



# Towards a holistic assessment of employees' acceptance of innovative workplace designs

Eileen Sim and  
Dr Christopher Heywood



- Increasing adoption of Activity Based Working (ABW) office as an innovation
- Lack of holistic evaluation method to evaluate employees' acceptance ABW
- Large-scale employees' satisfaction surveys do not sufficiently explain why employees may be struggling to accept ABW
- This study presents a holistic model for evaluating employees' ABW acceptance that draws on the innovation adoption, technology acceptance and existing ABW literature.
- First stage of research in which the model is developed from a review of the literature.



# What are innovative workplaces?

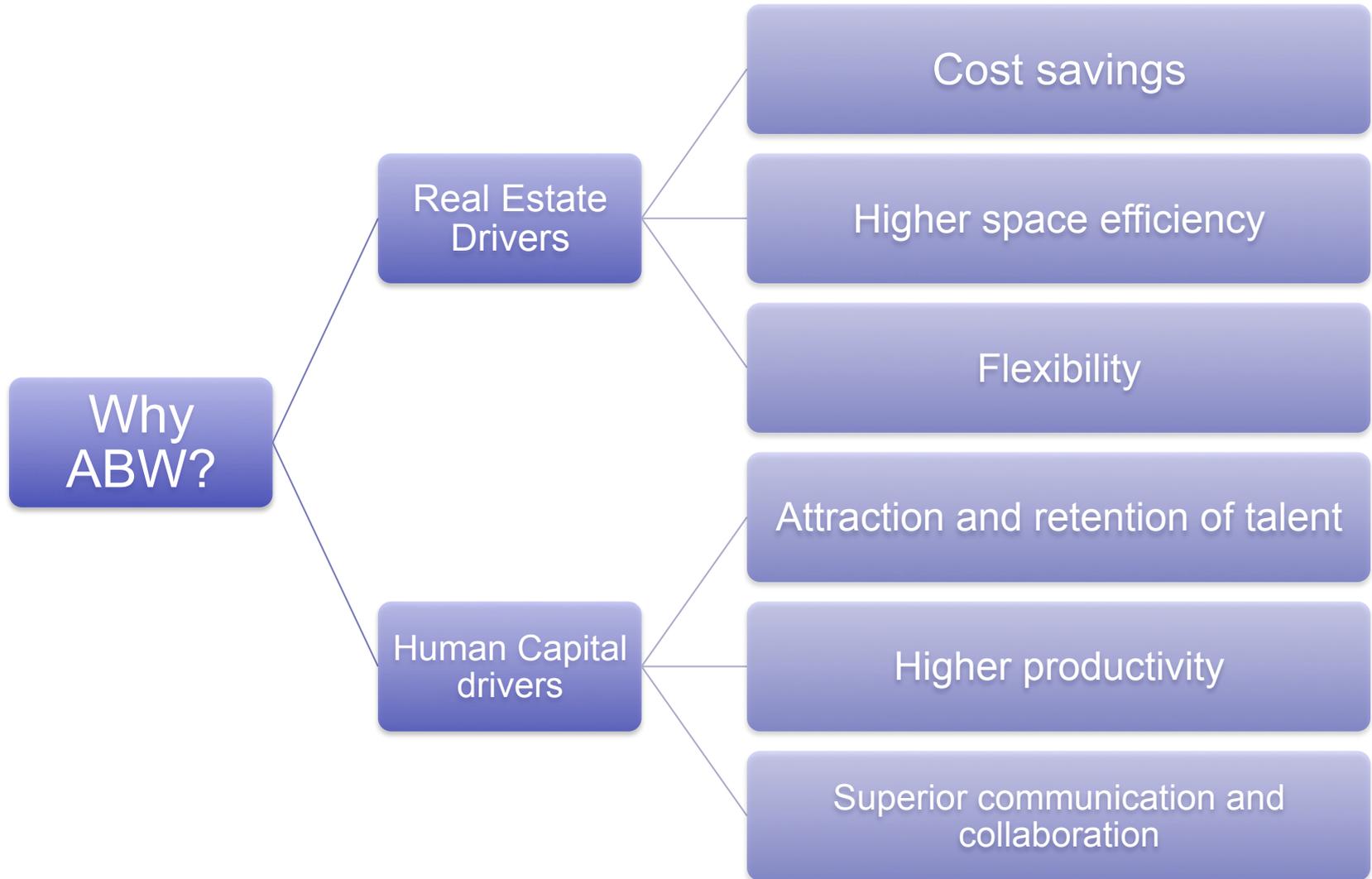
- **Innovation** as *“an idea, practice or object that is perceived as new by an individual or another unit of adoption”* Rogers (2003, p. 12)
- **Activity Based Working (ABW)**
  - 1) Unassigned (non-territorial) individual workspaces; and
  - 2) A variety of workspaces designed to support a new way of working where employees switch workplaces based on their activity (switching behaviour)
- ABW is a technological innovation to organisations that are introducing the ABW to their employees
- Organisations are increasingly choosing ABW as the real estate intervention to achieve their Corporate Real Estate (CRE) strategies because it addresses most of the nine value-adding CRE strategies.

