

Human Resources Information System (HRIS) to Enhance Civil Servants' Innovation Outcomes: Compulsory or Complimentary?

A Critical review

Azhar Naima M.

azhar.naima.m@gmail.com

Al-Nahrain University Baghdad-Iraq

Abstract: This critical and analytical review focuses on the study "Role of Digital Human Resource Systems to Improve Innovation for Civil Servant Government Office of Innovation" conducted in Indonesia by Sat Ipsievi, Ismi Rajiani, Mamun Murod and Andriansyah. The study aimed to answer the burning question: "Mandatory or Complementary?" when assessing a move to new digital human resource systems in Government. Based on the survey of 500 respondents, statistical analysis based on Structural Equation Modelling found that not only was the new digital system successfully adopted, but paradoxically there was no significant impact of moving to a new system on innovation, leading the authors to conclude it only plays a complementary role in government bureaucracy. In this review I praise the researchers for their open-mindedness, publishing negative findings and analyzing thoroughly the reasons why the innovation was not successfully introduced through the filter of cultural and bureaucratic context of Indonesia (seniority system and weak incentives), using The AMO model. At the same time I focus on limitations relating to the methodology used from cross-sectional sample, not tackling time factor, limited geographical scope on capital Jakarta and measuring innovation on the basis of self-assessment of the respondents vs. objective indicators, to old-fashioned model of mediation based on Baron and Kenny. On theoretical level the comparison of the research findings (lack of real motivation of employees having sure job, "cosmetic compliance") confirms and explains observations from other, international studies. I close the research with a set of developmental recommendations concentrating on cross-sectional analysis over time and measuring innovation through objective indicators, using new, digital statistical analysis, e.g. SmartPLS and increasing the geographical scope of sample to embrace remote areas outside capital cities.

Keywords: Critical review, Digital Human Resources Systems (HRIS), Government innovation, Indonesian bureaucracy, cosmetic compliance.

1. Introduction:

This research is based on a real problem in public administration in a developing environment, particularly in the Indonesian public sector. The government enacts strict regulations on digital transformation and HRIS implementation in institutions to create a world-class bureaucracy. Unfortunately, such a mandatory approach gives rise to technical failure without any real impact or fundamental changes in inherited traditional practices. In this regard, the present research examines the influence of the four key antecedents of successful adoption and subsequent innovation output: fit of technology to the task, organizational resources, human knowledge, and social. A total of 500 civil servants were sampled, and Structural Equation Modeling (SEM) was employed for data analysis. The results revealed that all four dimensions support the successful system adoption. However, surprisingly, the mediation between HRIS and innovation output was negative and insignificant. The authors concluded that digital systems, in this case, are complementary rather than necessary in producing innovations in this bureaucratic context.

2. Critical Analysis of Strengths:

Originality of the Problem and Bridging the Research Gap: The researchers, in their study entitled (Human Resource Information Systems (HRIS) for Enhancing Civil Servants' Innovation Achievements: Mandatory or Complementary?), made a significant contribution to expanding the horizons of HRIS literature. Instead they diverted their attention from the traditional evaluation of operational administrative impact i.e. reduction in cost and increase in speed of transaction to evaluation of organizational level strategies measured using innovation as the primary variable.

Interpretive Depth and Context: What differentiates this study from general research is that it did not simply make sterile statistical findings but gave a qualitative depth to its explanations too by attributing its findings to the cultural and political environment of the country's civil service, which provides for weak financial incentives, opaque channels for recruitment and the dominance of seniority against the merit in promotions etc. They based this framework on their Ability- Motivation- and Capacity (AMO) Model which again provides this study a distinguishing and real characteristic that should be taken up a role models for more applied academic researches.

Methodological and statistical rigor:

The researchersTM selection of a sample of 500 individuals ensured high statistical robustness for the results of the sessional equation modeling (SEM). The indexes of fit and also the reliability and validity indicators for the measures, were found to be consistent with the rigorous and recognized academic standards as itTM s required by scientific journal which uses peer review.

