How to improve organizational performance through learning and knowledge?



The current issue and full text archive of this journal is available at www. emeraldinsight. com/0143-7720. htm How to improve organizational performance through learning and knowledge? Tsung-Hsien Kuo Testing Center, Securities and Futures Institute, Taipei, Taiwan Abstract Purpose – Through investigating the relationship among human resource management (HRM), organizational learning (OL), organizational innovation (OI), knowledge management capability (KMC), and organizational performance (OP), the aim of this paper was to? d a way of improving organizational performance through learning and knowledge.

Design/methodology/approach – A survey questionnaire was utilized to collect data. The population of this study included 659 employees from electronic industrial listed and over-the-counter listed technological companies in Taiwan (N ? 208, valid return rate 37. 21 percent). Descriptive statistics, exploratory and con? rmatory factor analysis, as well as structural equation modeling were used for data analysis.

Findings – The results indicate that: HRM strategies result in better organizational learning, organizational innovation, and knowledge management capability, which ultimately contributes to achieving organizational performance; organizational learning improves organizational innovation and accumulates knowledge management capability; organizational innovation results in knowledge management capability development, which contributes to the establishment of organizational development; and technological companies should utilize organizational knowledge in order to enhance organizational performance.

Research limitations/implications – The generalization of the present study is constrained by the existence of possible biases of the participants, and the regional-constrained data which were collected in and thus focused on Taiwan. Thus, the characteristics of the surveyed ? rms may be different from those in other areas or countries. Managerial implications are presented at the end of the work. Originality/value – This structure has rarely been explored and the ? dings are particularly useful for management in helping to set human resource management, learning, innovation, knowledge management and organizational performance in a bigger context. Keywords Human resource management, Organizational learning, Organizational innovation, Knowledge management capability, Organizational performance, Learning, Knowledge management, Taiwan Paper type Research paper How to improve organizational performance 581 1. Introduction The technological revolution is accelerating a global transformation of the competitive environment.

Consequently, traditional organizational management is no longer perceived as an appropriate strategy in current markets. As a result, businesses must sustain their competitive competence through uninterrupted enhancement and innovation. In fact, businesses need competitive strategies and innovation in order to survive and react to the challenges and opportunities in the modern competitive environment. Resistance to innovation is likely to result in a business's downfall (Leavy, 1998). Globalization has not only opened international trade markets, which

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1108/01437721111158215 IJM 32, 5/6 582 brings numerous businesses opportunities; but this phenomenon also opened the door to numerous competitors. Thus, "employees" are no longer considered as "laborers" who only contribute their manpower. Gates (1999) suggests every person in the job market should be considered a knowledge worker in such a speed-emphasized era. In fact, human resource is considered the most important asset that any company must treasure.

It is especially essential to implement a successful knowledge management environment in order to offer the resources at the right place at the right time to knowledge-workers holding multi-nation and multi-cultural views. However, successful knowledge management is dependent on a well-functioning human resource management and the employees' perceived behavior in knowledge creation, knowledge sharing and knowledge application (Lord and Farrington, 2006). Therefore, appropriate human resource management is one of the critical factors for effective knowledge management (Nonaka and Takeuchi, 1995).

In other words, successful corporate knowledge management comes from the support of top management and the fundamental investment of human resource managers. It explains how organizations establish that mature human resource management systems are becoming an important issue in the contemporary business environment. The bene? ts of knowledge management result from a combination of appropriate organizational culture and structure. To deal with this issue, past research has explored the critical success factors for implementing KM (Wei et al., 2006).

Davenport and Prusak (1998) pointed out the goal of knowledge transfer is to enhance organizational action power through shared vision and utilization of past experience, which is also perceived as the process of organizational learning. Current studies indicate that a number of organizations have implemented organizational learning strategies (e. g. Lee and Gandol?, 2007). However, it is concluded that insuf? cient organizational infrastructure and inappropriate diffusion processes have decreased the value of knowledge management and led to employee disappointment.

Therefore, establishing a systematic organizational structure and fostering an organizational culture that promotes active information sharing, and ensures the circulation of knowledge sharing channels are critical issues that should be the focus of all modern organizations. Organization for Economic Cooperation and Development (OECD, 1996) indicates that contemporary economies are increasingly based on knowledge and information. OECD analysis is increasingly directed to understanding the dynamics of the knowledge-based economy and its relationship to traditional economics!

According to OECD, knowledge-based economy is directly based on the production, distribution and use of knowledge and information, and it is considered: an innovative economy, in terms of knowledge content; a networked economy, in terms of knowledge presentation; a learning economy, in terms of knowledge social type; and a green economy, in terms of organization sustainability. This is also re? ected in the trend in OECD economies towards growth in high-technology investments, high-technology industries, more highly-skilled labor and associated productivity gains.

This study aims to propose a model to explore the relationships among human resource management, organizational learning, organizational innovation, knowledge management capability and organizational performance using structural equation modeling. The research participants are from 208 electronic manufacturing companies. The study particularly targets management-level personnel (e. g. line managers, knowledge management of? cers, human resource management or training department directors) and explores their complete perception of the implementation of knowledge management.

