INFLUENCE OF ENVIRONMENTAL FACTORS ON ADOPTION OF HR ANALYTICS IN SELECTED INDUSTRIES AT CHENNAI

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ABSTRACT

HR can speak the language of statistics through other function numbers in the organization when analyzed with the right analytics tools. So now the focus in business has shifted from numbers reflecting HR performance to numbers reflecting HR impact. The research tries to identify influence of environmental factors on adoption of HR analytics in selected industries at Chennai. The data was collected from 50 HR managers/Executives through snowball sampling technique. It is found that the tool availability and data availability of environmental factors significantly influences adoption of HR analytics. The analysis identified that the tool availability and data availability of environmental factors significantly influences organizational performance. Finally, the research discovered that here is influence of adoption of HR analytics on organizational performance. Hence, it is concluded that organizations should implement HR Analytics with a full-time commitment. With this the HR Analytics department will make the entire process faster and easier and improve the organization's performance.

KEYWORDS: Tool Availability, Data Availability, Environmental Factors, Adoption of HR Analytics and Organizational Performance.

INTRODUCTION

In this modern business world, every small and big organization is trying to assess and understand the impact of data analytics, digital networking and its different functions. Data analytics is a boon to the HR function. HR can speak the language of statistics through other function numbers in the organization when analyzed with the right analytics tools. So now the focus in business has shifted from numbers reflecting HR performance to numbers reflecting HR impact. With this, HR has started to speak the language of line operations on the table. Hence, HR gets recognition for HRA's contribution. HRA creates new strategies to add value to the business and reduce costs. HRA makes HR valuable by being proactive.

Despite all the benefits HRA can bring to the organization, only a few organizations are actively involved in using HR Analytics. According to TJinsite, 90% of Indian companies believe that predictive analytics will be a suitable tool for the future. But only 7% of Indian companies use predictive analytics. HR behind such a wide gap becomes necessary to bridge this gap. Several studies have found that the influence of environmental factors (social influence, tool availability, data availability and fear appeals) on the adoption of HR analytics is high. All the studies related to this have been done worldwide. There are few studies at Indian level. This study is conducted to identify the impact of environmental factors such as tool availability and data availability on adoption of HR analytics.

REVIEW OF LITERATURE

Hassan Fehan and Osaro Aigbogun (2022) discovered that performance of construction firms was influenced by both institutional pressures and external environmental factors.

Ezenekwe Chikaodili (2020); Nnamani meka and Ajagu Helen Eyuche (2014) discovered that firms' productivity was influenced by technological environment and economic environment.

Alamelu, et al. (2017) discovered that the overall HRA adoptability was not influenced by self efficacy, social influence, quantitative efficacy and performance outcome & effort.

Adeoye, et al. (2012) discovered that organisational performance was influenced by the external business environment.

Harshita Agarwal, John Paul Raj (2022) discovered that there is influence of data availability and tool availability on adoption of HR Analytics in IT and ITES industry.

Susmita Ekka and Punam Singh (2022) discovered that there is positive significant impact of effort expectancy and social influence on behavioral intention to use HR analytics.

Batuol Ramzi Ali Alsuliman and Musaddag Elrayah (2021) discovered the positive relationship between HR analytics adoption and the factors such as data availability, tool availability and self-efficacy.

Hettiarachchi, et al. (2020) discovered that there is influence of environmental factors such as data availability and tool availability on the organizational adoption of HR analytics.

Organizational performance was influenced by HR analytics (McCartney, et al. 2020; Fernandez and Gallardo-Gallardo, 2020; Marler and Boudreau, 2017).

Zeidan, et al. (2020) organizational effectiveness was influenced by HR analytics. Lakshmi and Pratap (2016) have identified that HR Analytics influences organizational outcomes.

Margherita (2020); Minbaeva (2018); Huselid (2018) have identified that organizational performance was influenced by HR analytics.

Ezenekwe Chikaodili (2020) discovered that firms' productivity was influenced by technological environment and economic environment.

