

EFFECTIVENESS OF ELECTRONIC HUMAN RESOURCE MANAGEMENT IN PUBLIC SERVICE: A SYSTEMATIC LITERATURE REVIEW

Paper submitted to the EGPA Permanent Study Group I by
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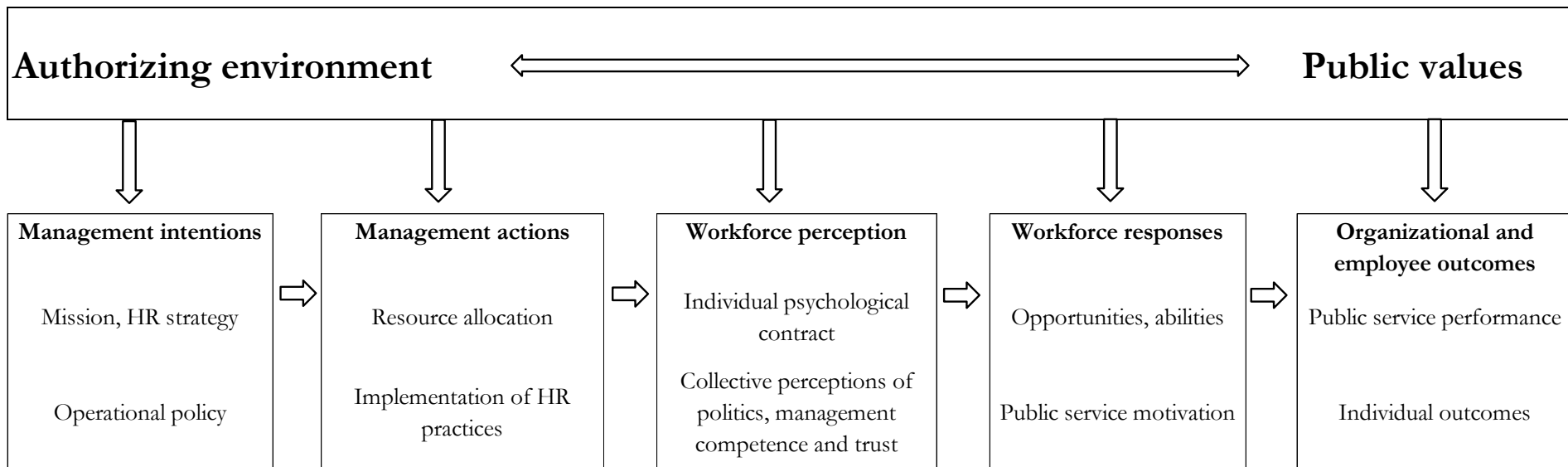
ELECTRONIC HUMAN RESOURCE MANAGEMENT (E-HRM) IN E-GOVERNMENT

E-government (e-gov)			
Government-to-Employees (G2E) e-gov, oriented towards civil servants			Other e-gov interactions
<p>Key G2E services</p> <p>Electronic Employee records, Benefits Administration, Payroll, Time Management, Employee Self-Service, Manager Self-Service</p>	<p>Electronic HRM or e-HRM in the context of G2E delivery</p> <p>HRM policies, practices and processes integrated with Information Systems (IS) (Strohmeier, 2007; Strohmeier and Kabst, 2014; Marler and Parry, 2016)</p>	<p>G2E Technology</p> <p>Human Resource Information System (HRIS) Human Resource Management System (HRMS)</p>	<p>Topics outside the scope of this work: Government-to-Citizen (G2C), Citizen-to-Government (C2G), Government-to-Business (G2B), Government-to-Government (G2G)</p>

RESEARCH QUESTION

e-HRM in the G2E delivery context
HRM policies, practices and processes integrated with IS

Which role does the e-HRM play in public value creation ?



Public Value Creation Model through public HRM (PHRM)

(Vandenabeele *et al.*, 2013, p. 48; Knies *et al.*, 2018)



RESEARCH CONTRIBUTIONS TO THE E-GOVERNMENT LITERATURE

- One of the first literature reviews systemizing the knowledge on public e-HRM.
- Development of an Extended Model of Public Value Creation that allows to understand the e-HRM and evaluate its efficiency in the context of Government-to-Employees (G2E) services, contributing to public value creation.

