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Virtual Hiring: An Effective Green Human Resource Management Practice

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ABSTRACT

Attracting high-quality employees is a critical human resource concern in the 'battle for talent. Virtual Hiring by the organization is a step towards sustainability by going paperless. Greening the activities involved in getting people into an organization is covered under the Green HRM. This Research paper attempts to establish an Integrated Model of the virtual Hiring mode, its Predictor and Outcome variables. To evaluate the relation between Perceived Usefulness (PU) and Perceived ease of use (PEU) over the virtual mode of Hiring (VMH) and the further impact of the Virtual Mode of hiring as Green HR Practice on Cost-effectiveness, Geographical Outreach and Environment/ Health benefits. Research Methodology- The study employed an adapted questionnaire to gather data from 266 respondents and used Partial Least Square (PLS) Structural Equational Modelling in SmartPLS software version 3.3.2 to conduct empirical analysis. To sum up, this study developed a new model using some variables of Technology Acceptance Model (TAM) to investigate the mechanism by which the Virtual mode of Hiring as Green HR practice impacts the outcome variables of this study. There found the significant positive impact of virtual Hiring on Cost Effectiveness, Geographical Outreach and Environment/ Health Benefits.

1. INTRODUCTION

The Covid age has reawakened the ordinary man, and everyone is more concerned with their own health and the state of the Environment as a whole. Organizations with long-term goals have gained more attention and goodwill. Greening the recruitment process might help the organization achieve larger goals of sustainable growth. Recruitment, selection, and, finally, the orientation of newly hired employees are all included in hiring operations, and these can be conducted with the help of Technology. The fundamentals of virtual Recruitment are as follows: Tracking: Assists in tracking a candidate's status in relation to the jobs for which the candidate has applied. Online Testing: Screening candidates over the internet against a variety of job profiles to rank them on a variety of criteria. Virtual Recruitment includes all the activities of searching for, attracting, assessing, interviewing, and hiring new employees through the use of web-based resources. The purpose of Recruitment is to increase the productivity and efficiency of procedures. Online Recruitment can increase the pool of available candidates and streamline the selection process. Virtual Mode of Hiring (VMH) refers to the process of Hiring via online software, websites, and social media platforms. Numerous online collaboration tools are available, including Zoom, Google Meet, Skype, Webex Meetings, and Google Hangouts Meet. Social media platforms such as LinkedIn, Facebook, and others. Employer's Website: Provides information about available positions and data gathering. Job portals: These include CareerAge, indeed, Monster, Naukri, and TimesJobs. Social networking websites like Twitter, Facebook, and LinkedIn all aid in developing strong networks and discovering employment opportunities.

Virtual Hiring is considered to be beneficial for both Employers and employees. Organizations can gain a competitive edge through Green HR practices which is essential for long-term survival in the market. Additionally, previous research has still not derived the impact mechanism of Green HR practices on Cost-effectiveness (CE), Geographical outreach and environment /health benefits Advantage via the Technology acceptance model. We discuss how GHRP influences these three selected outcome variables to address this literature gap. Virtual mode of Hiring acts as a moderating variable.

2. THEORETICAL FRAMEWORK

This study is based on Fred Davis's well-known Technology Acceptance Model (TAM), which he introduced in 1986 [1]. This concept is based on two primary variables: Perceived Ease of Use (PEU) and Perceived Usefulness (PU), both of which affect actual technology use via behavioural intention and attitude toward use. Additionally, this Model has been modified twice, with the most recent version being TAM3. The TAM model's fundamental constructs, PEU and Perceived Usefulness were used in this research Paper. These

components are then applied to the use of virtual Hiring mode, and outcome factors like cost effectiveness, geographic Reach, and environmental/health benefits are incorporated into the Model.

3. LITERATURE REVIEW AND PROPOSAL OF A HYPOTHESIS

3.1 Perceived ease of use

Perceived Ease of Use (PEU) can be understood as "the extent up to which a person perceives that utilizing a certain technology would be physically and mentally effortless" PEU has a strong and significant effect on both attitudes toward use (ATU) and behavioural intention (BI) [1]. Perceived simplicity of usage affects perceived Usefulness. If a new technology's features are simple to use, users regard it as beneficial technology Davis,1989. PEU and PU have a good association [2].

H1= Perceived ease of use significantly impacts Actual usage of a virtual mode of Recruitment by organizations.

