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Measuring the Added Value of Workplace Change
A comparison between theory and practice

Content

1. Introduction
   - Research Objectives and Research Questions
   - Methodology & Outline of the Research

2. Research Findings
   - Performance Measurement in the Literature and in Practice
   - Employees' Responses to the Work Environment
   - Prioritizing KPIs

3. Conclusions & Next Steps

Research problem

Problem statement in PhD thesis Chaiwat Riratanaphong

1. Knowledge on performance management and performance measurement strategies is limited.

2. Standardized performance measurement methods and KPIs are lacking.

3. The assessment of workplace performance in relation to organisational and national culture is limited.

4. Performance measurement of workplace solutions in different contexts have not yet been clearly identified.

Paper/presentation focuses on performance measurement of workplace change (1-2)

Research objectives

1. To develop knowledge and to present guidelines on performance measurement of workplace change

2. To improve our understanding of employees' appraisal of workplace change

Research questions

1. Which performance measurement systems, criteria and KPIs are presented in the literature?
2. Which performance measurement systems, criteria and KPIs are being applied in practice?
3. What is the performance of workplace change from the employees' perspective?
   - what is the percentage of (dis)satisfied employees?
   - how do employees perceive the impact of the work environment on labour productivity?
   - which aspects do employees mark as most important?

Research approach and methodology

- Review of literature
- A multiple case study with 2 cases in Thailand and 1 case in the Netherlands + comparison with the CfPB-Satisfaction Index
- Interviews, questionnaires, observations, analysis of documents
- Employees' responses have been measured with the Work Environment Diagnosis Instrument (WODI) of the Center for People and Buildings (CfPB), Delft, Netherlands

Dhanarak Asset Development (DAD)　　　　Philips Thailand　　　　Waterschap Rivierenland (NL)

Background

1. Introduction

Why is it important to research the performance measurement of workplace change in two different cultural contexts, i.e. Thailand and The Netherlands?

PART I
Theoretical Framework

2. Performance Measurement

3. Workplace Change

4. Organisational + National Culture

5. Comparison between Thai and Dutch cultural settings

How can the performance of workplace change be measured according to the literature?

What are the main drivers and objectives of workplace change?

What is the impact of organisational structure, staff characteristics and work processes on workplace change?

Background question: what are the main differences between the Thai and Dutch Culture?

PART II
Empirical research

6. Dhanarak Asset Development (DAD)

8. Waterschap Rivierenland

7. Philips Thailand (PTH)

9. Cross case analysis: findings & reflections

How is performance of workplace change being measured in practice?

How satisfied or dissatisfied are employees with the various aspects of their work environment and the perceived support of productivity?

Which aspects do they perceive as being the most important?

PART III
Conclusions & recommendations

**10. Conclusions & Recommendations**

What recommendations can be given to improve performance measurement of workplace change?

What recommendations can be given to improve employee satisfaction and productivity support?

What recommendations can be given for further research?