RESEARCH GAP

There has been a lot of research done on the adoption of HR analytics and environmental factors in worldwide, but very few researches have been done in the Indian context. Similarly, the environmental factors and adoption of HR analytics has not been addressed in selected industries in Chennai.
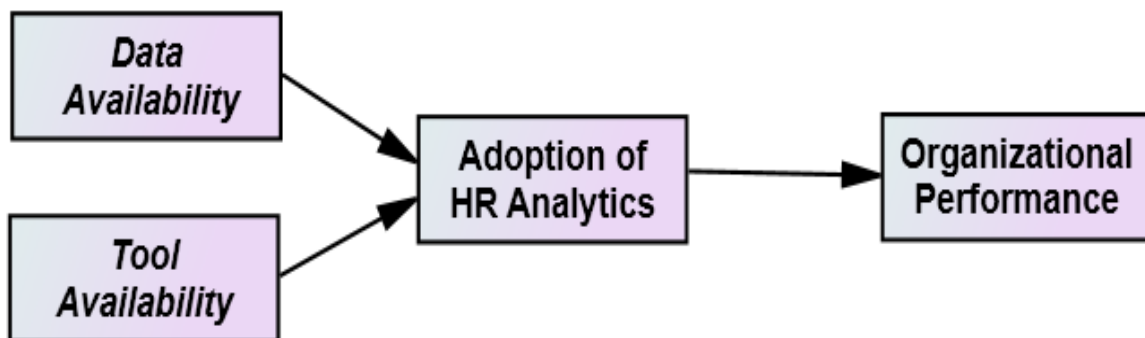
FRAMEWORK

Figure 1: Conceptual framework

NEED FOR THE STUDY

The findings of this study will help industries and policy makers. This study will help identify the influence of environmental factors on adoption of HR analytics in selected industries at Chennai. Findings from this study can help policy makers' adoption of HR analytics, increase their organizational performance. Findings from this study will help industries to adopt policies and processes to enable transparent, quick and efficient decision making for providing a better work environment with strong focus on performance to enhance employees' job satisfaction and reduced turnover intention.

OBJECTIVES
➢ To discover the influence of environmental factors on adoption of HR analytics.
➢ To assess the influence of adoption of HR analytics on organizational performance.
HYPOTHESES
➢ There is no influence of environmental factors on adoption of HR analytics.
➢ There is no influence of adoption of HR analytics on organizational performance.

MATERIALS AND METHODS

In order to explore the influence of environmental factors on adoption of HR analytics a descriptive research design is employed by the researcher. Data is collected from HR managers/Professionals in selected industries at Chennai through a standardized questionnaire. This descriptive research design is employed to explore the relationship between environmental factors, adoption of HR analytics and organizational performance.

QUESTIONNAIRE DESIGN

Table 1: Questionnaire Construction

S.No.	Variable	Items	Author
1	Demographic Profile	11	---
2	Environmental factors	20	
3	Adoption of HR Analytics	29	Developed by the Researcher
4	Organizational Performance	25	

Data is collected from HR managers/Professionals in selected industries at Chennai through a well-designed questionnaire. The questionnaire construction for this study is divided into four parts. The first part of the questionnaire is arranged in such a way to know the demographics profile of the HR managers/Professionals, the second part is environmental factors, the third part is adoption of HR analytics and the fourth part is organizational performance. Except first part, all the four sections are constructed with multiple choice questions. The first part is set up as a category and the other three as a measuring scaling technique.

RELIABILITY

Pilot study was done to confirm that the results of this study questionnaire are reliable. The questionnaires are verified by involving fifty HR managers/Professionals in selected industries at Chennai. Based on the HR managers/Professionals' opinion, some changes are made in the questionnaire as suggested by the HR managers/Professionals. Cronbach's alpha tool is employed to test the reliability of the research variables. All the variables of this questionnaire are above 0.70 which shows that it is reliable. This means that the set of questionnaire has a high reliability value. Based on this result, it is statistically recommended that the questionnaire set can be implemented for final analysis.