The following sections present the theoretical development of the ten hypotheses (to achieve the research objective mentioned above), its method, analysis and result, followed by discussions, conclusions, and managerial implications. 2. Theoretical development and hypotheses 2. 1 Human resource management and organizational learning Tichy et al. (1982) de? ne human resource management (HRM) as the process by which individuals are recruited into the organization to perform a speci? c task whereby performance is monitored and rewards given to keep the individuals productivity.

Many studies have indicated that HRM plays a critical role in facilitating? organizational learning For instance, Lopez et al. (2006) discover that selective hiring, strategic training and employee participation in decision-making positively in? uence organizational learning. It is generally accepted that adult learning is the foundation to HRM functions, which aims to support continuous quality and performance improvement, knowledge management,

organizational learning, change management as well as learning organizations (McLean, 2006).

Bhatnagar (2007) links the relationship between the OL with strategic HR roles as well as the organization commitment. In accordance with the studies presented above, this study proposes the following hypothesis: H1. Human resource management positively in? uences organizational learning. 2. 2 Human resource management and organizational innovation Ulrich and Lake (1990) propose that HRM facilitates the formation and development of organizational capability, consequently effective HRM could enhance an organization's innovation ability through employee empowerment.

Similarly, Zanko et al. (2008) conduct a detailed exploration of the relationship of innovation with HRM regarding absenteeism and internal politics. The study discovers product innovation is related to HRD practice. It has also been recommended to implement HRM in order to improve or renew employees' knowledge, skills, abilities and motivation, which are drivers for execution of organizational strategic plans (MacDuf? e, 1995). Moreover, based on data collected from 35 European manufacturing companies, Shipton et al. (2005) ? nd HRM ? ? enhances organizations' OI ability.

Jimenez-Jimenez and Sanz-Valle (2008) also con? rm that HRM enhances innovation. Therefore, the second hypothesis is de? ned as follows: H2. Human resource management positively in? uences organizational innovation. 2. 3 Human resource management and knowledge management capability Narasimha (2000) suggests that effectively HRM is the key to amplifying the effect of knowledge management. In fact, HRM strategies can

in? uence employees' beliefs How to improve organizational performance 583 IJM 32, 5/6 584 and values, which consequently affect organizational culture (Marshall et al., 1996).

It is concluded that HRM has signi? cant in? uence on organizational knowledge repository and management. Thus, HRM policies in selection, training, performance appraisal, etc., must be aligned with knowledge management strategies to enhance organizational functioning (Svetlik and Stavrou-Costea, 2007). The work done by Ikeno et al. (2007) leads to the conclusion that appropriate human resource management is one of the critical factors for effective knowledge management. Thus, we hypothesize that: H3. Human resource management positively in? uences knowledge management capability. . 4 Human resource management and organizational performance Collins and Smith (2006) state that HR practices are positively related to the organization's social climate of trust, cooperation, and shared codes and language. It is also found that HRM activities applied in combination have a greater effect on organizational performance than the sum of the individual effects of each activity alone (Wright and Boswell, 2002). Meanwhile, other research considered HRM practices have a major impact on a ? rm's productivity and facilitate the success of an organization?? (e.g.

Jimenez-Jimenez and Sanz-Valle, 2008). The above studies highly indicate that HRM is expected to help businesses to achieve greater results. The fourth hypothesis, therefore, is de? ned as follows: H4. Human resource management positively in? uences organizational performance. 2. 5

Organizational learning and organizational innovation Duncan and Weiss https://assignbuster.com/how-to-improve-organizational-performance-through-learning-and-knowledge/

(1979) de? ne organizational learning (OL) as the development of knowledge related to the relationships among actions, consequences and the work environment. In organizations, innovation activities are in? uenced by the learning environment.

As the result, organizational learning is one of the critical factors that sustain an organization's innovative ability. According to Argyris and Schon (1978), organizational learning will enhance a ? rm's innovativeness, especially in knowledge-intensive industries. Moreover, Stata (1989) discovers organizational learning can facilitate a ? rm's innovation activities, which becomes the source of substantial competitive competence. A number of studies have presented a positive correlation between organizational knowledge and organizational innovation (e. g. Shipton et al., 2005). Thus we hypothesize that: H5.

Organizational learning positively in? uences organizational innovation. 2. 6
Organizational learning and knowledge management capability Ju et al.
(2006) argue that levels of OL have a signi? cant impact on knowledge
integration, knowledge management capability, and ? rm innovation ability.
The interaction effects of human-oriented knowledge management
strategies, OL, system-oriented KM strategies and knowledge integration
were found to signi? cantly impact knowledge management capability.
Recent studies have indicated the positive relationship between OL and
knowledge management capability (e. g. Lemon and Sahota, 2004).

