

## Appendix

## Appendix A

List of Experts for Research Instrument Assessment

## List of Experts for Research Instrument Assessment

1. Asst. Prof. Dr. Weerawit Piyanonthasin  
Mae Hong Son College  
Chiang Mai Rajabhat University
2. Assoc. Prof. Dr. Siripapun Leephaijaroen  
Faculty of Humanity and Science Science  
Ubon Ratchathani Rajabhat University
3. Dr. Sokyuen Tepthong  
Graduate School of Management and Innovation  
King Mongkut's University of Technology Thonburi (KMUTT)

## Appendix B

Certificate of Exemption from Human Research Ethics Review

# Certificate of Exemption from Human Research Ethics Review

ที่ อว ๐๖๔๒.๐๘๐/๒๕๖๖



คณะกรรมการจริยธรรมการวิจัยในมนุษย์  
สถาบันวิจัยและพัฒนา  
มหาวิทยาลัยราชภัฏธนบุรี  
๑๓๒ ถนนอิสรภาพ แขวงวัดกัลยาณ์  
เขตธนบุรี กรุงเทพมหานคร 10600

๘ ธันวาคม ๒๕๖๖

เรื่อง ส่งเอกสารรับรองผลการพิจารณาจริยธรรมการวิจัยในมนุษย์

เรียน Miss Chen Yitong (ผู้ช่วยศาสตราจารย์ ดร.จิระพงศ์ เรืองกุล)

ด้วยคณะกรรมการจริยธรรมการวิจัยในมนุษย์ มหาวิทยาลัยราชภัฏธนบุรี ได้ประเมิน/พิจารณาจริยธรรมมา  
ในโครงการวิจัยของท่านแล้ว จึงขอนำส่งเอกสารรับรองการยกเว้นพิจารณาจริยธรรมโครงการวิจัย ตามรายละเอียดดังนี้

จึงเรียนมาเพื่อทราบ

(ดร.วีรชัย คำธ)

เลขาธิการคณะกรรมการจริยธรรมการวิจัยในมนุษย์  
มหาวิทยาลัยราชภัฏธนบุรี

คณะกรรมการจริยธรรมการวิจัยในมนุษย์  
โทร ๐-๒๘๕๐-๐๐๐๓, ๐-๒๘๕๐-๓๕๐๑ ต่อ ๒๐๘๓ และ ๒๐๘๓



คณะกรรมการจริยธรรมการวิจัยในมนุษย์ มหาวิทยาลัยราชภัฏธนบุรี  
172 ถนนอิสรภาพ เขตธนบุรี กรุงเทพมหานคร 10600 เบอร์โทรศัพท์ 02 890 0001  
Dhonburi Rajabhat University Institutional Review Board  
172 Itsaraparb Rd., Thonburi, Bangkok 10600 Tel No. 662 890 0001

เอกสารรับรองการพิจารณาโครงการจริยธรรมวิจัยในมนุษย์แบบยกเว้น  
Certificate of Exemption from Human Research Ethics Review

หมายเลขเอกสารรับรอง (COE NO.) 080/2566

หมายเลขคณะกรรมการจริยธรรมการวิจัยในมนุษย์ (IRB NO.) DRUIRB-GOV-66-00015

ชื่อโครงการ (Research title) :  
(ภาษาไทย) -  
(English) Design the High Performance Work System (HPWS) to Align with the Digital Transformation: A Case Study of D Company  
เลขที่โครงการวิจัย (Research number) : 082/2566  
ผู้วิจัยหลัก (Principal investigator) : (ภาษาไทย) -  
(English) - Miss Chen Yitong  
หน่วยงานที่สังกัด (Institutional affiliation) : Master of Business Administration Program, Faculty of Management Science, Dhonburi Rajabhat University  
ผู้วิจัยร่วม (Co-Investigators) : (ภาษาไทย) -  
(English) -  
หน่วยงานที่สังกัด (Institutional affiliation) : -

โครงการวิจัยนี้ได้รับการรับรองจากคณะกรรมการจริยธรรมการวิจัยในมนุษย์ มหาวิทยาลัยราชภัฏธนบุรี  
This research project is approved by Dhonburi Rajabhat University Institutional Review Board.

