A study on the impact of cross-border activities of knowledge-based employees on creativity in cultural enterprises-the case of Walt Disney

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Abstract: Along with the rise of the knowledge-based economy, cultural enterprises are gradually coming into the limelight. For culture-based enterprises, the creativity of knowledge-based employees is an important factor for the long-term development of culture-based enterprises. This paper divides cross-border activities into transactional and learning dimensions, and proposes a relatively sound theoretical model and hypothesis. Then, using the descriptive single case study method, we analyzed and verified the hypothesis by combining the specific case of Walt Disney's fantasy engineer, and finally verified the hypothesis that the mediating effect of role overload inhibits employees' creativity when they engage in transactional cross-border activities, while the mediating effect of knowledge acquisition inhibits employees' creativity when they engage in learning cross-border activities. When knowledge workers in cultural enterprises engage in learning cross-border activities, their creativity is facilitated by the mediating effect of knowledge acquisition.

Keywords: Cross-boundary activities; Role overload; Employee creativity; Case studies; Walt Disney; Imagineering

1. Introduction

Nowadays, along with the emergence of knowledge-based economy, culture-based enterprises have also emerged, and knowledge-based employees, the backbone of these enterprises, are increasingly coming into the limelight. This paper takes the example of Walt Disney' s imagineering to explore the relationship between the creativity of knowledge employees and their cross-boundary activity.

2. Literature Review

2.1 Definition of knowledge-based employees

The concept of knowledge-based employees was first introduced by Drucker, an American management guru, who believed that employees who have the ability to understand and use knowledge and information to accomplish their work tasks can be called knowledge-based employees. Knowledge workers are employees who are engaged in mental work, have professional knowledge and use it and create it to do creative work (Huang Weide, 2007). The difference between knowledge workers and general employees is that knowledge workers are employees who have more working knowledge than others in the organization and such employees are better at collecting, synthesizing, and using knowledge to cope with their work (Turriago-Hoyos et al., 2016).

2.2 Definition of Employee Creativity

The creativity component conceptualization framework proposes that a product or response will be judged creative if it (a) is novel, appropriate, and valuable, or provides a valuable response to the task

at hand; (b) the task is heuristic rather than algorithmic (Amabile, 1983) Employee creativity refers to the ability to produce novel and effective solutions, procedures, products, and services (Amabile, 1996), while in creativity composition theory, employee creativity is considered to be the result of a multifactorial combination of elements such as their expertise, creative thinking and motivation, domain-related skills, creativity-related processes, and intrinsic motivation (Amabile, 1996).Woodman et al. (1993) proposed interaction perspective of creativity research, which considers creativity as a procedure or process of creating valuable and useful new products, services, and ideas by individuals working together in a complex social system.

2.3 Definition of cross-border behavior

Coordination perspective, emphasizing that cross-boundary behavior is a challenging and innovative activity in the organizational activities mainly plays a role in coordinating and integrating the internal and external work of the team, how to pay attention to cross-boundary activities without neglecting the internal activities of the team, and how to achieve a balance and coordination between the two is of great significance to optimize cross-boundary behavior.

Learning perspective, which is associated with resource theory. Most scholars define cross-boundary activities from a learning perspective, emphasizing that they are the behaviors of teams or individuals to acquire external information across borders and exchange information with the external environment, focusing on acquiring information from external sources and filtering information through cross-boundary behaviors. However, this definition only includes the process of acquiring information from the outside and filtering it, while cross-border activities include not only the process of acquiring information from the outside but also the process of transferring information to the inside of the organization. This definition is no longer limited to the single process of acquiring information from the outside, but reflects the process of acquiring information from the outside and transferring it to the inside of the organization. According to some scholars, the process of cross-border people collecting relevant heterogeneous information from the outside, integrating it internally, and using it is considered to be the process of team learning, and cross-border behavior is an integral part of team learning.

The network perspective, which places the team that performs cross-border behavior in a social network, emphasizes that the team establishes various connections with external actors and believes that cross-border teams can obtain external resources and support only by making connections with external subjects. marrone (2007) defines network cross-border behavior from a network perspective, arguing that the behavior occurs among multiple groups, systems, and subjects, rather than focusing only on a single object.

