

Year 10 -Project Update

▶ 10a.002.JYU_WP9 IoB@work

Project Team

Role	Name	Email	University or Company
PI(s)	Pekka Abrahamsson	pekka.abrahamsson@jyu.fi	University of Jyväskylä
Researcher(s)	Joni Kultanen Ville Vakkuri		University of Jyväskylä
Graduate Student(s)	Teemu Autto Antti Kariluoto		University of Jyväskylä
Project Mentor(s)	Mikko Virtaneva		Workspace Oy

Project Goals & Novelty of Approach

- ▶ Internet of Behavior (IoB) is a hot topic in understanding consumer behavior and has lately seen increasing interest in the workplace domain as well, but not much in academia so far.
- ▶ The objective of the IoB@Work project is to find suitable models for predicting human behavioral events, and passively encourage positive behavior.
- ▶ In this project, our goal is to build understanding on how can IoB be utilized in improving wellbeing in a knowledge intensive work environment. In order to have means to build this understanding, following subgoals need to be met and understood:
 - What are the behavioral events affecting work wellbeing?
 - How to detect behavioral events of interest?
 - How to measure and quantify behavior?
 - How to encourage positive behavior with the means of IoB?
- ▶ In our approach to operationalize IoB in workplace context we aim for minimal intrusion into employees' privacy by:
 - utilizing ECCOLA in the design and implementation phase, and
 - building the experimental data collection platform in laboratory context.

Benefits to IAB

- ▶ Means to detect, measure, quantify and (dis)incentivize behavior affecting wellbeing in a knowledge intensive work environment
- ▶ Understanding on what kind of behavior / behavioral patterns influence work wellbeing - positively or negatively
- ▶ Potentially improve efficiency and productivity of employees through higher staff satisfaction / work wellbeing

Project Accomplishments

- ▶ IoB-laboratory setting established at the Startuplab, JYU
- ▶ First experiment completed
 - “Coffee break experiment”
 - Close collaboration with the department of psychology (JYU)
- ▶ Iterative improvement and implementation of new interventions / stimuli in the experimental setting (on-going)
- ▶ Controlled experiment designed to be run at the collaborating IAB member company’s facilities (Workspace Oy) with several interventions included in the protocol

Research Results

- ▶ Preliminary / indicative results from the first IoB-lab experiment
 - Commitment to the experiment
 - Effect of joint coffee break on the overall mood
 - Need for higher automation
 - Need for wider experimentation / observation area
 - Need for further interventions

Publications/Presentations/Invention Disclosures

- ▶ Positioning paper on loB in workplace wellbeing (on-going)
 - Defining loB in the context of workplace wellbeing
 - Research in progress description on the experimental setting (loB-lab) in order to establish the baseline for future reporting of research results
- ▶ Case study on the controlled loB-experiment at Workspace Oy and/or their client company premises (preparation for case study on-going)
 - Limited experimental setting in a meeting room
 - Interaction and collaboration measured with equipment and tools developed in the CVDI year 9 project (minor further development still required)
 - Interventions introduced and removed during the measurement to identify whether they have temporary or permanent (if any) affect on the behavior of the test subjects
- ▶ Further (1-3) reports / publications on the utilization of loB in improving wellbeing in knowledge intensive work environment
 - Including: detection, measurement, quantifying and (dis)incentivizing behavior

Next Steps/Deliverables & Timeline

Next Steps/Deliverables	Start Date	Completion Date
loB-laboratory setting - establishment (done) and iterative improvement and implementation of new interventions / stimuli in the experimental setting	9/2021	6/2022
Publication: Positioning / research in progress paper on loB in workplace wellbeing	10/2021	1/2022
Case study on the controlled loB-experiment - preparation, execution and writing an article	11/2021	4/2022
Further publications/reports on the results and lessons-learned on detecting, measuring, quantifying, and (dis)incentivizing behavior with the means of loB	9/2021	8/2022
ECCOLA case study - ethically aligned design of non-invasive measurement system	9/2021	8/2022

Questions?