H2= Perceived Ease of use of virtual software for Recruitment has a significant impact on the Perceived Usefulness of that software.

3.2 Perceived usefulness

Perceived Usefulness is described as Davis et al. [1] “the degree up to which the user thinks that employing a certain technology will boost job performance” A high level of PU is a crucial concept in understanding good user-performance experiences. Previous studies demonstrated that PU benefits users' attitudes and behavioural intentions of a person using Technology [3, 4].

H3= The perceived Usefulness of the Virtual software has a significant impact on its use as a platform for Recruitment.

3.3 Cost effectiveness

E-Recruitment attracts a greater number of job applicants. Additionally, it is cost-effective, and job searchers find it simple to access firms using this method [5]. Virtual Recruitment is gaining popularity among recruiters and job seekers due to its time, cost, and quality advantages. This technique results in significant cost savings for both job searchers and recruiters [6, 7]. It is predicted that a firm will save around one-twentieth of the expense associated with hiring through traditional channels by utilizing just virtual recruiting [8]. Virtual mode of Hiring gives several benefits, including reduced expenses [9] and faster turnaround times/cost reductions [10]. Organizations can gain a competitive edge through Green HR practices.

H4= Actual use of Virtual mode of Recruitment has a positive and significant influence over cost-effectiveness.

3.4 Environment & health benefits

The COVID-19 ones serve as a reminder of the environmental concerns that have arisen due to industry expansion and people altering dietary patterns. The deterioration of the Environment acts as a spur for increased global awareness of environmental conservation [11]. The attitude toward environmental and health concerns demonstrates the public's understanding of environmental issues and demonstrates the users' concern for the Environment. Previous research has established a favourable correlation between environmental concern and people having environmentally favourable attitudes and behaviours, and many scholarly reports are available on Green Practices [11]. In this current pandemic condition, Organizations using Technology like zoom for major Human Resource Activity, that is, Recruitment leads to Environment and health safety. Concern for the Environment is a critical demand in this pandemic era. Virtual software is deemed a green product in this instance since it enables the companies to conduct recruitments in accordance with the requirements of the contemporary Environment.

H5= Use of a virtual Hiring mode significantly influences the green product resulting in Environment and health benefits.

3.5 Geographical outreach

The traditional hiring concept was totally paper-based, followed by in-person interviews in certain geographical regions [12] defines e-recruitment as the process of evaluating prospective employees who apply for jobs via the internet. The sophistication of the virtual recruiting habitat will vary according to the Technology employed and the span of activities covered. E-recruitment ensures continuous global coverage [10, 13, 14], capacity to access a broader pool of applicants [15]. Based on available literature on Recruitment using the internet following Hypothesis is set:

H6= Usage of Virtual mode for Hiring as a green product positively impacts Geographical Outreach.

Table 1 below briefly defines the various variables of the study.

Figure 1 below shows the framework of the study.

Table 1. Definitions of the variables

Variable	Definition/meaning
Perceived Ease of Use	‘The degree up to which the technology user perceives that using a system would be physically and mentally effortless " [16].
Perceived Usefulness	“The level up to which the technology user believes that employing it would raise job accomplishment” [1].
Virtual mode of Hiring	process of identifying potential employees virtually and encouraging them to apply for positions inside the business.
Environment and Health Benefits	People in the Covid period are more concerned with their own health and the Environment as a whole. Being eco-friendly and avoiding physical contact are two of the Model's environmental and health benefits.
Cost Effectiveness	Cost-effectiveness analysis examines the relative costs and effects of various actions, so in this Model, by action, we mean the Virtual mode of Hiring.
Geographical Outreach	Recruitment through the virtual method assists the organization in reaching out to a greater number of applications. More geographical regions enable access to a broader range of applicants via numerous recruitment sources [17].

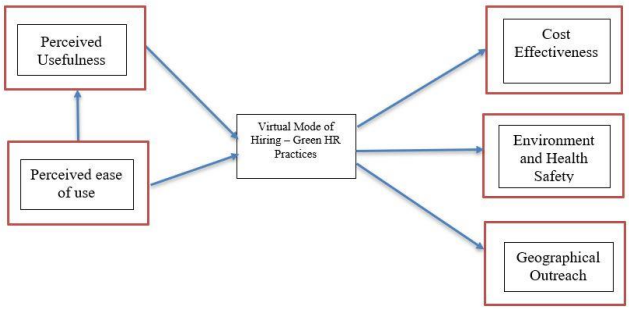

Figure 1. Research framework of the study

4. METHODOLOGY AND FINDINGS

4.1 Data collection and sample of the study

Employee data were gathered to examine the proposed research framework. Online platforms are used to distribute the questionnaire. The Adapted Questionnaire elicited a total of 266 responses which meets the required sample size as determined using GPower 3.1.9.7 to get the minimum sample size required. The count of variables taken for this Model is 6, and the level of significance is taken as 0.05, which the minimum sample size needs to be 262 respondents, although the study employed a sample size that complies with the acceptable sample size standards Estimates of the minimum sample size is shown in Figure 2.

