

# Innovative Behaviour of Human Resources Executives: Empirical Study of Hotel Businesses on Phuket Island as a World-Class Tourist Attraction

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**Abstract** – This research aims to describe components and relationship models of a business organization's innovation management model affecting the innovative behaviour of executives of hotels' human resources. An empirical study was conducted on 4- to 5-star hotels in Phuket Province seeking to become sustainable businesses by increasing the efficiency of performance and setting guidelines for hotel businesses to form a performance model relating to administration and human resource development in the midst of ongoing environmental changes. Questionnaires were used to collect data from 405 human resources executives of 4-5 stars hotels in Phuket Province, Thailand. The data analysis first involved applying descriptive statistics and then adopting Pearson correlation analysis, confirmatory factor analysis and structural equation modelling.

The results show that innovative behaviour has had a positive effect on task performance and that causal factors including valuable human resources,

transformational leadership, and innovation atmosphere have had a direct positive impact on innovative behaviour. Furthermore, we found positive direct and indirect effects on task performance.

**Keywords** – innovation, innovative creativity, Phuket Island, world-class tourist attraction

## 1. Introduction

Innovation in an organization or enterprise context separates perspectives in terms of creativity and supports and responds to the different needs of customers. Furthermore, such innovation involves the development and representation of novel products such as through the development of technology or applications or the improvement of existing products to achieve better levels of quality and efficiency, including in terms of creativity and development, or a crucial change in the working process in terms of production, delivery, responsibility, and work characteristics, for instance. In addition, such innovation is related to strategic opportunities and new business arrangements found throughout the entire system [1], [2].

To be successful amid rapid changes occurring globally, an organization has to rely on creativity, novel discoveries, and innovation [3]. A top-down management organization with a leader that governs and plans all work must become an innovative organization. Such an organization has to develop its management model by encouraging the innovative behaviour of personnel to achieve enough creativity to build a performance model. Creativity involves the initiation of innovation creation within an organization, referred to as an intangible asset, where its value is greater than that of tangible assets [4], [5].

The purpose of this research is to analyse the significance of organizational development, which

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involves using an innovative organization's knowledge to develop personnel and executives' innovative behaviours and characteristics to achieve innovative organization status. An organization must use models and methods to spur its own development or develop knowledge bases further. Moreover, an organization should focus on knowledge and capability development to develop its personnel and executives concordant with business criteria. In addition, an organization should encourage work motivation using tools such as promotions and salary increases to signal moral support and organizational commitment more than work satisfaction and professional commitment [6]. These factors related to psychosocial aspects are considered more vital and sustainable than material factors. For models of innovative organization development, researchers have identified five factors that affect innovation creation or organization development, which include leadership, atmosphere, human resources, satisfaction, and behaviour [7], [8]. Since the hotel sector is a service industry for service users that operates 24 hours a day without days off, hotel businesses require executives and employees who can work effectively, sufficiently, and at all times to offer services for their customers. Employees at every level are the most crucial resources and require training to be capable, knowledgeable, and skilful and to meet universal hotel standards. In this way, cooperation between all employees at every level, especially as service providers, is a crucial factor. Appreciation from customers is considered most essential to a hotel business [9], [10].

According to a research on the innovative behaviour of human resource executives of hotels on Phuket Island, as a world-class tourist attraction, service adjustments and improvements are required to meet tourists' needs and are regarded as critical to a business's survival and growth. Such a crucial factor influences enterprises' survival and growth. Therefore, studying the behaviours of executives' innovative creativity, particularly for human resource executives, is essential to the development of ways to adjust or change the directions of human resource development, improve operational effectiveness in organizations, enhance the potential for administrations to respond to the needs of employees, and prepare for potential changes in tourism business in world-class tourist attractions.

## 2. Literature Review

To study concepts and theories from the relevant literature, we reviewed the literature on innovative behaviour, valuable human resources, transformational leadership, innovation atmosphere, and task performance.

