

Journal of the Korea Institute of Information and Communication Engineering

한국정보통신학회논문지 Vol. 22, No. 9: 1185~1190, Sep. 2018

조직 내 다양성 관리를 위한 ICT의 역할: e-HRM을 중심으로

김문주*

The Role of ICT Enabling Diversity Management in Organization through e-HRM

Moonjoo Kim⁷

Ewha School of Business, Ewha Womans University, Seoul 03760, Korea

요 약

본 연구는 전세계적으로 증가하고 있는 조직 내 다양성에 대응할 수 있는 정보통신기술기반 다양성 관리 기능의 필요성을 제시하고 이를 가능하게 하는 전자인적자원관리의 역할에 대해 규명하고 있다. 성별, 인종, 연령과 같은 인 구통계적 속성 뿐 아니라 교육적 배경, 기능적 배경, 근속년수 등 다양한 속성을 가진 인력을 채용하고 효율적으로 관리하는 것은 조직성과와 직결되는 문제라는 점에서 전략적으로도 매우 중요하다. 다양성 관리에 있어 정보통신기술을 제대로 활용하는 조직만이 비교우위를 얻을 수 있다는 점에서 정보통신기술을 활용한 다양성 관리가 조직과 관리자에게 주는 함의점에 대해 논의하였다.

ABSTRACT

As a countermeasure to the increasing workforce diversity worldwide, this study addresses the need for an ICT (information communication technology) based diversity management function and identifies the role of e-HRM (electronic-human resource management), which enables this function. ICT has essential for the survival and growth of a company. And it is strategically crucial to recruit and manage a workforce efficiently that comprises individuals not only with diverse demographic backgrounds in terms of gender, race, and age, but also with diverse personal history in terms of educational background, functional background, and the number of years working at a previous job, because these are directly related to organizational performance. Based on the fact that only the organizations that utilize ICT adequately in managing diversity can gain a competitive advantage, this paper discusses the implications of ICT-based diversity management for organizations and managers.

키워드: 다양성관리, 전자인적자원관리, 정보통신기술, 조직유효성

Key Words: Diversity Management, Electronic Human Resources Management, Information Communication Technology, Organizational Effectiveness

 $\textbf{Received} \ 10 \ April \ 2018, \textbf{Revised} \ 24 \ May \ 2018, \textbf{Accepted} \ 7 \ June \ 2018$

*Corresponding Author Moonjoo Kim(E-mail:kimmoonjoo@ewha.ac.kr, Tel:+82-2-3277-3543) Ewha School of Business, Ewha Womans University, Seoul 03760, Korea

Open Access http://doi.org/10.6109/jkiice.2018.22.9.1185

print ISSN: 2234-4772 online ISSN: 2288-4165

©This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License(http://creativecommons.org/li-censes/by-nc/3.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Copyright © The Korea Institute of Information and Communication Engineering.

I. Introduction

In business management, information communication technology (ICT) has already become essential for the survival and growth of a company. Accordingly, companies' investments in ICT are continually on the rise. The utilization of ICT tools helps companies achieve their goals and optimize the work process. This is not an exception in the field of human resource management (HRM). The HR functions of recruiting. selection, hiring, training, assigning, and evaluating are crucial components for running an organization efficiently, because HRM is also under pressure to change its role, focus, and delivery system due to rapid changes in the environment. Numerous companies have improved their efficiency by implementing electronic HRM (e-HRM), and have generated and utilized beneficial ICT tools in managing their employees [1].

Along with technology development, the issue in the field of HRM is the increase in diversity within the organizations. The vitalized immigration policy in the U.S. and Western Europe is not only increasing the race diversity within organizations, but also increasing nationality diversity, as individuals with different nationalities form groups to achieve shared goals. The Republic of Korea is not an exception, although it has maintained a relatively conservative tendency and valued its homogeneity. Due to the increased female workforce, gender diversity within organizations is increasing, and due to the rapid increase of foreign workers as labor influx from least developed countries, the diversity in race is also increasing. Moreover, the intensifying phenomenon of job turnover and transfers increases diversity in age and the number of years at one job. Particularly, changes in the human resource system, such as disregarding educational background and seniority and increasingly hiring experienced workers, are also promoting diversity in organizations. This indicates individuals with diverse backgrounds and different attributes form one organization or group for the same goal. However, it also indicates that diversity

has emerged as a significant factor to consider in the organization' environment [2].