Therefore, we construct the sixth hypothesis as follows: H6. Organizational learning positively in? uences knowledge management capability. 2. 7

Organizational learning and organizational performance Milliman et al. (2002) propose that in order to improve the performance of cross-cultural enterprises, four principles for OL can be applied: (1) goal setting; (2)? exibility with HR requirement; (3) providing clear guideline; and (4) creating cross-culture interaction or teams. In fact, Zellmer-Bruhn and Gibson (2006) state that team learning positively in? uences both task performance and the quality of interpersonal relations.

While Hanvanich et al. (2006) demonstrate how learning orientation and organizational memory are related to important organizational outcomes; Ruiz-Mercader et al. (2006) contend that individual and organizational learning show signi? cant and positive effects on organizational performance. Thus, we hypothesize: H7. Organizational learning positively in? uences organizational performance. 2. 8 Organizational innovation and knowledge management capability Innovation is an idea, practice, or object that is perceived as new to an individual or another unit of adoption (Fruhling and Siau, 2007).

It is widely accepted that the uniqueness of continuous organizational innovativeness in Japanese companies lies in the integration of internal as well as external knowledge (Nonaka and Takeuchi, 1995). Davenport and Prusak (1998) suggest appropriately applying existing knowledge or creating new ideas can enhance organizational productivity. In fact, past research consistently demonstrates knowledge management as one of the key factors that in? uence an organization's innovative (OI) ability (e. g. Bonifacio and Molani, 2003). Based on above research, this study proposes the following hypothesis: H8.

Organizational innovation positively in? uences knowledge management capability. 2. 9 Organizational innovation and organizational performance? Reviewing the existing studies, Aragon-Correa et al. (2007) showed the positive effect of organizational innovation on organizational performance. Kim and Mauborgne (1997) suggest that organizational innovation facilitates the formation of organizational values and differentiates an organization from its competitors. The study conducted by Damanpour and Evan (1984) proves that administrative and? technological innovations improve business outcomes. Furthermore, Garc? a-Morales et al. 2006) also contend the relationship between various types of innovation and organizational outcomes. Thus we hypothesize that: H9. Organizational innovation positively in? uences organizational performance. How to improve organizational performance 585 IJM 32, 5/6 586 2. 10 Knowledge management capability and organizational performance Knowledge management capacity (KMC) has been recognized as a key factor for gaining and sustaining a competitive advantage (Rezgui, 2007). In his statement, Jantunen (2005) believed that knowledge-based assets and organizational learning capabilities are critical for organizational innovation ability.

In addition, Bogner and Bansal (2007) suggest that there are three components in the KM systems that in? uence ? rm performance: the ? rm's ability to produce new knowledge, its ability to build on that knowledge, and its effectiveness in capturing a high proportion of subsequent spin-offs. In accordance with the studies discussed above, we hypothesize that: H10. Knowledge management capacity positively in? uences organizational performance. The proposed model showing the relationships to be studied is

demonstrated in Figure 1. 3. Method 3. Sample and data collection The population of this study included 659 employees of electronic industrial listed and over-the-counter (OTC) listed technological companies in Taiwan. The pilot testing was aimed at 100 companies, and the formal testing aims at the remaining 559 companies. The present study speci? cally targets management-level personnel (e. g. line managers, knowledge management of? cers, human resource management or training department directors). A total of 559 questionnaires were distributed (each company received one questionnaire).

From these, 213 surveys were collected; among which 208 are valid for analysis (valid return rate was 37. 21 percent). Non-response analysis is conducted to ensure the absence of non-response biases. The respondent and non-respondent? rms (the subjects' service? rms) are compared for annual sales and assets to test for non-response bias. No differences between respondents and non-respondents were found for annual sales and company assets. Table I demonstrates the sample characteristics. 3. 2 Questionnaire design The questionnaire is composed of six parts including: HRM, OL, OI, KMC, OP, and personal background.

The questions were answered using a ? ve-point Likert scale (5 ? strongly agree, 1 ? strongly disagree). Detailed de? nitions of the dimensions are described in the following sections. Human resource management. Based on the literature review (Delery and Doty, 1996; Gomez-Mejia et al. , 2001; Liao and Chuang, 2004), ? ve major constructs were found to be the most extensively used constructs to measure HRM, thus these were adopted in the present study. They are: (1) personnel staf? ng (i. e. source analysis, https://assignbuster.com/how-to-improve-organizational-performance-through-learning-and-knowledge/

recruitment, hiring, etc); (2) performance appraisal (i. e. sing the results of appraisals, long term/short term, etc); (3) reward and compensation (i. e. salary system design, rewards, market positioning, compensation policy selection, etc); How to improve organizational performance 587 Figure 1. Research model (4) training and development (i. e. objectives, content, and resource of training, external and internal training, etc.); and (5) employee participation (i. e. employee rights, participation in decision making, etc.). Organizational learning. In creating the Organizational Learning Pro? le, Huber (1991) revised the major factors for evaluating OL. Based on other recent studies (e. g.

