

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/331114977>

# Role of human resource flexibility in organisational performance: a study of Indian IT firms

Article · January 2017

---

CITATION

1

READS

410

1 author:



Ajith KUMAR Vadakki Veetil

Skyline University College

6 PUBLICATIONS 15 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Digitalization [View project](#)

---

## **Role of human resource flexibility in organisational performance: a study of Indian IT firms**

---

V.V. Ajith Kumar

Skyline University College,  
University City of Sharjah,  
P.O. Box 1797, Sharjah, UAE  
Email: ajithkumarvv@gmail.com

Snigdha Rai\*

Symbiosis Institute of Business Management – Pune,  
Symbiosis Knowledge Village,  
Gram Lavale via Sus Road, Tal Mulshi, Pune, 412115, India  
Email: snigdharai@sibmpune.edu.in

\*Corresponding author

**Abstract:** Present study examines the direct relationship between HR flexibility and organisational performance. Also this study explores the moderating role of ethical culture in the relationship of HR flexibility and organisational performance. Data was collected via a questionnaire survey of 126 employees working in 65 major IT companies of Bangalore. The results indicate that all three dimensions of HR flexibility (skill flexibility, behavioural flexibility and HR practice flexibility) were significantly positively correlated with organisational performance (HR-related performance and financial performance). Results of moderated regression analysis reveal the significant moderating role of ethical culture in HR flexibility and HR performance relationship. Limitations of the study and implications of the results are also discussed.

**Keywords:** human resource flexibility; skill flexibility; behavioural flexibility; HR practice flexibility; ethical culture; organisational performance; CFA; moderated regression analysis.

**Reference** to this paper should be made as follows: Ajith Kumar, V.V. and Rai, S. (2017) 'Role of human resource flexibility in organisational performance: a study of Indian IT firms', *Int. J. Indian Culture and Business Management*, Vol. 14, No. 3, pp.306–325.

**Biographical notes:** V.V. Ajith Kumar is currently working in Skyline University College in Sharjah as an Assistant Professor. He received his PhD in the area of Industrial Relations. He has been teaching organisational behaviour, human resource management, business ethics and leadership to students of management both at graduate and postgraduate level. He believes that his core values are trust and teamwork.

Snigdha Rai is working as an Assistant Professor in Symbiosis Institute of Business Management, Pune. She received her PhD in Psychology from Banaras Hindu University. She had made publications in reputed Indian and international journals. Her research interest areas are leadership, personality, workplace ethics and psychometric testing.

## **1 Introduction**

Organisations are now-a-days function in an environment which is changing rapidly due to new and unforeseeable events turning out from several factors such as technological advances, increasing consumer consciousness of quality, rapid technology transfer, globalisation and low cost competition (Hitt et al., 1998; Ghoshal, 2015, Kaur and Aggarwal, 2014). These circumstances have compelled managers to make a paradigm change in directing their organisations where timeframe for strategic decisions are shorter. The increased demands on organisations have subsequently called for a corresponding staff of flexible and capable individuals (van den Beukel and Molleman, 1998; Way et al., 2015). In this context human resource flexibility has attracted a great deal of attention by researchers in the last few years. According to Sanchez (1995), flexibility is the capability of the organisation to react to various demands from its competitive environment. According to Ngo and Loi (2008), human resource flexibility (HR flexibility) is an important aspect of organisational flexibility and it focuses on adapting employee attributes and HR system to rapidly changing environmental conditions. Empirical research on organisational culture also proved that culture is an important source of competitive advantage for firms because it is the only organisational resource which is valuable rare and difficult to reproduce (Barney, 1986; Wang et al., 2012). Organisational culture is also considered as control and exchange mechanism to manage workforce effectively (Wilkins and Ouchi, 1983; O'Reilly et al., 1991). Essentially in today's world of severe competition where organisations are collapsing because of unethical practices followed by them to capture the market, another source of competitive advantage can come from ethical culture (Huhtala et al., 2013). In this context we assume that ethical culture can play an important role in HR flexibility and organisational performance relationship. It is worth noting that flexible HR systems supported by high ethical culture will lead to high organisational outcomes. In the following section of the paper we first present the definition of human resource flexibility and then we discuss the impact of human resource flexibility on organisational performance and later we will discuss the moderating role of ethical culture in the HR flexibility and organisational performance relationship.

## **2 Literature review**

Human resource flexibility is defined as an organisational capability and competence developed out of individual skills and behaviours and implemented through human resource practices (Bhattacharya et al., 2005). Wright and Snell (1998) developed a framework of human resource flexibility consisting of three different dimensions namely; flexibility of skill, behaviour and HR practices. Skill flexibility refers to two attributes; the number of possible alternative uses to which employee skills can be applied and how individuals with diverse skills can be quickly redeployed. This idea is similar to that of functional flexibility which implies that employees are able to work on multiple tasks and under different circumstances (van den Berg and van der Velde, 2005). Behaviour flexibility is defined as the availability of broad range of behavioural scripts among employees. It helps them to adapt to the situational demands while maintaining similarity

of responses by different members to likewise perceived situations. According to Wright and Snell (1998) flexibility of HR practices represents the extent to which they can be adapted and applied across a variety of situations and how quickly the practices can be resynthesised, reconfigured and redeployed. In sum, in the present study we consider three components in the definition of human resource flexibility; skill flexibility, behaviour flexibility and flexibility of HR practices. Barney (1991) also suggested that a firm's resource or capabilities might generate sustainable competitive advantage if it possesses attributes like value, rarity, inimitability and non-substitutability. Human resource flexibility is one capability by which an organisation can develop and integrate with other areas for improving the overall organisational performance. According to the model developed by Tracey et al. (2012), the firms high commitment work system will have a direct influence on the flexibility of HR system, as well as climate perceptions about commitment and performance. HR flexibility and climate will in turn influence employees evaluative attributions regarding the effectiveness of the firms HR system, which will in turn affect employee commitment and performance and ultimately, firm level performance outcomes.