Adopting the negative result thesis: Authors are worth praised for being the example of forthright scientifically and frankly dealing with the statistically rejected theses. Although I do agree with the adoption of negative-result-thesis to some degrees that a series of small projects should never be judged to be unworthy of publications because of negative findings for what has been considered strong evidence, I wonder how much the impact of the non-significant findings will decrease among those who never do read this paragraph of defense in such article which tends to be scientific in orientation and could not reach beyond the boundaries of academic communities; so if negative result thesis were adopted (especially if with no defence in written such as this case), could a more formal notice of such problem be delivered for ordinary people with no statistical training to let them gain a more complete impression of such studies so as to gain a sense of confidence from doing so. If this were so, they do not need fear about the effect on their businesses and will contribute with stronger motivation. In view of such worries, a small note at end of the executive summary attached to such academic paper might achieve this goal, by warning possible readers of negative-result-thesis if it is necessary for paper author to do so.

They proceeded to dissect the result of the system's insignificance in impact on innovation and deconstruct it objectively, rather than resorting to manipulating the data to confirm preconceived theoretical expectations.

3. Critical Analysis of Weaknesses and Shortcomings:

Limitations of the Cross-Sectional Design: As researchers know, collecting data at a single point in time prevents the study from tracking the maturation of technology adoption and measuring its cumulative impact on innovation. This is considered an organizational behavior that generally only develops over an extended period.

Geographical bias in the sample: Indonesian researchers used snowball and convenience sampling methods to collect data. The sample was concentrated in the capital, Jakarta. This geographic concentration weakens the generalizability of the results to rural areas and local governments with less efficient and developed infrastructure. It's worth noting that Indonesia has 38 administrative districts, also known as provinces or regions.

Relying on self-assessment: Measuring innovation based on employees' self-evaluation carries the risk of "social desirability" bias. This measure should be supplemented with objective, verifiable indicators such as the number of processes actually developed or registered management patents.

Using an outdated mediation methodology: The study's reliance on the methodology of (Baron & Kenny, 1986) to test the mediating effect reduces the accuracy of its conclusions compared to modern statistical methods based on self-sampling (Bootstrapping), which have become the established de facto standard for measuring indirect effects with higher credibility.

4. Enriching and Discussing the Review in Light of the Literature:

We note the convergence of the findings of this study with the trends of several contemporary literatures in the field of digital human resource management. Bondarouk et al. (2017) concluded that human resource technology is merely superficial unless it is linked to the development of talent management practices and genuine structural empowerment. Similarly, Marler and Fisher (2013) conducted a comprehensive review revealing the lack of conclusive evidence that the digital transformation of human resources automatically leads to strategic returns unless it is accompanied by a maturing of strategic thinking among senior management.

When we match this finding with the research done by Azhar in 2019 on factors determining e-HR adoption in Iraq, it gains more weight. Azhar was trying to find out whether or not adoption of e-HR could really result in smart management by looking at the role of technical factors. The result claimed that relying strictly on technical factors was not enough towards achieving complete transformation in smart Human resource management. Organisational structure, culture and conviction of employees were the most important factors. That is exactly what this study results in as social influence and coercive government pressure brought adoption to the forefront without penetrating the employees mind enough to force them into innovating.

Organisations also come across challenges of security and privacy threats to HRIS records. These issues include:

(A) User Authentication. Give certain HRIS users access to the records and associated data files and on occasions give them authorisation to amend the data to ensure that none of it is visible to unauthorised users.

(B) Password and Token Creation: Creating unique passwords and tokens to control access to different sections of the database, thereby preventing unauthorized access.

(C) Access for Specific Purposes: Granting access to specific sections of the database to control access to different parts of the database, thereby preventing unauthorized access to sensitive information.

(D) Policy Clarification: Clearly communicating the organization's policies and plans regarding the use of personal information to all employees, and explicitly informing them of the extent to which they can use this information.

(E) Employee Access Rights: Allowing employees access to their personal records to ensure their suitability and accuracy, and to take corrective action if necessary. (Gomez-Mejia et al., 2004)

According to Dessler (2011), various software systems allow employers to integrate performance appraisal, career development, training, and succession planning. For example, KenezaCareerTracker helps organizations enhance employee productivity by providing a platform for continuous performance management, succession planning, and career development.

Human Resources Information System (HRIS) applications are gaining significant importance in the field of succession planning because they:

- Monitoring and tracking management development.
- Creating succession lists.
- Identifying factors contributing to employee turnover at various management levels.
- Responding to evolving skills requirements.
- Generating reports that address a variety of employee-related questions and progress.
- Providing full statistics about Equal Employer Opportunity (EEO), career planning and Employee Profile.

