

# MULTI-SENSORY SERVICESPACES AND EXPERIENCES

*A PRACTICAL APPROACH TO  
NEUROMARKETING*

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THE  
BOX

# THE BOX

INTERNATIONAL RESEARCH AND DEVELOPMENT PROJECT



# AIMS OF THE PROJECT

1. Define the sensory elements of hospitality and tourism experience
  - *Test the role of sight, hearing, scents, taste, and touch?*
2. Enhance the existing hospitality and tourism experiencespaces with augmented sensory stimuli
  - *Digitally and physically augment the sensory stimuli.*
3. Develop and build a multisensory mixed reality touristic attraction
  - *Combine built environment and elements, Virtual Reality, Augmented Reality and digitally enhanced sensory stimuli to create an attraction.*



# AIMS OF THE PROJECT

1. Define the sensory elements of hospitality and tourism experience
  - *Test and research the role of sight, hearing, scents, taste, and touch using traditional, and “neuroscience” marketing research techniques.*
  - Enhance the existing hospitality and tourism experiencespaces with augmented sensory stimuli
    - *Digitally and physically augment the sensory stimuli by using 3D spatialized visualisations, immersive audio, superimposed scents, taste and tactile sensations.*
  - Develop and build a multisensory mixed reality touristic attraction
    - *Combine built environment and elements, Virtual Reality, Augmented Reality and digitally enhanced sensory stimuli to create an attraction.*





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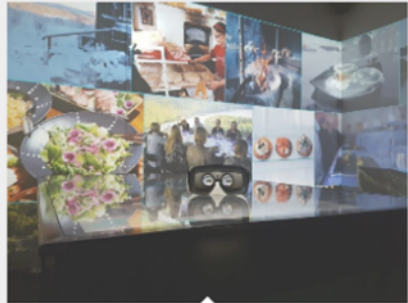




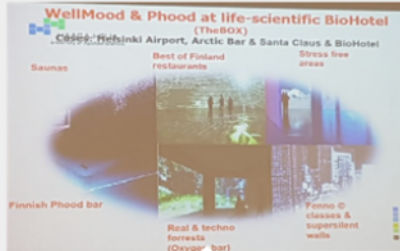
WE ARE THE BOX.



# THE BOX PROJECT PUBLICATIONS 2016-2017



**Functional, Hedonic or Social? Exploring Antecedents and Consequences of Virtual Reality Rollercoaster Usage**  
During the last years, various media technologies such as Augmented...  
04/03/2017



**WellMood & Phood at life-scientific BioHotel (TheBox)**  
C866: Helsinki Airport, Arctic Bar & Santa Claus & BioHotel  
Saunas Best of Finland Restaurants Stress free areas  
Finnish Phood bar Real & techno Surreals (Oxygyn) bar Future @ classes & supersistent walls  
From postmodern wellness tourism towards transmodernity. Interpretations and predictions of the Finnish well-being tourist. EuroCHRIE 2016, Budapest  
This article focuses on describing, interpreting and predicting...  
09/11/2016



**Sonic Immersion in Mixed Reality Environment – AR/VR Conference Dublin 2016**  
An emotional environmental element such as enjoyable music arouse...  
09/11/2016



**Exploring the Students' Perceptions to Virtual Reality Environment EuroCHRIE 2016, Budapest**  
Hotel operators around the world, as well as Destination Marketing...  
09/11/2016



**The hotel of tomorrow – A service design approach JVM**  
Pasi P Tuominen Mário P Ascensão Reports from the UN...  
23/03/2016



**Managing Multisensory Hospitality, Tourism and Experience Spaces of the Future EUROCHRIE 2015**  
Managers, by overlooking the sensory experiences, are missing...  
23/03/2016



**Feel theBox**  
Latest showreel representing theBox simulations. Enjoy 😊 theBox...  
04/03/2017



**theBox Project Update 12-2016**  
The Box project helps hospitality, tourism and experience operators...  
04/03/2017



**Vitriini 1/2017: Olipa kerran tarina**  
Tarinallistamisella tarkoitetaan minkä tahansa asian, palvelun...  
14/02/2017



