

The Role of the Characteristics of Knowledge Makers in Improving Embodied Knowledge an Analytical Study of the Opinions of Managers of Telecom Companies - In the Middle Euphrates

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Abstract: The topic of the characteristics of knowledge makers and embodied knowledge in recent decades has received prominent attention by most researchers. The problem of the study revolves around adopting characteristics of knowledge makers in order to improve the embodied knowledge of managers in Telecom, that is, the goal of the current study lies in diagnosing the relationship between the characteristics of knowledge makers and knowledge embodied, by standing on the role played by (achievements and challenges, individual growth, excellence, independence, directed goals) as dimensions of the characteristics of knowledge makers, in improving embodied knowledge (single scale), and therefore in order to diagnose this relationship, the opinions of (125) from Tel-Telecom company Managers. It recovered (115) valid for analysis with a percentage of (84%), the results were summarized to the existence of a correlation and a statistically significant effect of the characteristics of knowledge makers in the embodied knowledge to indicate that the managers of Telecom enjoy the characteristics of knowledge makers that improve the embodied knowledge in order to ensure the development and balance between the characteristics of the makers Knowledge Managers in companies telecom in and embodied knowledge.

Keywords: Knowledge, characteristics of knowledge makers, embodied knowledge

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INTRODUCTION

As a result of intense global competition and fast-paced technological change in the current business environment, new product development (knowledge) has emerged as one of the most important functions in today's organizations can be developed. Due to the increasing competitive importance of information and knowledge, researchers have studied this phenomenon extensively.

The researchers studied the cognitive variables that affect the organization's tendency to succeed in developing a new product, which generated the need to encourage workers to create more ideas through their embodied knowledge. Creativity represents one of the basic means through which organizations can achieve sustainable growth. In particular, the achievement of cognitive and technological success. In other words, interest and research in the characteristics of knowledge makers and their role in embodied knowledge is a must, as these knowledge characteristics work to increase the focus of capabilities, awareness and awareness of managers in communication companies in order to develop and enhance embodied knowledge, as they are the main anchor in any organization, as well as They represent a strategic resource that is rare, valuable, expensive, and difficult to imitate. Many organizations seek to focus on gaining a competitive advantage in the market and this is done by developing embodied knowledge as much as possible.

, as the characteristics of knowledge makers refer to the increased participation of managers of Telecom in work procedures, participation in administrative decision-making and work to create a certain kind of facilitation in the conduct of the internal operations of the organization and to improve the status and reputation of the organization among other organizations.

Theoretical literature:

1. Characteristics of knowledge makers:

Many writers and researchers have agreed that the concept of knowledge makers was developed by the American scientist Peter Drucker, with what the famous Canadian scientist came up with in the fifties of this century The first to use the concept of knowledge makers, the American scientist Peter Drucker in the fifties of the last century, where he defined them "the new groups that were formed in the era of the knowledge economy, and he described them as people who understand and use symbols, concepts, knowledge and information(Guidice,2009:144) Knowledge makers are workers who value their knowledge and ability to work in specialized fields. Knowledge makers usually include their work planning research acquisition, organizing information development, for advancement in specialized professional fields(Zhaohui&Huan,2011:478) Knowledge makers are groups of workers who mainly engage in intellectual work and use their knowledge to carry out creative work and create value and make it perceptible and linked with independence, individuality and creativity because they have more creativity, high weaning and ability to self-manage and they are interested in degrading their own profession and they pay more attention to the development of their organization(Qiang-guo,&Wen-han,2011:1-3).

(Hebert,2012:140) It refers to them as workers whose work involves processing or using information and who are considered very valuable commodities .(Lei&Lan,2013:61) He defines them as the workers who have the ability to participate in the production of knowledge, creativity and innovation for the organization and its application in the organization. They develop the knowledge capital in the organization and take it as their job.(Mitchell&Meacheam,2011:152) oth argue that knowledge makers build key relationships with their managers who enjoy them to serve the interests of the main manager. Since makers possess the specialized knowledge required to solve problems and make informal decisions, managers will rely on knowledge makers and expect that they will perform the accurate analyzes necessary to make appropriate decisions about the complex matters that they facing

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them, which gives sustainable value to the organization through that relationship, The intrinsic motivating factors model was adopted according to the previous literature reviews, as it includes the intrinsic motivating factors and the analysis of the five individual characteristics(Cheng&Zhang,2008:3) These are:

Achievements and Challenges, Great long-serving knowledge makers learn the knowledge and technological innovation they need to accomplish and challenge tasks

It's clear(chen,2011;3) That knowledge makers are the workers who will possess specific skill positions in certain areas and often use these skills to accomplish and re-solve problems and then prioritize and reshape organizational decision-making and the fundamental influence on the direction of organizational strategies,

Individual growth: The knowledge makers are the main workers who possess knowledge, skills and a high ability to learn, nurture and create value with knowledge and information and work to make full use of the technical advantage to improve the efficiency of their work and this makes them in sustainable growth(Haihuo&Zhanguo,2011:364),

Independence: Knowledge makers are the independent workers who enjoy progress and the ability to professional movement, and they resist the control and leadership of the organization. Their commitment here is more professional and less motivating, so their knowledge is a vital factor for achieving organizational success in the long term (Oneill&Adya,2007:413

Distinguished: distinguished in the creation of knowledge stems from the leadership and managers, in addition to the research and development team, co-workers and followers. Therefore, all academic achievements and social interaction are distinguished by knowledge makers in the administration and even in government departments, and what they have of the authority that will distinguish them in the organization and society, distinguished is the process of uniqueness in the field of work. Or distinction over other individuals in attitudes, skills, or competence, as well as distinction in race, age, religion, customs and traditions(Dessler,2013:81) ,

Targeted goals: Knowledge makers tend to have clear directed action that corresponds to their individual goal and the goal of the group and the organization, and to realize the harmony between the individual, the team, and the organization, He stressed that knowledge makers are distinguished by the great possibility of orientation in their jobs, as knowledge makers in some cases have a functional life longer than the life of the organization in which they work on the other hand, and because knowledge makers have the main production tools and the tacit knowledge they possess in their minds, they are able to accept new tasks(Wu,2008:52).

2. Embodied knowledge

The embodied knowledge approach explains how informal mechanisms of trust and expectations of cooperative behavior appear in the relationship and the investment of these mechanisms in a way that facilitates the transfer of knowledge resources between members of the organization and actors, allowing the organization the ability to build unique mechanisms that motivate it and protect the transfer of its knowledge capacity and enhance its ability to create value and exchange knowledge among its employees, and from this point of view, agreeing on a comprehensive concept that expresses embodied knowledge, is very difficult as a result of the different points of view and opinions of researchers, academics and writers on this subject, he pointed out (Purvis et al., 1995:216) It enables it to improve its ability to structure knowledge - into rules and relationships that can be stored to serve the organization in the short and long term. (Leszczyńska, 2004:4) defines it as an essential feature for improving the organization's ability to learn by developing its ability to transfer and invest knowledge. (Chen et al., 2012:13-14) Patha sees common values, procedures and

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systems that are built through a process Socialization, while (Raassens et al., 2014:3) presents it as a combination to support the activities of the organization in order to provide services to target customers in a way that earns customer satisfaction and loyalty, and shows (Togola et al., 2019:2-3) an essential feature of the knowledge that The organization uses it to improve the ability of its employees to use modern technical tools and methods, and (Zhao et al., 2021:2) defined it as a mechanism to improve the organization's ability to deal with damage by investing opportunities and addressing threats. number of researchers were based on a scale” unidirectional scale” (Lin,2018).

Therefore, the following hypotheses can be assumed:

The first hypothesis: that the increased interest in the characteristics of knowledge makers in its dimensions (achievements and challenges, individual growth, independence, excellence, directed goals) in embodied knowledge contributes to building a positive correlation relationship towards embodied knowledge.

The second hypothesis: that the increased attention of managers to the characteristics of knowledge makers in reality (achievements and challenges, individual growth, independence, excellence, directed goals) contributes to improvieng embodied knowledge, and Figure (1) shows the hypothetical scheme of the study.