Bhattacharya et al. (2005) conducted an empirical study that has explored the construct of human resource flexibility and its relationship with performance. In their study they found that flexibility of employee skill, employee behaviours and HR practices represent critical sub dimensions of HR flexibility and are related to superior firm performance. Ngo and Loi (2008) studied the relationship between human resource flexibility, adaptability culture and organisational performance. In their study they found adaptability culture as an intervening variable between HR flexibility and firm performance. The study was conducted in multinational corporations of Hong Kong and it was also found that there is a positive effect of adaptability culture on HR related and market related performance. Ketkar and Sett (2009) in their study found that a certain set of ambidextrous HR practices constitutes a distinct dimension of HR flexibility. Another important finding of this study is the fact that HR practices have both direct and indirect effects on firm level HR outcomes. Beltrán-Martín et al. (2008) using data from 226 Spanish companies found that HR flexibility mediated the relationship between high performance HR practices and a perceptual measure of customer service performance.

### *2.1 Employee skill flexibility and organisational performance*

According to Wright and Snell (1998), "employee skill flexibility refers to the number of possible alternative uses to which employee skills can be applied and how individuals with diverse skills can be redeployed quickly". In simple words if employees of an organisation is said to have a high degree of employee skill flexibility it indicates that employees have a broad variety of skills and they can perform different job duties as per the changing needs and demands of the organisation. Bhattacharya et al. (2005) contended that this type of flexibility could be a source of competitive advantage for firms since these broad-based skills are valuable and difficult to imitate or replicate. An organisation may develop skill flexibility through job rotation, cross functional teams and project-based work assignments which will help in development of broad-based skills which are complex and difficult to imitate. This suggests that the higher the level of organisations skill flexibility the more likely employees are to exhibit higher performance.

## *2.2 Employee behavioural flexibility and organisational performance*

Behavioural flexibility is the capacity of people to adapt to changing situations or to exhibit appropriate behaviour repertoires under different situations (Lepine et al., 2000; Pulakos et al., 2000). Behavioural flexibility creates values because the organisation is spared the costs of non-adjustments and changed situations. Adaptable individuals adjust to the complexities and uniqueness of changed situations (Lepine et al., 2000). Secondly, at organisational level behaviour flexibility is important because it enables the organisation to deal with a variety of situations and facilitates change implementation. Having employees with enhanced learning capabilities means that organisation does not need to recruit people with new attributes to address external and internal environmental changes. Garvin (1993) suggested that organisations that are greater at learning are defined as “creating, acquiring, transferring knowledge and modifying its behaviour to reflect new knowledge and insights which can enhance performance”.

## *2.3 HR practice flexibility and organisational performance*

Flexibility of HR practices is defined by Bhattacharya et al. (2005) as “the extent to which firms HR practices can be adopted and applied across a variety of situations or across various sites or units of the firm and the speed with which these adaptation and application can be made”. Flexibility of HR practices will lead to build a capability in the organisation that is difficult to imitate and non-substitutable. This will lead to achieve strategic consistency across different departments and enhances the responsiveness to environmental changes. HR practice flexibility creates value in several ways such as organisation is more readily able to adapt its HR practices to changed situations, induce flexible employee behaviours and allows the organisation to offer similar HR practices across different units achieving consistency. These characteristics are related to competitive advantage and thus improve organisational performance.

## *2.4 HR flexibility, ethical culture and organisational performance*

Organisational culture was identified as a potential element in organisational success in many decades ago itself (Peters and Waterman, 1982; Schein, 1985). Organisational culture is generally developed by a founder or leader who articulates particular ideas and values as a vision, philosophy or business strategy. These ideas and values become institutionalised through implementation of management practices. Lau and Ngo (2004) found that HR practices that emphasise extensive training, performance-based reward and team development help to create an organisational culture that promotes innovation. Trevino (1990) developed the ethical culture construct and proposed direct influence of ethical culture on individual conduct and overall organisational performance. Trevino (1990) defined ethical culture as a subset of organisational culture representing a multidimensional interplay among various formal and informal systems of behavioural control that are capable of promoting either ethical or unethical behaviour. Formal cultural systems include such factors as policies, leadership, reward system and training programmes. Informal cultural systems include factors such as peer behaviour and ethical norms. By definition culture is the shared beliefs of an organisation’s members hence the ethical culture of an organisation would be reflected in the beliefs about the ethics of an organisation which are shared by its members (Sivakumar and Rao, 2009).

The purpose of including ethical culture as a moderator in the present study is the belief that it can play a significant role in HR flexibility and organisational performance relationship. We assume that prevalence of ethical culture will make the relationship between various dimensions of HR flexibility and organisational performance stronger. The impact of HR practices on ethical culture and vice-versa is already empirically tested and established in the literature (Jackson and Schuler, 1995; Lau and Ngo, 2004). Similarly the linkage between organisational culture and firm performance is also demonstrated in many empirical studies (Wilderom et al., 2000; Chan et al., 2004). Organisational culture is also studied as moderator in many empirical studies (Ngo and Loi, 2008; Tett and Guterman, 2000; Wang et al., 2012; Annamalai and Ramayah, 2013). Ethical culture is already proved as significant predictor of low emotional exhaustion, morale, high engagement and organisational commitment (Martin and Cullen, 2006; Huhtala et al., 2011). On the similar line we suggest that the variability in the predictive power of HR flexibility may be accounted for the moderating impact of ethical culture in HR flexibility and organisational performance relationship. We further argue that the existence of strong ethical culture in organisations will strengthen the positive impact of HR flexibility on organisational performance. Ethical culture also promotes the clarity or concrete expectations regarding employee behaviour and transparency of organisational system and policies. Hence it is logical to hypothesise that ethical culture will support to reduce the ambiguity and conflicts arising due to flexible HRM systems and will enhance the HR flexibility and organisational performance relationship.