**Mediatiedote ePressi.com: Ähtäri Zoon pandat ja eläinpuiston elämää virtuaalisesti MATKA 2017 -messuilla**  
<https://www.epressi.com/tiedotteet/koulutus/ahtari-zoon-pandat-ja-elainpuiston-elamaa-virtuaalisesti-matka-2017-messuilla.html> Tiedote. Julkaistu:...  
16/01/2017



**Vitriini 7/2016: The Boxin vuosi – mitä on opittu?**  
Haaga-Helian ja Tekesin tammikuussa käynnistynyt yhteishanke...  
15/12/2016



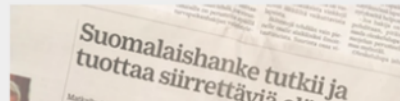
**Vitriini 6/2016: Vieraanvaraisuusala vuonna 2030**  
On odotettavissa, että 15 vuodessa vieraanvaraisuusala omaksuu...  
18/11/2016



**Vitriini 5/2016: Aistit rikastetussa todellisuudessa**



**Aromilehti: Keittiöväen oma Slush kokkaa**  
Lue alkuperäinen artikkeli osoitteessa:



**Turun Sanomat (25.9.2016): Suomalaishanke tutkii ja tuottaa siirrettäviä elämyksiä**



**Kuuntele Radio Kompassin juttu: Ähtäri Virtual Zoo hyödyntää muun muassa virtuaalitodellisuutta**



**Mediatiedote: The Box -hanke visualisoi Sauce 2016 -tapahtumaa**



**Moniaistinen The Box -hanke tekee yhteistyötä huippukokkien kanssa Tallinnan Sauce-tapahtumassa**

## TOOLS AND TECHNIQUES ENHANCED SENSORY STIMULI

- **Visual Stimuli**
  - Concept, and storyline based 3D spatialized videos, images and graphics in existing service environments and in theBox laboratory.
- **Auditory Stimuli**
  - Concept, and storyline based immersive audio tracks, tailored 3D sounds, and silence. (4channel audio, Dolby Atmos™).
- **Gustatory Stimuli**
  - Concept, and storyline based textures, temperatures, and shapes.
- **Haptic Stimuli**
  - Concept, and storyline based tempered furniture, shapes and “touchable” accessories.





# TOOLS AND TECHNIQUES MEASURING THE MARKETING & EXPERIENCE STIMULI

- Traditional

- Video observation
- Questionnaires
- Quick response surveys
- In-depth interviews

- Heart Rate Variance

- Bodyguard2 (originally developed for wellbeing monitoring)

- EEG

- Muse (easy access to EEG data for neuroscience research)



CHALLENGES  
*MEASURING THE MARKETING & EXPERIENCE  
STIMULI*

- Reliability
  - Measurement done in real-life settings.
  - Analysis of the (clinical EEG/fMRI) data requires neurology background.
- Time
  - Calibration of devices is time-consuming.
  - Experience – measurement – insight process is often too long and manifolded.
- Inconvenience
  - The devices are not comfortable and affect the behavior.
  - The consent form for testing “real visitors” is complicated (time + inconvenience).