Looking it closely, as this study is based on AMO model of functioning, digital empowerment will need real and efficient motivation (Miner & Crane, 1995; Moussa & Somjai, 2019). Absence of motivation denies the opportunity to use their competencies, which was explained by Appelbaum et al. (2000) in their pioneering thesis. In this aspect, Amrutha and Geetha (2021) mentioned that since the job of the employee is totally secured, so they do not want to take the risk to innovate something using the digital system as if they fail, they will be held responsible but successful experimentation gives them no immediate reward.

It was also shown by Heikkilä (2013) that for successful e-HRM practices entire alignment with organizational innovation strategies are vital factors in this regard. According to Thite's (2020) work about digital HR development, the compulsion of the use of the digital portal for legal necessities by employees are termed as "cosmetic compliance", where according to Nawaz et al. (2022) employees do adopt digital entering of the data successfully while maintaining their inflexible traditional mindset, unable to evoke any genuine innovation.

It was supported by Venkatesh's (2021) remodelled model about the acceptance of technology; the UTAUT2. He pointed out the mandatory systems follows a completely different logic from the optional; as usage is not for work-improvement but to avoidance the regulatory penalty. It was sustained by Al-Hussami et al. (2021) according to whom the rigidity of the government in its structure reduces down the positive effects of the information systems. In addition, the author revealed that according to the outcomes of Naima (2020)'s study there is a significant positive link of variables on behavioral intention.

This indicates that employees have an intention to adopt online training, suggesting that institutions are not giving sufficient attention to technology adoption. Meanwhile, employees are focused on adopting technology and believe it should also be used in training.

Most developing countries utilize technologies such as videos, presentations, and other methods, but they lack the use of online training, which benefits both the organization and its employees.

This reality necessitates adopting the perspective of Johnson et al. (2022), which emphasizes the need to redefine the role of human resources to become an active strategic partner capable of leveraging artificial intelligence and digital systems to build human capital, rather than being limited to its traditional bureaucratic role Innovation is built on interaction and the support employees feel in their daily system that is applied and not behind system screen. (Kutieshat & Farmanesh (2022)). Abuhantash, A. highlighted that e-HRM has enormous potential to revolutionize HR management and improve employee lives and organizational outcomes (2023). With the

rapid progress of technology, organizations must invest in e-HRM solutions while equipping HR professionals and employees with the required skills to use the tools effectively. Despite numerous challenges to implementing e-HRM, the benefits exceed those challenges and hence this is pivotal in future HR strategies. We emphasize here that all future research should be addressed into identifying best management practices to carry out eHRM; how the adoption in the long run would look like for companies and lastly how the HRIS system or e-HRM as a whole could be correlated between human engagement, innovation, and organizational performance. Finally, in a comprehensive study via meta-analysis and analysis using data on system application in thirty countries around the world, the Zhou (2022)'s have concluded that contextual characteristics existing in the countries, its level of advancement in terms of its culture and democracy determine if the HRIS system would flourish to be a catalyst for innovation or stay a tool that has nothing in more common than the more advanced digital archiving system. This complements the conclusion of (Satispi et al. (2023)) when it has been found that the context for the case in Indonesia has proven the system's role for compliment, not as an enforcing one for the case of creating the innovation process.

5. Developmental Recommendations for Future Studies

1. The longitudinal Study This study should be carried over a span of few years and should be able to measure impact of HRIS on innovation before its adoption, during the adoption and years later, this would enable a fair assessment of changes in real behavior of organizations, time and impact made by technology.
2. Using more tangible and scientific ways to measure impact on innovation Using tangible impact factors to measure innovation impact that are based on performance reports and government set indicators not by filling up self-assessment questionnaires that have always been susceptible to biases
3. Developing a mediation testing model There is a need to adopt advance and most modern statistical approaches like Smart PLS that works based on bootstrapping algorithm, to verify and find indirect pathways with accuracy and reliability
4. Expanding geographical scope of sample Study should be carried out with the local government agencies of the remoted areas, far from the urban centers and ^{capital} to measure the impact of digital divide on adoption and resultant impact that exists.

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