### **3 Rationale of the study**

It is clearly evident from the literature review that there are very few studies conducted to examine the role of human resource flexibility on organisational performance, especially in Indian context. To this date, there are no empirical studies conducted to examine the moderating role of ethical culture on HR flexibility and organisational performance relationship. For the present study, sample will be taken from Indian IT companies who had survived and continue growing despite of global financial crisis and the role of flexible systems are playing key role in their survival and growth (Pimpa, 2013, Pathak and Pandey, 2013). Based on the literature review, the objectives of the present study is as follows:

- to examine the relationship between employee skill flexibility and organisational performance
- to examine the relationship between employee behavioural flexibility and organisational performance
- to examine the relationship between HR practice flexibility and organisational performance
- to examine the role of ethical culture as a moderator in the relationship between HR flexibility and organisational performance.

## 4 Method

### 4.1 Sample and procedure

A questionnaire-based survey was conducted in major IT companies in India. To cover as many IT companies as possible, it was decided to choose not more than two respondents from each firm. In studies conducted by Ketkar and Sett (2009), Batt (2002) and Worren et al. (2002) single respondent design has already been used. To ensure the response from maximum number of company and to address the scope of the present research, two-respondent design has been used. In each company mid level and senior level manager with a minimum of three years of work-experience was identified for the study. Total 200 questionnaires were distributed and 126 completely filled questionnaires were received, which represents relatively high 63% response rate. The final sample represents 65 major Indian IT companies of which indicate a fair representation. All the companies included in the present study have code of ethics specified in their organisations. Final sample consist of total 126 respondents having an average work experience of 7.5 years.

### 4.2 Measures

#### 4.2.1 HR flexibility

In the present study scale developed by Bhattacharya et al. (2005) and Ketkar and Sett (2009) was used to measure HR flexibility and its related dimensions. The three factors of HR flexibility construct are; skill flexibility, behavioural flexibility and HR practice flexibility. Both scale utilised the three factors of the HR flexibility construct conceptualised by Wright and Snell (1988). This scale was also used in other empirical studies conducted in the area of HR flexibility (Ngo and Loi, 2008). Overall this scale consists of 27 items and all items were rated on five-point Likert rating scale (1 = strongly disagree to 5 = strongly agree).

##### a *Employee skill flexibility*

All the seven items of skill flexibility dimension of HR flexibility scale of Bhattacharya et al. (2005) were retained and two more items used by Ketkar and Sett (2009) to measure skill flexibility in their study is also included. Total nine items were used in the study to assess the employee skill flexibility. Sample item includes *our employees are capable of performing a broad range of jobs available in our firm.*

##### b *Employee behavioural flexibility*

Total 11 items were used to assess behavioural flexibility in the present study. Four items have been taken from the HR flexibility scale of Bhattacharya et al. (2005) and seven items were taken from behavioural flexibility sub scale of Ketkar and Sett (2009). Sample item includes *people in our firm show flexibility in their behaviour in order to meet customer requirement.*

c *HR practice flexibility*

All the seven items of skill flexibility dimension of HR flexibility scale of Bhattacharya et al. (2005) were retained in the present study. Sample item includes *our firm modifies its HR system to keep pace with the changing competitive environment.*

#### 4.2.2 *Organisational performance*

In this study perceptual measures were utilised to assess the organisational performance at two levels; human resource related performance and financial performance. Perceptual measures are successfully used in many empirical studies to assess organisational performance (Ngo and Loi, 2008; Ketkar and Sett, 2009; Khatri, 2000; Deanne et al., 2004). In the present study total seven items were used to assess organisational performance. All items were rated on five-point Likert-type rating scale (1 = very poor to 5 = very good).

a *Human resource-related performance*

Respondents were asked to rate the performance of their organisation as compared to industry average in the areas of:

- 1 morale of employees
- 2 retention of employees
- 3 employment relations
- 4 managing employee grievances.

b *Financial performance*

Respondents were asked to rate the financial performance of their firm when compared to industry average over the last two years in the area of:

- 1 growth of sales revenue
- 2 profitability
- 3 overall financial performance.

#### 4.3.3 *Ethical culture*

The modified version of ethical culture questionnaire (ECQ-M) developed by Trevino et al. (1995) based on earlier theoretical work (Trevino, 1990) was used in the present study. The modification involved rewording or deleting items that referred to an ethics code. In the original research, these were found to be problematic because many organisations do not have a formal ethics code. The modified ECQ (ECQ-M) consist of 18 items. All items were rated on five-point Likert-type rating scale (1 = absolutely false to 5 = absolutely true). Sample item includes *ethical behaviour is rewarded in this organisation.*

## **5 Results**

In order to test the validity of the instrument both exploratory factor analysis (EFA) and confirmatory factor analysis method used. EFA was employed to test the construct validity of the tool used for data collection. Confirmatory factor analysis was used to validate the results of EFA. Hierarchical multiple regressions were used to test the moderating role of ethical culture in HR flexibility and organisational performance relationship.

### *5.1 Exploratory factor analysis*

An EFA (principal axis factoring) with promax rotation was conducted. For factor interpretation, a threshold value of 0.50 or higher on a specific factor and a loading of no higher than 0.45 on other factors was confirmed (Igbaria et al., 1995). Variables should generally have communalities of greater than 0.50 was retained in the analysis (Hair et al., 2006). Evaluation of the Eigen values greater than 1.0 suggested six factors. In sum, 30 items are extracted and six factor solutions was established for further analysis (refer to Table 1). The reliability of the items were tested with the help of Cronbach alpha which ranges from .945 to .687 (refer to Table 1).