Table 2: Reliability of the research

S.No.	Variable	Items	Cronbach's Alpha
1	Environmental factors	20	0.86
2	Adoption of HR Analytics	29	0.91
3	Organizational Performance	25	0.89

SAMPLING TECHNIQUE

In this study, snowball sampling technique has been applied to collect the primary data from HR managers/Professionals in selected industries at Chennai. In this way 50 HR managers/Professionals are approached to collect the primary data in Chennai.

STATISTICAL TOOLS

Path analysis is used to estimate model by probing the relationship between environmental factors, adoption of HR analytics and organizational performance. The researcher has employed the path analysis for impact of environmental factors on organizational performance with respect to adoption of HR analytics.
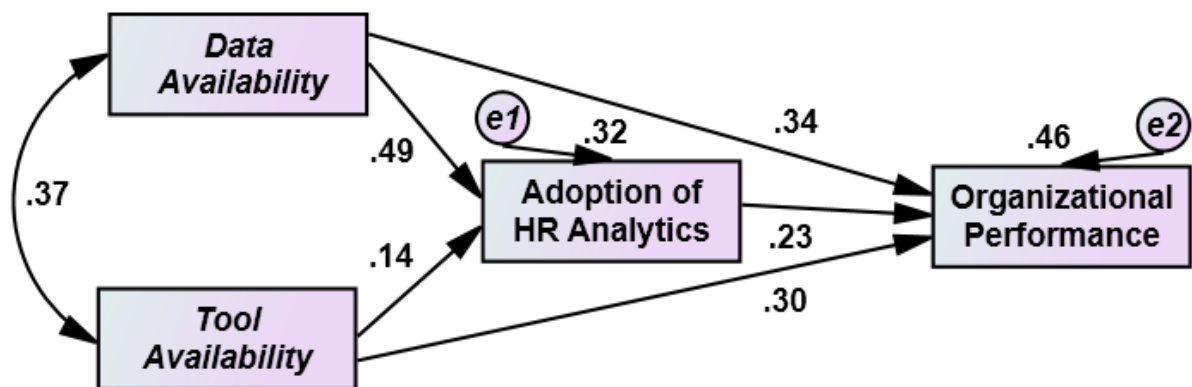
RESULTS AND DISCUSSION

Figure 2: Influence of environmental factors on adoption of HR analytics

Table 3: Model Fit Indication

S.No.	Model Fit Indicators	Calculated Values in the Analysis	Recommended Values (Premapriya, et al. 2016)
1	Chi-Square	5.32	---
2	p	0.057	> 0.050
3	GFI	0.989	
4	AGFI	0.917	
5	CFI	0.987	> 0.90
6	NFI	0.988	
7	RMS	0.037	< 0.080
8	RMSEA	0.021	

Source: Primary data

The table 3 presents the mode summary of influence of environmental factors on adoption of HR analytics. The path model presented, along with mode summary to verify the model fitness. The Chi-square statistic is 5.32 with p> 0.05. The table illustrates the model fit statistics such as RMSEA, RMR, NFI, CFI, AGFI and GFI. RMR and RMSEA are within than the recommended limit i.e., RMR and RMSEA is less than 0.08 (Indra, Balaji and

Velaudham, 2020; Velaudham and Baskar, 2016). NFI, CFI, AGFI and GFI are within than the recommended limit i.e., NFI, CFI, AGFI and GFI is greater than 0.90 (Kantiah Alias Deepak and Velaudham, 2019; Velaudham and Baskar, 2015). All the model fit statistics imply a better model fit (Premapriya, et al. 2016; Victor and Velaudham, 2020).

