

## **Human resource management approaches in the VUCA world: In focus the workforce management challenges for non-profit organisations.**

Author 1

### **Abstract**

Business organisations have been facing recurrent dilemma of mitigation of workforce related challenges and improving work productivity simultaneously. While human resource management is theoretically presented as the centre piece of issues related to employee management, the field of organisational management has become replete with theoretical descriptions. However, there is a dearth of factual understanding of processes that form the edifice of efficacious HR strategies. The current research adopted a primary quantitative approach towards investigation of the impact of internal strategy, diversity and agility of workforce, innovation-oriented policies, and technology advancement on HR's ability to effectively manage workforce challenges. The study included 200 participants (employees and HR managers), and statistical tests were conducted to decipher the associations. It was found that all the four variables mentioned previously have significant impact on management of workforce challenges.

### **Introduction**

Contemporary professional organisations have become tremendously competitive which pressurises them to enhance their workforce capabilities in order to sustain a competitive edge in the market (Sharma et al., 2020). Management of workforce has become synonymous with better work efficiency, growth-oriented trajectory, and internal harmony in work culture of the organisations. In the context of workforce management in modern economic backdrop, scholars, policy makers, human resource managers, and organisational leaders have started to look for new strategies for leadership development (Parthanadee et al., 2014). This has gain considerable momentum with the emergence of the Covid-19 pandemic, which has thwarted business growth exponentially, taking the global business world to a standstill. Sharma et al.

(2020) asserted that in such a scenario, it becomes imperative for organisations to efficiently manage their internal work culture through conducive workforce management techniques, so that required level of employee motivation, team work, and growth orientation could be sustained at the face of external impediments.

As businesses shut down and individuals were incarcerated, a whole transformation in how companies dealt with the challenges of the VUCA environment we live in emerged, implying that human coarseness is far more rooted in investigating any ambiguity of endurance (Caligiuri et al., 2020). VUCA stands for the framework comprised of Volatility, uncertainty, complexity and ambiguity, which draws upon the theories of leadership as propounded by Bennis and Nanus, who emphasised on the volatile, uncertainty, complexity, and ambiguity of the situation to describe particular leadership characteristics that would produce optimal results. As Dohney, Nagali, and Weig (2012) noted nearly ten years ago, a rising tide of unpredictability, vulnerability, and business complication is irritating business sectors and changing the concept of competition; experts and business pioneers have since long attested that we now live in a 'VUCA world.' Given the fast changes occurring on friendly, monetary, political and mechanical fronts in the current climate, COVID-19 pandemic has arisen as an ideal illustration of a VUCA landscape (Sharma, 2020).

The current study aims to analyse the different approaches of human resource management within the framework of VUCA intended to overcome workforce management challenges for non – profit organisations. In light of this stated aim, the research is circumscribed by the following research objectives:

- To examine the HRM approaches within VUCA world for workforce management
- To analyse the VUCA's HRM approaches to overcome the workforce management challenges in non-profit organisations
- To assess the impact of VUCA approaches on optimal outcomes of workforce management solutions in non-profit organisations

## Literature review

According to Das (2015), the VUCA world reflects all of the challenges that today's businesses face in remaining serious following trend-setting innovations, shifted plans of action, a lack of time to respond to changes, and the necessity to redesign executive structures. Whereas, according to Jain (2019), instability is caused by rapid innovation improvement, vulnerability is caused by irregular plans of action, and complexity is caused by multi-faceted openness. Uncertainty is aided by the continual growth of the demand for development. In a difficult business climate, the need for interior HR process adjustment is critical for effective corporate operations (Sharma & Sharma 2019). Authoritative leaders and administrators are concentrating on gaining a practical edge rather than a significant overall benefit (Hamadamin & Atan, 2019). Analysts reveal this inclination, implying that a practical upper hand is more appropriate for the VUCA world because it implies that an organisation succeeds in selecting and holding human talents, has a successful internal strategy, and exhibits monetary development (Almada & Borges, 2018). Kimura (2019) believe that in order to flourish, cutting-edge organisations must be lean or rely on a collaborative effort of empowered abilities.