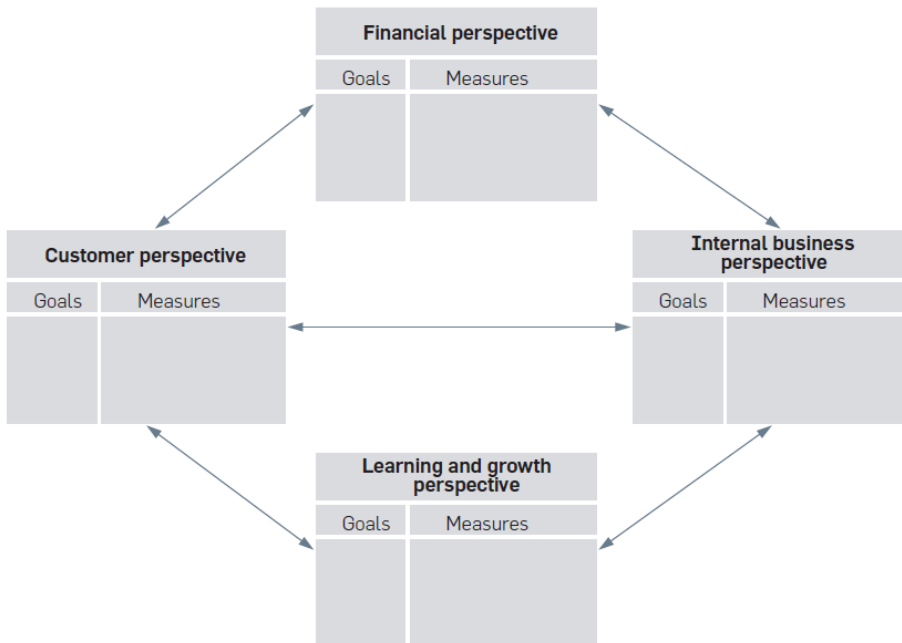Outline
PhD thesis
Riratanaphong
2014

Findings from literature

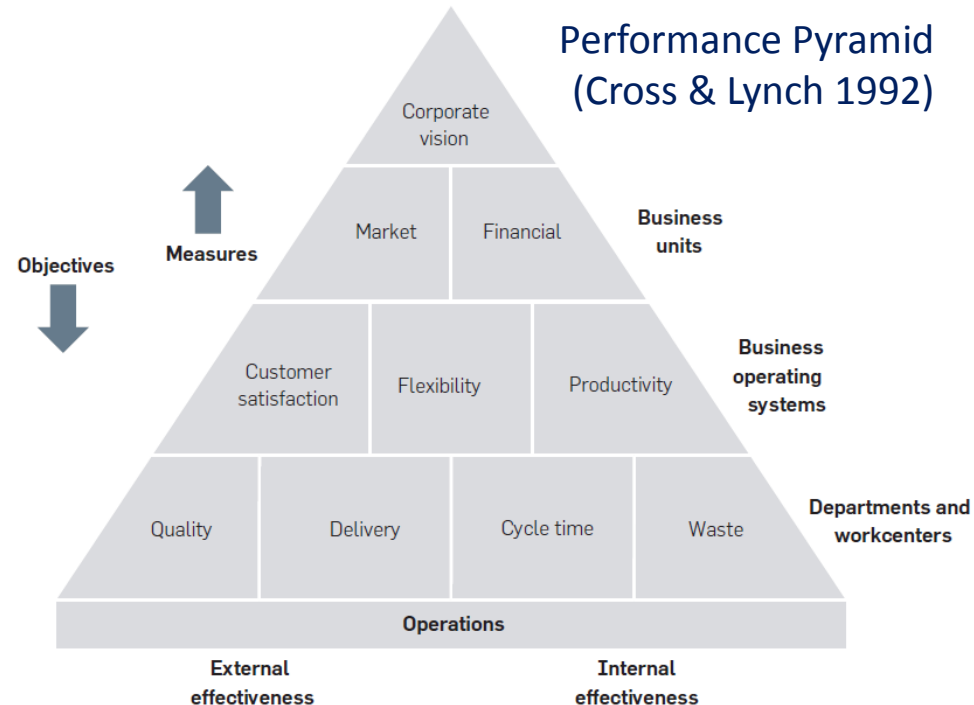A huge number of performance systems, criteria and KPIs
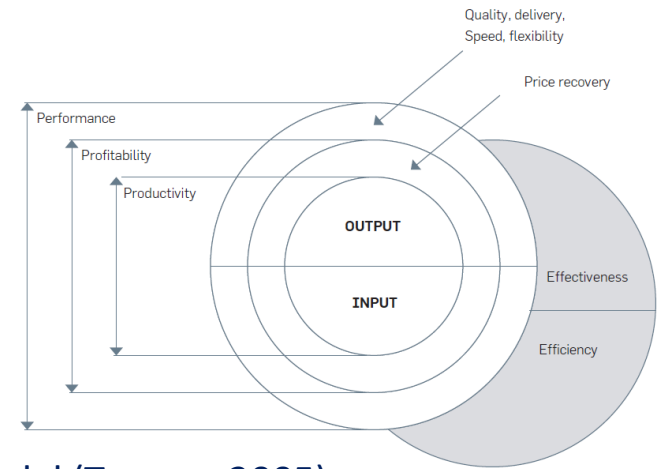
Triple P-model (Tangen, 2005)