Model evaluation is carried out using the PLS-SEM approach. It begins with an examination of the items' reliability. This can be accomplished through the use of standardized loadings analysis, as shown in Table 2. Each item had a loading value greater than 0.708. Except for two items whose loadings were less than the required threshold, the Model retains all items except these two. Validity is determined for convergent and discriminant validity. The following stage is to evaluate the composite reliability to determine the construct's internal consistency, which indicates the construct's internal consistency dependability.

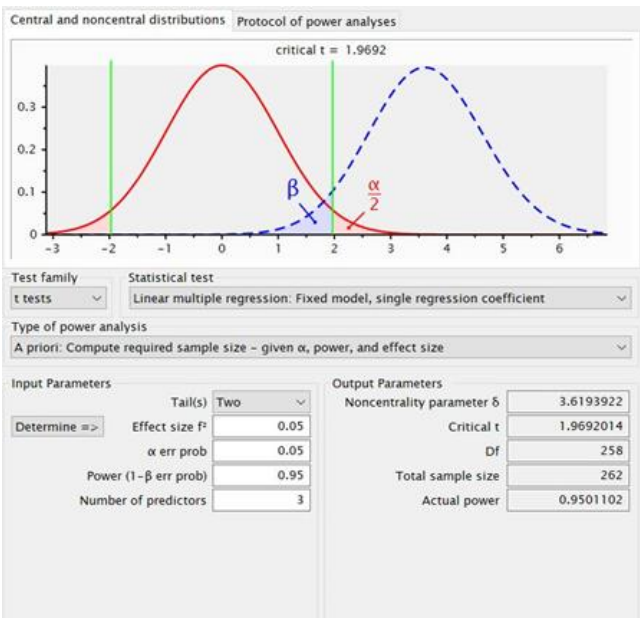

Figure 2. GPower calculations

Figure 3 below shows results of PLS algorithm run on conceptual framework.

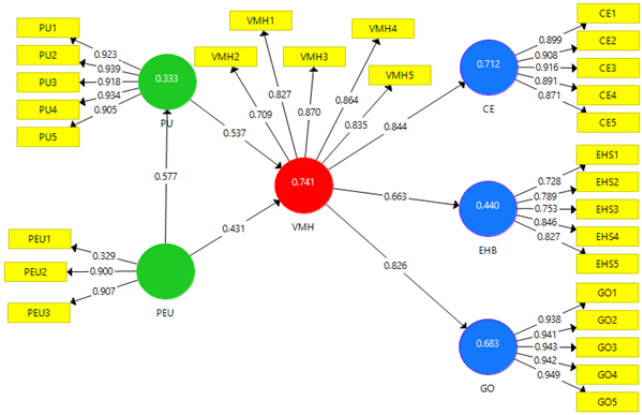

Figure 3. Results of PLS algorithm run on conceptual framework

Table 2. Assessment findings of the proposed model using SMART-PLS

Variables	Outer Loading	Composite Reliability	Average Variance Extracted (Ave)
CE1	0.899		
CE2	0.908		
CE3	0.916	0.954	0.805
CE4	0.891		
CE5	0.871		
EHS1	0.728		
EHS2	0.789		
EHS3	0.753	0.892	0.624
EHS4	0.846		
EHS5	0.827		
GO1	0.938		
GO2	0.941		
GO3	0.943	0.976	0.889
GO4	0.942		
GO5	0.949		
PEU1	0.329		
PEU2	0.901	0.783	0.58
PEU4	0.906		
PU1	0.923		
PU2	0.939		
PU3	0.918	0.967	0.854
PU4	0.934		
PU5	0.905		
VMH	0.827		
VMH	0.709		
VMH	0.871	0.913	0.678
VMH	0.864		
VMH	0.835		

Note: PEU= Perceived Ease of Use, CE= Cost effectiveness, EHS= Environment and Health Safety, GO= Geographical Outreach, PU = Perceived Usefulness, VMH= Virtual Mode of Hiring.