Hypothesis 1: HR's effective internal strategies have a significant impact on overcoming workforce management challenges in a VUCA environment

Hamid (2019) believes that the development of variety, enlisting, and determination of abilities for advancement, execution of executives, training, and development are some of the useful HR approaches for gaining an edge in a VUCA atmosphere. Kimura (2019) and Jarrah et al. (2019) also support this idea: modern organisations should be dexterous or rely on the combined effort of engaged abilities to thrive. As a result, HR executives' job is to ensure that employees are passionate about enhancing an organisation's success through superb execution, proactivity, advancement, and adaptability (Holbeche, 2015). They can help associations gain a sustainable advantage in this circumstance. Employee involvement in advancing a company's success through high-quality performance, proactivity, innovation, and adaptability must be ensured by HR management.

Hypothesis 2: Promotion of diversity and agility has a significant impact on mitigation of workforce management challenges in a VUCA environment

Another particular disruption that will likely impact the way we work in the future as a result of the pandemic is telecommuting or having the option to do so (Wronsky and Cohen 2020). It also accelerates the digitalisation cycle at many organisations, forcing managers and representatives to stay up to date on relevant data and innovation. The well-being of employees has also become a critical consideration that managers must attend to with great care (Gandhi et al., 2019). The prohibition of direct connection is prompted by the Covid-19. As a result, administrators are faced with the challenge of developing new working techniques to ensure representative well-being without interfering with corporate operations (Murugan, 2020). VUCA creates both tough and promising conditions for firms to grow. Some businesses take advantage of specific disruptions and shifts in consumer behaviour to establish new business opportunities. The rise of Uber and Airbnb serve as examples of how a VUCA environment might foster innovative business ideas (Vey et al., 2017). These inconvenient developments compete directly with traditional hotels and cab services, causing a new mechanical disruption that alters the landscape and employing a strategy based on assistance rather than ownership.

Innovation has been defined as "a panacea for a wide variety of difficulties that companies encounter, including ensuring benefit, increasing revenue, maintaining a loyal customer base, and increasing effectiveness" (Do et al., 2018). The organisational researchers correctly argue that development has been a substantial source of advantage. This is due to the fact that changes in products or services are thought to be critical if a business is to survive in today's turbulent market (Adner, 2012). Using this logic, we argue that advancement is a must for organisations to accelerate their assembly and administration delivery to achieve widespread execution all at once in order to control disruption in the outside environment.

Hypothesis 3: HRM strategic focus on innovation-oriented policy has a significant impact on mitigation of workforce management challenges in a VUCA environment.

Technology advancements have become the building block of contemporary business organisations. It is projected that by 2040, artificial intelligence, advanced data analytics,