Balanced Score Card (Kaplan & Norton, 1992)

Performance Pyramid (Cross & Lynch 1992)

Findings from literature

Different clusters of performance criteria and KPIs
e.g. six perspectives according to the BSC concept
(Bradley, 2002)

1. Stakeholder perception

2. Financial health

3. Organisational development

4. Productivity

5. Environmental responsibility

6. Cost efficiency

Types and terminology

	Bradley (2002)	Nourse and Roulac (1993)	De Jonge (1996)	Lindholm (2008)	Van Meel et al. (2010)	Den Heijer (2011)	Van der Zwart & Van der Voordt (2012)	Jensen (2012)
1. Stakeholder perception (employee satisfaction)	Promote Human Resources objectives	not mentioned	Increasing employee satisfaction	Attract and retain staff	Supporting user activities / Increase user satisfaction / Improving quality of place	Increase user satisfaction	Satisfaction	
2. Financial health	Capture the real estate value creation of business	Increase of value	Increasing the value of assets	not mentioned	Increase real restate value	Improve finance position	not mentioned	
3. Organisational development	Flexibility	Increase of flexibility	Increasing flexibility	Increase flexibility	Increase flexibility	Improve flexibility	Adaptation	
	Facilitate managerial process and knowledge work	Changing the culture	not mentioned	Encourage interaction / Support cultural change	Supporting culture / Stimulating collaboration	Improve culture	Culture	
	Promote marketing message, Promote selling process	PR and marketing	Promoting marketing and sales	Express the brand	Supporting image	Support image	not mentioned	
	Facilitate &control production, operations, service delivery	Risk control	not mentioned	not mentioned	Controlling risk	Controlling risk	Reliability	
	not mentioned	not mentioned	Increasing innovation	Stimulate creativity	Stimulating innovation	Increase innovation	not mentioned	
4. Productivity	not mentioned	Increasing productivity	Increasing productivity	Enhance productivity	Supporting user activities	Improve productivity	Productivity	
5. Environmental responsibility	not mentioned	not mentioned	not mentioned	Reduce environmental impact	Reducing the footprint	not mentioned	Environmental	
6. Cost efficiency	Occupancy cost minimization	Cost reduction	Reducing costs	Reduce costs	Decreasing costs	Reduce costs	Cost	

Real estate strategies

(Nourse and Roulac, 1993, Lindholm, 2008)

Performance measurement

(Bradley, 2002; Riratanaphong, 2014)

Objectives

(Van Meel et al., 2010; Van der Voordt et al., 2009)

Added value

(De Jonge, 1996, Den Heijer, 2011, Van der Zwart and van der Voordt,2012, Jensen et al., 2012a).

Example of comparison between literature and practice

1. Stakeholder perception	Performance measures from the literature	DAD	PTH	WSRL
Employee satisfaction with work environment	• Quality of indoor environment • Provision of safe environment • Location success factors • Ratio of office space to common areas • Provision of amenities • Amount of workplace reforms and space modifications	• Employee satisfaction	• Employee attitude survey • Employee satisfaction survey conducted by Philips Real Estate	• Employee satisfaction survey (WODI) • User satisfaction survey
Employee satisfaction with CRE services	• Employee satisfaction with professional skills • Employee satisfaction with information sharing	• Employee satisfaction survey (the WODI tool)	• Employee satisfaction survey (the WODI tool)	• Employee satisfaction survey (WODI)
Customer satisfaction with facilities	• Survey rating • Number of complaints • Average call frequency and cost per square foot help desk • Location success factors	• Satisfaction of the government complex building users	• Rank in customer survey* • Number of Complaints*	• Customer satisfaction survey*
Community and well-being	• The contribution to public policy and societal priorities	• Percentage of complaints from public regarding the environmental impact	NA	• Provision of knowledge and information on water management to citizen*