### 2.1. Concepts and Theories of Innovative Behaviour

Concepts and theories of innovative behaviour refer to behaviour that creates novel products through initiative and creative thinking and integration appropriate to the organizational operation for discovering new opportunities to achieve the utmost benefits to the organization. Such behaviour will help solve problems occurring within an organization and identify resources to apply to new concepts [11], [12], [13].

Innovative behaviour is often defined as an expression or action intended to consider, recommend, and adopt new beneficial ideas in an organization. Such innovative behavior includes four components [14], [15].

1. Championing involves showing creativity and initiative in applying new ideas to improve performance with organizational support and confidence. The person engaged in championing must be able to brainstorm, persuade, and motivate others to support the new concept and disseminate the idea further.
2. Opportunity exploration involves identifying an opportunity to learn new things, which includes finding opportunities to apply novel concepts to improve performance.
3. Generativity involves an interest in introducing new concepts to an organization until they can be used authentically by considering opportunities for creativity with colleagues and then forming relationships or connections between new ideas and empirical information obtained from operations.
4. Application involves applying new ideas to routine work and developing productivity from such ideas by having an organization adopt them regularly.

For the concepts mentioned above, the following can be concluded: To encourage employees' innovative behaviour, an organization must show its employees that it will support them by responding to their various needs, treating them well, giving appropriate compensation, never taking advantage personnel, creating a lively atmosphere for operation, identifying areas for potential, and assessing self-advancement regularly [16], [17].

### 2.2. Concepts and Theories Concerning Valuable Human Resources

Human resource management in the workplace is crucial and necessary to have the human resources of an institute or organization to operate efficiently and effectively. Such an institute or organization will then be able to survive and achieve progress. To consider and recruit personnel, an organization must

view personnel as an investment or asset. Such investment has maximum benefits; therefore, employing staff must also consider risk management. According to the human capital concept, a human is crucial in helping an organization reach set goals. The problem concerns how many employees in an organization generate novel innovations that satisfy customers. Numerous enterprises limit personnel responsible for product development or new services to certain departments, which are divided into divisions or departments. A valuable human resource is characterized by 1) helpfulness, 2) accountability, 3) patience, 4) courtesy, and 5) cooperation [18], [19]. Hence, the following hypothesis is proposed:

H1: There is a positive relationship between valuable human resources and innovative behaviour.

### ***2.3. Concepts and Theories of Transformational Leadership***

Various scholars have provided different definitions for transformational leadership, which indicates that transformational leadership is a distinct behaviour. Leaders are not limited in following followers. On the other hand, leaders must pay attention to their work to change their employees' proposals and improve them rather than believe that they must operate concordant with their employees' needs [20]. Hence, leaders adopting transformational leadership based on idealized influences, inspired motivation, individualized consideration, and intellectual stimulation are more effective in terms of creativity and expressing transformational leadership, which affects organizational efficiency [21], [22].

Regarding the specific components of transformational leadership, four aspects are related to each other. In addition, each element is divided into elements because it is unique and significant in different ways. The factors include 1) Idealized Influence or Leadership: II or CL, 2) Inspiration Motivation: IM, 3) Intellectual Stimulation: IS, and 4) Individualized Consideration: IC [23].

This indicates that transformational leadership is a process whereby the leader tries to have its followers to operate effectively. This method can result in reliability, loyalty, and credibility in leaders.

Followers are willing to follow, use their efforts to solve problems, be confident and responsible, and dedicate themselves to their organizations. Hence, the following hypothesis is proposed:

H2: There is a positive relationship between transformational leadership and innovative behaviour.

### ***2.4. Concepts and theories of Innovation Atmosphere***

With rapid changes in technology, competition, and the business environment, organizations have been significantly affected both internally and externally. At present, organizations' external environments occupy a disruptive world including disruptive innovation.