Pace et al. , 1998), four factors have been analyzed and extracted, and consequently used in the present study to measure OL. The four factors were: (1) information-sharing patterns (i. e. the methods and the degree of information sharing); IJM 32, 5/6 Construct Company type Industry type Classi? cation Industrial listed Over-the-counter listed Semiconductor industry Computer and peripheral equipment industry Optoelectronic industry Communication and internet industry Electronic parts/components industry Electronic products distribution industry Information service industry Other electronic industry , 3 years 3-6 years 6-9 years 9-12 years . 2 years , 1. 5625 million (US dollars) 1. 5625 – 3. 1250 million 3. 1250 – 4. 6875 million 4. 6875 – 9. 3750 million 9. 3750 – 31. 25 million . 31. 25 million , 150 (people) 150-300 300-500 500-1, 000 1, 000-3, 000 . 3, 000 N 99 109 35 31 29 19 44 18 17 15 40 78 48 21 21 14 41 41 42 40 30 2 38 54 53 41 20 % 47. 60 52. 40 16. 83 14. 90 13. 94 9. 13 21. 15 8. 65 8. 17 7. 21 19. 23 37. 50 23. 08 10. 10 10. 10 6. 73 19. 71 19. 71 20. 19 19. 23 14. 42 0. 96 18. 27 25.

96 25. 48 19. 71 9. 62 588 Length of time since been industrial listed or over-the-counter listed Capital

Total number of fulltime employees Table I. Sample characteristics (2) inquiry climate (i. e. the attitude of employees and individuals toward organizational learning); (3) learning practices (i. e. the number of employees who actively learn); and (4) achievement mindset (i. e. the degree of employees' self-realization). Organizational innovation. This study adopts Subrmanian and Nillakanta's (1996) constructs to measure Ol. Two major constructs were considered: (1) technological innovation (i. e. product, process and services innovation); and (2) administrative innovation (i. e. rganizational strategy, structure, system, cultural innovation). Knowledge management capability. According to reviewed research (e. g. Tsai et al., 2004), three major constructs were found to be the most widely used constructs to measure KMC, which were then adopted in the present study. Thus, the measurement of KMC can be conceptualized in three parts: (1) knowledge learning and acquiring (i. e. capturing, understanding, and replicating existing knowledge); (2) sharing (i. e. using electronic communication tools and formal and informal discussion groups to assist in knowledge sharing); and (3) creating nd improving (adapting existing knowledge and innovating new knowledge for new tasks or customers). Organizational performance. This study adopts the OP construct, proposed by Delaney and Huselid (1996), including seven elements: (1) product or service quality; (2) product or service innovation; (3) employee attraction; (4) employee retention; (5) customer satisfaction; (6) management and employee relation; and (7) employee relations. The survey structure and

sample survey items (questions) on the questionnaire is presented in the Appendix. 3. Reliability and validity tests Reliability and validity tests were conducted on constructs with multivariate measures. The results show that the Cronbach's a for all factors are greater than 0, 883, which indicates strong reliability for our survey instrument (Cuieford, 1965). In addition, the item-to-total correlations for each measure were at least 0. 676. Table II shows the description statistics for the dimensions and factors. Meanwhile, to ensure that the instrument has reasonable construct validity, con? rmatory factor analyzes (CFA) were used.

The results reveal that all correlations are all higher than zero and large enough to proceed with discriminant validity. Furthermore, discriminant validity, as proposed by Aldawani and Palvai (2002), was conducted by counting the number of times an item correlates higher with items in other factors than with items in its own factor. The results con? rm adequate discriminant validity. In conclusion, the dimensions used in this study demonstrate both convergent and discriminant validity. Tables III to VII present the outcome of CFA for each dimension. 4.

Analysis and result The structural equation modeling approach is a multivariate statistical technique for testing structural theory (Tan, 2001). This approach incorporates both observed and latent variables. The analysis for the present study was conducted using LISREL 8. 52 and utilizing the maximum likelihood method. In the proposed model (Figure 1), HRM is considered an exogenous variable, and OP is considered an endogenous variable. OL, OI, and KMC serve as both an endogenous variable (to OI, KMC, and OP) and exogenous variable (to HRM, OL, and OI).

The individual questionnaire items were aggregated into speci? c factor groups. The following four rules were utilized for the hypotheses' structure: (1) each observed variable has a nonzero loading on the latent factor within the structure, but have a loading of zero towards other latent factors; How to improve organizational performance 589 IJM 32, 5/6 Dimension Human resource management Factor Mean 3. 763 3. 429 3. 343 3. 502 3. 382 3. 494 3. 555 3. 506 3. 527 3. 489 3. 506 3. 514 3. 490 3. 556 3. 577 3. 483 3. 627 3. 561 3. 475 3. 574