Example of comparison between literature and practice

6. Cost efficiency	Performance measures from the literature	DAD	PTH	WSRL
Occupancy costs	• Total occupancy cost per employee • Occupancy cost as a % of total operating expense • Occupancy cost as a % of operating revenue by building or business unit	• Taxes (property and land)	• Office rent (Baht/sq.m./month)**	• Depreciation expense
Operating costs (building and FM)	• Total operating expenditures versus budget including: general administration; capital expenditures; moves, adds, rearrangements; facility/properties services; other business services (mail, and copy centres, risk, and/or security) • Facility management costs (environment, working conditions, quality)	• Operating costs - Facility costs (buildings & equipment) - Overhead costs (employees and committee)* - Fees and services*	• Utility (electricity & water) cost/unit • Parking cost/month • Overhead cost*	• Operating costs - Salary costs* - Social charges* - Personnel costs of third party*
* does not directly relate to real estate, NA = not applied i.e. not measured or no data available, **43 Baht = 1 euro				

Conclusions

❑ No common performance measurement system is being applied in practice, apart from Balanced Scorecard

❑ There is still a long way to go to attain a widely agreed, well defined, holistic and practically applicable PM system

❑ Standardizations is needed for benchmarking purposes

❑ Many KPIs from literature can be used as input

❑ Prioritization depends on type of organization and context

❑ Be aware of difference between organizational performance and CRE/FM performance

Proposed steps for selection and prioritization of KPIs

1. Inventory of currently applied KPIs
2. Clustering of all KPIs in two groups: organisational performance and corporate real estate performance
3. Classification of all measures e.g. into the six categories of Bradley (2002)
4. Comparison of currently applied measures and KPIs with possible KPIs according to the literature.
5. Reflection on similarities and dissimilarities in connection to the vision and mission of the organisation and its main objectives.
6. Prioritization of KPIs in connection to the main objectives and contextual variables

Next steps

❑ Additional empiric research into the use of performance measurement systems and KPIs in practice

❑ Comparison of systems and KPIs in different sectors (offices, health care, industry)

❑ developing and testing of a standardized system

❑ Analysis of ways to improve workplace performance

  - regarding different performance areas

  - from the perspective of different stakeholders

 - taking into account both benefits and sacrifices

Employee satisfaction

% satisfied respondents in three case studies and average percentages in a number of Dutch cases (CfPB index)

	DAD	PTH (before the change)	PTH (after the change)	WSRL	CfPB
Organisation	25	60	66	72	64
Content and complexity of work	32	64	59	83	79
Sharing own ideas	24	31	41	45	43
Accessibility of the building	37	55	62	72	77
Architecture of the building	59	45	45	91	53
Subdivision of the whole building	33	48	38	80	47
Number, diversity, funct. spaces	30	19	55	65	45
Adjacency/ locality of the spaces	33	38	55	76	54
Openness and transparency	27	57	55	61	54
Functionality/comfort workspaces	37	52	62	70	59
Interior design ambiance	29	43	62	60	54
Privacy	28	14	41	29	37
Opportunities to concentrate	23	7	52	33	40
Opportunities to communicate	51	43	48	75	70
Archive and storage facilities	25	24	34	42	35
ICT and ICT support facilities	21	52	48	47	55
Facilities / FM	23	52	55	67	55
Indoor climate	23	57	59	48	40
Lighting	40	64	69	48	62
Acoustics	21	48	52	48	46
Facilities for remote working	14	67	62	65	42
Individual productivity	30	43	55	45	41
Team productivity	35	45	34	46	39
Organisation productivity	17	43	31	38	31