วันที่รับรอง (Certified date) : 8 ธันวาคม 2566 (December 8<sup>th</sup>, 2023)

(ดร. ผ่องศรี เวสารัช/ Dr. Phongsri Waysarach)

ประธานคณะกรรมการจริยธรรมการวิจัยในมนุษย์ มหาวิทยาลัยราชภัฏธนบุรี  
Chairperson of Dhonburi Rajabhat University Institutional Review Board

- หมายเหตุ :  
Remarks:
1. ไม่ต้องส่งรายงานความก้าวหน้า
  2. ส่งรายงานการวิจัยฉบับสมบูรณ์ พร้อมแบบฟอร์มรายงานผลสรุปการวิจัย (DRU - IRB Form 14-01/2.0) เมื่องานวิจัยแล้วเสร็จ
  1. No requirement for progress report.
  2. When complete the research, please submit a full research report and the research report form (DRU - IRB Form14-01/2.0).

## Appendix C

Questions for Expert Interview

## Questions for Expert Interview

1. Can you describe the practices and strategies that Company D currently employs in its human resource management?
2. What are the key challenges or issues facing HR at Company D in the current context?
3. How has the role of HR evolved to respond to the latest changes in the business environment, including digital transformation?
4. Are there any specific HR plans or initiatives in place to meet the changing needs of employees and the goals of the organization?
5. How would you assess the effectiveness of Company D's current HRM practices?
6. Can you talk about the digital transformation program that Company D is under taking?
7. What are the specific goals and objectives of Company D's digital transformation efforts?
8. How do you see the role of the High Performance Work System (HPWS) in supporting and enhancing Company D's digital transformation journey?
9. What do you think are the key elements or components that should be incorporated into the design of the HPWS to ensure alignment with the digital transformation strategy?
10. What potential challenges or barriers do you anticipate in implementing the proposed HPWS in the context of Company D's digital transformation?
11. Opportunities and threats in China's HRM industry
12. Strengths and weaknesses of HRM in Company D after digital transformation
13. The current situation of HRM in Company D
14. Aspects to be paid attention to in designing high-performance work system
15. How to design a high-performance work system to retain talents
16. How to design a high-performance work system to improve employee productivity
17. How to design a high-performance work system to keep in line with Company D's digital transformation.
18. Problems facing human resource management after digital transformation
19. How to innovate the organizational structure after digital transformation
20. Innovative Strategies for Human Resource Management in the Context of Digital Transformation



## Appendix D

Example of Interview Record

## Example of Interview Record

Question: In the current context, what are the main challenges or issues facing HR in Company D?

Answer: The problems that Company D is facing now are facing the difficulty of talent recruitment, due to the imbalance of supply and demand in the market, a single recruitment channel, and the lack of an effective recruitment process and evaluation system; insufficient training and development in Company D. Employees' skills and knowledge can not be updated and improved, and they can not adapt to the digital transformation of Company D; and the low level of satisfaction of the employees, which will affect the efficiency of the work and the motivation of the work, which will make the competitiveness of the company D Company D's compensation and benefits are not attractive, which leads to employee turnover and recruitment difficulties, making it difficult to retain its own talented employees and attracting other talented people; Company D's talent pipeline is not sufficiently constructed, which leads to a serious brain drain and a serious fault line phenomenon.

## Appendix E

The Environment of Digital Transformation Analysis Forms

## 1. PEST Analysis Form

| Category   | Sub-Categories  | Factors   |
|------------|---|---|
| Political  | government stability, regulations, trade agreements, and taxes.                                   | <ul style="list-style-type: none"><li>● political system</li><li>● form of government</li><li>● political situation</li><li>● government attitude</li><li>● laws and regulations</li></ul>                    |
| Economic   | inflation rates, interest rates, and currency exchange rates                                      | <ul style="list-style-type: none"><li>● GDP</li><li>● interest rate level</li><li>● Fiscal and monetary policy</li><li>● Market mechanisms and demand</li><li>● Disposable income of the population</li></ul> |
| Social     | demographic changes, cultural attitudes, and consumer behavior                                    | <ul style="list-style-type: none"><li>● Size of population</li><li>● cultural background</li><li>● age structure</li><li>● Population distribution</li><li>● Income distribution</li></ul>                    |
| Technology | the level of innovation in the industry, technological advancements, and the impact of automation | <ul style="list-style-type: none"><li>● new technologies</li><li>● new material</li><li>● new technology</li><li>● growing trend</li><li>● Application Background</li></ul>                                   |