Std. dev. 0. 641 0. 615 0. 601 0. 593 0. 565 0. 589 0. 494 0. 572 0. 509 0. 500 0. 504 0. 523 0. 519 0. 514 0. 498 0. 503 0. 535 0. 470 0. 511 0. 554 Item to total correlation 0, 676 0, 740 0, 733 0, 784 0, 830 0, 713 0, 812 0, 709 0, 735 0, 844 0, 916 0, 698 0, 796 0, 886 0, 841 0, 780 0, 746 0, 762 0, 748 0. 876 Cronbach a 0. 902 0. 932 0. 910 0. 944 0. 948 0. 883 0. 938 0. 893 0, 887 0, 906 0, 946 0, 870 0, 936 0, 955 0, 950 0, 914 0, 914 0, 911 0, 909 0. 946 590 Table II. Internal consistency values for the guestionnaire Personnel staf? g Performance appraisal Reward and compensation Training and development Employee participation Organizational learning Information sharing pattern Inquiry climate Learning practice Achievement mindset Organizational innovation Technological innovation Administrative innovation Knowledge management Knowledge learning and capability acquiring Knowledge sharing Knowledge creating and improving Organizational Product or service quality performance Employee attraction Employee retention Customer satisfaction Management/employee relation Employee relation 2) no relationship among measurement errors for observed variables; (3) no relationship among the residuals of latent factors; and (4)

no relationship among residuals and measurement errors. The reliability results are illustrated in Table III, Table IV, Table V, Table VI, and Table VII (i. e. observed variables reliability). Additionally, the analytical results of the LISREL model reveal a satisfactory? t for our sample data. The ? nal result of LISREL analysis is shown in Figure 2. The ? nal SEM model analysis is presented in Figure 2. The absolute? t measures? GFI?: 91; AGFI? 0: 88 and RMSEA? 0: 036? indicate that the structural model either meets or exceeds recommended levels, and thus represents a satisfactory? t for the sample data collected. The Chi-square statistic divided by the degrees of freedom also indicates a reasonable? t at 1. 26. It can be concluded that the proposed model maintains good construct validity (see Table VIII for the statistics of the? t test of the model). Based on Figure 2, nine out of ten hypothesized relationships (H 1, H 2, H 3, H 5, H 6, H 7, H 8, H 9, and H 10) show statistical signi? cance. 5.

Discussion The following discussion is based upon the results of the LISREL analysis (shown in Figure 2). It is ? rst noted that HRM has a positive direct in? uence on OL, OI and KMC (H1, H2 and H3 are supported) but has no direct in? uence on OP (H4 is not supported). Fit type Item No. -1 , ? 1 . 0. 5 0. 91 0. 66 . 0. 6 . 0. 5 F Latent variables . ? 0 12. 78 * 14. 45 * 13. 53 * 11. 08 * 12. 81 * 13. 31 * 11. 63 * 14. 04 * 14. 17 * 14. 34 * 13. 87 * 14. 46 * 11. 46 * 12. 03 * 12. 79 * 12. 42 * 13. 45 * 13. 66 * 12. 07 * 9. 89 * 10. 52 * 11. 00 * 9. 16 * 9. 30 * 0. 90 0. 92 . ? 1. 96 Preliminary ? Standardized factor loading Error variance t-value Fit of internal structure Observed variables Composite Average variance reliability reliability extracted Criteria value First-order factor Personnel staf? ng Performance appraisal 0. 65 Reward &

Second-order factor Personnel staf? ng Performance appraisal Reward & compensation Training & development Employee participation 0. 61 Note: *p , 0. 001 ? jtj . 3: 29? ; F ? Fixed parameter (non-standardized error and t value); Item No: the numbers for every question on the survey questionnaire. Overall model fitx2 ? 288: 10? df ? 247? ; GFI ? 0: 90; AGFI ? 0: 87; RMR ? 0: 046 How to improve organizational performance 591 Table III. Con? rmative factor analysis for human resource management 592 IJM 32, 5/6 Fit type Item No. t-value . ? 1. 96 . 0. 5 0. 89 . 0. 6 -1 , ? 1 . ? 0 Observed variables reliability Composite reliability

Latent variables Criteria value First-order factor Information sharing pattern 13. 40 * 12. 57 * 12. 82 * 12. 56 * 12. 34 * 10. 88 * 16. 09 * 16. 32 * 15. 69 * 11. 90 * 10. 75 * 10. 51 * 10. 66 * 11. 56 * 9. 57 * 0. 31 0. 26 0. 29 0. 40 https://assignbuster.com/how-to-improve-organizational-performance-through-learning-and-knowledge/