Perceived productivity support

% participants that perceive the working environment as being supportive to different types of perceived productivity
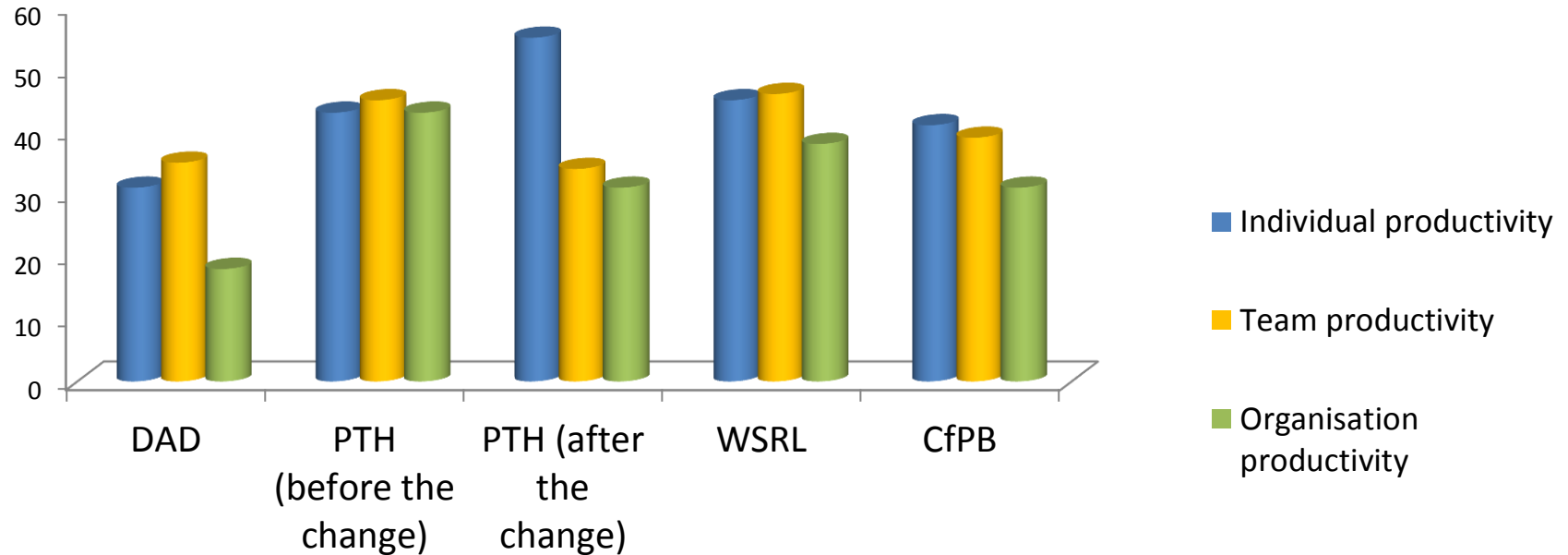
	DAD	PTH (before the change)	PTH (after the change)	WSRL	CfPB
Individual productivity	31	43	55	45	41
Team productivity	35	45	34	46	39
Organisation productivity	18	43	31	38	31