## 2. Core Competence Analysis Form

| Competence                       | What does this competency allow us to do?  | How strategic is it for the future?<br>(1 = Low; 10 = High) | Can competitors copy it?<br>(1=Easy; 10=Hard) | Score of 15 or higher indicates strategic capability & likely differentiator |
|----------------------------------|--|---|---|--|
| Company profile                  | Founded in 2002, Company D has branches in several locations in China and employs 25,000 people, of which 300 are company-owned and the rest are outsourced. For historical reasons, most of the company's clients are government organizations and state-owned enterprises. |   |   |  |
| Technological innovation ability | D company independent research and development of OA system and APP, can efficiently docking customers, timely understanding of customer needs, for can provide personalized service.  | 9   | 7   | 16   |
| Production and service capacity  | Company D conducts professional skills tests every year to ensure that the most professional services are provided to customers; Company D has also set up an emergency planning team to ensure that unexpected situations are handled in a timely manner for customers.     | 6   | 3   | 15   |

|                                |  |   |   |    |
|--------------------------------|--|---|---|----|
| Marketing service capability   | With more than 600 clients to work with in 2022, up 23.1% year-over-year, Company D has been repeatedly recognized as a benchmark company in the human resources industry and has won a number of HR awards.   | 8 | 7 | 17 |
| Financial management ability   | Company D's 2022 revenue topped \$200 million, up 30.4% year-over-year, with the majority of revenue coming from the labor dispatch business, which is the company's main revenue.   | 7 | 5 | 15 |
| After-sales service capability | Company D has a customer service department with professionally trained personnel who are able to respond quickly to problems from expatriate employees or customers. The company has specialized counterparts for its clients so that they can resolve issues in a timely and efficient manner. | 6 | 5 | 15 |

### 3. External Factor Analysis (EFA) Form

| External Factors                                   | Weight | Rating | Weighted score |
|--|--------|--------|----------------|
| <b>Opportunities</b>                               |        |        |                |
| O1 Growing importance of human resources           | 0.1    | 3      | 0.3            |
| O2 Growing market size and influx of new customers | 0.13   | 3      | 0.39           |

| External Factors  | Weight      | Rating | Weighted score |
|---|-------------|--------|----------------|
| O3 Leveraging developments in artificial intelligence to more accurately predict customer needs | 0.09        | 3      | 0.27           |
| O4 Brand building of HR service industry receives attention                                     | 0.07        | 4      | 0.28           |
| O5 Further upgrading of market segmentation and industrial structure optimization               | 0.11        | 3      | 0.33           |
| <b>Treats</b>   |             |        |                |
| T1 Increasing specialization and complexity   | 0.09        | 3      | 0.27           |
| T2 Stabilization of competitors' market share in the same industry                              | 0.1         | 3      | 0.3            |
| T3 Risk of changes in industry policies and regulations   | 0.13        | 3      | 0.39           |
| T4 Shortage of financial resources in the post epidemic era                                     | 0.11        | 3      | 0.33           |
| T5 Decrease in state subsidy programs for the HR industry                                       | 0.07        | 2      | 0.14           |
| <b>Total Scores</b>   | <b>1.00</b> |        | <b>3.00</b>    |