Inquiry climate Learning practice Achievement mindset Second-order factor Information sharing pattern Inquiry climate Learning practice Achievement mindset 0. 83(0. 06) 0. 86(0. 06) 0. 84(0. 06) 0. 78(0. 06) Note: *p , 0. 001 ? jtj . 3: 29? ; F ? ? xed parameter (Non-standardized error and t-value); Item No: the numbers for every question on the survey questionnaire. Overall model ? x2 ? 124. 09(df ? 86); GFI ? 0. 93; AGFI ? 0. 90; RMR ? 0. 037 Table IV. Con? rmative factor analysis for organizational learning Preliminary? t Standardized factor Error loading variance Fit of internal structure Average variance extracted . 0. 5 0. 68 0. 61 0. 74 0. 66 0. 69 0. 60 0. 70 0. 68 0. 87 Item Item Item Item 0, 39 0, 26 0, 34 0, 31 0, 40 0, 30 0, 32 0, 45 0, 29 0, 23 0. 22 0. 26 0. 38 0. 29 0. 44 0. 71 0. 77 0. 78 0. 74 0. 62 0. 71 0. 56 0. 69 0. 74 0. 71 0. 60 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 0. 78F 0. 86(0. 8) 0. 82(0. 08) 0. 83(0. 08) 0. 77F 0. 84(0. 09) 0. 83(0. 09) 0. 74(0. 09) 0. 84F 0. 88(0. 06) 0. 88(0. 06) 0. 86(0. 07) 0. 79F 0. 84(0. 09) 0. 75(0. 09) 0. 84 0. 63 0. 90 0. 69 Fit type Item No. t-value . ? 1. 96 Observed variables reliability . 0. 5 Composite reliability . 0. 6 Fit of internal structure Average variance extracted . 0. 5 Latent variables Criteria value Preliminary? t Standardized factor Error loading variance -1,?1.? 0 First-order factor Technological innovation Item Item Item Item 0. 35 0. 32 0. 43 0. 50 12. 52 * 11. 33 * 10. 47 * 0. 87 12. 62 * 12. 34 * 10. 80 * 13. 39 * 1. 00 0. 4 9. 38 * 0. 63 0. 69 0. 66 0. 53 0. 37 0. 31 0. 34 0. 47 0. 00 0. 46 0. 65 0. 68 0. 57 0. 50 0. 86 Item Item Item Item 1. 00(0. 06) 0. 74(0. 06) F 40 41 42 43 44 45 46 47 0. 79F 0. 83(0. 08) 0. 82(0. 08) 0. 73(0. 09) 0. 81F 0. 82(0. 08) 0. 75(0. 08) 0. 70(0. 08) 0. 60 Administrative innovation 0. 63 Second-order factor Technological innovation Administrative innovation 0.87 0.77? xed parameter (Nonhttps://assignbuster.com/how-to-improve-organizational-performancethrough-learning-and-knowledge/

standardized error and t-value); Item No: the numbers for every question on the survey questionnaire; Overall model ? t x2 ? 27. 58(df ? 19); GFI ? 0. 97; AGFI ? 0. 94; RMR ? 0. 028 Note: *p , 0. 001 ? jtj . : 29? ; How to improve organizational performance Table V. Con? rmative factor analysis for organizational innovation 593 594 IJM 32, 5/6 Fit type Item No. -1, ? 1.0.5 F Latent variables . ? 0 16. 67 * 16. 28 * 15. 65 * 12. 48 * 11. 41 * 10. 75 * 10. 48 * 10. 32 * 10. 65 * 10. 93 * 9. 23 * 0. 34 0. 22 0. 33 . ? 1. 96 Criteria value First-order factor Knowledge learning and acquiring Knowledge sharing Knowledge creating and improving Second-order factor Knowledge learning and acquiring Knowledge sharing Knowledge creating and improving 0.88(0. 06) 0. 81(0. 07) 0. 82(0. 07) Note: *p , 0. 001 ? itj . 3: 29? F ? ? xed parameter (Non-standardized error and t-value); Item No: the numbers for every question on the survey questionnaire; Overall model? t x2?60. 16(df ? 41); GFI ? 0. 95; AGFI ? 0. 92; RMR ? 0. 034 Table VI. Con? rmative factor analysis for knowledge management capability Preliminary? t Standardized factor loading Error variance t-value Fit of internal structure Observed Composite Average variables reliability reliability variance extracted . 0. 6 0. 93 . 0. 5 0. 75 0. 85 0. 60 Item Item Item Item Item Item Item Item Item 0, 29 0, 20 0, 22 0, 26 0, 34 0, 35 0, 44 0, 49 0, 45 0. 36 0. 9 48 49 50 51 52 53 54 55 56 57 58 0. 84 0. 89(0. 06) 0. 88(0. 06) 0. 86(0. 07) 0. 82F 0. 81(0. 08) 0. 75(0. 08) 0. 71(0. 08) 0. 74F 0. 80(0. 10) 0. 78(0. 10) 0. 71 0. 80 0. 78 0. 74 0. 66 0. 65 0. 56 0. 51 0. 55 0. 64 0. 61 0. 66 0. 78 0. 67 0. 82 0. 88 0. 60 0. 70 Fit type Item No. -1, ? 1. 0. 5 0. 87 0. 56. 0. 6 . 0. 5 10. 62 * 10. 36 * 10. 55 * 9. 87 * 13. 13 * 12. 81 * 12. 32 * 16. 16 * 16. 45 * 12. 24 * 11. 69 * 10. 85 * 10. 81 * 9. 97 * 11. 07 * 10. 80 * 9. 69 * 15. 56 * 15. 75 * 0. 71 0. 54 0. 55 0. 76 0. 60 0. 65 0. 90 0. 90 . ? 0 . ? 1. 96 https://assignbuster.com/how-to-improve-organizational-performancethrough-learning-and-knowledge/

t-value Latent variables Preliminary ? t Standardized Error factor loading variance