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Prioritized aspects

% respondents marking a particular aspect in top 3 of most important aspects

	DAD	PTH (before the change)	PTH (after the change)	WSRL	CfPB
Sharing own ideas	31	2	14	9	6
Accessibility of the building	20	21	7	21	37
Architecture of the building	24	10	0	8	6
Subdivision of the whole building	35	0	7	5	8
Number, diversity, functionality	20	17	7	24	15
Adjacency/ locality of the spaces	39	21	17	5	10
Openness and transparency	24	10	7	15	8
Functionality and comfort	15	43	34	55	52
Interior design	2	14	3	11	10
Privacy	18	33	41	9	12
Opportunities to concentrate	5	12	45	25	37
Opportunities to communicate	0	2	21	26	24
Archive and storage facilities	7	19	14	7	3
ICT and ICT support facilities	21	33	28	23	15
Facilities and facilities management	14	7	3	6	4
Indoor climate	14	19	3	29	29
Lighting	6	10	14	29	4
Acoustics	1	2	7	29	4
Facilities for remote working	5	24	28	20	14

Many factors affect appraisal of workplace change
Different responses in different cases difficult to explain
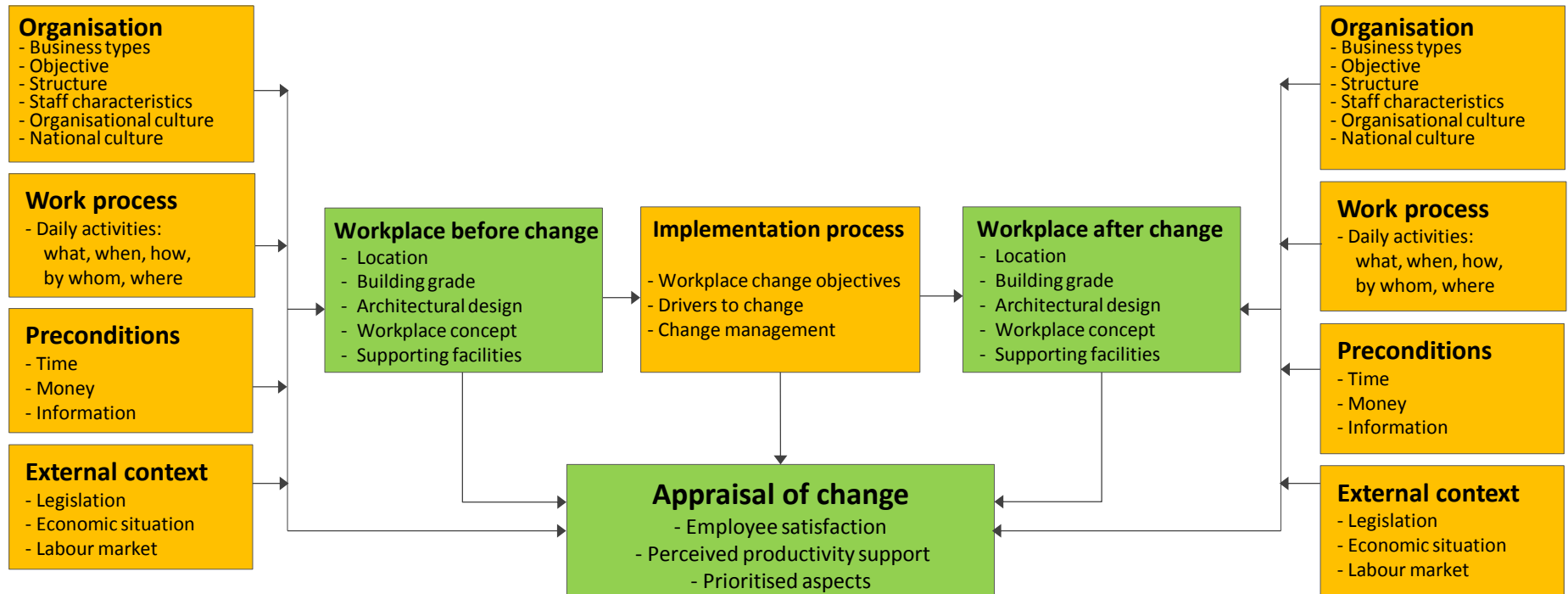
Complex relationships between variables that affect the appraisal of workplace change (Riratanaphong & Van der Voordt , 2012)

Thank you!

Time for questions and debate