2.4 The impact of employee behavior across boundaries on creativity

2.4.1 Cross-border activities have a negative impact on creativity

Drach-Zahavy and Somech (2010) divided cross-border activities into two dimensions: boundary relaxation activities and boundary tightening activities, in which both argued that boundary tightening activities would reinforce the existence of boundaries and emphasize the distinction between internal and external boundaries, which on the one hand would reinforce employee cohesion within boundaries, and when an internal member feels role pressure, the internal On the other hand, it reinforces stereotypes and makes it difficult for individual employees to enhance their creativity because they are more inclined to solve new problems in their own way when they encounter them. et al. (2012) found that when employees are stressed by excessive resource consumption in cross-border behavior, they do not have enough resources to devote to creative activities. Empirical studies have found that employee creativity is positively influenced by proactive personality and negatively influenced by role conflict and role ambiguity. In the process of frequent transboundary activities, employees need to switch back and forth between different and even conflicting roles, which leads to ambiguity in their roles, which leads to role conflict, which increases their role stress, which leads to role overload, and finally leads to a significant depletion of their resources and their inability to devote more resources to creative work (Shih-Yi Chien et al., 2021).

2.4.2 Cross-border activities are beneficial to employees' creativity

Drach-Zahavy and Somech (2010) also argue that boundary relaxation activities weaken the existence of boundaries and help people inside and outside the boundaries to establish effective

information exchange channels, so that employees who perform boundary relaxation activities can exchange information with the outside world more effectively and have access to more novel information resources will help employees' creativity to At the same time, in order to better carry out boundary relaxation activities, employees need to cross the knowledge barriers and fixed thinking brought about by existing boundaries and respond to the pressure brought about by cross-border activities in a more positive and innovative way, which will help to enhance the creativity of cross-border employees; based on the classification of two dimensions of boundary relaxation activities and boundary tightening activities, and combined with role theory, Fan Hua et al. (2015) concluded through an empirical study However, role overload is more of an opportunity and challenge than a difficulty for knowledge-based employees in cultural enterprises, and knowledge-based employees will appear to be more motivated in the face of role overload, triggering their creativity. This has a positive effect on stimulating employees' creativity; from a resource perspective, the empirical study concludes that employees' cross-border behavior has a negative impact on individual creativity by increasing their role stress. Role breadth self-efficacy moderates these relationships, and employees with lower role breadth self-efficacy are more likely to experience role stress and have a stronger negative impact on creativity than those with higher role breadth self-efficacy, while employees with proactive personality traits will have higher role breadth self-efficacy (Zhu, Jinqiang et al., 2020).

3. Theoretical Models and Assumptions

Based on information theory and role theory, and based on the classification of cross-boundary activities by Liu Xiaojuan and other scholars, this study classifies employees' cross-boundary activities into transactional cross-boundary activities and learning cross-boundary activities, and proposes two hypotheses on the impact of cross-boundary behaviors on knowledge-based employees' creativity.

H1: Based on role theory – transactional cross-boundary activities inhibit knowledge-based employees' creativity through the mediating effect of role overload.

Knowledge-based employees often face dealing with multiple departments in their daily work of maintaining normal corporate operations, and in this process, employees will play multiple different roles. Frequent role transitions will most likely lead to employee role conflict, which in turn will lead to excessive role pressure and trigger role overload, and ultimately inhibit employee creativity.

H2: Based on information theory – learning cross-border activities will promote knowledge-based employees' creativity through the mediating role of knowledge absorption.

Knowledge-based employees differ from other types of employees in that knowledge-based employees are more adept at collecting, synthesizing, and using knowledge to cope with their work (Turriago-Hoyos et al., 2016). It can be said that knowledge extraction is an important part of knowledge-based employees' work, and through knowledge extraction, knowledge-based employees can accumulate more knowledge outside the boundary and synthesize it for daily work within the boundary, and by extracting knowledge outside the boundary, employees will be exposed to more novel things and ideas, which will stimulate the work potential and inspiration of knowledge-based employees and enhance their creativity.
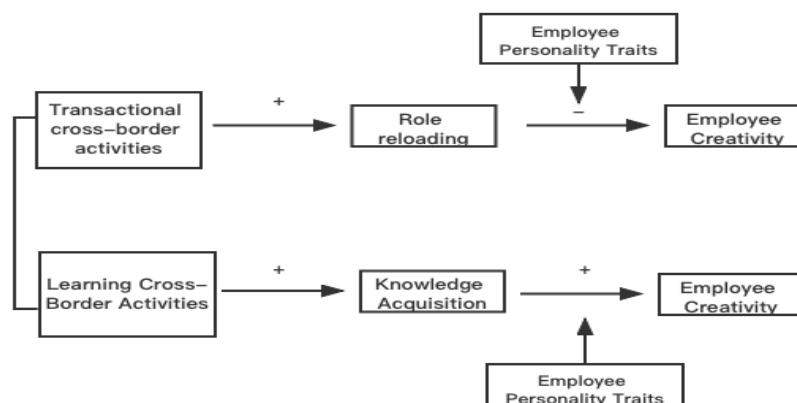

Figure 1 Theoretical model

4. Research Methodology and Design

4.1 Research Methodology

Using a descriptive single-case study approach, this paper focuses on the types of cross-boundary activities of fantasy engineers in Walt Disney's day-to-day operations and how they impact employee creativity through the mediation of role overload and knowledge absorption. The descriptive single-case study approach allows for a longitudinal analysis of the case study to delve into how knowledge workers' transboundary activities based on what scenarios affect their cumulative use of creativity.