As per Table 2, the composite reliability index (CRI) and the average variance explained are used to measure the Model's convergent validity (AVE). All constructs have an AVE greater than 0.50, which meets the fundamental criterion of validity [18].

4.2 Model assessment

4.2.1 Discriminant validity

The Fornell-Larcker criterion is used to assess the Model's

discriminant validity [19]. According to the F-L criterion, discriminant validity is proven when the variance between all constructs is less than the variance shared by each component with its constituents. When the square root value exceeds the correlation index, discriminant validity is inferred. Table 3 shows that all constructs fit with the F–L criterion.

In Addition to this, the discriminant validity is tested using HTMT. The HTMT approach is a novel way to examine discriminating validity proposed by Henseler et al. [20]. The scores derived by the HTMT index should be below 0.85, employing a more restricted criterion. As per Hair et al. [21] & Gold et al. [22], the HTMT value may reach 0.90. As seen in Table 4, all relationships have a score of less or equal to 0.90.

4.2.2 Bootstrapping

The structural Model's hypotheses are tested using the widely used bootstrapping approach, which determines the significance and confidence intervals for the route coefficient. Table 6 contains the coefficient of determination, or R2 value, for each regression equation in the structural equation model. R2 values denote the proportion of variance explained by the explanatory variables in each of the endogenous constructs and are a proxy for the Model's explanatory power, also known as in-sample predictive power. The minimal value of R2 that is acceptable is context-dependent; however, low values of R2 are acceptable in some contexts.

Figure 4 below shows the testing of the model through bootstrapping.

Table 5 below shows the results of the hypothesis testing.

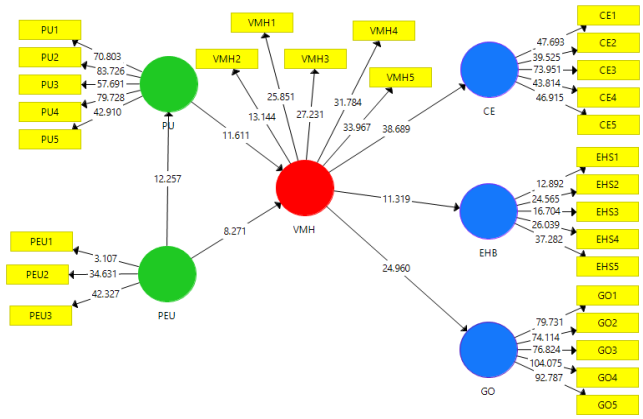

Figure 4. Testing the model through bootstrapping

Table 3. Discriminant Validity – Fornell-Larcker Criterion

	Cost Effectiveness	Environment & Health Safety	Geographical Outreach	Perceived Ease of Use	Perceived Usefulness	Virtual Mode of Recruitment
Cost Effectiveness	0.897					
Environment & Health Safety	0.625	0.79				
Geographical Outreach	0.714	0.693	0.943			
Perceived Ease of Use	0.571	0.405	0.618	0.762		
Perceived Usefulness	0.681	0.472	0.544	0.577	0.924	
Virtual Mode of Hiring	0.845	0.666	0.826	0.734	0.782	0.823

Table 4. Discriminant Validity –Heterotrait Monotrait Ratio

	Cost Effectiveness	Environment & Health Safety	Geographical Outreach	Perceived Ease of Use	Perceived Usefulness	Virtual Mode of Recruitment
Cost Effectiveness						
Environment & Health Safety	0.695					
Geographical Outreach	0.746	0.761				
Perceived Ease of Use	0.607	0.517	0.628			
Perceived Usefulness	0.716	0.522	0.562	0.583		
Virtual Mode of Hiring	0.900	0.755	0.892	0.836	0.855	

Table 5. Testing hypotheses

		Original Sample (Beta)	Sample Mean (M)	Standard Deviation (Stdev)	T Statistics (|O/Stdev|)	P Values	Decision On Acceptance
H1	Perceived Ease of Use -> Virtual Mode of Hiring	0.431	0.428	0.052	8.271	0	Supported
H2	Perceived Ease of Use -> Perceived Usefulness	0.577	0.578	0.047	12.257	0	Supported
H3	Perceived Usefulness -> Virtual Mode of Hiring	0.537	0.537	0.046	11.611	0	Supported
H4	Virtual Mode of Hiring-> Cost Effectiveness	0.844	0.844	0.022	38.689	0	Supported
H5	Virtual Mode of Hiring -> Environment & Health Safety	0.663	0.671	0.059	11.319	0	Supported
H6	Virtual Mode of Hiring > Geographical Outreach	0.826	0.826	0.033	24.96	0	Supported