### *5.2 Confirmatory factor analysis*

A model fit of six-factor measurement model that included three dimensions of HF flexibility (skill flexibility, behavioural flexibility and HR practice flexibility), ethical culture and two dimensions of performance (HR performance and financial performance) was assessed with the help of confirmatory factor analysis. As reported in Table 2 the fit indices of our proposed model indicates reasonable good fit. As suggested by Hair et al. (2006) it is essential to test the convergent as well as discriminant validity. Convergent validity indicates the extent to which indicators of a particular construct converge or share a high proportion of variance in common whereas discriminant validity indicates the extent of which a construct is truly distinct from other construct. As suggested by Hair et al. (2006) convergence validity should be tested by computing composite reliability and average variance extracted (AVE). In our study the composite reliability values of all six constructs which depict the degree to which the indicators specify the latent construct range from 0.730 to 0.94, which is more than the recommended value of 0.7 recommended by Hair et al. (2006). AVE reflects the overall amount of variance in the indicators accounted for by the latent construct and AVE of .05 or higher is a good rule of thumb suggesting convergence. The constructs used in the present study achieved AVE in the range of 0.51 to 0.79, which exceeded the recommended value of 0.5 recommended by Hair et al. (2006).

**Table 1** Results of EFA and internal reliability

Items	Skill flexibility	Behavioural flexibility	HR practice flexibility	Ethical culture	HR performance	Financial performance	Cronbach alpha
Our employees are capable of performing a broad range of jobs available in our firm	.482						.814
Our employees pick up new skills quickly	.863						
Our employees can put new skills to use quickly	.939						
Our firm can shift employees to different jobs when needed	.557						
People in our firm show flexibility in their behaviour in order to meet customer requirements		.579					.687
People in our firm change their work habits in response to changes in the competitive environment		.606					
Our employees respond to changing situations fast		.504					
Flexibility of our HR practices helps us to adjust to changing demands of the environment			.696				.945
Our firm modifies its HR system to keep pace with the changing competitive environment			.845				
Our HR practice parameters are designed so that they quickly adjust to changes in business conditions			.896				
We make frequent changes in our HR practices to align the HR system with changing work requirements			.730				
Changes in our HR practices enable us to remain competitive in the market			.914				
Our HR practices adjust meaningfully to changed business scenarios			.870				
Our HR practices, as a whole, are flexible			.860				

Notes: Total variance explained: 62.31%; extraction method: principal axis factoring

**Table 1** Results of EFA and internal reliability (continued)

Items	Skill flexibility	Behavioural flexibility	HR practice flexibility	Ethical culture	HR performance	Financial performance	Cronbach alpha
The top managers of this organisation represent high ethical standards				.561			.900
Top managers of this organisation regularly show that they really care about ethics				.708			
People of integrity are rewarded in this organisation				.690			
Top managers of this organisation guide decision making in an ethical direction				.771			
My co-workers in this organisation are highly ethical				.824			
Management in this organisation disciplines unethical behaviour when it occurs				.630			
Ethical behaviour is rewarded in this organisation				.673			
Top managers of this organisation are models of ethical behaviour				.835			
The average employee in this organisation accepts organisational rules and procedures regarding ethical behaviour				.658			
Morale of employees					.672		.836
Retention of employees					.813		
Employment relations					.790		
Managing employee grievances					.518		
Growth of sales revenue						.883	.921
Profitability						.878	
Overall financial performance						.894	

Notes: Total variance explained: 62.31%; extraction method: principal axis factoring

**Table 2** Results of confirmatory factor analysis-fit indices

	<i>Measurement model</i>	<i>Single factor model</i>	<i>Recommended value</i>
CMIN/DF	1.43	3.86	< .3
GFI	.799	.450	≥ 0.8
AGFI	.797	.368	≥ 0.8
RMR	.063	.126	≥ 0.08
CFI	.932	.529	≥ 0.9
TLI	.924	.494	≥ 0.9
IFI	.934	.534	≥ 0.9
RMSEA	.059	.151	≥ 0.08

*Source:* Hair et al. (2006)

Subsequently, the discriminant validity was tested in the present study which can be examined by comparing the squared correlations between the constructs and square root of the AVE for a construct as suggested by Fornell and Larcker (1981). As shown in Table 3, the squared correlations for each construct is less than the square root of the AVE of the construct which clearly ascertain discriminant validity of all six constructs used in the study. Discriminant validity can also be examined by comparing the values of AVE with maximum shared variance (MSV) and average shared variance (ASV). In order to achieve significant discriminant validity the value of AVE should be greater than MSV and ASV (Hair et al., 2006). As per our findings of the study all the constructs report greater AVE than MSV and ASV which demonstrate substantial discriminant validity of the constructs (refer to Table 3). Additionally, discriminant validity was also tested by assembling all 30 items of the six variables to one single factor. The Harman's one-factor test was performed and the results displayed a poor model fit (refer to Table 2). In total, the measurement model demonstrated adequate model fit as well as convergent validity and discriminant validity.

### 5.3 Data aggregation

Since response on all variables was taken from the individuals and they have been aggregated at the firm level, therefore intra-class correlation coefficients ICC(1), ICC(2) and also within-group interrater agreement ( $r_{wg(j)}$ ; James et al., 1984) were used to justify aggregation to higher levels of analysis. Across all the six variable used in the present study, the ICC(1) value ranged from .38 to .65 which is above the recommended value of .12 (James, 1982). Glick (1985) recommended the ICC(2) value to be more than .60. In the present study the ICC(2) value of all the six variables are greater than .65. Lastly, within-group agreement  $r_{wg(j)}$  (James et al., 1984) estimates ranged from .65 to .92.

**Table 3** Convergent and discriminant validity of constructs

	Composite reliability	AVE	MSV	ASV	1	2	3	4	5	6
1 Skill flexibility	0.892	0.581	0.162	0.122	0.762					
2 Behavioural flexibility	0.730	0.461	0.361	0.242	0.363	0.679				
3 HR practice flexibility	0.937	0.711	0.445	0.251	0.356	0.601	0.843			
4 HR performance	0.846	0.573	0.445	0.328	0.402	0.586	0.667	0.757		
5 Financial performance	0.944	0.797	0.268	0.161	0.323	0.366	0.284	0.518	0.893	
6 Ethical culture	0.892	0.511	0.424	0.241	0.289	0.488	0.490	0.651	0.466	0.715

#### 5.4 Descriptive statistics

Table 4 displays means, standard deviations and bivariate correlations among the variables. It is evident from the results of correlation that all dimensions of human resource flexibility are significantly positively correlated with each other and also with the two dimensions of organisational performance; human resource related performance and financial performance.