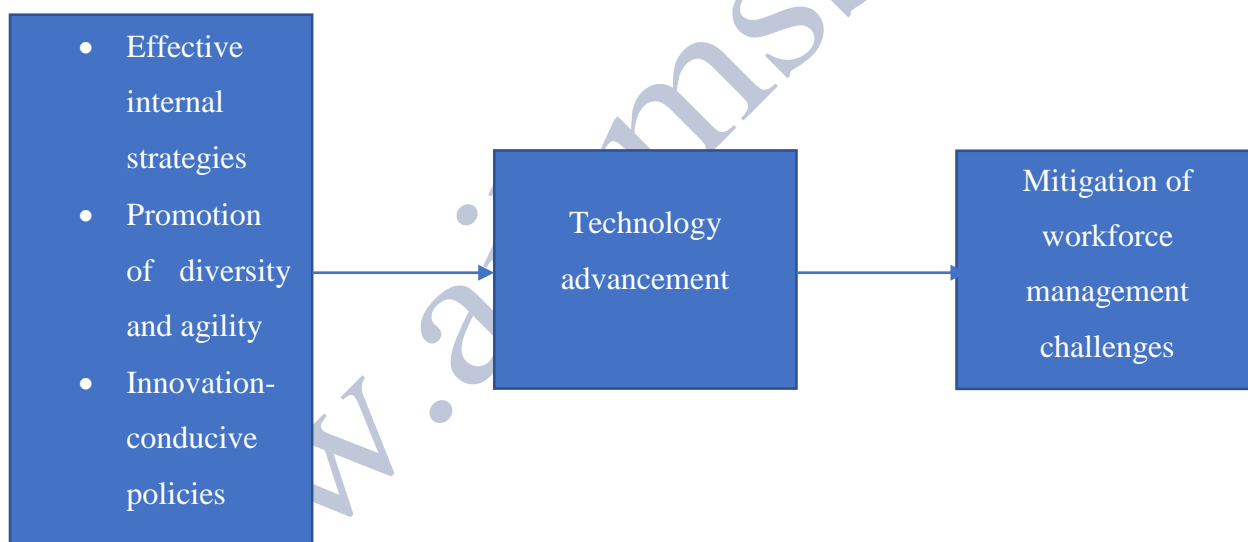
robotics, and blockchain would have significantly changed the way in which modern organisations manage their workforce (Hinrichs et al., 2019). The change has already started to become observable as many organisations are moving towards a skill-mix approach of employee management instead of a staff-mixed approach that gained fame in the 1970s and 1980s. However, in order to gain and maintain sustainable market competitive edge, it is imperative for the organisations to not just limit their innovative approach to inclusion of certain technologies in their day-to-day work (Dubois et al., 2019). Instead, technology is only accepted by group of people when it shares their existing values. Meanwhile, it is propounded by Lee et al. (2013) that acceptance of new technology within an organisation depends upon efficacy of internal culture and organisational policies to make the technology more attractive than its predecessor.

In contrast to the prior assertion, when organisations attempt for incorporate new technology through a top-down approach, it is found that technology acceptance rates remain low (Ward, 2013). Meanwhile, it is also found that without an efficacious policy framework that is oriented towards ultimate welfare of the workforce, technological advancement underperforms to realise its intended objectives. Researchers and professionals have been increasingly interested in investigating HR and labour force leaders as the market for high-performing and high-potential talent becomes more "proficient" in many organisations, top talent becomes more expensive and more rapidly lost to competitors (Gobakhloo et al., 2012). Because conventional sources of competitive advantage no longer distinguish organisations in the global marketplace, effectively responding to globalisation necessitates adaptability, speed, and development, as well as competitive ability. The findings from literature suggest that labour force analytics may significantly improve the ability of organisational leaders and administrators to achieve their functional and critical goals by utilising a more capable labour force (Huselid et al., 2018). To take advantage of these opportunities, HR and line managers will need to nurture a thorough understanding of how the labour force contributes to the company's critical success—and this understanding should be represented in the labour force metrics and investigations they generate and transmit. Viable frameworks of thinking and diagnostics that are oriented towards a design/system thinking approach, according to Levenson's (2018) article, are critical for the planning and execution of compelling labour force inquiry initiatives. Viable frameworks

thinking and diagnostics, according to Levenson's (2018) article, are critical for the planning and execution of compelling labour force inquiry initiatives. According to Levenson, labour force investigation must be really evolved after a careful assessment of the fundamental concerns affecting business pioneers, as well as an understanding of the extent to which these issues are rooted in social credits, the labour force, or elsewhere.

Hypothesis 4: Technology advancement has a significant mediating effect on HRM strategies in mitigation of workforce management challenges.