- 1) Increase productivity;
- 2) Reduce and control occupancy costs;
- 3) Increase customer and employee satisfaction;
- 4) Increase asset value;
- 5) Increase flexibility;
- 6) Increase innovation;
- 7) Support image and culture;
- 8) Increase sustainability; and
- 9) Risk control

After: Gerritse, Bergsma, & Groen, (2014); Jensen & Voordt, (2016); Lindholm & Levainen, (2006); Nourse & Roulac, (1993)



# Why ABW?





# How are ABWs performing?

**Increase in organisational flexibility was the only CRE strategy which outperformed the organisation's expectations**

(Baalen, Heck, Muelen, & Oosterhout, 2011) in (Appel-Meulenbroek, Oldman, & Susante, 2016).

**Mixed outcomes about employee productivity:**

(Appel-Meulenbroek et al., 2016; Candido, Zhang, Kim, Dear, & Thomas, 2016) (Voordt, 2004a)

**Issues with past office concepts are still present**

(Brunia et al., 2016; Kim, Candido, Thomas, & de Dear, 2016).

**Struggling to accept switching behaviour**

(Kim et al., 2016; Mosselman et al., 2009; Tagliaro & Ciaramella, 2016a, 2016b); (Kim et al., 2016; Voordt, 2004b); (Brunia & Hartjes-Gosselink, 2009; Tagliaro & Ciaramella, 2016b).

**Mixed outcomes on employee satisfaction in regards to employee interaction and support for collaboration:**

(Appel-Meulenbroek et al., 2016; Been et al., 2015; Candido et al., 2016) ( Ekstrand, 2016) (Kim et al., 2016).

**The strategy to improve the corporate image seems to be achieved**

(Appel-Meulenbroek et al., 2016)

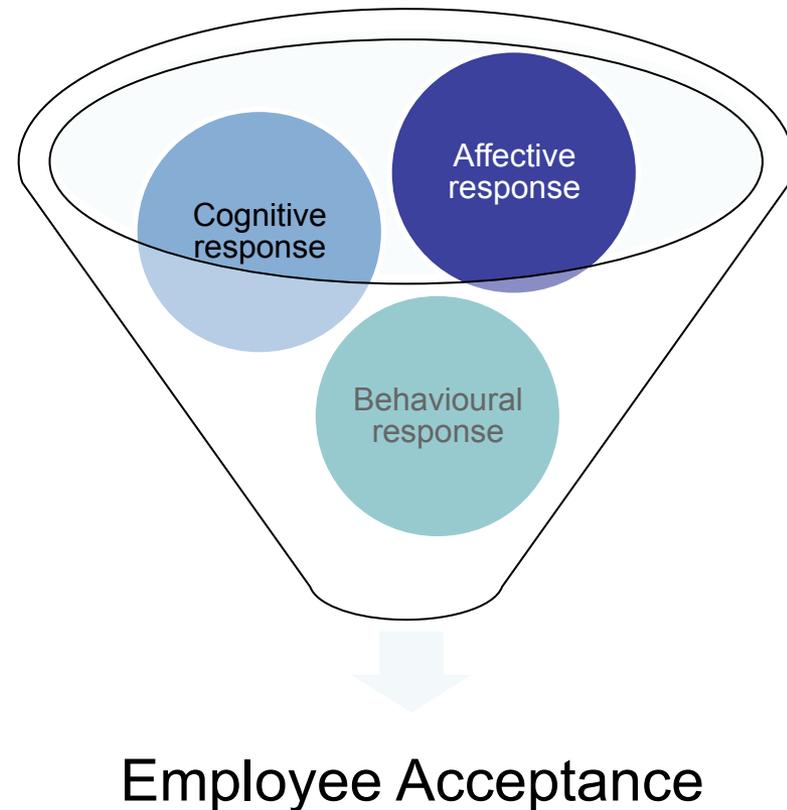


- Large scale post-occupancy evaluation questionnaires assess employees' agreement with subjective statements or satisfaction level
- Surveys does not normally capture the 'why' and the behavioural responses – other methods are required
- Key issue: NOT THE METHODS but what they're capturing.
- Existing measures attempt to provide proxies of employees' acceptance. They do not specifically evaluate employees' acceptance of the ABW features and policies. They are not holistic – employee's affective, cognitive and behavioural responses.
- **Why is it important?**
- Employees' acceptance of the ABW is critical. They are the end-users that the ABW is designed for and their acceptance of the workplace affects the achievement of both CRE and organisational strategies.