METHODOLOGY

- Systematic narrative literature review methodology (Cooper, 1988, 2017; Grant and Booth, 2009; Paré *et al.*, 2015).
- Peer-reviewed academic articles written in English from EBSCO and Web of Science; snowballing technique for additional articles.
- 12 retained empirical studies on e-HRM conducted exclusively in public sector.

RETAINED PUBLIC SERVICE ORGANIZATIONS

Paper Code	Public organization type	Country	Number of organizations	Primary data sources and respondents
Paper A (Obeidat, 2016)	Communications and media organization	Jordan	1	121 workers
Paper B (Wahyudi and Park, 2014)	Governmental organization (a service in a ministry)	Indonesia	1	306 workers involved in HR and information technology management
Paper C (Bondarouk and Ruël, 2013)	Governmental organization (large federal governmental organization)	Belgium	1	219 staff members, internal documentation
Paper D (Bondarouk <i>et al.</i> , 2015)	Governmental organization (ministry)	Belgium	19	140 employees
Paper E (Bondarouk <i>et al.</i> , 2009)	Governmental organization (ministry)	The Netherlands	1	10 line managers, and 11 employees
Paper F (Rahman <i>et al.</i> , 2018)	Governmental organization (ministry)	Bangladesh	1	30 workers
Paper G (Ruël <i>et al.</i> , 2007)	Governmental organization (ministry)	The Netherlands	2	100 workers
Paper H (Zhang and Wang, 2006)	Manufacturing fully state-owned enterprise	China	88	215 workers, internal documentation
Paper I (Parry <i>et al.</i> , 2014)	Municipal administration	UK	1	17 HR managers and workers-users of e-HRM, internal documentation
Paper J (Reddik, 2009)	Municipal administration	USA	11	88 Human Resource Directors of different municipalities in Texas Municipal League
Paper K (Dilu <i>et al.</i> , 2017)	Regional public health organization	Ethiopia	1	246 human resource employees and 16 key informants
Paper L (Troshani <i>et al.</i> , 2011)	Various public sector organizations (Communications and media; Education; Health; Financial services; Natural resources; Utilities; Defense)	Australia	1	16 managers (Heads of HR departments or team leaders having knowledge on HRIS in their organizations)

SAMPLE SOURCE – PAPER E

- The **qualitative study** aimed to explore the relationships between the **perceived usefulness** and **ease of use** of **e-HRM tools** and **HRM effectiveness** in **The Ministry of the Interior and Kingdom Relations in the Netherlands** (Bondarouk, Ruel and van der Heijdenb, 2009).
- It focused on **e-Career Development** as e-HRM application, provided by **UNIT4 Emplaza**
- Findings show Managers and employees didn't **perceive** the e-HRM effectiveness in the same way.
- Further they **value differently** e-HRM applications (Mobility bank is important for employees and Appraisal Talk is important for managers)
- Finally The **e-HRM** in public administration are effective, when it is **aligned with HRM activities** (ex: Mobility bank tool for career development was not enough supported by real HR policy)



Findings 1: Building blocks in the Model of Public Value Creation through HRM

1.1 Management Intentions	Governmental and Municipal organizations	Other public sector organizations
National context of e-HRM adoption (Troshani et al., 2011; Rahman et al., 2018)	V	
Organizational readiness (Dilu et al., 2017)		V
1.2 Management Actions	Governmental and Municipal organizations	Other public sector organizations
E-HRM scope (Reddik, 2009)	V	
Workforce stability (Zhang and Wang, 2006)		V
1.3 Organizational and Employee Outcomes	Governmental and Municipal organizations	Other public sector organizations
Multidimensional e-HRM outcomes (Reddik, 2009; Bondarouk et al., 2009; Bondarouk et al., 2015; Obeidat, 2016; Rahman et al., 2018)	V	V
Variety of e-HRM contributions to HRM, ranging from detrimental to beneficial effects (Bondarouk et al., 2015; Bondarouk et al., 2009)	V	



Findings 2: Building blocks not included in the Model of Public Value Creation through HRM

The **task technology** is defined as “the way equipment (software or hardware) is arranged to perform a task” (Beer *et al.*, 1984, p. 32).