4.2 Case content

4.2.1 Overview of The Walt Disney Company

The Walt Disney Company, an American diversified multinational media conglomerate, is headquartered in Burbank, California. The Walt Disney Company's businesses include: Theme Parks, Experiences and Consumer Products, Media and Entertainment Distribution, and three content segments - Motion Pictures, Mass Entertainment, and Sports - that collectively focus on developing content for direct service consumer platforms, theaters and cable platforms. developing and producing content. The company is well known for the work of its studios, and Walt Disney Studios Group is one of the largest and most prominent film production companies in the United States today. The Walt Disney Company owns and operates ABC, one of the leading television networks in the United States, as well as the Disney Channel, Entertainment and Sports Programming Television Network, Arts and Entertainment Television Network, Freeform, FX and National Geographic cable networks, and owns 14 of its licensed theme parks worldwide.

4.2.2 Imagieering career introduction

Walt Disney Imagineering, the development division of The Walt Disney Company, is responsible for designing and building Disney theme parks around the world. Walt Disney Imagineering is responsible for all phases of the design and construction of Disney theme parks, resorts, cruise ships and other entertainment venues. There are over 140 different job titles within the department, including illustrator, architect, engineer, lighting designer, show scriptwriter, graphic designer and more. Most Fantasy Engineers work out of our Glendale, California headquarters, but are often assigned to different theme park locations around the world.

4.3 Status of Walt Disney Imagineers Cross-Border Activities

Imagineers come from different backgrounds and their daily work activities require them to travel around the world to collect information to enrich their design inspiration. For example, Shanghai Disney's team of fantasy engineers come from different backgrounds such as art, engineering and architecture, and the team of fantasy engineers will also cooperate with local artists to collect representative elements in the local area, trying to fully integrate local elements into the design drawings of Disneyland, and use technology to tell stories, using high-tech science and technology to realize design ideas. For example, in the design and construction process of Shanghai Disneyland, the fantasy designer team worked with more than fifty local artists in China to integrate Chinese elements such as the Shanghai World Expo, Beijing Hutong, Chengdu Face Changing into the design of Shanghai Disneyland.
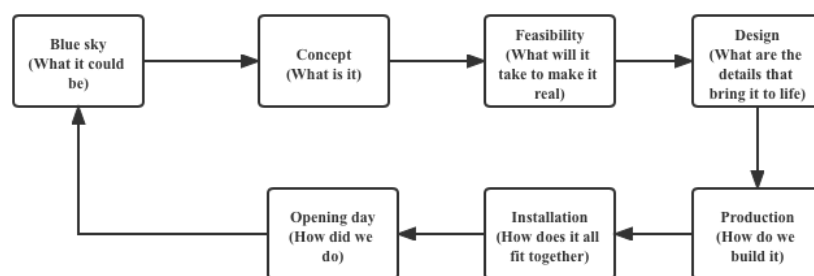

Figure 2 Imagineers' daily work flow

According to Figure 2, fantasy designers often begin their daily design work with a search for inspiration. In the "Blue Sky" session, designers will discuss an inspiration to find ways to bring a Disney story to life; imagine a specific park attraction, show, or project; or brainstorm together about how to advance new technologies and design new lines of business; and fantasy engineers When seeking inspiration as well as approaches, they often reach out to other partners to learn what challenges are common to the industry, or conduct market research to understand the business needs of the day. With a general direction in mind, the Imagineers will begin to design the sensory details of the project. In this "conceptual" phase, the Imagineers will collaborate with experts from other disciplines across borders to create an executable conceptual framework. In the subsequent stages, the fantasy engineers will collaborate with teams of experts from other disciplines and invite teams of local designers to work together in the design process to design entertainment projects with local characteristics. It can be said that the daily workflow of fantasy engineers is always accompanied by interaction with activities outside the boundary, and the design projects of fantasy designers would not be possible without cross-border activities.