As such, diversity management is also an urgent issue for Korean companies, as it is being utilized by numerous companies worldwide for its positive potential [3]. Diversity management is a strategy that employs best practices by finding and creating a diverse and inclusive workplace. It is a process of recruiting, obtaining, and managing diverse talents to achieve the goals of the organization. Based on the fact organizations cannot arbitrarily control diversity, western companies have begun to employ chief diversity officers (CDO). Preemptively managing diversity has now become a strategic business issue for organizations.

In this light, this study investigates what roles the functions of e-HRM will play in this age of increased diversity. The utilization of ICT in the field of HRM can be helpful for effective diversity management, based on the fact it can become a crucial medium that connects the company with individual employees. The bilateral communication with employees through the intranet and Internet will contribute to understanding colleagues with diverse attributes and to eliciting positive potential from their diversity. This is because ICT-based diversity management can provide the opportunity to utilize diversity within the organization more efficiently, as it performs the functions of storing, processing, retrieving, disseminating the issues related to diversity. Therefore, this study investigates the role of e-HRM in improving the function of diversity management for better efficiency and presents its probability and directionality.

Π_{\bullet} e-HRM Function and Workforce Diversity

e-HRM entails planning, implementation, and application of ICT for networking and supporting more than two people. It is a way of implementing HR strategies, policies, and practices by using webtechnology-based channels. Shifting from traditional HRM to e-HRM not only decreases operating costs but

also enhances efficiency, while improving strategic orientation and HR services. Additionally, it provides more accurate and more reliable data for HR managers to make more prompt decisions. Subsequently, it allows for more time and energy towards investing in strategic management and critical decision-making by saving the time for investing in transactional actions. This does not simply mean a reduced number of HR staff, but provides the opportunity to focus on turning their information into knowledge, which is useful for decision-making in the organization. In other words, it improves the efficiency of HR functions and helps HR managers play a more significant strategic business role.

When such e-HRM is efficiently applied to diversity management, it can improve organizational effectiveness. The concept of diversity can be defined as follows: "a term that refers to a point or respect of multiformity with difference and variety. A concept that includes differences in personal background, perspective, style, value, preference, and belief, as well as the differences in age, gender, physical features, race, nationality, marital status, parental status, religion, socio-economic status, place of birth, hometown, number of years working at a job, experience, position, ability, knowledge, skills, education and training, labor union membership, employment status, etc." [4]. In the age of globalization, organizational diversity is gradually increasing based on these attributes, and it is becoming an inevitable reality that managers cannot control them arbitrarily. Therefore, successful diversity management is an essential competence for an organization. Diversity management is about understanding each other and moving beyond simple tolerance to embracing and celebrating the rich dimensions of diversity in each individual. In other words, it is a process of managing people, so that they can accept and respect that everyone has different attributes and backgrounds, starting with the awareness that each individual is unique. Therefore, organizations can implement a more efficient diversity management as follows: (1) through e-recruiting and e-selection, which help hire human resources from diverse backgrounds, (2) through e-training, which can contribute to diversity education, (3) through virtual teams that allow geographical diversity, and (4) through smart-working that enables work-life balance.

Ⅲ. ICT-based Diversity Management

3.1. e-Recruiting and e-Selection: ICT tool that helps hire human resources from diverse backgrounds and forms efficient teams

An increasing number of companies of interacting with potential job applicants through technology. E-recruiting allows organizations to employ global talents from around the world more efficiently. It can support the hiring and managing of talent with the potential the organization needs. Companies and diverse potential applicants meet by using technology as a medium such as on job boards, virtual career centers, and corporate websites [5]. Through this, they attract talented human resources for their advertised positions by providing advance essential information about job responsibilities. This information is delivered not only to potential employers but also to future job seekers, such as students and graduates who can become employees in the future. The biggest merit is that individuals can apply online from anywhere. This allows various talents of different gender, race, age, nationality, educational background, and functional background to seek employment at a company fitting their talents and skills by learning about its organizational culture and working environment. In other words, it is a type of talent acquisition service that provides talents from diverse backgrounds. Furthermore, such an ICT tool can be utilized for an internal recruiting track system, which can contribute to the formation of a multifunctional team that comprises individuals from diverse backgrounds. This is because it can function as a decision-making tool that enables communication with internal applicants for organizing the recruiting and selection process.