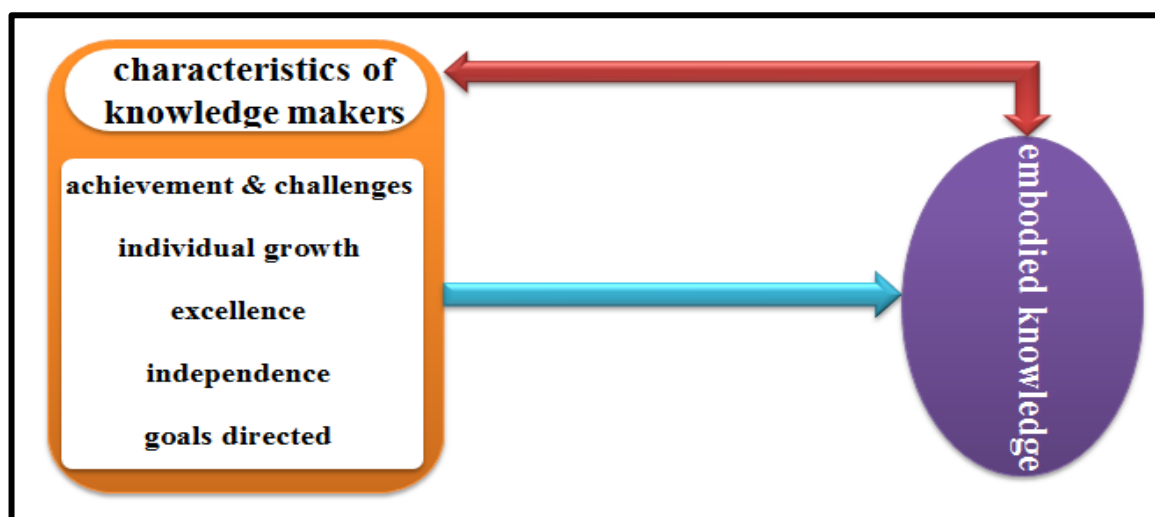


Figure (1) hypothetical scheme of study

Study Methodology:

1. Study Scales

The study consisted of two variables, the opposite of the independent variable (characteristics of knowledge makers (COKM) with five dimensions representing achievement and challenges (CKCC), individual growth (CKIG), excellence (CKEX), independence (CKID), and goals directed (CKOG) by (4)) items for each dimension, by adopting a scale (chang,2008), while the dependent variable is represented in (embodied knowledge (KNEM) by (4) items, by adopting a scale (Lin,2018).

2. Study sample

The study sample was represented by a group of executives Managers in tel-etelecom companies in the central Euphrates governorates in Iraq, as (125) questionnaires were distributed, and (115) were retrieved, with (10) between damaged and invalid for analysis. While the number of non-returned

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forms represented in (10) forms, therefore, the number of valid forms for analysis reached (105), that is, with a response rate equal to (84%) and at a level of significance less than (0.05), and with a stability coefficient of Cronbach's alpha for the measurement item is higher than (75). %) (Hair et al., 2010), as it reached for the variable characteristics of knowledge makers (0.920) and embodied knowledge (0.880), and the relative stability coefficient of the study as a whole amounted to (0.928), which indicates the harmony, harmony and consistency of the paragraphs and dimensions of the study with the studied sample

3. Results

3-1 Description of the study sample

The results of Table (1) show that the general average of the characteristics of knowledge makers (COKM) was (4.36) and a standard deviation of (0.118) to show the interest of the members of executives towards the dimension of individual growth (CKIG) with an arithmetic mean of (4.46) and a standard deviation equal to (0.198).) In addition to the interest of telecom companies in goal-oriented (CKOG) with an arithmetic mean equal to (4.45) and a standard deviation of (0.218) to indicate the consistency and consistency of the views of executives towards developing their capabilities and knowledge in order to keep pace with the changes that occur in the tastes of customers with whom they deal.

The results also show that the working average of Embodied Knowledge (KNEM) amounted to (4.12) and a standard deviation of (0.23), and this shows the interest of the studied sample towards indicating the interest of the studied sample in developing and improving the embodied knowledge of its managers in order to ensure that more ambitious and effective ideas are presented in Improving the company's performance and developing its branches in all parts of Iraq compared to its competitors.