### Conceptual framework



### Theoretical framework

There are a myriad of theories, frameworks, and models addressed towards HRM practices. However, in the context of the current research, the two distinct theoretical dimensions found are cultural dimension and technology adoption. In this respect, as propounded by Cacciato et al. (2014), Trompenaars and Hamden-Turner's dimensions of organisational culture highlight those policies of HR that shape organisation's culture can be categorised in seven distinct classes; universalism vs particularism, individualism vs

communitarianism, specific vs diffuse, neutral vs emotional, achievement vs ascription, sequential time vs synchronous time, and internally directed vs outward directed.

As elaborated in the literature review, modern HR practices towards management of workforce challenges largely depend on their ability to incorporate technology and innovation in a conducive manner, which could improve employee's efficiency and motivation. In this respect, technology acceptance model (TAM) is a holistic guidance framework, which highlights factors that influences users' decision to adopt a new technology (Zhang et al., 2019). The two main factors are perceived usefulness (PU) and perceived ease of use (PEOU).

### **Methodology**

Research philosophy refers to the fundamental mental guiding principal for the researcher that the researcher depends upon to form the conceptual basis of the research. In this respect, there are two distinct types of research philosophies; interpretivism and positivism (Bryman, 2016). While interpretivism relies upon interpretivist perspective of research, positivism emphasises on the factual knowledge attainment. In the current study, the researcher has utilised a positivist philosophy because it was helpful in expounding on the theoretical and factual significance of the variables involved. This approach is also helpful in formulating objective and testable theories from careful observation of a phenomenon. Meanwhile, the research was mainly formed on a quantitative research design. Along with a positivist philosophy, quantitative design helped in identification of testable variables, which was the centre piece of hypothesis formation step. Quantitative design facilitated the researcher in designing the other components of the research in such a manner that they are focused towards decided variables of the study, and thus minimise biases and external errors. Quantitative design, therefore, helped in assessing workforce management challenges in an objective manner, and identified those variables that could be objectively changed to attain positive changes in the workforce management problems.

The step of data collection holds significant importance with respect to outcomes of the research. Theoretically, there are two kinds of data collection methods; primary data collection and secondary data collection (Chu and Ke, 2017). Since the current research investigates a

novel confluence of HR strategies, technology advancement, and mitigation of workforce management challenges in a VUCA environment, it was imperative that the research adopts a primary approach for data collection, as it does not depend upon existing information. The size of sample population was taken as 200, comprising of employee and HR managers through convenience sampling technique. Participants were distributed questionnaires based on 5-point Likert scale, in which they were asked about different aspects of the variables involved and their interdependencies. Stata statistical software was used for data analysis, in which descriptive analysis, correlation and regression analysis were used to investigate the correlation of independent and dependent variables. Meanwhile, Mediating Effect (Maximum Likelihood Model) was used to decipher the impact of technology advancement as the mediating variable.

## Results

### *Descriptive Statistics*

*Table 1 - Descriptive Statistics*

Variable	Obs	Mean	Std. Dev.	Min	Max
Diversity and Agility	200	1.311667	0.760614	0	3.333333
Innovative strategies	200	1.32	0.948619	0	4
Technological Advancement	200	1.623333	0.995417	0	4
Workforce management issues in a VUCA environment	200	1.478333	0.993321	0	4

Descriptive statistics is considered as vital step before conducting any statistical or inferential analysis. However, the above table indicate about the statistical values of the data that have been gathered through using Likert scale. Referring to the diversity and agility, its mean value is estimated as 1.31 which implies that average respondents are inclined toward agree. Similarly, the mean value of innovative strategies is determined as 1.32 which denotes that



average respondents are inclined towards agree. In contrary, the mean value of technological advancement is determined as 1.62 which implies that average respondents are inclined toward neutral. Lastly, the mean value of Workforce management issues in a VUCA environment is found to be 1.47 which denotes that average respondents are inclined toward agree. Further referring to the above table, standard value of diversity and agility, innovative strategies, technological advancement, and Workforce management issues in a VUCA environment is identified in the range of 0.76 to 0.99 which implies that mean value of all these variables are expected to deviate toward agreement.