**Table 4** Descriptive statistics and correlations

<i>Variables</i>	<i>Mean</i>	<i>S.D.</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1 Skill flexibility	3.84	.63	.305**	.344**	.284**	.410**	.334**
2 Behavioural flexibility	3.63	.93		.467**	.389**	.439**	.298**
3 HR practice flexibility	3.39	.94			.449**	.607**	.234**
4 Ethical culture	4.04	.79				.560**	.431**
5 HR performance	3.54	.80					.426**
6 Financial performance	3.98	.77					-

Notes: \*\*Correlation is significant at the 0.01 level (two-tailed)

\*Correlation is significant at the 0.05 level (two-tailed)

Source: Prepared by the author

Skill flexibility is significantly positively correlated with HR related performance ( $r = .410$ ,  $p < .01$ ) and firm's financial performance ( $r = .334$ ,  $p < .01$ ). Behavioural flexibility is significantly positively correlated with HR related performance ( $r = .439$ ,  $p < .01$ ) and firm's financial performance ( $r = .298$ ,  $p < .01$ ). Finally HR practice flexibility is also significantly positively correlated with HR related performance ( $r = .607$ ,  $p < .01$ ) and firm's financial performance ( $r = .234$ ,  $p < .01$ ).

Ethical culture is also found to be significantly positively correlated with all the dimensions of HR flexibility and two dimensions of organisational performance. It is clearly evident from Table 4 that ethical culture is significantly positively correlated with skill flexibility ( $r = .284$ ,  $p < .01$ ), behavioural flexibility ( $r = .389$ ,  $p < .01$ ) and HR practice flexibility ( $r = .449$ ,  $p < .01$ ). It is also apparent from Table 4 that there is a significant positive correlation between ethical culture and HR related performance ( $r = .560$ ,  $p < .01$ ) and financial performance ( $r = .431$ ,  $p < .01$ ). Lastly there is a significant positive correlation between HR related performance and firm performance ( $r = .426$ ,  $p < .01$ ).

#### 5.5 Moderated regression analysis

Further, moderated regression analysis is performed to examine the moderating role of ethical culture in the relationship of human resource flexibility and organisational performance. Moderated regression analysis method proposed by Baron and Kenny (1986) was utilised. Firstly all the variables were centred using the standardisation procedure proposed by Aiken and West (1991) to eliminate the problems associated with multicollinearity. Firstly mean value of for a variable was subtracted from each score of that variable and then interaction terms were created. Following this, the dependent variable was regressed on independent variable, then on moderator variable and subsequently interaction terms were entered using hierarchical regression analysis

method. As per the results it is clearly evident that ethical culture significantly moderate the relationship between skill flexibility and HR performance, behavioural flexibility and HR performance relationship and lastly between HR practice flexibility and HR Performance (refer to Table 5). The interaction term between skill flexibility and ethical culture is positive and statistically significant ( $\beta = .180$ ,  $p < .01$ ), the interaction term between behavioural flexibility and ethical culture is positive and statistically significant ( $\beta = .141$ ,  $p < .05$ ). Lastly the interaction term between HR practice flexibility and ethical culture is also positive and statistically significant ( $\beta = .175$ ,  $p < .01$ ), but ethical culture does not moderate the relationship between HR flexibility (skill, behavioural and HR practice flexibility) and financial performance (refer to Table 5).

**Table 5** Hierarchical regression analysis – ethical culture as moderator

Variables	HR performance	Financial performance
	B	B
Skill flexibility	.306**	.231**
Ethical culture	.500**	.365**
Skill flexibility X ethical culture	.180**	.002
Adjusted R <sup>2</sup>	.398	.215
F	28.60**	12.44**
Behavioural flexibility	.281**	.140
Ethical culture	.486**	.356**
Behavioural flexibility X ethical culture	.141*	-.076
Adjusted R <sup>2</sup>	.374	.191
F	25.91**	10.86**
HR practice flexibility	.481**	.052
Ethical culture	.395**	.407**
HR practice flexibility X ethical culture	.175**	.001
Adjusted R <sup>2</sup>	.487	.168
F	40.51**	9.38**

## 6 Discussion

Organisations now-a-days are bound to function in a VUCA (volatile, uncertain, complex, ambiguous) world where unprecedented events happen due to technological advances and market globalisation. In this situation demand of flexible system, policies and workforce is the need of the hour. Many other research studies conceptualised and empirically proved HR flexibility as a vital source of sustainable greater firm performance in vibrant environments (Cordery et al., 1993; Lepak et al., 2003; Bhattacharya et al., 2005; Ngo and Loi, 2008; Ketkar and Sett, 2009; Way et al. 2015). Consequently, human resource flexibility is included as job performance standard to achieve organisational excellence (Hesketh and Neal, 1999). The purpose of the present study was to empirically examine the relationship between human resource flexibility (skill flexibility, behavioural flexibility and HR practice flexibility) and organisational performance (HR performance and financial performance). Results of the present study

report the significant positive relationship between human resource flexibility and organisational performance. Therefore, all three hypotheses are accepted on the basis of obtained results.