Table 6. Model's predictive ability

Variables	R Square	Adj- R^2	Q^2 (=1-SSE/SSO)
CE	0.712	0.711	0.562
EHB	0.44	0.438	0.261
GO	0.683	0.681	0.599
PU	0.333	0.33	0.279
VMH	0.741	0.739	0.49

4.3 Hypotheses testing

All six Hypotheses are tested at the 1% significance level with T-statistics and P Values.

Perceived Ease of use βeta is 0.431, and P-value is 0.00, indicating that Perceived simplicity of use (PEU) has a strong beneficial effect on the utilization of virtual mode of Hiring (VMH) in order to support H1. Perceived utility (βeta =0.577, P=0.00), perceived ease of use has a substantial positive effect on perceived Usefulness, indicating perceived ease of use favourably affects perceived Usefulness (βeta is 0.537; P-value is 0.00) has a large significant effect overuse of virtual mode of hiring Thus, the findings adequately support the H2 and H3 hypotheses.

Three constructs were introduced to the technology acceptance model after carefully analyzing the prior literature and considering the use of Technology as a Green Human Resource practice. Constructs for cost-effectiveness, environmental/health benefits, and geographic outreach were added to the TAM model in response to the current pandemic situation. Actual use of virtual mode has a considerable positive effect on cost-effectiveness (β = 0.844, p=0.00), supporting alternative hypothesis H4. Actual use of Technology also has a favourable effect on environmental/health benefits (βeta is 0.663, P-value is 0.00) and geographic outreach (βeta is 0.826, P-value is 0.00), supporting both H5 and H6.

As per Table 6. The predictive force of the proposed Model is checked in this work by processing a blindfolding approach in SMART-PLS Hair et al. [23, 24] proposed that R2 values of 0.75 and 0.50 for predictive variables be considered significant and moderate, respectively. Chin [25] defined a moderate influence as an R2 value of 0.33. All model constructs in this study provide values solely within a prescribed range of Hair et al. The Q-square statistic indicates a model's predictive relevance, and values more than zero imply that the values have been well rebuilt and the Model has predictive significance. The Q-square of this Model is shown in the above table, indicating that it has a high predictive capacity.

5. CONCLUSIONS

This Research paper attempted to validate the Technology Acceptance Model (TAM) in the context of using the Virtual mode for Hiring (VMH) in the COVID-19 era, thereby contributing to the field of Technology and human resources field. This study confirms that the Technology Acceptance Model accurately depicts users' behaviour toward Technology, and studies are available that demonstrate this. This research intends to ascertain the influence of virtual Hiring on cost-effectiveness, environmental/health advantages, and geographic outreach as a non-TAM variable. The fit of TAM to the full sample was tested in this Paper, as well as the extent to which an external variable can explain variation in PEOU and PU. It is the most appropriate structures that are consistent with the current scenario that is added to the Model. The Partial Least Square -Structural Equation Model was used to test the Hypothesis.

This Paper accepted each of the six hypotheses. Most firms have begun utilizing internet platforms to recruit new employees for various positions. The findings of the Paper indicate that PU and PEU are critical TAM components that have an immediate influence on the actual use of the virtual Hiring mode, resulting in environmental/health benefits, cost-effectiveness, and a broader geographic reach. PEU and PU are determinants of users' willingness to embrace virtual platforms for processing hiring during this pandemic period. Each of these predictors has a favourable and statistically significant effect. The effect size suggested that the virtual mode of employment has the greatest effect on cost-effectiveness of utilization, and this mode of Hiring became more popular following the government's nationwide lockdown. Geographical Reach is the next significant effect of such technology use. The majority of organizations used Zoom to conduct interviews and make final selections. Environmental concern was part of the Model as an outcome variable because it was found to be significant in relation to such web-based platforms.

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NOMENCLATURE

PEU	Perceived Ease of Use
CE	Cost effectiveness
EHS	Environment and Health Safety,
GO	Geographical Outreach
PU	Perceived Usefulness
VMH	Virtual Mode of Hiring