Fit of internal structure Observed Composite Average variables reliability reliability variance extracted Criteria value First-order factor Product or service quality Employee attraction 0. 70 Employee retention 0. 70 Customer satisfaction 0. 84 0. 57 Management/employee relation 0. 87 0. 58 Employee relation Item 59 Item 60 Item 61 Item 62 Item 63 Item 64 Item 65 Item 66 Item 67 Item 68 Item 69 Item 70 Item 71 Item 72 Item 73 Item 74 Item 75 Item 76 Item 77 Item 78 Item 79 Item 80 Item 81 Item 82 Item 83 0. 90 0. 91 0. 75 0. 63 0. 84(0. 06) 0. 73(0. 06) 0. 74(0. 06) 0. 87(0. 06) 0. 78(0. 06) 0. 81(0, 06) 0, 29 0, 6 0, 45 0, 24 0, 40 0, 35 9, 92 * 9, 16 * 10, 39 * 11, 43 * 9, 14 * 10. 98 * 0. 73F 0. 77(0. 10) 0. 76(0. 10) 0. 77(0. 10) 0. 72(0. 10) 0. 75F 0. 89(0. 09) 0. 87(0. 09) 0. 84(0. 09) 0. 87F 0. 86(0. 06) 0. 86(0. 06) 0. 75(0. 07) 0. 81F 0. 77(0. 08) 0. 72(0. 08) 0. 72(0. 08) 0. 72F 0. 74(0. 10) 0. 82(0. 10) 0. 80(0. 10) 0. 72(0. 10) 0. 83F 0. 88(0. 07) 0. 89(0. 07) 0. 47 0. 40 0. 43 0. 41 0. 48 0. 44 0. 21 0. 25 0. 30 0. 24 0. 26 0. 26 0. 44 0. 34 0. 41 0. 48 0. 48 0. 48 0. 46 0. 32 0. 36 0. 49 0. 31 0. 22 0. 20 0. 53 0. 60 0. 57 0. 59 0. 52 0. 56 0. 79 0. 75 0. 70 0. 76 0. 74 0. 74 0. 56 0. 66 0. 59 0. 52 0. 52 0. 2 0. 54 0. 68 0. 64 0. 51 0. 69 0. 78 0. 80 Second-order factor Product or service quality Employee attraction Employee retention Customer satisfaction Management/employee relation Employee relation Note: *p , 0. 001 (jtj . 3. 29); F? ? xed parameter (Non-standardized error and t-value); Item No: the numbers for every question on the survey questionnaire; Overall model? t x2 ? 300. 31(df ? 269); GFI ? 0. 90; AGFI ? 0. 87; RMR ? 0. 042 How to improve organizational performance 595 Table VII. Con? rmative factor

analysis for organizational performance IJM 32, 5/6 596 Figure 2. LISREL measurement model diagram

However, HRM has an indirect in? uence on organizational performance through organizational learning (by H1 and H7), organizational innovation (by H2 and H9) and knowledge management capability (by H3 and H10). The results of the current study fail to support the ? ndings of prior studies concerning the in? uence of HRM on OP (e. g. Wright and Boswell, 2002; Collins and Smith, 2006), since we found no direct in? uence of HRM on OP (i. e. H4 is not supported). However, based on the structure of our research model, which includes OL, OI and KMC, the results seem to be reasonable. That is, the model suggests that an Measure Absolute? measures Testing indicators Chi-Square with 160 Degrees of Freedom ? 202, 27 (p? 0, 013) Goodness of Fit Index (GFI) ? 0. 91 Root Mean Square Error of Approximation (RMSEA) ? 0. 036 Expected Cross-Validation Index (ECVI) ? 1. 46 Adjusted Goodness of Fit Index (AGFI) ? 0. 88 Non-normed ? t index (NNFI) ? 0. 99 Comparative? t index (CFI)? 0. 99 Incremental? t index (IFI)? 0. 99 Parsimony normed? tindex (PNFI)? 0.82 Parsimony goodness of? tindex (PGFI) ? 0. 69 Critical N (CN) ? 208. 94 Normed chi-square (NC) 202. 27/160 ? 1. 26 Optimal indicators likelihood-ratio x2 . 0 (p. 0. 05) GFI . 0. 9 RMSEA, 0. 5 0 , ECVI , 1 0 , AGFI , 1 How to improve organizational performance 597 Incremental? t measures Parsimonious? t measures NNFI. 0. 9 CFI. 0. 9 IFI . 0. 9 PNFI . 0. 5 PGFI . 0. 5 CN . 200 1 , NC , 2 Table VIII. Fit test of the model organization needs to effectively and ef? ciently manage OL activities and leverage OI and KMC by implementing an effective HRM system to enhance OP, since HRM can affect OP positively through OL, OI and KMC (i. e.