Table (1) Description of the study sample

| NO. | Menu | S.D | NO. | Menu | S.D |
|--------------|-------------|--------------|--------------|-------------|--------------|
| CKCC1 | 3.62 | 1.095 | CKEX1 | 4.05 | 0.626 |
| CKCC2 | 4.15 | 1.284 | CKEX2 | 4.26 | 0.439 |
| CKCC3 | 4.23 | 0.697 | CKEX3 | 4.38 | 0.488 |
| CKCC4 | 4.59 | 0.494 | CKEX4 | 4.56 | 0.536 |
| CKCC | 4.15 | 0.449 | CKEX | 4.31 | 0.245 |
| CKIG1 | 4.33 | 0.494 | CKID1 | 4.99 | 0.098 |
| CKIG2 | 4.47 | 0.589 | CKID2 | 4.16 | 0.774 |
| CKIG3 | 4.6 | 0.511 | CKID3 | 4.67 | 0.494 |
| CKIG4 | 4.45 | 0.537 | CKID4 | 3.92 | 0.454 |
| CKIG | 4.46 | 0.198 | CKID | 4.44 | 0.322 |
| CKOG1 | 4.3 | 0.463 | COKM | 4.36 | 0.118 |
| CKOG2 | 4.34 | 0.569 | KNEM1 | 4.01 | 0.525 |
| CKOG3 | 4.42 | 0.496 | KNEM2 | 4.15 | 0.731 |
| CKOG4 | 4.73 | 0.505 | KNEM3 | 4.32 | 0.47 |
| CKOG | 4.45 | 0.218 | KNEM4 | 4.38 | 0.488 |
| | | | KNEM | 4.12 | 0.23 |

3-2 Hypothesis testing

The results of Table (2) show that there is a statistically significant correlation between the characteristics of knowledge makers and embodied knowledge, with a correlation strength of (0.409), while the strength of the correlation ranged between the dimensions of the study variables from (-

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0.310) for the independence dimension (CKID), to (0.420) for the dimension Directed Objectives (CKOG), this value indicates the weak independence of managers in the telecom company, which requires these companies to give executives more freedom and independence in order to improve the level of their telecom services by gaining the largest possible number of customers.

Table (2) Correlation Matrix

| | KNEM | CKCC | CKIG | CKEX | CKID | CKOG | COKM |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| KNEM | 1 | .352** | .205* | .209* | -.310** | .420** | .409** |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | |

The results of Figure (2) show that the standard model for the characteristics of knowledge makers in embodied knowledge corresponds to the criteria emphasized by (Hair et al., 2010) (CMIN/DF=1.897, GFI=0.933, AGFI=0.924, CFI=0.928, RMSEA= 0.064) to show the consistency and congruence of the standard model with the opinions of the executive managers of communication companies.

It is noted from the results of Table (3) the contribution of the characteristics of knowledge makers to the development of embodied knowledge by (0.797), meaning that increasing the characteristics of knowledge makers by one standard deviation leads to an improvement of (0.797) in embodied knowledge with a standard error equal to (0.075) and a critical value of (10.627) To show the managers' interest in encouraging the company's employees to innovate and create new ideas in order to achieve the company's goals and support its marketing capabilities in the telecom sector.

Table (3) Standard weights for the effect of the characteristics of knowledge makers on embodied knowledge

| | path | | Estimate | S.E | C.R | R² | P |
|-------------|----------------|-------------|-----------------|--------------|---------------|----------------------|------------|
| COKM | ---> | KNEM | 0.797 | 0.075 | 10.627 | 0.635 | *** |

The results also indicate the contribution of the characteristics of knowledge makers in the interpretation of (0.635) of embodied knowledge, attitudes and reasons that limit the ability of managers to develop their capabilities.