### ***Correlation Analysis***

*Table 2 - Correlation Analysis*

	Diversity & Agility	Innovative strategies	Technological Advancement	Workforce management issues in a VUCA environment
Diversity and Agility	1			
Innovative strategies	0.8299* 0.000	1		
Technological Advancement	0.8122* 0.000	0.9608* 0.000	1	
Workforce management issues in a VUCA environment	0.7816* 0.000	0.9661* 0.000	0.9810* 0.000	1

The Pearson coefficient values in the above table, shows about the association between variables. However, referring to the workforce management issues in a VUCA environment with respect to diversity and agility, its coefficient values is estimated as 0.781. In addition the coefficient value of technological advancement is identified as 0.8122, and coefficient value of innovative strategies is determined as 0.829. Although, these aforementioned values indicate that workforce management issues in a VUCA environment (dependent variable) has a strong

and positive association with diversity and agility, innovative strategies, and technological advancement (Independent variables).

### Regression Analysis

Workforce management issues in a VUCA environment a	Coeff.	S	t	> t	95% Conf.	Interval]
	*	0				-
	**	-.02779				- 0.0736
Diversity and Agility	0.12842	2	4.62	.000	0.18323	1
	*	0				0
	**	0.3871	.04691		0	.47964
Innovative strategies	14	7	.25	.000	.294588	1
	*	0				0
	**	0.7042	.04275		0	.78852
Technological Advancement	07	3	6.47	.000	.619891	2
		0				0
	-	.02601				- .04392
Cons	0.00737	1	0.28	.777	0.05867	7
R-squared	0.982	Adjusted R-squared			0.981	

\*Significant at 10%; \*\*Significant at 5%; \*\*\*Significant at 1%

The regression analysis has also been used to evaluate the influence of management strategies in VUCA environment. From the table, it can be noted that innovative strategies and technological advancement has a significant and positive influence on workforce management issues in non-profit organisation in a VUCA environment as the coefficient value is estimated as 0.38 and 0.070, and  $P = 0.000 < 0.01$ . In contrary, the coefficient value of diversity and agility is estimated as -0.12 which implies that diversity has a negative and significant influence on workforce management issues in non-profit organisation in a VUCA environment.

**Mediating Effect Model (Maximum Likelihood Method)**

*Agility and Diversity*

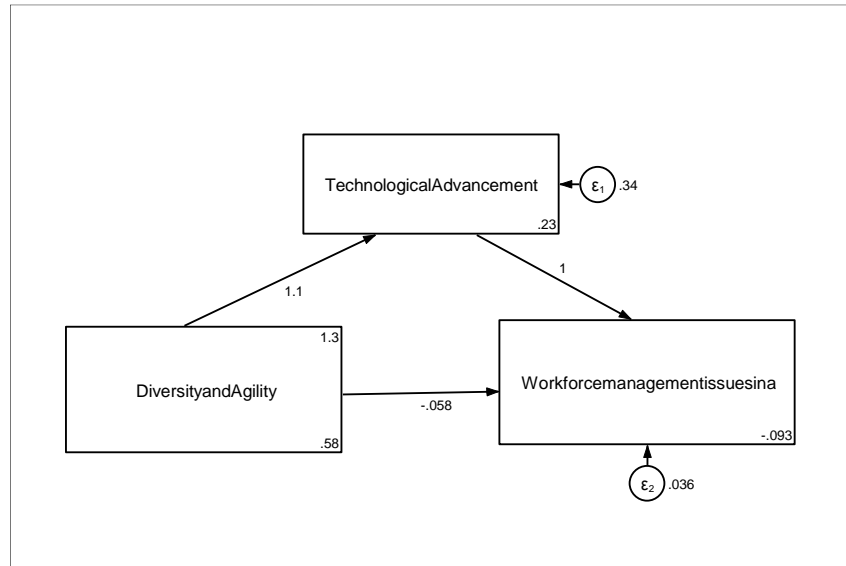


Figure 1- Technological Advancement Mediating Effect with Diversity and Agility

	Coef.	Std. Err.	t	> z	5% Conf. Interval	Lower	Upper
<b>Technological Advancement &lt;-</b>							
Diversity and Agility	*1.06288	.05399	19.69	.000	(.957063	.91687	
_cons	*0.22918	.08181	2.8	.005	(.068842	.389533	
<b>Workforce management issues in a &lt;-</b>							
Technological Advancement	*1.01504	.023227	3.7	.000	(.969524	.1060573	