2.1 Task Technology in e-HRM

	Governmental and Municipal organizations	Other public sector organizations
Managerial knowledge on e-HRM (Zhang and Wang, 2006; Troshani et al., 2011; Bondarouk et al., 2015)	V	V
Information System Resources (Bondarouk et al., 2015; Dilu et al., 2017; Troshani et al., 2011; Zhang and Wang, 2006)	V	V
Access strategy to Information System Resources (Troshani et al., 2011; Zhang and Wang, 2006; Dilu et al., 2017)		V

2.2 Organizational fit

	Governmental and Municipal organizations	Other public sector organizations
Fit between e-HRM technology and HRM value chain (Troshani et al., 2011; Ruël et al., 2007).	V	V
Fit between resource allocation and HRM structure in an organization (Troshani et al., 2011; Zhang and Wang, 2006)		

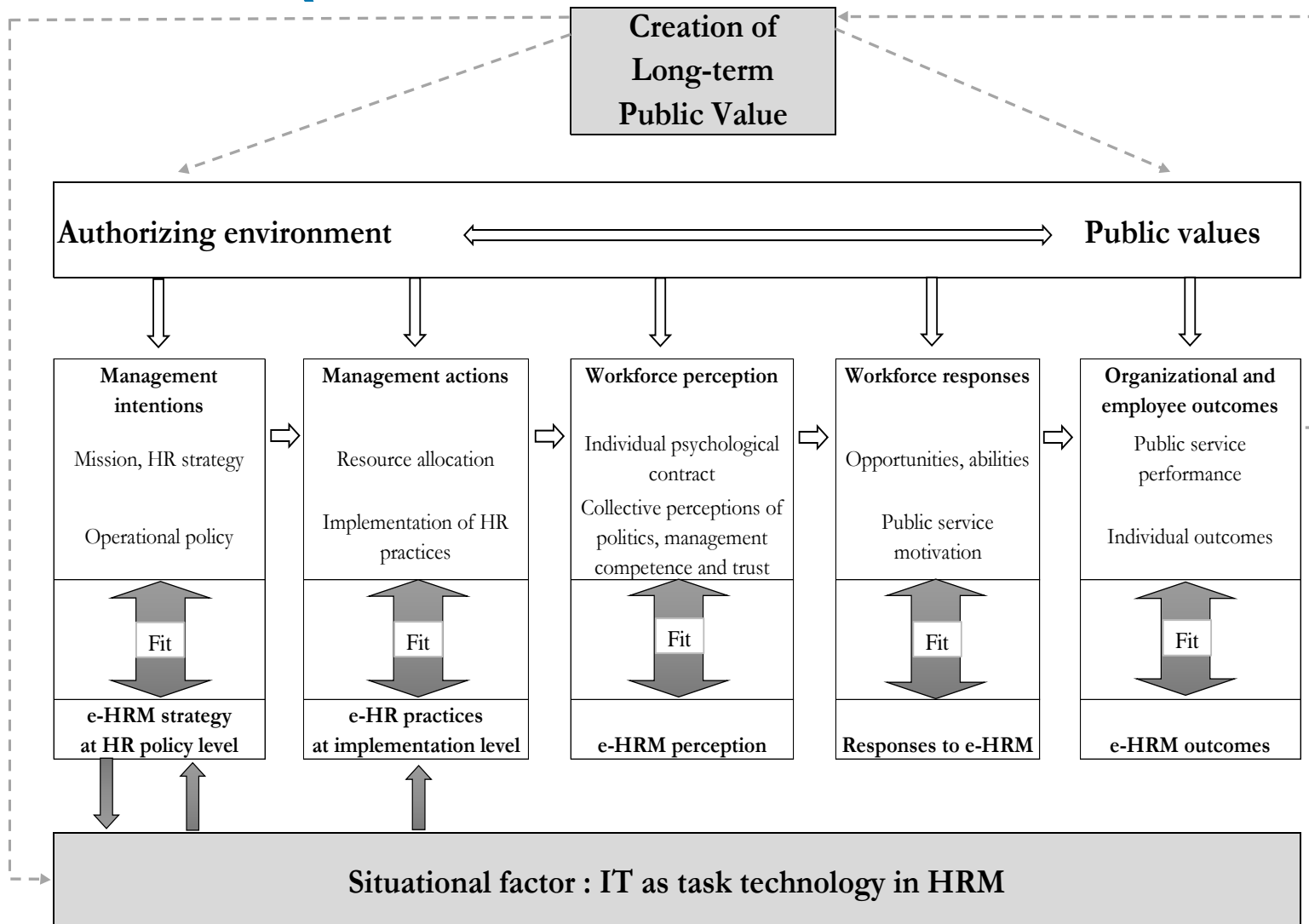
Findings 2: Building blocks not included in the Model of Public Value Creation through HRM