#### 4. Internal Factor Analysis (IFA) Form

| Internal Factors   | Weight      | Rating | Weighted score |
|--|-------------|--------|----------------|
| <b>Strengths</b>   |             |        |                |
| S1. A team of professionally qualified employees   | 0.19        | 3      | 0.57           |
| S2. High sense of obedience among the employees of the company                                       | 0.14        | 3      | 0.42           |
| S3. High brand awareness   | 0.1         | 4      | 0.4            |
| S4. Sufficient capital of the company  | 0.11        | 3      | 0.33           |
| S5. Leading in innovation and technology   | 0.16        | 4      | 0.64           |
| <b>Weaknesses</b>  |             |        |                |
| W1. Lack of mechanisms for employees to share the benefits of corporate development with the company | 0.03        | 2      | 0.06           |
| W2. Low level of internationalization of the company   | 0.06        | 2      | 0.12           |
| W3. Lack of diversity in the company's products  | 0.05        | 3      | 0.15           |
| W4. Lack of management talents   | 0.04        | 3      | 0.12           |
| W5. Inadequate human resource management system  | 0.12        | 3      | 0.36           |
| <b>Total Scores</b>  | <b>1.00</b> |        | <b>3.17</b>    |

## 5. SWOT Analysis

| Strengths   | Weakness  |
|---|---|
| <ul style="list-style-type: none"> <li>• S1 A team of professionally qualified employees</li> <li>• S2 A strong sense of obedience among the company's employees</li> <li>• S3 High brand awareness</li> <li>• S4 Adequate capitalization of the company</li> <li>• S5 Leading in innovation and technology</li> </ul>  | <ul style="list-style-type: none"> <li>• W1 Lack of mechanism for employees to share the benefits of corporate development with the company</li> <li>• W2 Low level of internationalization of the company</li> <li>• W3 Lack of diversity in the company's products</li> <li>• W4 Lack of management talents</li> <li>• W5 Inadequate human resource management system</li> </ul>                        |
| Opportunities   | Threats   |
| <ul style="list-style-type: none"> <li>• O1 Increasing importance of human resources</li> <li>• O2 Expanding market size and influx of new customers</li> <li>• O3 Utilizing developments in artificial intelligence to more accurately predict customer needs</li> <li>• O4 Brand building in the HR service industry receiving attention</li> <li>• O5 Upgrading of market segmentation and optimization of industrial structure</li> </ul> | <ul style="list-style-type: none"> <li>• T1 Increasing specialization and complexity</li> <li>• T2 Stabilization of competitors' market share in the same industry</li> <li>• T3 Risk of changes in industry policies and regulations</li> <li>• T4 Shortage of financial resources in the post epidemic era</li> <li>• T5 Reduction of state subsidy programs in the human resources industry</li> </ul> |

## 6. TOWS Matrix

| Opportunities  | OS strategies   | OW strategies  |
|--|---|--|
| <p>O1 Increasing importance of human resources</p> <p>O2 Expanding market size and influx of new customers</p> <p>O3 Utilizing developments in artificial intelligence to more accurately predict customer needs</p> <p>O4 Brand building in the HR Service industry receiving attention</p> | <p>1. Human resources are becoming increasingly important in today's market Company D can utilize its brand awareness and a team of professionally qualified employees to attract new customers and enhance its competitiveness in the market. (O1, S1, S3)</p> | <p>1. The market size is expanding and new customers are coming in. Company D needs to improve its internationalization level and enhance the diversity of its products so that it can attract new customers. (O2, W2, W3)</p> |



