An Evidence-Based Review of e-HRM and Strategic HRM

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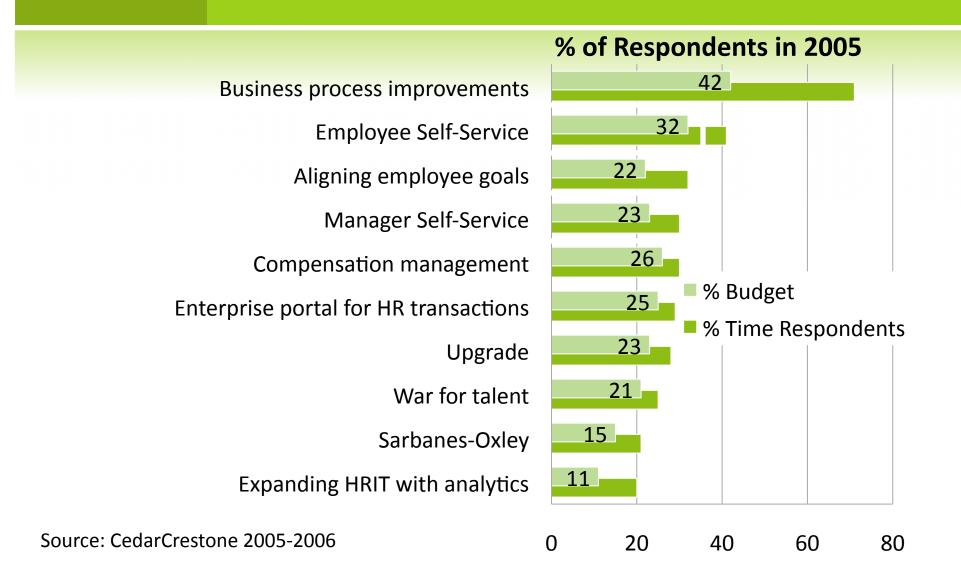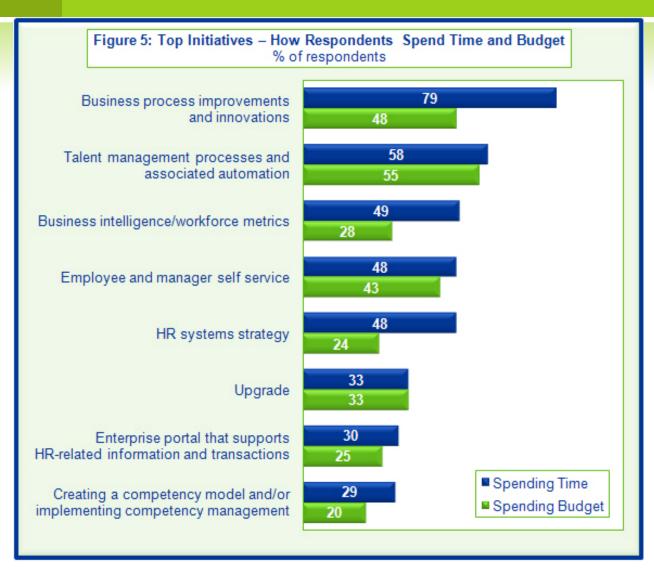THE WORLD WITHIN REACH

AGENDA

- ◎ Motivation and purpose

- ◎ Research questions

- ◎ Evidence-based methodology

- ◎ Results

- ◎ Synthesized conclusions

- ◎ Future steps

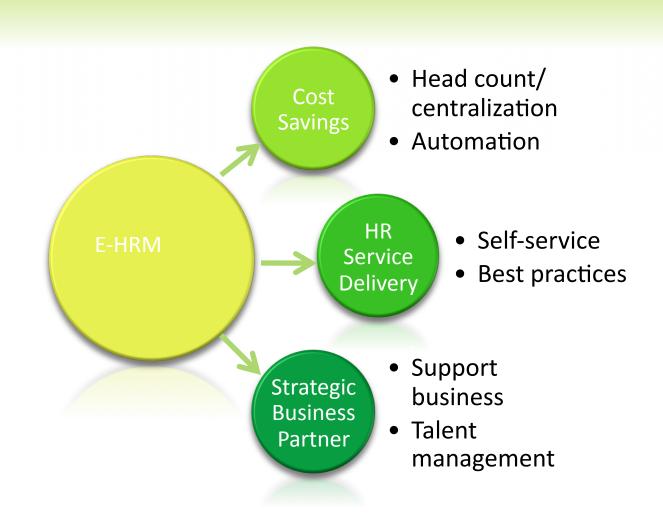# Top U.S. Practitioner Initiatives in 2005

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% of Respondents in 2005

Initiative	% Budget
Business process improvements	42
Employee Self-Service	32
Aligning employee goals	22
Manager Self-Service	23
Compensation management	26
Enterprise portal for HR transactions	25
Upgrade	23
War for talent	21
Sarbanes-Oxley	15
Expanding HRIT with analytics	11