Table 4: Regression Weights

DV		IV	Estimate	S.E.	C.R.	Beta	p
Adoption of HR Analytics	<---	Data Availability	0.376	0.025	14.998	0.494	0.001
Adoption of HR Analytics	<---	Tool Availability	0.139	0.032	4.393	0.145	0.001
Organizational Performance	<---	Tool Availability	0.527	0.052	10.113	0.299	0.001
Organizational Performance	<---	Data Availability	0.473	0.047	10.151	0.339	0.001
Organizational Performance	<---	Adoption of HR Analytics	0.418	0.060	6.960	0.229	0.001

Source: primary data

H₁: Data availability of environmental factors significantly influences adoption of HR analytics.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 14.998; β value is 0.494 and p value is significant. The result shows that adoption of HR analytics was influenced by data availability of environmental factors at 49.4 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the data availability of environmental factors significantly influences adoption of HR analytics. Harshita Agarwal, John Paul Raj (2022); Batuol Ramzi Ali Alsuliman and Musaddag Elrayah (2021); Hettiarachchi, et al. (2020) have discovered that there is influence of data availability and tool availability on adoption of HR Analytics.

H₂: Tool availability of environmental factors significantly influences adoption of HR analytics.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 4.393; β value is 0.145 and p value is significant. The result shows that adoption of HR analytics was influenced by tool availability of environmental factors at 14.5 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the tool availability of environmental factors significantly influences adoption of HR analytics. Harshita Agarwal, John Paul Raj (2022); Batuol Ramzi Ali Alsuliman and Musaddag Elrayah (2021); Hettiarachchi, et al. (2020) have discovered that there is influence of data availability and tool availability on adoption of HR Analytics.

H₃: Tool availability of environmental factors significantly influences organizational performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 10.113; β value is 0.299 and p value is significant. The result shows that organizational performance was influenced by tool availability of environmental factors at 29.9 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the tool availability of environmental factors significantly influences organizational performance. Adeoye, et al. (2012) discovered that organisational performance was influenced by the external business environment.

H₄: Data availability of environmental factors significantly influences organizational performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 10.151; β value is 0.339 and p value is significant. The result shows that organizational performance was influenced by data availability of environmental factors at 33.9 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the data availability of environmental factors significantly influences organizational performance. Adeoye, et al. (2012) discovered that organisational performance was influenced by the external business environment.

H₅: Adoption of HR analytics significantly influences organizational performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 6.960; β value is 0.229 and p value is significant. The result shows that organizational performance was influenced by adoption of HR analytics at 22.9 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the adoption of HR analytics significantly influences organizational performance. Margherita (2020); Minbaeva (2018); Huselid (2018) have identified that organizational performance was influenced by HR analytics.

FINDINGS

➢ It is found that the tool availability and data availability of environmental factors significantly influences adoption of HR analytics. Harshita Agarwal, John Paul Raj (2022); Batuol Ramzi Ali Alsuliman and Musaddag Elrayah (2021); Hettiarachchi, et al. (2020) have discovered that there is influence of data availability and tool availability on adoption of HR Analytics.

➢ The analysis identified that the tool availability and data availability of environmental factors significantly influences organizational performance. Adeoye, et al. (2012) discovered that organisational performance was influenced by the external business environment.

➢ Finally, the research discovered that here is influence of adoption of HR analytics on organizational performance. Margherita (2020); Minbaeva (2018); Huselid (2018) have identified that organizational performance was influenced by HR analytics.

RECOMMENDATION

➢ In order to improve the concept of human resource function in the organization, the organization should develop methods and ways of analyzing the dimensions of organizational and gender type.

➢ Organizations should create a favorable environment for low employee resistance to HR Analytics and a sign of high employee acceptance. Organizations should make sure to implement HR analytics on a large scale.

➢ HR professionals should implement HR Analytics with a full-time commitment. With this the HR Analytics department will make the entire process faster and easier and improve the organization's performance.

CONCLUSION

The research tries to identify influence of environmental factors on adoption of HR analytics in selected industries at Chennai. The data was collected from 50 HR managers/Executives through snowball sampling technique. It is found that the tool availability and data availability of environmental factors significantly influences adoption of HR analytics. The analysis identified that the tool availability and data availability of environmental factors significantly influences organizational performance. Finally, the research discovered that here is influence of adoption of HR analytics on organizational performance. Hence, it is concluded that organizations should implement HR Analytics with a full-time commitment. With this the HR Analytics department will make the entire process faster and easier and improve the organization's performance.

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