The HRM contribution to the external strategic objectives (Beer et al., 1984) through alignment of practices (Ulrich, 1997; Ulrich et al., 2012)

2.3 Strategic Public Value creation through e-HRM, i.e. creation of Long-Term Public Value	Governmental and Municipal organizations	Other public sector organizations
<p>Variety of strategic e-HRM outcomes, ranging from absent to positive effects (Ruël et al., 2007; Parry et al., 2014; Bondarouk and Ruël, 2013)</p>	V	
<p>Conditional strategic e-HRM impact (Bondarouk et al., 2015; Wahyudi and Park, 2014)</p>	V	
2.4 E-HRM Evaluation Through a Feedback Loop	Governmental and Municipal organizations	Other public sector organizations
<p>Authorizing environment feedback (Troshani et al., 2011; Dilu et al., 2017; Rahman et al., 2018)</p>	V	V
<p>Internal organizational feedback (Ruël et al., 2007; Wahyudi and Park, 2014)</p>	V	



EXPANDED MODEL OF PUBLIC VALUE CREATION (NEW AREAS IN GREY COLOR)

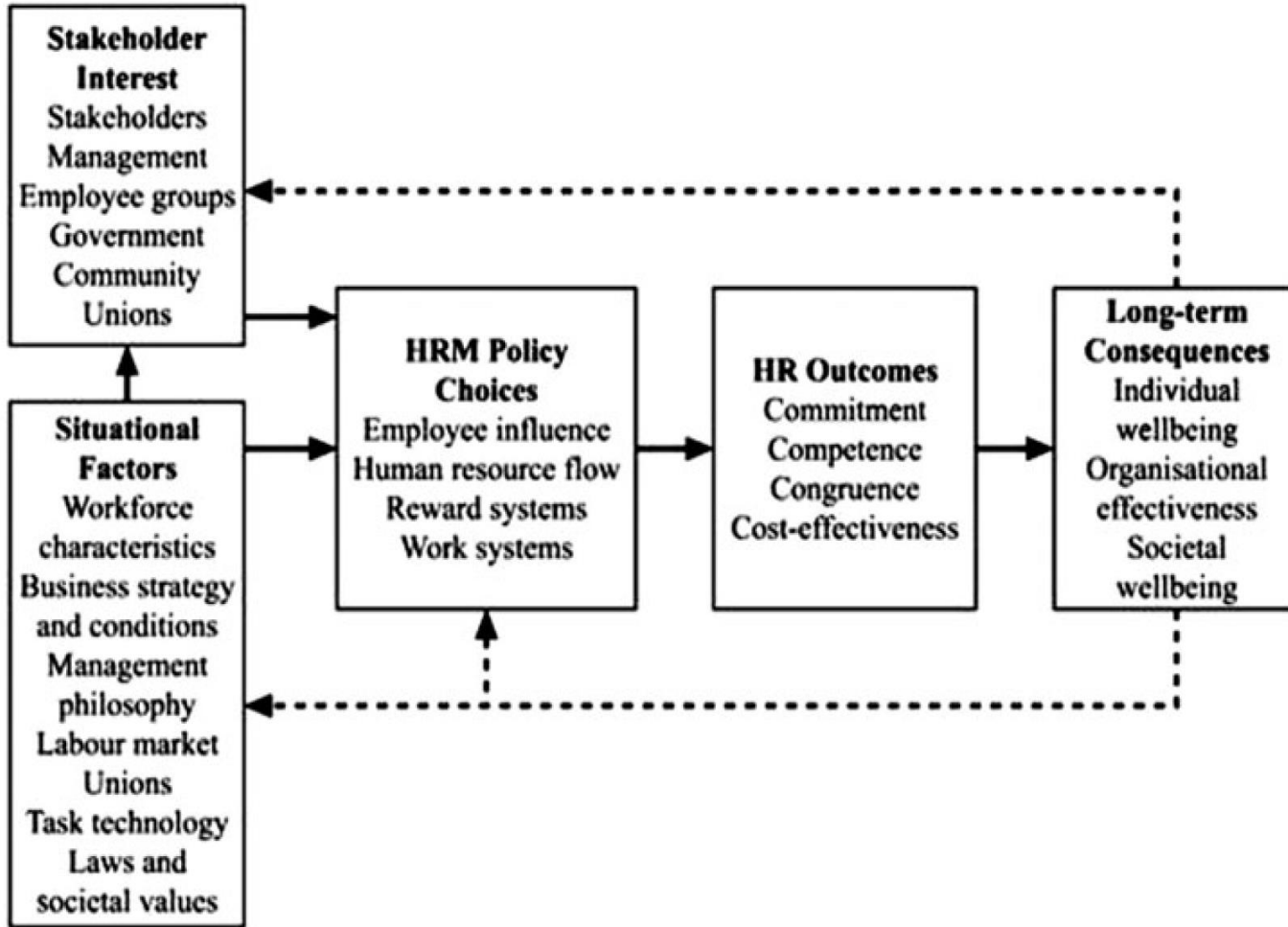


FUTURE RESEARCH

- Examining the **technologies and organizational fit between the e-HRM and HRM in public service organizations** with different activity types
- **Mediating or moderating variables influencing the e-HRM adoption and consequences** (Bondarouk *et al.*, 2017)
- **Multiple e-HRM dimensions**
- **Integration of other contingency factors and their interaction** could also help advancing the understanding of e-HRM in public service context.

THANK YOU! ANY QUESTIONS?

APPENDIX – HBR MODEL