|  |   |   |
|--|---|---|
| <p>O5 Upgrading of market segmentation and optimization of industrial structure</p>  | <p>2. In this era of big data, the use of digitalization is becoming more and more popular Company D has sufficient capital and innovative technology, which can be used to attract new customers and stabilize old ones. (O2, S4, S5)</p>  | <p>2. The importance of human resources is increasing, the market is segmented and the structure is optimized, while the human resource management system of Company D is still deficient, lack of management personnel, which will reduce the competitiveness of Company D's market, so it is necessary to design a high- performance work system to improve the motivation of the staff and enhance the competitiveness of the Company D's market. (O5, W4, W5)</p>       |
| <p style="text-align: center;"><b>Threats</b></p> <p>T1 Increasing specialization and complexity</p> <p>T2 Stabilization of competitors' market share in the same industry</p> <p>T3 Risk of changes in industry policies and regulations</p> <p>T4 Shortage of financial resources in the post epidemic era</p> <p>T5 Reduction of state subsidy programs in the human resources industry</p> | <p style="text-align: center;"><b>TS strategies</b></p> <p>1. The national subsidy program for the human resource industry has been reduced, and Company D will lose a lot of income from the subsidy program, but Company D has sufficient capital of its own, and this status quo has little impact on Company D. (T5, S4)</p> <p>2. Nowadays, the industry is becoming more specialized and complex, and the requirements for HR service companies are</p> | <p style="text-align: center;"><b>TW strategies</b></p> <p>1. The increasing specialization of the industry, such a situation for the staff requirements are higher, so you need to enhance the staff welfare system, so as to avoid the loss of talent. (T1, W1)</p> <p>2. There are many changes in the industry policy, in this case, Company D needs more excellent management personnel and efficient workflow to cope with the changes in the rules. (T3, W4, W5)</p> |

|  |   |  |
|--|---|--|
|  | higher, in which case Company D can use its own specialized team to attract customers. (T1, S1) |  |
|--|---|--|

## 7. Questionnaire

| Name               | Width | Label          | Values | Value  |
|--------------------|-------|----------------|--------|--|
| Gender             | 1     | Gender         | 1-4    | 1 = Male<br>2 = Female<br>3 = Non-binary<br>4 = Prefer not to answer   |
| Age                | 1     | Age            | 1-3    | 1 = 20-30<br>2 = 31-40<br>3 = 41-50  |
| Highest degree     | 1     | Highest degree | 1-8    | 1 = Less than high school<br>2 = High school<br>3 = University<br>4 = junior college<br>5 = undergraduate<br>6 = Master<br>7 = Doctorate<br>8 = prefer not to answer |
| Income composition | 1     | composition    | 1-5    | 1 = Grass-roots staff<br>2 = Human resources specialist<br>3 = Middle management<br>4 = Top management<br>5 = prefer not to answer                                   |

| High Performance Work System  | 1<br>Strongly<br>Agree | 2<br>Agree | 3<br>Average | 4<br>Disagree | 5<br>Strongly<br>disagree |
|---|------------------------|------------|--------------|---------------|---------------------------|
| <b>Job Involvement</b>  |                        |            |              |               |                           |
| 1. Employees actively participate in job rotation to enhance their skills and adaptability in the context of digital transformation             | 2                      | 49         | 86           | 32            | 5                         |
| 2. Employees are empowered to make decisions, fostering a culture of autonomy and responsibility in the digital transformation journey          | 23                     | 95         | 54           | 2             |                           |
| 3. Job roles are customized to match individual skills and capabilities, with a specific focus on supporting digital initiatives.               | 37                     | 99         | 38           |               |                           |
| <b>Employee selection</b>   |                        |            |              |               |                           |
| 4. Employee selection is a comprehensive process involving interviews, tests, and other assessments tailored to digital roles and competencies. | 17                     | 57         | 56           | 39            | 5                         |
| 5. Selection criteria emphasize candidates' ability to collaborate effectively within digital teams and adapt to technological advancements.    | 27                     | 86         | 61           |               |                           |
| Selection involves screening many job candidates.   |                        |            |              |               |                           |
| 6. Rigorous candidate screening is conducted to ensure the best fit for the organization's digital goals.                                       | 35                     | 103        | 35           | 1             |                           |
| 7. Selection prioritizes identifying candidates with broad skillsets relevant to digital transformation, regardless of specific job roles.      | 25                     | 69         | 77           | 2             | 1                         |
| 8. The selection process encourages promotion from within the company, with a keen eye on nurturing digital talent.                             | 37                     | 112        | 25           |               |                           |