It is suggested on the basis of obtained results that high skill flexibility leads to higher organisational performance. Skill flexibility indicates that employees are able to accomplish a large number of diverse tasks under diverse circumstances. Also less time and cost will be required to channelise employees into new jobs and responsibilities. Employees with wide range of skills and behavioural repertoires can provide a firm with options to pursue strategic alternatives when they are facilitated with appropriate HR system and process (Wright and Snell, 1988). In sum it gives strategic importance to an organisation by facilitating employee movements between jobs as the changing requirements. As per the findings of the present study behavioural flexibility is also positively related to organisational performance. Behavioural flexibility represents the greater tolerance to non-routine behaviour among employees. It is characterised by the employee readiness to adapt themselves into new job demands based on improvisation not on routine behaviour (Bhattacharya et al., 2005; Dyer and Ericksen, 2006). Behavioural flexibility in an organisation motivates employees to look for new sequence of actions in performing their daily activities and dealing with novel challenging situations. In sum, pool of employees with flexible skills and behaviours determine the strategic advantage of contemporary global organisations. As per the findings of the present study HR practice flexibility also leads to higher organisational performance. HR practice flexibility is relevant in adoption of innovative solutions in the organisation because it encourages employees to think and improvise new ideas or questions. In due course of time it also helps employees to continuously improve their pool of knowledge and motivate them to develop new processes innovation to eliminate costly and redundant steps. Human resource flexibility mobilised through the suitable human resource practices, comprise a basis of competitive advantage for any firm that is difficult to imitate and non-substitutable (Beltrán-Martín et al., 2008).

This research also examined the role of ethical culture as moderator. It was hypothesised that HR flexibility can lead to higher organisational performance only when it is supported by ethical culture. Most of the researcher believes that organisation's culture socialises people (Schein, 1985) and that ethics is an integral part of the organisation's culture (Trevino and Nelson, 1995). Therefore, building and reinforcing an ethical organisation means systematically analysing and managing all aspects of the organisation's culture so that they support ethical behaviour which in turn results in greater organisational performance. As ethical culture represents a multidimensional interplay among various formal and informal systems especially, informal systems such factors as policies, reward system and training programmes, it was hypothesised to be a significant moderator in human resource flexibility and organisational performance. It was assumed that an internal fit can be achieved by supporting HR flexibility and ethical culture both at the same time. As per the results of the present study ethical culture does play a significant moderating role in the relationship between human resource flexibility and HR performance, whereas the moderating role of ethical culture is not proved in HR flexibility and financial performance relationship Therefore the fourth hypothesis was partially on the basis of obtained results. The findings of this study is supported by another study by Wei and Lau (2010) which clearly suggest that HR flexibility has a proximal impact on employee outcomes (i.e. commitment and performance), which in turn influence more distal organisational outcomes (e.g. operational efficiency, quality

financial performance, etc.). High level of flexibility in HRM system is a unique, indigenous and hard to replicate HRM capability which can easily get translated in valuable HR outcomes like retention, grievance handling and other important employee relations issues. Our study proves that ethical culture will increase the possibility of this valuable and firm-specific organisational competency to generate organisational effectiveness.

## **7 Limitations and directions of future research**

There are some methodological limitations in this study required to be noted. Firstly, the cross sectional design used in the study makes causality difficult to determine. The observed linkages between the predictor and criterion variables should be interpreted as correlational and not necessary causal. Secondly, since our data has been collected on two respondent design, common method bias could be an issue. Third limitation of the present study is the use of perceptual measure for study variables, especially organisational performance; that is unavoidable. Fourthly, social desirability bias is also an unavoidable problem in survey research. It becomes more problematic with sensitive topics like business ethics and ethical culture (Randall and Fernandes, 1991). However, this limitation is addressed by ensuring the respondents anonymity as well as by estimating the convergent and divergent validity of the tool used in the present study. Randall and Fernandes (1991) suggested that anonymity is an important and effective way to reduce social desirability bias in ethics related surveys. Lastly, since our data were collected from major IT companies only, therefore generalisation of the finding is restricted.

With respect to future research directions, a longitudinal research with multiple respondents is required to examine the relationship of human resource flexibility with organisational performance and role of ethical culture as moderator. Lastly, there may be some other organisational factors like innovative organisational culture that may act as moderator or mediator between HR flexibility and firm performance. Therefore it is suggested to critically identify and empirically examine the role of these factors in improving the understanding the dynamism of human resource flexibility construct. The findings from this study also offer opportunities for both theoretical development and empirical assessment of other potential employee as well as organisational outcomes of HR flexibility.

## **8 Implications of the study**

Human resource flexibility represents a valuable organisational specific capability which can generate sustainable competitive advantage for an organisation. Another source of competitive advantage comes from prevailing ethical culture in an organisation. HR practices followed by the organisation plays an important role in developing and shaping ethical culture and in turn results in greater organisational performance. In the changing world flexible HR system and policies is valuable competitive asset for any organisation. Present day VUCA world calls for new skill set and behaviours, demands a deep knowledge of data, analytics and manpower modelling skills. It is therefore important for new age HR professionals to revisit the existing HR frameworks and build and modify

their repertoire of skills and apply the revised collection of skills and behaviours to emerging or current circumstances.

In the new millennium we find that there is a shift from specialisation to multi-tasking as there is a shift from the traditional industrial age to Information age as work performed in organisations by machines is replaced by computer terminals and employees work with more ideas and concepts. The emphasis is also shifting towards intellectual capital where lot of emphasis is on acquiring the right kind of people with the right kind of knowledge and skill sets which will help the organisation in achieving its goals. In this context flexibility and especially human resource flexibility is an emerging phenomenon where employees are trained for multiple skills and behavioural flexibility with respect to their work. It eventually helps in not only motivating employees but also results in better employee performance which increase the overall productivity of the organisation. In this scenario contemporary multinational organisations should focus on building systems and policies to enhance skill, behavioural and HR practice flexibility in their workforce.

## 9 Conclusions

This study contributes to the exiting growing literature on HR flexibility and its employee and organisational outcomes. As per the major findings of the present study all dimensions of HR flexibility (skill flexibility, behavioural flexibility and HR practice flexibility) play an important role in fostering the capacity of an organisation in dealing with changing customer and competitive demands, emerging market threats and opportunities. The present study makes its unique contribution by determining the moderating role of ethical culture in HR flexibility and HR performance relationship. In sum, in order to achieve greater organisational performance, organisations need to develop flexible HRM practices and an ethical culture to achieve organisational excellence.