Regarding the organizational climate, several scholars have been interested in the performance atmosphere and workers' attitudes. Such authors argue that workers consider how their organizations will perform or manage them depending on the organizations' executives [24]. The organizational climate is relevant to organizations and individuals since they do not work alone but operate under supervision, control, organizational structure, leadership types, rules and regulations, including the environments within organizations that they cannot perceive. Employees who perceive the organizational climate will have positive attitudes toward their work and a lower absence rate. These factors impact individuals, organizations, and perceptions as well as behaviours and attitudes [25].

Such an atmosphere should encourage employees to be creative, show initiative, dare to propose creative ideas and develop and extend new ideas to engage in innovation (product, process, and service innovation). Through such value creation, an organization can commercially develop innovation until it achieves business model innovation [26], [27]. The latest research has started to measure the organizational atmosphere as part of a specific model that directly affects behaviour more and more through the innovation atmosphere, for instance. From several decades of research on the organizational climate, scholars have shown how much employees' innovative behaviours rely on the innovation atmosphere. The following eight dimensions have been identified: [25].

1) Participative Safety, 2) Striving for Excellence, and 3) Support for Innovation. Hence, the following hypothesis is proposed:

H3: There is a positive relationship between the innovation atmosphere and innovative behaviour.

### ***2.5. Task Performance***

According to research on concepts and theories relating to task performance, relevant information was collected from numerous articles, textbooks, and related literature. It was found that the efficiency of performance is usually determined from a comparison between productivity and resources. On the other hand, the difference between output and input matters when performing a task to achieve an

organization's target. Not only compensation but also existing resources such as time, materials, and administrative dimensions must be considered to determine organization members' satisfaction with administration methods used to achieve goals. Furthermore, the social dimension might also be considered through feedback [28].

1. Quality: Each task must be of high quality, standardized as needed, efficient, and error free. The level of quality must be considered satisfactory and benefit the organization in achieving desired goals;
2. Quantity: The quantity must be concordant with the organization's expectations and will depend on requirements and levels of satisfaction. Therefore, an organization must use its time according to the determined goal for the desired quantity to achieve such a goal quickly and in a timely manner;
3. Time: The time involved in achieving a certain level of performance must be adhered to appropriate principles. Operations must limit errors and occur on time;
4. Costs: An organization's costs must target certain benefits. An organization must focus on using resources effectively, which will help reduce expenses, increase incomes and achieve maximum profits.

Individual performance is effective when resulting in excellent knowledge, capabilities, skills, and work experiences. In addition, performance must achieve goals in time with minimal errors. The assessment of effective performance is based on work characteristics, quantities, suitable timeframes, low-cost solutions, and expenses, including existing organizational resources that balance these factors. These factors will cause organizations to achieve more efficient performance [29], [30].

However, [3] noted that an organization's success amidst rapid changes in this world depends on its creativity, discoveries, and innovation. [4] and [5] proposed that creativity constitutes the origin of creative innovation within organizations and is an intangible asset but with more value than a tangible asset. Hence, an organization that can motivate its personnel to obtain knowledge and the capability to innovate will achieve innovative behaviour, which will increasingly allow the organization to achieve effective performance. Therefore, the following hypothesis is proposed:

H4: There is a positive relationship between innovative behaviour and task performance.

From the above literature review on employees' innovative behaviour, valuable human resources, transformational leadership, innovation atmosphere, and task performance, the following conceptual framework is developed:

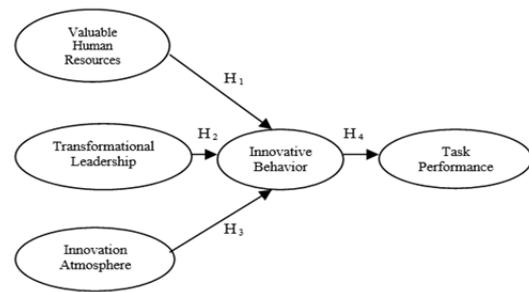


Figure 1. Conceptual framework

### 3. Research Methodology

This research applies a mixed-method qualitative and quantitative design using demographic data from the Thai Hotels Association and Hotel Entrepreneur Association based in Phuket Province, covering a total of 1,240 hotels. The purposive sampling technique was used, and a questionnaire was used to collect data. The questionnaire employs a five-level Likert scale. Five experts investigated the survey's content validity. The survey originally included 72 question items, four of which were found not to fulfill the IOC value criteria. Thus, 68 question items were removed, and a sample of 125 (25% of the sample group) was used to measure reliability before applying it for the study. The Cronbach's alpha coefficients [31] of all of the questionnaires are shown in Table 1. An alpha coefficient higher than 0.700 is generally considered acceptable. A total of 500 questionnaires were sent by post to the sample group of 4- to 5-star hotel human resource executives in Phuket Province. In total, 405 questionnaires were returned, which is concordant with the terms and conditions of structural equation analysis, which require a minimum sample size of between 100 and 200 [32].

Table 1. Cronbach's Alpha coefficient reliability values

Variable	Cronbach's Alpha
Valuable Human Resources	0.835
Transformational Leadership	0.845
Innovation Atmosphere	0.838
Innovative Behaviour	0.886
Task Performance	0.847

The data analysis involved the following. 1) A factor analysis applying the confirmatory factor analysis technique was used to study the concordance of the structural equation model with the empirical data. 2) Pearson's product-moment coefficient was used to analyse the relationships between components using SPSS software. 3) Structural equation modelling (SEM) was applied to test the concordance of the linear structural relationship model developed with empirical data derived from the questionnaires using LISREL software.

**4. Results**

**4.1. Confirmatory Factor Analysis and Correlation Results**

According to the Confirmatory Factor Analysis (CFA), the measurement model for all five latent

variables includes 22 observed variables. Every factor loading presents a positive value and is significantly different from 0 (p-value < 0.01) at between 0.672 and 0.854, thus exceeding the value of 0.5 regarded as acceptable [33]. Further details shown are in Table 2.

Table 2. Factor loading values

Construct	Indicator	Factor Loading	t-value	R <sup>2</sup>
Valuable Human Resources	HR 1	0.764	10.289	0.024
	HR 2	0.728	11.421	0.611
	HR 3	0.872	9.523	0.559
	HR 4	0.668	9.124	0.544
	HR5	0.750	10.380	0.514
Transformational Leadership	CL 1	0.800	11.077	0.627
	CL 2	0.668	11.593	0.539
	CL 3	0.750	12.421	0.514
	CL 4	0.668	11.593	0.023
Innovation Atmosphere	INA1	0.794	9.289	0.385
	INA 2	0.677	11.228	0.499
	INA 3	0.608	11.201	0.748
	INA 4	0.897	11.564	0.024
Innovative Behaviour	INB 1	0.792	12.014	0.722
	INB 2	0.678	9.258	0.766
	INB 3	0.708	10.380	0.078
	INB 4	0.785	12.014	0.559
	INB 5	0.612	10.380	0.544
Task Performance	PER 1	0.752	12.253	0.132
	PER 2	0.792	12.421	0.766
	PER 3	0.768	11.077	0.161
	PER 4	0.618	11.749	0.766

When considering the correlation coefficients between the variables [34], the variables show weak relationships. When  $r = 0.36$  to  $0.67$ , there is a moderate relationship where  $r = 0.68$  to  $0.89$ . The results reveal that Valuable Human Resources, Transformational Leadership, and Innovation Atmosphere have strong positive relationships with

Innovative Behaviour. Furthermore, such variables have moderately strong positive relationships with Task Performance by statistical significance (p-value < 0.01). Moreover, Innovative Behaviour is moderately positively related to Task Performance by statistical significance (p-value < 0.01). Further details are shown in Table 3.