Diversity and Agility	*-	0	.	(	-	0
	0.05813	.030398	1.91	.056	0.1177	.001452
_cons	**	0	.	(	-	-
	*-0.09319	.027396	3.4	.001	0.14688	0.03949
var(technological Advancement)	0.	0			0.	0
	335588	.033559			275858	.40825
var(workforce management issues in a nonprofit organisation)	0.	0			0.	0
	036211	.003621			029766	.044051
*Significant at 10%; **Significant at 5%; ***Significant at 1%						

From the above table, in direct effect it can be seen that diversity and agility has a significant influence on the technological advancement. In addition, the coefficient value of workforce management issues with technological advancement is estimated as 1.05 and its p value = 0.000 < 0.01, and the coefficient value of workforce management issues with diversity and agility is estimated as -0.05 and its p value = 0.056 < 0.01. Thus it implies that technological advancement has partial significant mediating effect in relationship of workforce management issues and diversity and agility.

*Innovative Strategies*

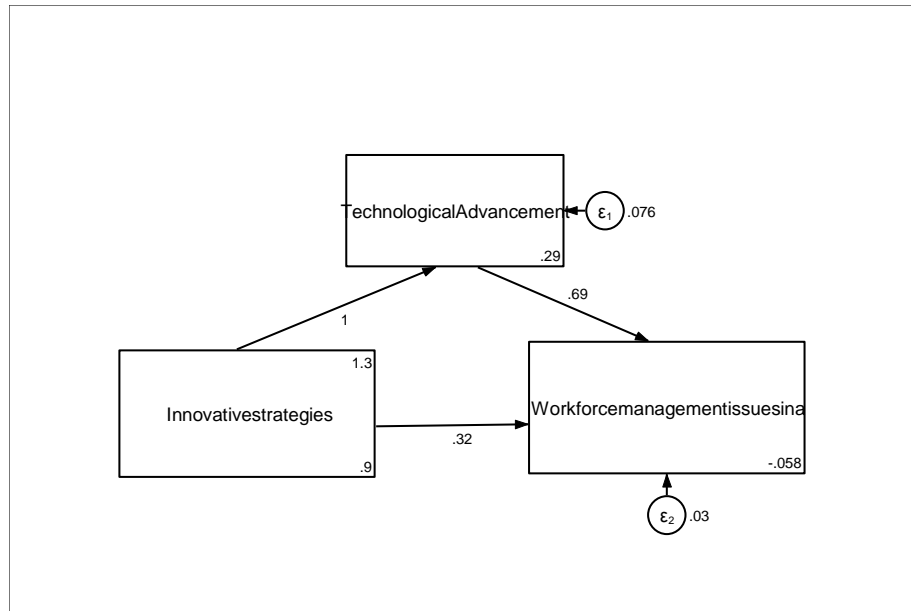


Figure 2 - Technological Advancement Mediating Effect with innovative Strategies

	Coef.	Std. Err.	z	> z	5% Conf.	Interval]
<b>Technological Advancement</b>						
<- Innovative strategies	** *1.00824	0 .020561	4 9.04	( .000	0. 967941	1 .048539
_cons	** *0.292457	0 .033394	8 .76	( .000	0. 227006	0 .357907
<b>Workforce management issues in a &lt;-</b>						
Technological Advancement	** *0.685365	0 .044366	1 5.45	( .000	0. 598409	0 .772321
Innovativ strategies	** *0.320653	0 .046555	6 .89	( .000	0. 229407	0 .411899