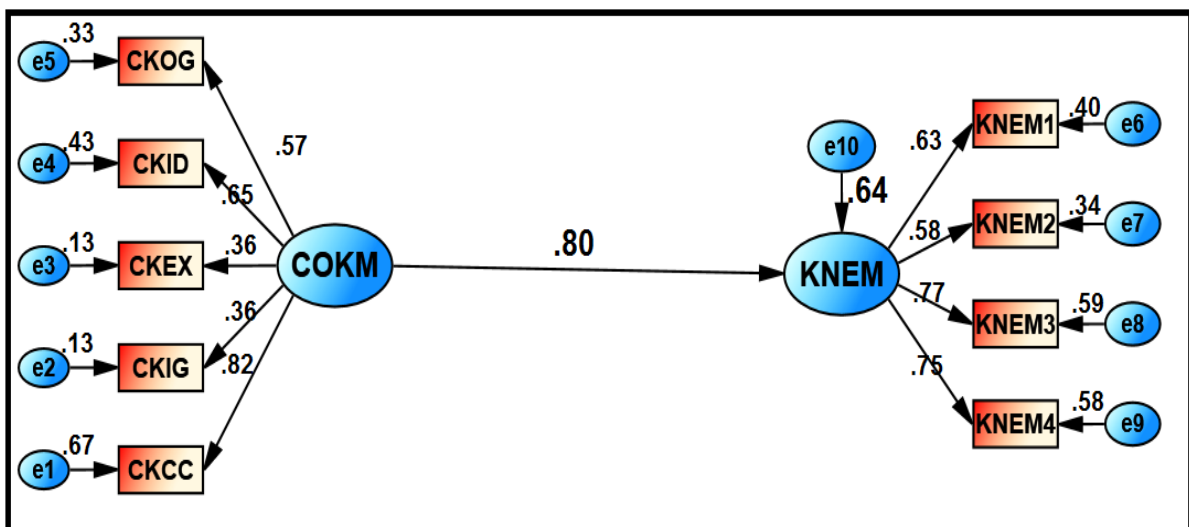


Figure (2) The standard model for the effect of the characteristics of knowledge makers on embodied knowledge

4. Discuss the results

The results of the study argue the interest of managers in the studied telecom companies to encourage their employees to achieve the goals directed by understanding the culture of the society in which it is working to invest creative ideas in a fundamental way that contributes to achieving organizational excellence and achieving its desired goals, as well as the interest of the studied companies to develop their capabilities by granting managers More independence in developing their abilities to complete their work in order to enhance their ability and talent to implement individual creative ideas through learning, creativity and acquiring new knowledge.

The study also recommends the necessity of distinguishing workers from other companies by attracting talented and highly skilled individuals to be an essential point for generating more ideas towards developing the skills and capabilities of other workers.

REFERENCES:

1. Bigliardi . B , Ivo Dormio . A , Galati . F , Schiuma . G , "The Impact of Organizational Culture on the Job Satisfaction of Knowledge Workers", The journal of information and knowledge management systems Vol. 25 No. 6-2012 .
2. Cao , Hong Liang, "China's private enterprises to explore the loss of knowledge workers", IEEE, 2011 .
3. Chen, Y. L., Lee, Y. C., & Lin, J., Culture Proximity, Knowledge Complexity, Embeddedness And Internationalization Involvement: An Exploratory Study Of Knowledge Intensive Service Industry, Competitive Paper, The 29th Euro-Asia Management Studies Association Annual Conference, National University of Singapore, 2012.
4. Cheng , Wen & Zhang , Guoliang"Self-motivator Factors of Senior Knowledge Workers" , IEEE, 2008, .
5. Cheng , Wen & Zhang , Guoliang"Self-motivator Factors of Senior Knowledge Workers" , IEEE, 2008.
6. Dul, Jan, Ceylan , Canan, &Jaspersb , Ferdinand, "Knowledge worker creativity and the role of the physical work environment",Forthcoming in Human Resource Management, 2011.
7. Eschenbach , Sebastian, "From inspired teaching to effective knowledge work and back again : A report on Peter Drucker's schoolmistress and what she can teach us about the management and education of knowledge workers" , Emerald Group Publishing Limited, Management Decision , Vol. 20 No. 2, 2018.
8. Fei, XIANGBing, LIU, "A Study on Work Stress of Real Estate Industry Knowledge Workers on the Basis of Psychological Contract" International Conference on Management Science & Engineering, 65th , September 58-55, Dallas, USA, 2012.
9. Guidice , Rebecca M., Joyce Thompson , Heames, & Wang , Sheng, "The indirect relationship between organizationallevel knowledge worker turnover and innovation : An integrated application of related literature" Emerald Group Publishing Limited, The Learning Organization , Vol. 65 No. 5, 2009.
10. Haihuo , Kong &Zhanguo , Duna"Study on the Model of Knowledge Workers Efficiency and the Influence Factors" , IEEE, 32. Hebert , Paulette, 2011 .