Table 3. Correlations of Pearson's Product-Moment coefficient

Variable	Valuable Human Resources	Transformational Leadership	Innovation Atmosphere	Innovative Behavior	Task Performance
Valuable Human Resources	1.00				
Transformational Leadership	0.45	1.00			
Innovation Atmosphere	0.59	0.39	1.00		
Innovative Behaviour	0.69**	0.71**	0.68**	1.00	
Task Performance	0.49**	0.45**	0.55**	0.65**	1.00

Notes: N = 405; significance at: \*\* p < 0.01 and \* p < 0.05 (two-tailed)

**4.2. Analysis of the Hypothesized Model**

The Structural Equation Modelling (SEM) results show that the model is concordant with the empirical data. Regarding the goodness of fit indices according

to the criteria of [35], most of the indices show a good fit with values of  $c2 = 462.64$ , p-value = 0.0000,  $c2/df = 1.35$ , GFI=0.94, AGFI=0.94, RMSEA=0.041, and RMR=0.029. Further details are shown in Table 4.

Table 4. Acceptable Model Fit

Goodness of Fit Index	Value	Good Fit/[Acceptable Fit]
$\chi^2$	462.64	
p-value	0.0000	
$\chi^2/df$	1.35	$0 \leq \chi^2/df \leq 2$
GFI	0.94	$[0.90 \leq GFI < 0.95]$
AGFI	0.94	$0.90 \leq AGFI \leq 1.00$
RMSEA	0.041	$0 \leq RMSEA \leq 0.05$
RMR	0.029	Close to zero

The analysis of casual relationships shows that employees' innovative behaviour has a direct positive relationship with employees' task performance by statistical significance ( $\beta=0.45$ ,  $p\text{-value} < 0.01$ ).

Valuable Human Resources show a direct positive relationship with employees' Innovative Behaviour

by statistical significance ( $\beta=0.33$ ,  $p\text{-value} < 0.05$ ) and both direct and indirect positive relationships with employees' Task Performance through employees' Innovative Behaviour by statistical significance ( $\beta=0.20$ ,  $p\text{-value} < 0.05$ ).

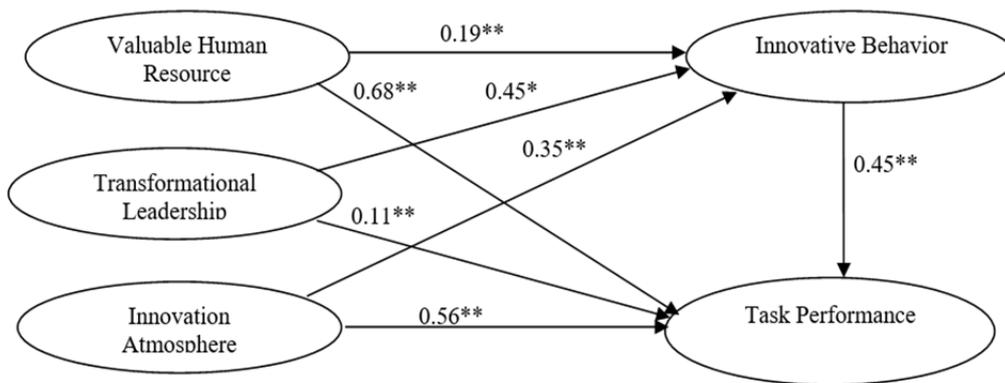
Transformational Leadership has a direct positive relationship with Innovative Behaviour by statistical significance ( $\beta=0.45$ ,  $p\text{-value} < 0.05$ ) and both direct and indirect positive relationships with Task Performance through Innovative Behaviour by statistical significance ( $\beta=0.33$ ,  $p\text{-value} < 0.05$ ).