4.4 Summary Analysis

Through a case study of Walt Disney, the cross-boundary activities of Walt Disney Imagineers were divided into transactional cross-boundary activities, and learning cross-boundary activities:

Table 1 Categorization of Imagineers' cross-border activities

Transactional cross-boundary activities	Learning cross-boundary activities
1. Providing support to the actors who will run and maintain the experience. 2. Working with superiors on the reporting of creative solutions. 3. Working with colleagues in the marketing department on aspects such as market demand. 4. Financial reimbursement process with colleagues in the finance department ……	1. Connect with partners to be informed of their priorities and help address common challenges. 2. Collaborating across borders with experts in other disciplines to build conceptual frameworks for projects. 3. Working with a team of local designers to integrate the ride with the local culture. 4. Traveling to locations to seek out the best construction materials for project work. ……

4.4.1 Effect of transactional cross-border activities on the creativity of imagineers

From the case study, it can be seen that when fantasy engineers perform learning cross-border activities, they still need to take into account the daily operation activities of various departments of the enterprise, and need to carry out daily project communication, financial reporting, routine group meetings, etc. Most of these transactional cross-border activities with other work departments are characterized by high repetitiveness, fixed time and rigid patterns, which can be completed without the integration and application of knowledge by fantasy designers, and are of low value to knowledge-based employees. It is a low-value cross-border activity for knowledge-based employees. Moreover, in the process of such cross-departmental cross-border activities, imagineersoften make frequent role changes, which will easily cause role conflicts among employees and increase their role pressure and eventually lead to role overload and inhibit the creativity of knowledge-based employees. Thus, it can be verified that H1: Transactional cross-border activities inhibit creativity through the mediating effect of role overload.

4.4.2 Effect of Learning Cross-Boundary Activities on Creativity of imagineers

From the case study, it can be seen that the daily project process of imagineers, as knowledge-based employees of cultural enterprises, starts from demand inspiration and is realized in the process of cross-border cooperation with experts from other disciplines. In the process of project realization, imagineers often need to draw, classify, synthesize and apply all kinds of knowledge and information outside the boundary. In the "Blue Sky" and "Concept" sessions, the Imagineers' team collaborated with experts from various disciplines to brainstorm ideas on how to turn Disney stories into reality, etc. All of these cross-border activities involve interacting with the outside world and absorbing knowledge and information. After absorbing the information from the outside world, the imagineers will use the inspiration inspired by the knowledge to better complete the construction of the project. Therefore, we can verify the hypothesis H2: Learning transboundary activities promote creativity through the intermediary role of knowledge acquisition.

5. Conclusion

Through a descriptive case study of Walt Disney Imagineers, this study tested the following two hypotheses. H1: When knowledge employees in cultural firms engage in thing-based cross-border activities, thing-based cross-border activities can inhibit knowledge employees' creativity through the mediating effect of role overload; H2: When knowledge employees in cultural firms engage in learning cross-border activities, learning cross-border activities can promote knowledge employees' creativity through the the mediating effect of knowledge extraction to promote the creativity of knowledge employees. This paper analyzes the role of employees' cross-border behaviors on employees' creativity from two latitudes, eliminates the contradictory findings of previous studies, and provides a reference for corporate leaders and human resources departments on whether to strengthen employees' cross-border activities to foster employees' creativity.

At the same time, this paper has some limitations because it uses a descriptive single-case study method, and the findings lack generalizability and need further improvement. In addition, this case study can only broadly analyze the relationship between transactional cross-border activities and learning cross-border activities and the creativity of knowledge workers, and lacks a variety of situational factors to examine. Therefore, this paper needs to be further improved and empirical studies should be added in order to make the findings more generalizable.