- **Research Question:**
- How can employees' acceptance of innovative workplace be evaluated?
- **Method:**
- In-depth literature review and development of theoretical framework

- **Diffusion of innovation:**  
Success = the accumulated number of adopters over time  
BUT ABW diffusion is two-fold.  
Organisational adoption of ABW does NOT equate to employees' adoption/ acceptance
- **Technology acceptance model:**  
realising potential benefits of new technological innovations is relies on users' acceptance (Davis, 1985). Acceptance is determined by: **cognitive, affective** and **behavioural** responses





- **Intended** and **unintended** reactions to innovation are equally important but unintended reactions tend to get neglected (or are thought to be bad).
- **Intended reactions:** The anticipated employee reactions that align with and facilitate achieving the organisation's intended outcome and yield the potential benefits expected from the innovation.
- **Unintended reactions:** reactions that may not align with the intended organisational outcomes which are not just negative but may also be positive.



- **Affect** is the ‘emotional interpretation of perception, information or knowledge’. (Sailer & Penn (2010, p. 8)
- Workplace relocations may cause employees to experience different affective responses such as denial, anger, bargaining and acceptance.
- In the ABW literature, affective responses are rarely captured except in the joined affective and cognitive response captured by post-occupancy evaluations’ ‘employee satisfaction’.
- Proposed methods
  1. Forms of self-report



# Employee Acceptance model – Cognitive responses

- **Cognition** is the mental process of generating information or knowledge (Sailer, 2014).
- Cognition is not solely based on incoming information but also dependent on the individual's existing knowledge, memory, motivation, visual and spatial processing and attention.
- 3 proposed and existing cognitive measures:
  1. Knowledge of ABW: because employees' behavioural responses are limited by their knowledge on how to use the innovation.
  2. Perceived support for each activity conducted within the ABW.
  3. Commitment to use.
- The inclusion of open-ended and less structured questions enable researchers to capture unintended cognitive reactions.



- **Behaviour** “... how individuals overtly act in the presence of others; actions that are observable and measurable, including verbal expression”. Includes action or inaction.
- Proposed behavioural measures:
  1. Extent of use observations and self-reports:
  2. Territorial behavioural observations and residual markers



# ABW innovation acceptance model

	<b>ABW innovation acceptance</b>				
	<b>Acceptance Level 1:</b> Limited or Non-Use	<b>Acceptance Level 2:</b> Compliant Use	<b>Acceptance Level 3:</b> Sporadic and inadequate Use	<b>Acceptance Level 4:</b> Adequate Use	<b>Acceptance Level 5:</b> Committed and Creative Use
<b>Affective Responses</b>	Negative	Negative	Negative	Neutral	Positive
<b>Knowledge of ABW</b>	Low	High	Low	High	High
<b>Perceived support from the ABW</b>	Low	Low	Low	High	High
<b>Commitment of use</b>	Low	Low	Moderate-High	More than compliant but less than committed use.	High
<b>Extent of Use</b>	Low	Low	Moderate	Moderate-High	High
<b>Territorial Behaviour</b>	High	High	Moderate	Low-moderate	Non-existent

Source: Author adapted from (Klein & Sorra, 1996)

2 possible models that provide 'levels of innovation use':

- 1) Hall & Hord's (2015) from the education innovation field was too different
- 2) Klein and Sorra's (1996) model was a multi-level unit of analysis including both organisational or collective-employee level and employee level indicators; unlike the employee acceptance model that is only for individual employee level indicators.



- Proposed methods to test the model

Field work Phase	Affective outcomes	Cognitive outcomes	Behavioural outcomes
Focus Group Interviews	X	X	X
Method 4: Interview with Janitor and janitor's photo-record			X
Method 5: Non-participant observation			X

## Qualitative data

- Thematic Content Analysis (Attride-Stirling, 2001)
- Nvivo

## Quantitative data

- Simple statistical analysis (eg. Mean, median, mode, percentages)



Thank you!  
Any questions?

Contact:

Dr. Chris Heywood

[c.heywood.@unimelb.edu.au](mailto:c.heywood@unimelb.edu.au)

&

Eileen Sim

[Eileen.sim@unimelb.edu.au](mailto:Eileen.sim@unimelb.edu.au)



THE UNIVERSITY OF  

---

MELBOURNE