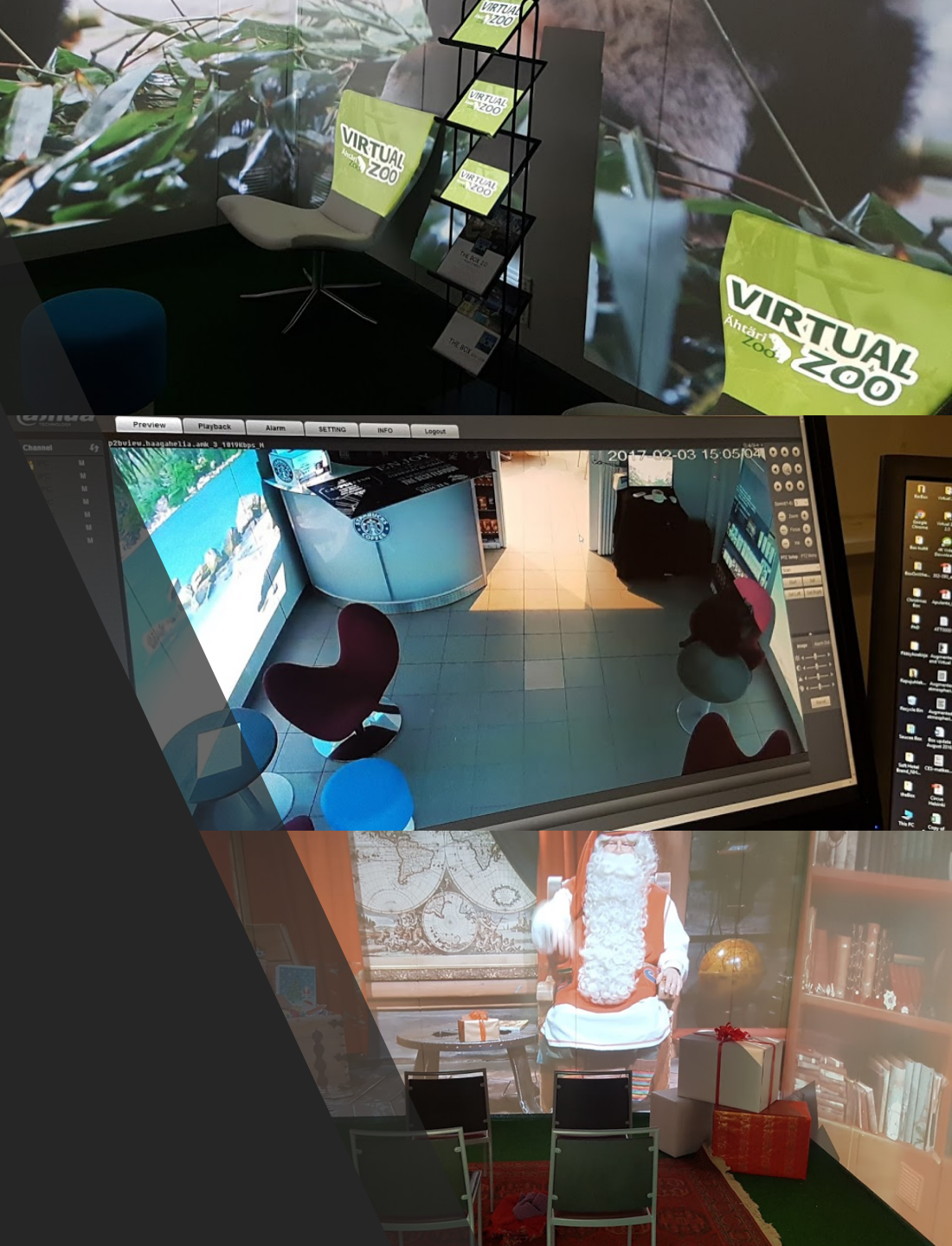




# THE BOX NEXT STEPS

*Measuring the reactions, and the psychophysiological response to multiple sensory stimuli in a mixed reality environment.*

- Virtual Starbuck
- Mixed Reality Santa Claus
- Mixed Reality Zoo Experience





# THANK YOU !

[www.thebox.fi/en](http://www.thebox.fi/en)

 [www.facebook.com/imagineeringbox/](https://www.facebook.com/imagineeringbox/)

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The logo for 'THE BOX' is displayed in a stylized, bold font. The word 'THE' is in a smaller, white, sans-serif font above the word 'BOX'. The 'B' is a large, white, blocky letter. The 'O' is a large, white, blocky letter with a square cutout in the center. The 'X' is a large, white, blocky letter. The entire logo is set against a background of a pink-to-purple gradient. The logo is framed by a white border. There is a dark grey diagonal shape overlapping the logo from the top-left corner.