## References

- Aiken, L.S. and West, S.G. (1991) *Multiple Regression: Testing and Interpreting Interactions*, Sage, Newbury Park, CA.
- Annamalai, C. and Ramayah, T. (2013) 'Does the organizational culture act as a moderator in Indian enterprise resource planning (ERP) projects? An empirical study', *Journal of Manufacturing Technology Management*, Vol. 24, No. 4, pp.555–587.
- Barney, J. (1986) 'Organizational culture: can it be a source of sustained competitive advantage', *Academy of Management Review*, Vol. 11, No. 3, pp.656–665.
- Barney, J.B. (1991) 'Firm resources and sustained competitive advantage', *Journal of Management*, Vol. 17, No. 1, pp.99–120.
- Baron, R.M. and Kenny, D.A. (1986) 'The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations', *Journal of Personality and Social Psychology*, Vol. 51, No. 6, pp.1173–1182.
- Batt, R. (2002) 'Managing customer services: human resource practices, quit rates and sales growth', *Academy of Management Journal*, Vol. 45, No. 3, pp.587–597.
- Beltrán-Martín, I., Roca-Puig, V., Escrig-Tena, A. and Bou-Llusar, J.C. (2008) 'Human resource flexibility as a mediating variable between high performance work systems and performance', *Journal of Management*, Vol. 34, No. 5, pp.1009–1044.

- Bhattacharya, M., Gibson, D. and Doty, D.H. (2005) 'The effects of flexibility in employee skills, employee behaviours and HR practices on firm performance', *Journal of Management*, Vol. 31, No. 4, pp.622–640.
- Chan, L.L., Shaffer, M.A. and Snape, E. (2004) 'In search of sustained competitive advantage: the impact of organizational culture, competitive strategy and human resource management practices on firm performance', *The International Journal of Human Resource Management*, Vol. 15, No. 1, pp.17–35.
- Cordery, J., Sevastos, P., Mueller, W. and Parker, S. (1993) 'Correlates of employee attitudes toward functional flexibility', *Human Relations*, Vol. 46, No. 6, pp.705–723.
- Deanne, N., Den, H. and Verburg, R.M. (2004) 'High performance work systems, organisational culture and firm effectiveness', *Human Resource Management Journal*, Vol. 14, No. 1, pp.55–78.
- Dyer, L. and Ericksen, J. (2006) 'Dynamic organizations: achieving marketplace agility through workforce scalability', *CAHRS Working Paper*, pp.6–12.
- Fornell, C. and Larcker, D.F. (1981) 'Structural equation models with unobservable variables and measurement error: Algebra and Statistics', *Journal of Marketing Research*, Vol. 18, No. 1, pp.382–388.
- Garvin, D.A. (1993) 'Building a learning organization', *Harvard Business Review*, Vol. 74, No. 4, pp.78–91.
- Ghoshal, M. (2015) 'Descriptive analysis of present quality management practices of Indian micro, small and medium enterprises', *International Journal of Indian Culture and Business Management*, Vol. 10, No. 1, pp.16–41.
- Glick, W.H. (1985) 'Conceptualizing and measuring organizational and psychological climate: pitfalls in multilevel research', *Academy of Management Review*, Vol. 10, No. 3, pp.601–616.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006) *Multivariate Data Analysis*, Pearson Prentice Hall, Upper Saddle River, NJ.
- Hesketh, B. and Neal, A. (1999) 'Technology and performance', in Ilgen, D. and Pulakos, E. (Eds.): *The Changing Nature of Performance. Implications for Staffing, Motivation, and Development*, pp.21–55, Jossey-Bass, San Francisco.
- Hitt, M.A., Keats, B.W. and DeMarie, S.M. (1998) 'Navigating in the new competitive landscape: building strategic flexibility and competitive advantage in the 21st century', *Academy of Management Executive*, Vol. 12, No. 4, pp.22–42.
- Huhtala, M., Feldt, T., Lämsä, A.M., Mauno, S. and Kinnunen, U. (2011) 'Does the ethical culture of organisations promote managers' occupational well-being? Investigating indirect links via ethical strain', *Journal of Business Ethics*, Vol. 101, No. 2, pp.231–247.
- Huhtala, M., Kangas, M., Lämsä, A.M. and Feldt, T. (2013) 'Ethical managers in ethical organisations? The leadership-culture connection among Finnish managers', *Leadership and Organization Development Journal*, Vol. 34, No. 3, pp.250–270.
- Igbaria, M., Guimaraes, T. and Davis, G.B. (1995) 'Testing the determinants of microcomputer usage via a structural equation model', *Journal of Management Information Systems*, Vol. 11, No. 4, pp.87–114.
- Jackson, S.E. and Schuler, R.S. (1995) 'Understanding human resource management in the context of organizations and their environments', *Annual Review of Psychology*, Vol. 46, No. 1, pp.237–264.
- James, L.R. (1982) 'Aggregation bias in estimates of perceptual agreement', *Journal of Applied Psychology*, Vol. 67, No. 2, pp.219–229.
- James, L.R., Demaree, R.G. and Wolf, G. (1984) 'Estimating within-group interrater reliability with and without response bias', *Journal of Applied Psychology*, Vol. 69, No. 1, pp.85–98.
- Kaur, B.P. and Aggarwal, H. (2014) 'Information system implementation failures in Indian telecommunication companies', *International Journal of Indian Culture and Business Management*, Vol. 10, No. 1, pp.84–109.