Innovation Atmosphere has a direct positive relationship with Innovative Behaviour by statistical significance ( $\beta=0.35$ ,  $p\text{-value} < 0.05$ ) and both direct and indirect relationships with Task Performance through Innovative Behaviour by statistical significance ( $\beta=0.78$ ,  $p\text{-value} < 0.05$ ). Further details are shown in Table 5. and Figure 2.

Table 5. Path coefficient and hypothesis testing

Dependent Variable	R <sup>2</sup>	Effect	Independent Variable			
			Valuable Human Resource	Transformational Leadership	Innovation Atmosphere	Innovative Behavior
Innovative Behavior	0.49	DE	0.19**	0.45*	0.35*	
		IE	-	-	-	
		TE	0.19**	0.45*	0.35*	
Task Performance	0.74	DE	0.68**	0.11*	0.56*	0.45**
		IE	0.12**	0.22*	0.19*	-
		TE	0.20**	0.33*	0.78*	0.45**

DE = Direct Effect, IE = Indirect Effect, TE = Total Effect, \* ( $P < 0.05$ ), \*\* ( $P < 0.01$ ),



( $\chi^2 = 462.64$ ,  $df = 342$ ,  $\chi^2/df = 1.35$ ,  $P\text{-value} = 0.00000$ ,  $GFI = 0.94$ ,  $AGFI = 0.94$ ,  $RMSEA = 0.041$ ,  $RMR = 0.029$ )

Figure 2. Structural equation results of the Innovation Management Model of business organizations affecting the Innovative Behaviour of Hotel's Human Resources Executives: Empirical Study of 4- to 5-Star Hotels in Phuket Province

### 5. Discussion

According to the above study, Valuable Human Resources have a positive relationship with Innovative Creativity. This finding is concordant with Hypothesis 1, as valuable human resources can affect the performance of a five-star hotel in Karon.

The studied employees help one another, participate in organizational activities, and respond to assignments without burdening one another. This finding corroborates research [36] showing that valuable human resources improve performance and indirectly affect the well-being of employees in the organization.

Transformational Leadership has a positive relationship with Innovative Behaviour, supporting Hypothesis 2; its role is crucial in supporting employees through an organizational climate suitable for performance. On the other hand, this feature encourages employees to employ their creativity. For example, in reference to a proactive setting, the executive of the leading enterprise Google, Eric Schmidt, said that an innovative organization becomes successful when it relies on 'smart creatives.' However, such a firm must manage in different ways. Schmidt also noted that 'commanding' such intelligent people directly to do what one wants is impossible. Google instead manages the 'environment' to encourage employees to work hard and to their greatest capacity. Google's organizational culture has in turn become highly effective. At its offices, employees have access to colourful bicycles, free food, and premium coffee. People may think that Google emphasizes luxury, but what the company tries to create is a 'university climate' where employees can use their time to engage in various activities at almost any time. At Google, it is assumed that creative individuals will enjoy working in such settings and enjoy their time with their colleagues. In accordance with [37], leaders can do numerous things to shape employees' creativity in both direct and indirect ways. Internal motivation and operations based on employees are considered crucial sources of creativity.

Innovation Atmosphere has a positive relationship with Innovative Behaviour. This finding is in line with Hypothesis 3, which elaborates that organizations need innovation atmospheres. For instance, employees who are judged independent of their performance feel safe to share their ideas even if they do not achieve success, as they will never be blamed or punished when sharing such ideas.

In contrast, the organization supports them in practicing their skills continuously. In accordance with [38], a business organization with a performance atmosphere that encourages innovative creativity usually has a positive effect on creativity at both the group and organizational levels.

Furthermore, the present research reveals that Innovative Behaviour has a positive relationship with Task Performance. This result confirms Hypothesis 4, since hotel employees exhibiting innovative behaviours will initiate innovation by developing new products or services that can improve performance. This finding is in line with [3], which proposes that creativity, discovery innovation, and innovative creation will lead organizations to become successful amid rapid changes occurring worldwide.