3.2. e-Training: ICT tool that can contribute to diversity education

Organizations are actively implementing onboarding and training by utilizing communication tools, such as email, text, and Skype. e-HRM should play the role of helping employees recognize the positive potential that diversity can bring, beyond its utilization as a tool for continually providing a training program for employees' individual development. First, diversity management needs to approach it as a continuous process, as opposed to a one-time process. What matters most is each individual's perception of diversity rather than the fact that everyone is objectively different. People respond based on their perception and awareness instead of the real phenomena they experience [6]. In other words, how they perceive heterogeneity and homogeneity can have a greater impact on effective interaction. Therefore, companies can secure a competitive edge by identifying the need for diversity education, and by providing content that help understand and acknowledge different backgrounds, races and culture, values, and attitudes. Based on the fact attitudes can be changed by education and training, it is critical to develop and manage an educational program that helps employees embrace diversity positively. Particularly, the focus should be placed on how to utilize diverse human resources in developing and implementing these programs.

3,3. Virtual team: ICT tool that allows geographical diversity

ICT is also transforming the traditional structure of organizations. As the human resources, as well as geographical working conditions, become diverse, there is an increase in the number of teams working for the same goals in physically remote places. This is also made possible through ICT [7]. In performing tasks, virtuality is a continuum of face-to-face communication. The degree of virtuality is one of the most significant elements differentiating organizational interaction from communication using technology. Virtual teams are a collection of geographically distributed, functionally

and/or culturally diverse entities that are linked by electronic forms of communication and rely on lateral, dynamic relationships for coordination [8]. Diversity management in virtual teams emphasizes self-management team, multi-function skills, and network orientation. Since ICT is utilized for the effective development of virtual human capital teams, it plays a key role in geographical diversity management.

3.4. Smart working: ICT tool that enables work-life balance

The increase in the number of female workers in organizations not only increased the level of gender diversity, but also led to an increase in the number of working couples and working mothers. Subsequently, the issue of balancing work and personal life has been drawing significant attention. The development of ICT has transformed working patterns, allowing some jobs to be done from home. However, not all jobs can be done from home or through mobile working. In fact, most jobs need to be done in a physical space, the office. Moreover, unlike past employees, who prioritized success and development at work, modern day employees greatly value self-improvement and personal leisure activities, as well as family life. Because of the changed perspective that emphasizes an individual's personal life, incidents from family and personal life can influence work activities, because it is impossible to completely separate work from personal life. Considering that employees cross daily the border between work and home [9], ICT can play a decisive role in integrating and balancing the two domains. When the balance between the two domains is not maintained, conflicts arise and absenteeism increases, decreasing work performance. Technology can help employees balance between work and home by allowing employees to perform the job and keep track of their family events at workplace or working from home. Basically, ICT is used as a tool that keeps the organization running efficiently. Therefore, it is crucial to have organizational support that can foster the work-life balance.

Technology can play a critical role in maintaining social relations between family members who are physically away [10]. Such communication is essential for the psychological well-being of employees who work away from their families, and can further foster the work-life balance. ICT provides the opportunity for interacting with the family and home by eliminating spatial boundaries and enabling digital connectivity, thus contributing to the well-being of employees [11].

IV. Discussion and Conclusions

ICT is certainly a critical tool that can help managers make decisions promptly and improve the quality of decision-making. Ultimately, e-HRM plays the role of a pipeline that facilitates personal management by providing better services to line managers and connecting the policy with the process of an individual within an organization. It also provides crucial data for strategic decision-making for HR managers by quickly obtaining, analyzing, and delivering data, and reducing the cost of performing HR activities. Furthermore, organizations can contribute to effective diversity management as follows: (1) by strategically hiring human resources from diverse backgrounds and attributes and by forming the most efficient team, (2) by contributing to diversity education, (3) by maximizing the usefulness of geographical diversity, and (4) by properly utilizing ICT for work-life balance. To this end, this study aims to make suggestions for future research to help ICT-based diversity management to be successfully established.