	**	0	-	(	-	-
_cons	*-0.0575	.024645	2.33	.02	0.10581	0.0092
<hr/>						
Var						
(technological	0.0	0			0.	0
Advancement)	75706	.007571			062231	.092098
var(workforce	0.0	0			0.	0
management issues ina)	29803	.00298			024499	.036256

\*Significant at 10%; \*\*Significant at 5%; \*\*\*Significant at 1%

From the above table, in direct effect it can be seen that innovation strategies has a significant influence on the technological advancement as its coefficient value is identified as 1.0 and  $P = 0.000 < 0.01$ . In addition, the coefficient value of workforce management issues with technological advancement is estimated as 0.68 and its p value =  $0.000 < 0.01$ , and the coefficient value of workforce management issues with innovative strategies is estimated as -0.31 and its p value =  $0.000 < 0.01$ . Thus it implies that technological advancement has partial significant mediating effect in relationship of workforce management issues and innovative strategies.

### Discussion and Hypothesis Assessment Summary

Through statistical analysis, it was found that internal strategies of the HR hold significant influence on workforce challenge management. Careful examination of literature indicates a similar outcome, however, the studies of Almada and Borges (2018) and Jain (2019) did not found significance of this extent. This could be attributable to particularities of the selected participant population and / or influence of inherent organisational culture on the internal strategies. Hence, hypothesis 1 was found to be correct. Further analysis also proven hypothesis 2 to be correct, as it was found that in modern organisations, policies oriented towards diversity and agility. However, study of Holbech (2015) also indicated that over-emphasis on diversity and agility are not guaranteed to produce positive workforce outcomes. For this to work, internal culture of the organisation first needs to be conducive for agile work, otherwise, a diverse workforce could also face substantial challenges in terms of mode of working. This is the reason behind the negative value of statistical relation found between diversity and agility, and workforce challenge management in the context of the current research. However, it is to be noted at this point that this relationship is highly context based, because as explicated previously, efficacy of diversity and agility in a workplace depends upon

mind-set of employees and other internal cultural factors, which determine whether a firm basis for a diversification of workforce exists or not.

Hypothesis 3 was also found to be correct as there is a significant impact of innovation-oriented policy and workforce management. This result is in line with findings of some contemporary observations of (Sart, 2014)). Meanwhile, hypothesis 4 was also found to be correct, as technology advancement was found to be playing significant mediating role between HR strategies and workforce challenge management.

Table 3. Hypothesis summary

S. No.	Hypothesis	Status
1.	HR's effective internal strategies have a significant impact on overcoming workforce management challenges in a VUCA environment	Accepted
2.	Promotion of diversity and agility has a significant impact on mitigation of workforce management challenges in a VUCA environment	Accepted
3.	HRM strategic focus on innovation-oriented policy has a significant impact on mitigation of workforce management challenges in a VUCA environment.	Accepted
4.	Technology advancement has a significant mediating effect HRM strategies in mitigation of workforce management challenges.	Partially Accepted

### Conclusion and future implications

This research was conducted to analyse the impacts of HR practices in VUCA environment within the context of non-profit organisations. Through literature analysis, the

researcher found that in a VUCA world, internal strategies of the HR, diversity and agility of the workforce are some extensively researched subjects in this domain. However, in non-profit organisations, higher work efficiency is now dependent upon adoption of innovative policies and technologies. Through statistical analysis, all the four hypotheses were found to be correct. Effective internal strategies, diversity and agility, and innovation-oriented policies have a significant positive impact on workforce challenge management, with high significance of technology advancement as mediating the relationship.

Since the current research mainly relied upon statistical data, future research could focus on an interview-based approach in which a narrower set of participants could be included. Moreover, each of the factors could also be independently investigated to further expound on the nature of their association with workforce challenge management in VUCA environment.