◼ % Budget
◼ % Time Respondents

Source: CedarCrestone 2005-2006

0   20   40   60   80

TOP US PRACTITIONER INITIATIVES IN 2010

Figure 5: Top Initiatives – How Respondents Spend Time and Budget
% of respondents

Initiative	Spending Time	Spending Budget
Business process improvements and innovations	79	48
Talent management processes and associated automation	58	55
Business intelligence/workforce metrics	49	28
Employee and manager self service	48	43
HR systems strategy	48	24
Upgrade	33	33
Enterprise portal that supports HR-related information and transactions	30	25
Creating a competency model and/or implementing competency management	29	20

Source: CedarCrestone 2009-2010

Practitioner Stated Intended e-HRM Outcomes

E-HRM

Cost Savings
- Head count/ centralization
- Automation

HR Service Delivery
- Self-service
- Best practices

Strategic Business Partner
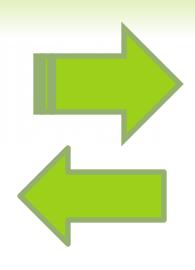- Support business
- Talent management

E-HRM "THEORETICAL" LITERATURE: TALE OF TWO PERSPECTIVES

E-HRM

"IT's transformational impact on HRM"

Snell, Stueber & Lepak (2002)
Lengnick-Hall & Moritz (2003)

Strategic HRM

"IT as a strategic tool to meet HR strategic objectives"

Broderick & Boudreau (1992)
Reddington & Martin (2006)
Ruel, Bondarouk and Van der Veld (2007)

THE DUALITY OF TECHNOLOGY

- ◎ Technological determinism
  - ⊙ Independent variable
  - ⊙ Exogenous change
  - ⊙ Technology as triggering force
- ◎ Technology as an outcome
  - ⊙ Dependent variable
  - ⊙ Consequence of strategic choice
  - ⊙ Technology as a tool

Orlikowski, 1992; Strohmeier, 2009

EVIDENCE-BASED QUESTIONS

e-HRM → Strategic HRM → Performance

1) **What e-HRM and strategic HRM relationships are present and supported across studies?**

2) **Does the evidence support a deterministic view in which technology triggers organizational change or does the evidence suggest a more influential role for social and organizational actors?**

3) **Under what conditions does eHRM lead to/ enhance strategic HRM and what mechanisms operate in this relationship?**

Strategic HRM → e-HRM → Performance

Evidence-Based Methodology

◎ **Systematic Review of Evidence** (Rousseau, Manning & Denyer, 2008; Briner, Denyer & Rousseau, 2009)

⊙ A key methodology for locating, appraising, synthesizing, and reporting "best evidence" from multiple studies.

⊙ More structured, unbiased and practitioner focused than traditional literature review.

⊙ Better than evidence from one study.

◎ 4 Approaches

○ Aggregation

○ Integration

○ Interpretation

○ Explanation

◎ 5 Categories of Evidence

4 EVIDENCE-BASED APPROACHES

	Aggregation	Integration	Interpretation	Explanation
Goal	•Combine effects to increase sample size and reduce bias •Predict intervention results via more exact estimate than any single study achieves	•Synthesis across different methods to answer specific questions. •To explore when interventions are more likely to be appropriate.	•Create tentative theories of phenomena including patterns of social construction based on qualitative data	•Synthesis to create explanations. •Generate theory
Method	•Quantitative combination of results of primary studies	•Triangulation across multiple studies and methods; reviewer judgment	•Compilation of descriptive data. •Cross-study concepts are identified and translated into new categories	•Discern patterns behind explanatory claims
Data	•Favors randomized controlled studies •Published and unpublished studies; data sets	•Typically published studies	•Published studies with qualitative data on comparable subject matter. •Incorporates primary researcher interpretations	•Multiple forms of evidence. •Typically published studies.

5 CATEGORIES OF EVIDENCE

◎ Construct validity
◎ Internal validity
- ⊙ covariation,
- ⊙ cause precedes effect, and
- ⊙ no plausible alternative explanations (i.e., not a spurious relationship)
◎ Effect size
◎ External validity
◎ Contextualization—identifies the limits of a phenomenon or cause and effect relationship

Evidence-Based Review Methodology

◎ **Integration Systematic Review** (Rousseau, Manning and Denyer, 2008)

- ⊙ Goal
  - ○ Synthesis across different methods
- ⊙ Method
  - ○ Triangulations across multiple studies
- ⊙ Data
  - ○ Typically published studies

E-HRM CONSTRUCT

◎ Intended and actual HRM practices or services

⊙ A way of implementing HRM policies and practices (Ruel, Bondarouk & Looise, 2004)

◎ Representing collaborations between employees or organizations

⊙ Supports at least two individual or collective actors in shared performance of HR activities (Strohmeier, 2007)

◎ Delivered or enabled by internet/intranet-based information technology

⊙ Configurations of computer hardware, software and electronic networking capability (Marler & Fisher, 2010)