The Harvard Model of HRM (Beer *et al.*, 1984, p. 16)



SAMPLE SOURCE – PAPER C

- An exploratory single case study was conducted in the **Belgian Federal Public Health Service** (Bondarouk and Ruel, 2013).
- Strategic benefits of e-HRM were examined through careful selection and **integration of quantitative and qualitative data involving a survey, face-to-face semi-structured interviews**, focus groups and documents from 2006 to 2009. It focused on e-HRM system with various e-HR applications in the Oracle HR project since 7 years.
- Only 2 internal and external training modules were used in $\frac{3}{4}$ of cases among 16 e-HRM modules. The e-HRM applications were used rarely, though the users were satisfied with their experience.
- It suggests that strategic and operational advantages of e-HRM can be fully realized, but only under **certain conditions (ex: Enhanced ease of use; integrations of all modules, correct technological functioning, etc.)**. HR professionals perceived strategic change taking roles of managers and business partners (from administrative function). However this change was rather associated with new vision of HRM work at the Federal Agency and leadership of HRM director but not with e-HRM implementation.
- Findings in Belgium show that **e-HRM should be aligned with the HR function to have positive long-term effects on organizational capabilities (ex: more communication related to HR and comprehensibility of HR policies; involvement of employees in the Oracle HR projects is required)**