## 6. Conclusion and Recommendations

In the hotel sector, innovative management depends on hotel executives. If the individuals do not realize the importance of this factor, innovation will never happen. Executives must understand that innovation is necessary and must realize that innovation is not always successful and can merely involve learning. In addition, innovation must support work satisfaction. Hotels must realize the importance of employees in building work satisfaction by enabling independence in proposing ideas and never severely punishing on grounds of poor performance. When employees make mistakes, this merely suggests that they can improve their performance. Moreover, executives must understand the characteristics of innovation (its significance and necessity and the need for organizational innovation support). In addition, there must be room for employees to think freely, accumulate skills and knowledge, explore creative ideas, and access funds to engage in innovation.

As a whole, in adopting innovation management to enable Innovative Behaviour, executives must pursue Transformational Leadership for their enterprises to meet practical requirements. Executives should support their employees in such efforts by adjusting rules and regulations that do not interrupt creativity. By creating an atmosphere conducive to innovative creativity, performance freedom, safe participation, and achievement, employees can develop their ideas, dare to think independently, and take risks, thus developing their creative skills. All of these factors are crucial for organizations to achieve competitive capabilities.

## References

- [1]. Karkoulian, S., Assaker, G., & Hallak, R. (2016). An empirical study of 360-degree feedback, organizational justice, and firm sustainability. *Journal of business research*, 69(5), 1862-1867.
- [2]. Akram, T., Haider, M. J., & Feng, Y. X. (2016). The effects of organizational justice on the innovative work behavior of employees: an empirical study from China. *Innovation*, 2(1), 114-126.
- [3]. Adams, R., Bessant, J., & Phelps, R. (2006). Innovation management measurement: A review. *International journal of management reviews*, 8(1), 21-47.
- [4]. Ouyang, Z., Sang, J., Li, P., & Peng, J. (2015). Organizational justice and job insecurity as mediators of the effect of emotional intelligence on job satisfaction: A study from China. *Personality and Individual Differences*, 76, 147-152.
- [5]. Kuo, Y. K., Kuo, T. H., & Ho, L. A. (2014). Enabling innovative ability: knowledge sharing as a mediator. *Industrial Management & Data Systems*, 114(5), 696-710.