H7, H9 and H10 are supported). In addition, support for H1 concludes with the argument that HRM plays a pivotal ? role in facilitating OL, as proposed by a number of scholars (e. . Lopez et al. , 2006; McLean, 2006). It also shows that HRM has direct and positive effect on OL as well as KMC, which is supported by several studies (e. g. Shipton et al. , 2005; Ikeno et al. , 2007). From the perspective of OL, the study concludes that it has a positive effect on OI, KMC and OP. Support for this conclusion can be found in many studies (e. g. Ju et al. , 2006; Ruiz-Mercader et al. , 2006). Moreover, past research (e. g Bonifacio and Molani, ? 2003; Aragon-Correa et al. , 2007) is in line with the ? nding of the present study that OI has direct and positive effect on KMC and OP.

Last, as with previous research (e. g. Bogner and Bansal, 2007), the results of this study support the ? nding that KMC signi? cantly affects OP. 6. Conclusion and managerial implications The ? ndings of this study have been largely unexplored by prior researchers. The results indicate that HRM can only indirectly impact OP though OL, OI and/or KMC, although HRM still has marginal positive effects on OP. This implies that all HRM policies or activities should be constructed to facilitate the activities of OL, OI and/or KMC, otherwise the positive effects on OP can not be achieved from the policies or activities of HRM alone.

Thus, in order to enhance a ? rm's OL, OI and KMC, the top management in organizations should focus on formulating effective OL, OI and KMC polices, and facilitate their implementation. As Rezgui (2007) points out, a suitable HRM system is necessary to help organizations overcome barriers to achieve effective KMC, which consequently adds value to the ? rm. In the context of https://assignbuster.com/how-to-improve-organizational-performance-through-learning-and-knowledge/

global companies and their human resource system, it is essential for a company to try to institute a standardized human resource management system in all or most of its facilities around IJM 32, 5/6 598 the world (Ryan et al. 2003). One possible suggestion to the management may be to establish a reward system to motivate employees to devote their effort in OL, OI and KC activities in order to enhance OP. Several results of this study support the ? ndings of prior research, which proposed ? a positive relationship between OL and OI, KMC and OP (e. g. Garc? a-Morales et al. , 2006). Past research indicates appropriate information technology is one of the critical factors to supporting learning activities (Real et al. , 2006) and knowledge management mechanisms (Gray and Meister, 2006) within organizations.

In fact, appropriate investment and adoption of advanced technology not only supports OL, but also helps knowledge capturing, storage, and distribution (Tidd and Trewhella, 2002). That is, technological-mediated learning and management of knowledge form a driving force on OL, OI, and KMC, which also in? uences the effectiveness of organizational operating systems (Real et al., 2006). It is evident that OL is often considered as one of the key performance indicators for international enterprises (Azadeh et al., 2007). According to Azdeh et al. he top management may improve existing management systems through OL practice, which ultimately increases OP. Last but not least, although the empirical results of the study largely support the current model, at least two limitations should be carefully considered. First, since individual informants provide the empirical data, possible biases may exist. Second, since the data were collected in Taiwan,

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Number of items per factor Sample survey item (question) 5 Your organization has standardized operation procedures and policies for recruiting Your organization appraises employees based on evaluations from management/supervisors, peers, and clients/customers Your organization's

reward policies are performance-based Your organization values individual training as well as team training When establishing strategic plans or discussing new policies, your organization invites employees (nonmanagement) to participate Your organization encourages employees to share work experiences or learning re? ctions Employees in your organization actively explore the current market and related new product information Employees in your organization actively improve their professional competencies Employees in your organization set work-related goals and try to accomplish them Your organization values technological innovations that will enhance market competitiveness Your organization establishes reward policies for new ideas and innovations proposed by employees Your organization utilizes various channels to facilitate employees' learning Your organization provides a knowledge base which can be utilized by employees (continued) 02 Human resource management Performance appraisal 6 Reward and compensation Training and development Employee participation 4 5 4 Organizational learning Information sharing pattern Inquiry climate 4 4 Learning practice Achievement mindset Organizational innovation Technological innovation Administrative innovation Knowledge management capability Knowledge learning and acquiring Knowledge sharing Table Al. 4 3 4 4 4 Dimension Factor Knowledge creating and improving

Number of items per factor Sample survey item (question) 3 Your organization utilizes various channels to receive employees' suggestions in order to improve current organizational policies Your organization has the ability to provide customers with high quality goods and services Your

organization has multiple recruiting strategies to attract talents Your organization provides welldesigned wellness programs to retain employees Your customers are satis? ed with your organization's service quality and ef? iency Your organization facilitates management to effectively utilize employees with task-related resources in order to help employees to complete their jobs Your organization values the interactions between management and staff, and among staff members How to improve organizational performance 603 Organizational performance Product or service quality Employee attraction Employee retention Customer satisfaction Management/ employee relation 5 4 4 4 5 Employee relation 3 Table Al.

About the author Dr Tsung-Hsien Kuo is the Director of the Testing Center at Securities & Futures Institute. He gained his PhD from the National Taipei University of Technology. Dr Kuo's research interests include human resource management, knowledge management, organizational behavior, and professional development. Dr Tsung-Hsien Kuo can be contacted at: com Or visit our web site for further details: www.emeraldinsight. com/reprints