### References

- Almada, L., & Borges, R. (2018). Sustainable competitive advantage needs green human resource practices: A framework for environmental management. *Revista de Administração Contemporânea*, 22, 424-442.
- Cacciattolo, K. (2014). Understanding organisational cultures. *European scientific journal*.
- Das, J. (2015). A brave new world of challenges and opportunities. *NHRD Network Journal*, 8(3), 51-57.
- Do, H., Budhwar, P. S., & Patel, C. (2018). Relationship between innovation-led HR policy, strategy, and firm performance: A serial mediation investigation. *Human Resource Management*, 57(5), 1271-1284.
- Dubois, C. A., & Singh, D. (2019). From staff-mix to skill-mix and beyond: towards a systemic approach to health workforce management. *Human resources for health*, 7(1), 1-19.
- Gandhi, L. (2017). Human Resource Challenges in VUCA and SMAC Business Environment. *ASBM Journal of Management*, 10(1).



- Ghobakhloo, M., Hong, T. S., Sabouri, M. S., & Zulkifli, N. (2012). Strategies for successful information technology adoption in small and medium-sized enterprises. *Information*, 3(1), 36-67.
- Hacker, J., vom Brocke, J., Handali, J., Otto, M., & Schneider, J. (2020). Virtually in this together—how web-conferencing systems enabled a new virtual togetherness during the COVID-19 crisis. *European Journal of Information Systems*, 29(5), 563-584.
- Hamid, H. (2019). The Strategic Position of Human Resource Management for Creating Sustainable Competitive Advantage in the VUCA World. *J. Hum. Resour. Manag. Labor Stud*, 7, 1-4.
- Holbeche, L. (2015). *The Agile Organization: How to build an innovative, sustainable and resilient business*. Kogan Page Publishers.
- Huselid, M. A. (2018). The science and practice of workforce analytics: Introduction to the HRM special issue. *Human Resource Management*, 57(3), 679-684.
- Jarrah, M. A. A., Karadsheh, L., Naser, M., & Alhawari, S. (2019). The influence of human resources management processes (HRMPs) to achieving sustainable competitive advantage. In *Human performance technology: Concepts, methodologies, tools, and applications* (pp. 1433-1451). IGI Global.
- Kimura, T. (2019). The Implementation Challenge in Strategic Management: Hitachi's Transformation & Post-Transformation Experience. *Journal of Strategic Management Studies*, 10(2), 103-107.
- Murugan, S., Rajavel, S., Aggarwal, A. K., & Singh, A. (2020). Volatility, uncertainty, complexity and ambiguity (VUCA) in context of the COVID-19 pandemic: Challenges and way forward. *International Journal of Health Systems and Implementation Research*, 4(2), 10-16.
- Parthanadee, P., & Buddhakulsomsiri, J. (2014). Production efficiency improvement in batch production system using value stream mapping and simulation: a case study of the roasted and ground coffee industry. *Production Planning & Control*, 25(5), 425-446.

- Sart, G. (2014). The impacts of strategic talent management assessments on improving innovation-oriented career decisions. *The Anthropologist*, 18(3), 657-665.
- Schröder-Hinrichs, J. U., Song, D. W., Fonseca, T., Lagdami, K., Shi, X., & Loer, K. (2019). Transport 2040: Automation, technology, employment-The future of work. *World Maritime University, Transport, 2040*.
- Sharma, S., & Singh, T. (2020). VUCA World and its impact on Human Resource Function: A roadmap for HR Leaders to navigate the current challenging times. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(7), 10219-10227.
- Ward, R. (2013). The application of technology acceptance and diffusion of innovation models in healthcare informatics. *health Policy and Technology*, 2(4), 222-228.
- Zhang, Y., Luo, Y., Zhang, X., & Zhao, J. (2019). How green human resource management can promote green employee behavior in China: A technology acceptance model perspective. *Sustainability*, 11(19), 5408.