- [6]. Hall, P. (1996). The global city. *International Social Science Journal*, 48(147), 15-23.
- [7]. Abstein, A., & Spieth, P. (2014). Exploring HRM meta-features that foster employees' innovative work behaviour in times of increasing work-life conflict. *Creativity and innovation management*, 23(2), 211-225.
- [8]. Agarwal, U. A. (2014). Linking justice, trust and innovative work behaviour to work engagement. *Personnel Review*, 43(1), 41-73.
- [9]. Kamasak, R., & Bulutlar, F. (2010). The influence of knowledge sharing on innovation. *European Business Review*, 22(3), 306-317.
- [10]. Lu, L., Lin, X., & Leung, K. (2012). Goal orientation and innovative performance: The mediating roles of knowledge sharing and perceived autonomy. *Journal of applied social psychology*, 42, E180-E197.
- [11]. De Jong, J., & Hartog, D. D. (2003). Leadership as a determinant of innovative behaviour. *A Conceptual framework*, 23, 24-44.
- [12]. Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: development and validation of the team climate inventory. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 19(3), 235-258.
- [13]. Chatzi, S. C., & Nikolaou, I. (2007). Validation of the four-factor Team Climate Inventory in Greece. *Organizational Analysis*, 15(4), 341-357.
- [14]. Kleysen, R. F., & Street, C. T. (2001). Toward a multi-dimensional measure of individual innovative behavior. *Journal of Intellectual Capital*, 2(3), 284-296.
- [15]. Ford, C. M. (1996). A theory of individual creative action in multiple social domains. *Academy of Management review*, 21(4), 1112-1142.
- [16]. De Jong, J. P., & Den Hartog, D. N. (2008). Innovative work behavior: Measurement and validation. *EIM Business and Policy Research*, 8(1), 1-27.
- [17]. Chompukum, P. (2008). Innovation for Sustainable Competition. Bangkok: CU Printing.
- [18]. Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of management perspectives*, 28(4), 328-352.
- [19]. Harrison, A., Skipworth, H., van Hoek, R. I., & Aitken, J. (2019). *Logistics management and strategy: competing through the supply chain*. Pearson UK.
- [20]. Burns, J. M. (2010). Leadership: Harper perennial political classics. New York, NY: Harper Collins.
- [21]. Anuroj, K. (2014). Leadership: Tips for successful sustainable development. *Royal Thai Air Force Medical Gazette*, 60(3), 53-56.
- [22]. Paton, R. A., & McCalman, J. (2008). *Change management: A guide to effective implementation*. Sage.
- [23]. Bass, B. M., & Avolio, B. J. (Eds.). (1994). *Improving organizational effectiveness through transformational leadership*. Sage.
- [24]. De Dreu, C. K., & West, M. A. (2001). Minority dissent and team innovation: the importance of participation in decision making. *The Journal of Applied Psychology*, 86(6), 1191-1201.
- [25]. Roderic, G. (2007). A climate of success: Creating the right organizational climate for high performance. Butterworth-Heinemann Publisher.
- [26]. Yusoff, Y. M., Omar, M. K., Zaman, M. D. K., & Samad, S. (2019). Do all elements of green intellectual capital contribute toward business sustainability? Evidence from the Malaysian context using the Partial Least Squares method. *Journal of Cleaner Production*, 234, 626-637.
- [27]. Nybakk, E., & Jenssen, J. I. (2012). Innovation Strategy, Working Climate, And Financial Performance In Traditional Manufacturing Firms: An Empirical Analysis. *International Journal of Innovation Management (ijim)*, 16(02), 1-26.
- [28]. Foumany, G. H., Mehraban, M., & Gahani, S. (2015). The effect of transformational leadership on innovation with the mediating role of knowledge management among high school teachers in saveh city. *Research Journal of Fisheries and Hydrobiology*, 10(13), 125-131.
- [29]. Crespell, P., & Hansen, E. (2008). Managing for innovation: insights into a successful company. *Forest Products Journal*, 58(9), 6-18.
- [30]. Rhee, J., Park, T., & Lee, D. H. (2010). Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation. *Technovation*, 30(1), 65-75.
- [31]. Cronbach, L. J. (1990). Essentials of psychological testing (5th ed.). New York : Harper Collins Publishers.
- [32]. Boomsma, A. (1985). Nonconvergence, improper solutions, and starting values in LISREL maximum likelihood estimation. *Psychometrika*, 50(2), 229-242.
- [33]. Hair, Joseph, F Rolph, E Ronald, Barry J. Babin and William, C Black (2010), *Multivariate Data Analysis a Global Perspective*. Prentice Hall: Pearson Education, Inc
- [34]. Taylor, R. (1990). Interpretation of the correlation coefficient: a basic review. *Journal of diagnostic medical sonography*, 6(1), 35-39.
- [35]. Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, 8(2), 23-74.
- [36]. Tjahjadi, B., Soewarno, N., & Gunawan, G. M. (2020). Effect of Information Capital Readiness on Business Performance in Indonesian MSMEs: Does Online Market Orientation Matter?. *Journal of Asian Finance, Economics and Business*, 7(12), 267-274.
- [37]. Pancasila, I., Haryono, S., & Sulistyono, B. A. (2020). Effects of work motivation and leadership toward work satisfaction and employee performance: Evidence from Indonesia. *The Journal of Asian Finance, Economics, and Business*, 7(6), 387-397.
- [38]. Hunter, S. T., Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. *Creativity research journal*, 19(1), 69-90.