Acknowledgement

References

[1] 2021.[online] Available at: <https://sites.disney.com/waltdisneyimagineering/our-process/> [Accessed 20 October 2021].
[2] Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. Journal of Personality and Social Psychology, 45(2), 357-376.
[3] Amabile, T. M. (1996). Creativity in context: Update to"The social psychology of creativity". Boulder: Westview Press.
[4] Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. Academy of Management Journal, 39, 1154–1184. Available at: https://doi.org/10.5465/256995
[5] Ancona, D.G. (1990), "Outward bound: strategic for team survival in an organization", Academy of Management Journal, Vol. 33 No. 2, pp. 334-365.
[6] Çekmecelioglu, H. G., & Günsel, A. (2011). Promoting creativity among employees of mature industries: The effects of autonomy and role stress on creative behaviors and job performance. Procedia Social and Behavioral Sciences, 24, 889−895.
[7] Chen, Y., Liu, D., Tang, G. and Hogan, T., (2020). Workplace events and employee creativity: A multistudy field investigation. Personnel Psychology, [online] 74(2), pp.211-236. Available at: <https://doi.org/10.1111/peps.12399> [Accessed 16 October 2021].
[8] Chien, S., Yang, A. and Huang, Y.,(2021). Hotel frontline service employees' creativity and customer-oriented boundary-spanning behaviors: The effects of role stress and proactive personality. Journal of Hospitality and Tourism Management, [online] 47, pp.422-430. Available at: <http://www.elsevier.com/locate/jhtm>.
[9] De Jonge, J., Spoor, E., Sonnentag, S., Dormann, C., & van Den Tooren, M. (2012). "Take a break?!" Off-job recovery, job demands, and job resources as predictors of health, active learning, and creativity. European Journal of Work & Organizational Psychology, 21(3), 321−348.
[10] Dey, C. and M.P., G. (2017), "Team boundary activity: a review and directions for future research", Team Performance Management, Vol. 23 No. 5/6, pp. 273-292. https://doi.org/10.1108/TPM-06-2016-0029
[11] Drach-Zahavy, A., & Somech, A. (2010). From an Intrateam to an Interteam Perspective of Effectiveness: The Role of Interdependence and Boundary Activities. Small Group Research, 41(2), 143–174. https://doi.org/10.1177/1046496409356479
[12] Fan Hua, Liu Yi, Han Bing. (2015). A study on the role of role pressure and shared leadership on

creativity of cross-border employees. Soft Science, 29(012), 77-81.

[13] Kianto, A., Shujahat, M., Hussain, S., Nawaz, F. and Ali, M., (2018). The impact of knowledge management on knowledge worker productivity. Baltic Journal of Management, 14(2), pp.178-197.

[14] Li Jiajun, Li Yanshu. A study on the impact of internal and external knowledge integration on team creativity in cross-functional R&D teams of high-tech enterprises[J]. Nanjing Social Science, 2017(6):55-62.

[15] Li, Junkan. (2012). Exploring the development and operation mode of cultural and creative enterprises--a case study based on Walt Disney Company. China collective economy, 19(07S), 127-127.

[16] Liangding Jia, Jason D. Shaw, Anne S. Tsui, and Tae-Youn Park, (2014): A Social–Structural Perspective on Employee–Organization Relationships and Team Creativity. AMJ, 57, 869–891, https://doi.org/10.5465/amj.2011.0147

[17] Liu, Liangchan, & Zhao, Longying. (2019). Status and Prospects of Cross-Border Behavior Research. Science and Technology Management Research, v.39;No.435(17), 266-273.

[18] Liu, Xiaojuan, Deng, Chunping, Wang, Guofeng, & Pan, Jinzhen. (2015). The impact of it employees' cross-border activities on job satisfaction based on role overload and knowledge acquisition. Journal of Management, 12(9).

[19] Marrone, J.A., Tesluk, P.E. and Carson, J.B. (2007), "A multi-level investigation of antecedents and consequences of team member boundary spanning behavior", Academy of Management Journal, Vol. 50 No. 6, pp. 1423-1439.

[20] Ramarajan, L., Bezrukova, K., Jehn, K. A., & Euwema, M. (2011). From the outside in: The negative spillover effects of boundary spanners' relations with members of other organizations. Journal of Organizational Behavior, 32(6), 886−905.

[21] Shafi, M., Zoya, Lei, Z., Song, X. and Sarker, M., (2020). The effects of transformational leadership on employee creativity: Moderating role of intrinsic motivation. Asia Pacific Management Review, [online] 25(3), pp.166-176. Available at: <https://doi.org/10.1016/j.apmrv.2019.12.002> [Accessed 16 October 2021].

[22] Shalley, C. and Gilson, L., (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. The Leadership Quarterly, [online] 15(1), pp.33-53. Available at: <https://doi.org/10.1016/j.leaqua.2003.12.004> [Accessed 16 October 2021].

[23] Somech, A., & Khalaili, A. (2014). Team Boundary Activity: Its Mediating Role in the Relationship Between Structural Conditions and Team Innovation. Group & Organization Management, 39(3), 274–299. https://doi.org/10.1177/1059601114525437

[24] Tang, Chaoying, & Gao, Jiaxin. (2018). Where does employee creativity come from? Influencing Factors and Formation Mechanisms of Creativity. China Human Resource Development, 6.

[25] Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. Academy of Management Review, 18 (2), 293-321.

[26] Zhu JQ, Xu WY, Zhou JY, Zhang BN, Xu Fang Fang, Zong BQ. (2020). The cross-level double-edged sword effect of cross-border behavior on creativity. Journal of Psychology, 52(11), 1340-1351.