First, companies generally try to increase profit and reduce costs by utilizing ICT. However, it is also important to assess the satisfaction level of employees and make necessary improvement, to practically help the employees. As for employees who have to adapt to a new system, ICT can be a challenge as well as a new opportunity. Although numerous studies have focused on the usefulness of e-HRM, more empirical studies should be conducted to discover actual organizational

performance and level of employee satisfaction.

Second, to counteract increasing diversity, which has become an unavoidable reality, it is essential to conduct an empirical study on the necessity and effectiveness of diversity-management-focused ICT. In other words, future research should evaluate whether the system is user-friendly, service-efficient, whether it generates additional cost, and whether diversity management ICT transaction cost can be reduced [12].

Finally, future research should empirically target HR managers and employees in the organization to discover:

(1) if ICT tool utilization is helpful to diversity management, (2) advantages and disadvantages of utilizing diversity management ICT tools, (3) probability of implementing diversity management ICT tools, (4) efficiency of utilizing diversity management ICT, and (5) management support for utilizing the diversity management ICT. Additionally, future research should also continue to explore how diversity management ICT can help HRM and performance, and which type of ICT tools should be developed and maintained.

REFERENCES

- [1] S. Strohmeier, and R. Kabst, "Organizational adoption of e-HRM in Europe: An empirical exploration of major adoption factors," *Journal of Managerial Psychology*, vol. 24, no. 6, pp. 482-501, Aug. 2009.
- [2] M. Kim, "Effects of team diversity, transformational leadership, and perceived organizational support on team-learning behavior", Social Behavior and Personality, vol. 45, no. 8, pp. 1255-1270, Sep. 2017.
- [3] Y. Lee, "A Study on the Development of Diversity Management Consulting Model and Operational Process," Asia-pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology, vol. 5, pp.439-446, Dec. 2015
- [4] D. van Knippenberg, W. P. van Ginkel, and A. C. Homan, "Diversity mindsets and the performance of diverse teams," *Organizational Behavior and Human Decision Processes*, vol. 121, pp. 183-193, Apr. 2013.
- [5] N. T. Tippins, and S. Adler, Technology-enhanced

- assessment of talent. San Francisco: Jossey-Bass, 2011.
- [6] J. Lauring, and J. Selmer, "Diversity attitude and group knowledge processing in multicultural organization", *European Management Journal*, vol. 31, pp. 124-136, Apr. 2013.
- [7] C. M. Axtell, S. J. Fleck, and N. Turner, "Virtual teams: Collaborating across distance," in *International Review of Industrial and Organizational Psychology*, Chichester: Wiley, Vol. 19, pp. 205-248, 2004.
- [8] G. DeSanctis, and P. Monge, "Introduction to the special issue: Communication processes for virtual organizations," *Organization Science*, vol. 10, pp. 693 - 703, Dec. 1999.
- [9] S. C. Clark, "Work/family border theory: A new theory of work/family balance," *Human Relations*, vol. 53, no. 6, pp. 747-770, Jun. 2000.

- [10] H. Horst, "The infrastructures of mobile media: Towards a future research agenda," *Mobile Media and Communication*, vol. 1, no. 1, pp. 147-152, Jan. 2013.
- [11] G. Bergstrom-Casonowsky, "Working life on the move, domestic life at a standstill? Work related travel and responsibility for home and family," *Gender, Work and Organization*, vol. 20, no. 3, pp. 311-326, May. 2013.
- [12] S. Eum, G. Kim, G Kim, J. Nam, "Development of Smart App to Support the Paramedics Activities," *Journal of the Korea Institute of Information and Communication Engineering*, vol. 22, pp. 49-53, Jan. 2018.



김문주(Moonjoo Kim)

1992년 2월: 이화여자대학교 경영학과 (경영학사) 2001년 1월: University of Sussex (MSc 경영학석사) 2010년 8월: 이화여자대학교 경영학과 (경영학박사) 2008년 3월 ~ 2017년 8월: 이화여자대학교 경영학과 강사 2017년 9월 ~ 현재: 이화여자대학교 경영학과 겸임교수 ※관심분야: 팀 다양성, e-HRM, 리더십, 공유정신모형