11. Jayasingam , Sharmila, Ansari , Mahfooz A., Jantan , Muhamad" Influencing knowledge workers: the power of top management" Emerald Group Publishing Limited, Industrial Management & Data Systems , Vol. 668 No. 6,2010 .
12. Juan , Wang & Kai , Xiong"Research on Innovation of the Incentive Mechanism and Strategies on Knowledge Workers" , International Conference on E-Business and E-Government, IEEE, 2010 .
13. Kelly , Graíinne, &Mastroeni , Michele, & Conway , Edel& Monks , Kathy, & Truss , Katie, & Flood , Patrick, & Hannon , Enda, "Combining diverse knowledge : knowledge workers' experience of specialist and generalist roles" Emerald Group Publishing Limited , Personnel Review , Vol. 28 No. 2, 2011.
14. Lei , Hongzhen and Lan , Juanli, "Research into the influence factors of knowledge workers sharing residual claims rights" , Emerald Group Publishing Limited, Journal of Knowledge-based Innovation in China , Vol. 2 No. 6, 2013.
15. Lin, C., Li, B., & Wu, Y. J." Existing knowledge assets and disruptive innovation: The role of knowledge embeddedness and specificity. Sustainability, 10(2), 2018.
16. Liu , Liang & Chai , Huaqi"Based on The Balanced Score Card: Performance Evaluation of knowledge workers", IEEE, 2011 .
17. Markova , Gergana& Ford , Cameron "Is money the panacea? Rewards for knowledge workers" Emerald Group Publishing Limited ,International Journal of Productivity and Performance Management ,Vol. 58 No. 0, 22. 2011.
18. Martens ,Cristina Dai – Pra ; Defreitas ,Henrique Mello Rodrigues ; Salvi ,Eloni Jose ; Menegaz - Lajus, Gustavo;&Boissin Jean-Pierre, "Entrepreneurship Orientation in Food Industries: Explory Study On Medium & Large Size Companies in south Of Brazil", International Conference Entrepreneurship in Brice .SaoPaluo, 2010.
19. McAusland.C&Kuhn.P"Bidding for brains:Intellectual property rights and the international migration of knowledge workers", Journal of Development Economics,52,2011.
20. Mitchell , Rebecca &Meacheam , David "Knowledge worker control: understanding via principal and agency theory" Emerald Group Publishing Limited, The Learning Organization , Vol. 60 No. 5, 2011.
21. Purvis, R., Sambamurthy, V., & Zmud, R. (1995). The Effects of Knowledge Embeddedness on the Diffusion of Case Technologies within Organizations.
22. Raassens, N., Wuyts, S., & Geyskens, I. , The performance implications of outsourcing customer support to service providers in emerging versus established economies. International Journal of Research in Marketing, 31(3), 280-292, 2014..
23. Schneckenberg , Dirk, "Web 3.8 and the empowerment of the knowledge worker" , Emerald Group Publishing Limited, JOURNAL OF KNOWLEDGE MANAGEMENT, VOL. 62 NO. 2009.
24. Shubiri, faris, "Entrepreneurship and performance : apractical method to estimate entrepreneurship reward in Jordan banks" Amman Arab university for graduate studies – Jordan faculty of business, 2010.

25. Togola, A., Ahmed, S., & Jadaan, T., January). Barriers of knowledge transfer between globally distributed teams in ict product development. In Proceedings of the 52nd Hawaii International Conference on System Sciences, 2019.
26. Wang , Shu-qin, Gao, Cun-chen, Liu , Yun-long, Liu , Zhen, & Tang , Shu-hong. "Sliding mode variable structure control for the dynamic system of knowledge workers in high-tech enterprises" , IEEE, 2013.
27. Xiaojun,Wu&Shizong , Li, "The Research on Knowledge Worker's Person-organization Fit (POF)",Third International Conference on Knowledge Discovery&DataMining,IEEE, 2010.
28. Zainol , Fakhrul A. &Ayadurai , Selvamalar , " Entrepreneurial Orientation and Firm Performance : The Role of Personality Traits in Malay Family Firms in Malaysia " , International Journal of Business and Social Science , Vol. 5 , No. 6, 2011.
29. Zhan , Hong, Tang , Tian, & Zhang , Yue, "The Research on Characteristics of Knowledge Workers and Their Motivating Factors: A Review and Comparison Study", American Journal of Industrial and Business Management, 2012.
30. Zhao, Q., Lyu, S., Zhang, Z., Xu, T. B., & Cheng, G. (2021). Embedded Knowledge Distillation in Depth-Level Dynamic Neural Network. arXiv preprint arXiv:2013.