| High Performance Work System  | 1<br>Strongly<br>Agree | 2<br>Agree | 3<br>Average | 4<br>Disagree | 5<br>Strongly<br>disagree |
|---|------------------------|------------|--------------|---------------|---------------------------|
| 9. Selection criteria emphasize candidates' potential to learn and adapt within the evolving digital landscape.                                     | 45                     | 97         | 32           |               |                           |
| <b>Training &amp; Development</b>   |                        |            |              |               |                           |
| 10. Continuous training & development programs are in place to develop and enhance employee skills, specifically focusing on digital proficiency.   | 23                     | 97         | 46           | 8             |                           |
| 11. Training & development programs are comprehensive, covering a wide range of digital topics and technologies.                                    | 36                     | 116        | 22           |               |                           |
| 12. Training & development initiatives focus on building firm-specific digital skills and knowledge required for successful digital transformation. | 34                     | 117        | 23           |               |                           |
| 13. Training & development emphasizes practical, on-the-job experiences to facilitate skill application in digital contexts.                        | 35                     | 115        | 24           |               |                           |
| <b>Performance management</b>   |                        |            |              |               |                           |
| 14. Employee performance is assessed based on objective, quantifiable digital results and contributions.  | 27                     | 123        | 9            | 15            |                           |
| 15. Performance appraisals include a management-by-objective approach with mutual goal setting, aligned with digital transformation objectives.     | 33                     | 126        | 13           | 2             |                           |
| 16. Performance evaluations provide developmental feedback to aid employee growth in the digital realm.   | 51                     | 115        | 8            |               |                           |

| High Performance Work System  | 1<br>Strongly<br>Agree | 2<br>Agree | 3<br>Average | 4<br>Disagree | 5<br>Strongly<br>disagree |
|---|------------------------|------------|--------------|---------------|---------------------------|
| <b>Compensation</b>   |                        |            |              |               |                           |
| 17. Incentive structures are tied to team performance, promoting collaboration and achieving digital milestones.                    | 49                     | 122        | 3            |               |                           |
| 18. Compensation packages feature an extensive benefits package to support employee well-being during the digital transition.       | 87                     | 80         | 7            |               |                           |
| 19. Competitive wages are an integral part of our compensation offerings, reflecting the value of digital skills and contributions. | 85                     | 88         | 1            |               |                           |
| 20. The incentive system incorporates skill-based pay to reward digital expertise and proficiency.                                  | 56                     | 87         | 27           | 4             |                           |
| 21. Compensation is contingent on individual and team performance, with a clear link to digital transformation success.             | 58                     | 101        | 15           |               |                           |

## 8. Interview Guideline

| Research objectives  | Questions  |
|--|--|
| 1. To analyze the current situation of human resource management in D company. | 1. Can you describe the current practices and strategies employed in human resource management at D Company?                               |
|  | 2. What are the key challenges or issues faced by the HR department in D Company in the current context?                                   |
|  | 3. How has the role of HR evolved in response to recent changes in the business landscape, including digital transformation?               |
|  | 4. Are there any specific HR initiatives or programs in place to address the changing needs of the workforce and the organization's goals? |
|  | 5. How do you assess the effectiveness of the current HR management practices at D Company?  |

| Research objectives   | Questions   |
|---|---|
| <p>2. To design a high-performance work system (HPWS) aligned with the digital transformation of D Company.</p> | <p>1. Could you provide insights into the ongoing digital transformation initiatives at D Company?</p>  |
|   | <p>2. What are the specific goals and objectives of D Company's digital transformation efforts?</p>   |
|   | <p>3. How do you envision the role of a high-performance work system (HPWS) in supporting and enhancing the digital transformation journey of D Company?</p>            |
|   | <p>4. What key elements or components do you think should be incorporated into the design of the HPWS to ensure alignment with the digital transformation strategy?</p> |
|   | <p>5. What potential challenges or barriers do you foresee in implementing the proposed HPWS within the context of D Company's digital transformation?</p>              |

## Biography

Name Chen Yitong  
Day Month Year of Birth 28/02/1994  
Domicile Building 7, Area C, Shihua Waterfront, Fengtai District,  
Beijing, China

### Academic Background

2018 Bachelor of Laws  
JILIN University  
2023 Master of Business Administration  
Dhonburi Rajabhat University

### Position and Office

2023 Beijing Oriental Huibo Labor Dispatch Co.