Methodology: Sample Selection

- All published articles on eHRM in last ten years (1999-2009)
- Searched primary business and psychology databases
    - ABI/Inform/Proquest, Business Source Premier and PsycArticles
    - Multiple search terms used (B2E and HRM, e-HR e-HRM,HRIS, self-service, virtual HRM, web-based HRM, HRM and Internet)
    - Scanned reference lists
- 77 published articles
    - Peer reviewed, included quantitative or qualitative data, addressed use of eHRM in organizations not for pedagogy
    - Limited initially to 2007-2009
- Final sample for this review - 20 articles

CLASSIFICATION OF SAMPLE ARTICLES

- ⊙ Key Theoretical Perspectives
- ⊙ Construct and Internal Validity
  - ○ Define constructs
  - ○ Establish basis of internal validity
  - ○ Level of analysis
- ⊙ Empirical approach
  - ○ Covariation; cross-sectional
  - ○ Causal-longitudinal or experimental
  - ○ Descriptive; case study

KEY THEORETICAL PERSPECTIVES

- ⊙ Strategic HRM Literature
  - ○ Stages (Lengnick-Hall, et al. 2009)
    - ⊙ Contingency theory of SHRM
    - ⊙ Strategic outcomes/ RBV
    - ⊙ Intended vs. realized
- ⊙ Information Science Literature
  - ○ Technological determinism debate
    - ⊙ Stages of HRIS and e-HRM
    - ⊙ Structuration theory
  - ○ Technology Acceptance Model (TAM)
- ⊙ Other

THEORETICAL CLASSIFICATION RESULTS

- 20 percent use one main theory (HR or IS)

- 60 percent use multiple theories
  - 30% partly based on TAM
  - 30% explicitly or implicitly use determinism
  - 15% use contingency theory of SHRM
  - 5% use RBV

- 20 percent use no theory – largely descriptive

EMPIRICAL CLASSIFICATION RESULTS

◉ **Empirical Approach**

- ◉ 45% cross section
- ◉ 30% case study
- ◉ 20% experimental
- ◉ 10% longitudinal

◉ **Internal validity**

- ◉ Covariation
  - ○ 70 percent of studies
- ◉ Cause preceding effect
  - ○ 30 percent

STUDY RESULTS QUESTION 1

◎ **What e-HRM and strategic HRM relationships are present and supported across studies?**

- ◉ 40 percent deal explicitly with the e-HRM Strategic HRM relationship
  - ○ Macro level constructs

- ◉ Evidence not adequate to establish causality
  - ○ All cross sectional or descriptive

QUESTION 2

◎ **Deterministic view or a more influential role for social and organizational actors?**

- ◉ Multiple theories used suggest bias towards technological determinism
  - ○ 5 survey-based studies in UK, Canada, Greece, and Netherlands support e-HRM to Strategic HRM relationship
    - ○ Leads to perceptions of HRM as a strategic partner
  - ○ 1 case study indicates no relationship
  - ○ 1 case study indicates possible negative relationship
  - ○ 1 survey-based study supports reverse direction (Strategic HRM to e-HRM)

- ◉ However, empirical design correlational or descriptive

STUDY CLASSIFICATION RESULTS: QUESTION 3

- **Under what conditions does eHRM lead to/ enhance strategic HRM and what mechanisms operate in this relationship?**
  - Intended vs. actual outcomes
    - Complexities in system development
    - Experimental studies
    - Data privacy concerns
  - Support for contextualization
    - 60 percent at micro level
    - 10 percent at macro level
  - There are many contextual contingencies

Synthesized Practical Conclusions

◎ **1. Managers expect e-HRM to lead to strategic HRM**

   ○ *Although evidence largely supportive....*

◎ **2. Evidence is also mixed on direction of relationship**

◎ **3. No evidence on actual strategic outcomes**

   ○ Superior performance?

   ○ Competitive advantage?

SYNTHESIZED PRACTICAL CONCLUSIONS

4. There are many contextual/moderating factors to consider

- Stage of e-HRM diffusion (publish, auto, transform)
- Culture
- National institutional infrastructure
- Competitive environment/pressures
- HR customer expectations, perceived usefulness, and EOU
- Managerial pressure
- Organizational support/training
- Participation in development and implementation

NEXT STEPS

- ◎ Construct validity
  - ⊙ How to measure e-HRM and strategic HR
    - ○ Strategic HR currently "perceptual"
    - ○ Defining strategic outcomes
- ◎ Need more evidence on internal validity
  - ⊙ Partner with business on whether expectation and reality are the same
    - ○ Strategic outcome studies
    - ○ Longitudinal research designs
    - ○ More macro level multi-organizational or multi-unit research designs
- ◎ Contextual evidence : moderators and mediators
  - ⊙ E.g., under what conditions is e-HRM strategic?
  - ⊙ Through what process or mechanism?

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