<td>Deductive</td>
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<tr>
<td>Fast</td>
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<td>Unconscious</td>
<td>Self-aware</td>
</tr>
<tr>
<td>Skilled</td>
<td>Rule following</td>
</tr>
</tbody>
</table>

Examples

- Savings
- Waste handling
- Organ donations
- ..... and
- Healthy eating

Inducing consumption

Examples of nudges

- Appearance (how things look)
- Anchoring (to set high price, amount, goal, compare everything subsequent with that)
- What others are doing (collectivity)
- Variety (affluence)
- Novelty (something is new)
- Bogoffs (Buy1Get1ForFree)
- Brand (logos etc)
- Prices

Lobstein, EUPHA, 2013; Fat Crisis
A Nudging Typology?  
According to Thaler

- **5.7 Thaler-Sunstein Heuristics - in detail** (different types of nudges)
  - Anchoring and Adjusting* (guessing then guessing)
  - Availability (perceived rarity/predominance)
  - Representativeness (stereotyping & comparison)
  - Loss Aversion* (holding on to things/resistance to change)
  - Status Quo Bias (default to stay)
  - Framing (presentation, accentuation, styling)
  - Temptation (short-term reward)
  - Mindlessness (neglect, avoidance, not concentrating)
  - Self-Control Strategies (habits and routines to counter weaknesses)
  - Following the herd (conforming, mob instinct, safety in numbers)
  - Spotlight effect (anxiety, pressure, fear of making mistakes)
  - Priming (the ways people can be made ready or prepared before thinking and deciding, e.g., visualization, role-modelling, building belief, offering methods not just directions)
  - Stimulus–response compatibility (overlays other heuristics and 'nudges' - the design of signages, language, visuals, etc. are all important)
  - Feedback (given to respondents during and after thinking/decisions, enabling adjustment and useful experience)

---

A Nudging Typology?  
Other

- **6.1 Positioning - moving things, prominence**
- **6.2 Limiting - expiry dates, limited stock**
- **6.3 Sympathy - ease of adoption, path of least resistance**
- **6.4 Accessibility - efficiency of communication, reach, penetration**
- **6.5 Likeability - trust, reputation, credibility, honesty, integrity (of nudger)**
- **6.6 Relevance - fit with audience needs, self-image, situation**
- **6.7 Mood Changers - inspiration, passion, flair, intrigue, humor/humor**
- **6.8 Fear - thinking driven by risk or threat**
- **6.9 Facilitation - helping people to think and decide**
- **6.10 Sensory - sounds/music, smells, touch, colour/color**

---

Nudging towards a taxonomy?

- The classification comes from the work of Susan Michie, e.g.:
- A taxonomy of behavioral change techniques used in interventions.  
  Abraham C, Michie S.  
  Health Psychol. 2008 May;27(3):379-87. doi: 10.1037/0278-6133.27.3.379.  
  PMID:  
  18624603  
  Similar articles
- Reliability of Identification of Behavior Change Techniques in Intervention Descriptions.  
  Ann Behav Med. 2015 Aug 20. [Epub ahead of print]