- Ketkar, S. and Sett, P.K. (2009) 'HR flexibility and firm performance: analysis of a multi-level causal model', *The International Journal of Human Resource Management*, Vol. 20, No. 5, pp.1009–1038.
- Khatri, N. (2000) 'Managing human resource for competitive advantage: a study of companies in Singapore', *International Journal of Human Resource Management*, Vol. 11, No. 2, pp.336–365.
- Lau, C.M. and Ngo, H.Y. (2004) 'The HR system, organizational culture and product innovation', *International Business Review*, Vol. 13, No. 6, pp.685–703.
- Lepak, D.P., Takeuchi, R. and Snell, S.A. (2003) 'Employment flexibility and firm performance: examining the interactive effects of employment mode, environmental dynamism and technological intensity', *Journal of Management*, Vol. 29, No. 5, pp.681–703.
- Lepine, J.A., Colquitt, J.A. and Erez, A. (2000) 'Adaptability to changing task contexts: effects of general cognitive ability conscientiousness, and openness to experience', *Personnel Psychology*, Vol. 53, No. 3, pp.563–594.
- Martin, K.D. and Cullen, J.B. (2006) 'Continuities and extensions of ethical climate theory: a meta-analytic review', *Journal of Business Ethics*, Vol. 69, No. 2, pp.175–194.
- Ngo, H.Y. and Loi, R. (2008) 'Human resource flexibility, organizational culture and firm performance: an investigation of multinational firms in Hong Kong', *International Journal of Human Resource Management*, Vol. 19, No. 9, pp.1654–1666.
- O'Reilly, C.A., Chatman, J. and Caldwell, D.F. (1991) 'People and organizational culture: a profile comparison approach to assessing person-organization fit', *Academy of Management Journal*, Vol. 34, No. 3, pp.487–516.
- Pathak, A.A. and Pandey, S. (2013) 'European vs. Indian ITES employees: a comparison of their work attitude and behaviour', *International Journal of Indian Culture and Business Management*, Vol. 6, No. 2, pp.248–256.
- Peters, T.J. and Waterman Jr., R.H. (1982) *In Search of Excellence: Lessons from America's Best-run Companies*, Harper and Row, New York.
- Pimpa, N. (2013) 'Analysis of software industry in India: local factors and global impacts', *International Journal of Indian Culture and Business Management*, Vol. 6, No. 2, pp.150–161.
- Pulakos, E.D., Arad, S., Donovan, M.A. and Plondon, K.E. (2000) 'Adaptability in the workplace: development of taxonomy of adaptive performance', *Journal of Applied Psychology*, Vol. 5, No. 4, pp.612–624.
- Randall, D.M. and Fernandes, M.F. (1991) 'The social desirability response bias in ethics research', *Journal of Business Ethics*, Vol. 10, No. 11, pp.805–817.
- Sanchez, R. (1995) 'Strategic flexibility in product competition', *Strategic Management Journal*, Vol. 16, No. 1, pp.135–159.
- Schein, E. (1985) *Organizational Culture and Leadership*, Jossey-Bass, San Francisco, CA.
- Sivakumar, N. and Rao, U.S. (2009) 'Building ethical organisation cultures: guidelines from Indian ethos', *International Journal of Indian Culture and Business Management*, Vol. 2, No. 4, pp.356–372.
- Tett, R.P. and Guterman, H.A. (2000) 'Situation trait relevance, trait expression, and cross-situational consistency: testing a principle of trait activation', *Journal of Research in Personality*, Vol. 34, No. 4, pp.397–423.
- Tracey, T.J., Allen, J. and Robbins, S.B. (2012) 'Moderation of the relation between person-environment congruence and academic success: environmental constraint, personal flexibility and method', *Journal of Vocational Behavior*, Vol. 80, No. 1, pp.38–49.
- Trevino, L.K. (1990) 'A cultural perspective on changing and developing organizational ethics', *Research in Organizational Change and Development*, Vol. 4, No. 1, pp.195–230.
- Trevino, L.K. and Nelson, K.A. (1995) *Managing Business Ethics: Straight Talk About How To Do It Right*, Wiley, New York.

- Trevino, L.K., Butterfield, K.D. and McCabe, D.L. (1995) 'Contextual influences on ethics related outcomes in organizations: rethinking ethical climate and ethical culture', paper presented at the *Annual Academy of Management Meeting*, Vancouver, BC, August 1995.
- van den Berg, P.T. and van der Velde, M.E.G. (2005) 'Relationships of functional flexibility with individual and work factors', *Journal of Business and Psychology*, Vol. 20, No. 1, pp.111–129.
- van den Beukel, A. and Molleman, E. (1998) 'Multifunctionality: driving and constraining forces', *Human Factors and Ergonomics in Manufacturing*, Vol. 8, No. 4, pp.303–321.
- Wang, H., Begley, T., Hui, C. and Lee, C. (2012) 'Are the effects of conscientiousness on contextual and innovative performance context specific? Organizational culture as a moderator', *The International Journal of Human Resource Management*, Vol. 23, No. 1, pp.174–189.
- Way, S.A., Tracey, J.B., Fay, C.H., Wright, P.M., Snell, S.A., Chang, S. and Gong, Y. (2015) 'Validation of a multidimensional HR flexibility measure', *Journal of Management*, Vol. 41, No. 4, pp.1098–1131.
- Wei, L.Q. and Lau, C.M. (2010) 'High performance work systems and performance: the role of adaptive capability', *Human Relations*, Vol. 63, No. 10, pp.1487–1511.
- Wilderom, C.P.M., Glunk, U. and Maslowski, R. (2000) 'Organizational culture as a predictor of organizational performance', in Ashkanasy, N.M., Wilderom, C. and Peterson, M.F. (Eds.): *Handbook of Organizational Culture and Climate*, pp.193–210, Sage, Thousand Oaks, CA.
- Wilkins, A.L. and Ouchi, W.G. (1983) 'Efficient cultures: exploring the relationship between culture and organizational performance', *Administrative Science Quarterly*, Vol. 28, No. 3, pp.468–481.
- Worren, N., Moore, K. and Cardona, P. (2002) 'Modularity, strategic flexibility and firm performance: a study of the home appliance industry', *Strategic Management Journal*, Vol. 23, No. 12, pp.1123–1134.
- Wright, P.M. and Snell, S.A. (1998) 'Toward a unifying framework for exploring fit and flexibility in strategic human resource management', *Academy of Management Review*, Vol. 23, No. 4, pp.756–772.