

# Reward Prototype Development for Innovation Performance of Private Hospital Employees



**Amika Tuntaweesinsak<sup>1</sup> and Piyapong khaikleng<sup>2\*</sup>**

*1Master degree student in the Applied Psychology, Srinakharinwirot University, Thailand*

*2Lecturer in the College of Creative Industry, Srinakharinwirot University, Thailand*

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**\*Corresponding author:** Piyapong khaikleng, Lecturer in the College of Creative Industry, Srinakharinwirot University, Thailand

## Abstract

The rewards can encourage motivation and drive innovation in an organization, and also influence the motivation to drive innovation performance. This research aims to 1) Analysis of rewarded innovation performance experience and needs 2) Design reward prototype from the result of user experience research and 3) Test appropriate of reward prototype. The methodology was using by user-experience research and design research. One hundred four persons of non-clinical employees collected by an online questionnaire with five research Measurements: 1) User Experience Questionnaire 2) Needs Questionnaire 3) Reward Questionnaire 4) Motivation Questionnaire and 5) Innovation Performance Questionnaire. The study applied the results of user experience analysis to develop a model based on the principles of employee innovation performance reward prototype design for developing the employees' Innovation Performance.

**Keywords:** Innovation performance; Reward prototype; Design research; User-experience research

## Introduction

Private hospitals need high performing employees with innovation and creativity. The organization will have a competitive advantage if they have innovation behavior employees [1]. Innovation performance has become an integral part of the hospital business, especially personnel who can create to new solutions for problems solving [2]. A key factor in innovation performance is the motivation for employees to innovation performance [3]. Highly motivation contributed to higher operational efficiency and are associated with higher creativity and innovation practices. Organizations need to design strategies to keep employees motivated in their innovation performance [4].

Rewarding impacts the motivation for innovation performance, the motivation should be encouraged in the organization [4-6]. Rewarding has a positive relationship to innovation motivation and performance [7-9]. The reward has important role in innovation performance [10]. In this study, focus on in-depth study by applying user experience research to obtain information on emotion and needs of Private Hospital Employees and design research methods [11] for user experience analysis developed as

a model based on the prototype design principles of rewarding of innovation performance of private hospital employees. The information obtained will be useful in the implementation of the prototype that is the nature of the activity process as well as the new design principles for the development of employees of private hospitals to innovation performance.

## Review of Literature

### Innovation Performance

Innovation Performance refers to the behavior of work that demonstrates creativity and the implementation of Idea to achieve the goals setting. The innovation performance's elements are 1) developing new ideas, called "creativity" and 2) application of new ideas, called "innovation" [12]. It would not have happened without shared creativity and innovation. (Ford, 1996) Innovation Performance is the actions of individuals who aim to create, processing and apply new ideas to their operations and includes ideas about new products, technologies, procedures or work processes aimed at increasing the effectiveness and success of organizations at all levels [12-14].

## Rewarding

Reward refers to the nature of rewards of private hospitals in the form of giving something of a financial reward and nonfinancial reward to private hospital employees for innovation performance. Rewards are essential in formulating an organization's strategy and policy. Reward used as a tool to employees guide to perform tasks more effectively, unbiased and consistent with the needs of employees is a challenge for the organization. The management should understand reward meanings and formats were building an appropriate reward system requires continuous design and improvement of the reward process [15,16].

## Motivation Theory

Motivation is a stimulus that needs of the employee and giving that person the motivation to pursue innovation. Human-centeredness relates to motivation to allow oneself and those around them to move or conduct their intended behaviors [17]. Motivation is a key mechanism for an organization to encourage employee motivation [18]. Motivation is an individual's goal and there are a variety of ways that a person's behavior can be changed. How to motivate others to take the direction they want to achieve a specific goal or outcome. Motivating is a matter of directing the own direction and then acting to reach goals because motivation is the power that motivates, regulates and maintains behavior [19].

According to previous studies and literature reviews, psychologists categorized motivation into two categories: 1) extrinsic motivation and 2) intrinsic motivation. Extrinsic motivation is those that motivate the individual in forms of reward, such as increased money from normal, praise, and in forms of punishment. Disciplinary deductions can be effective immediately and effective. Extrinsic motivation contributed to the effectiveness of incentives that affect the performance of continuous innovation. Intrinsic motivation is a stimulus that arises within a person, arising from a mental need of motivation within a person motivated, feels that their work is important and interesting, challenging and freedom at the right level (freedom) results in a positive sense of control, perception of the cause, challenges arise, and intrinsic motivation enhances innovation performance [20].

## User Experience Research

Research User Experience with related terminology in three words: 1) User 2) User experience: UX and 3) User Experience Research: UX research. User experience research refers to the study of users' experiences of different products, devices, or services with a focus on Role, emotional, Attitude and behavioral needs. User using the product by data collection [11] this study selected to 4 dimensions of user experience dimension to reflect the context of a private hospital employee who received an innovation performance reward to understand the emotions, feelings, and needs of the users from experiences as follows; 1) Role 2) Emotion 3) Attitude and 4) Behavior

## Needs

[11] Proposes needs with two definitions: 1) the difference between the expected condition and the actual condition. By reflecting on the problems that need to be addressed and 2) define what is useful. Or solving problems which meet the needs necessary.

## Design Research

[11] Design research is a research strategy aimed at developing innovation or problem-solving, with a process of designing and developing a design-based solution which requires theoretical concepts to be involved in formulating design principles. Experiments put innovation into action, with assessments in the process to improve innovation. It was repeated several cycles during the research so that a viable solution obtained.

## Materials and Methods

### Participants

The research population was 104 clinically underserved employees for 100% of the sample population who are expected by the organization to develop innovation performance.

### Research Instrument

1) The Experience of innovation performance Questionnaire  
2) Innovation Performance Needs Questionnaire  
3) Innovation Performance Rewarding Questionnaire  
4) Innovation Performance Motivation Questionnaire and  
5) Innovation Performance Questionnaire.

### Data Analysis

Methods for analyzing using statistics describing frequency, percentage, mean, and standard deviation. Simple linear regression analysis and needs analysis by the PNI modified index.

## Conceptual Framework

From studying documents related to the reward concept it can be used to encourage innovation performance consisting of two components: Creativity and Implementation by defining the nature of the operational activities in accordance with the motivation principle [7]. The design principles determined based on data obtained from user experience research classified as 2 of the elements are Needs and User Experience, divided into 4 dimensions: roles, emotions, attitudes, and behaviors as shown in Figure 1.

## Research Methodology

The user experience research and design research are divided into 3 phases.

### Phase 1 Analysis and survey

Study of documents related to variables. Documentation related to experience research, design research and defining

questionnaires and collecting data with employees in private hospitals about the reward, motivation, and innovation performance. The determination of the quality of the tool by determining the content validity and the confidence reliability by calculating the Cronbach alpha coefficient found that the dimensional there was a dimensional confidence value between

0.73-0.88 for all variables and discrimination. Data collection and analysis by using statistics describing frequency, percentage, mean, standard deviation, correlation coefficient analysis, and simple linear regression and needs analysis using PNI modified index.

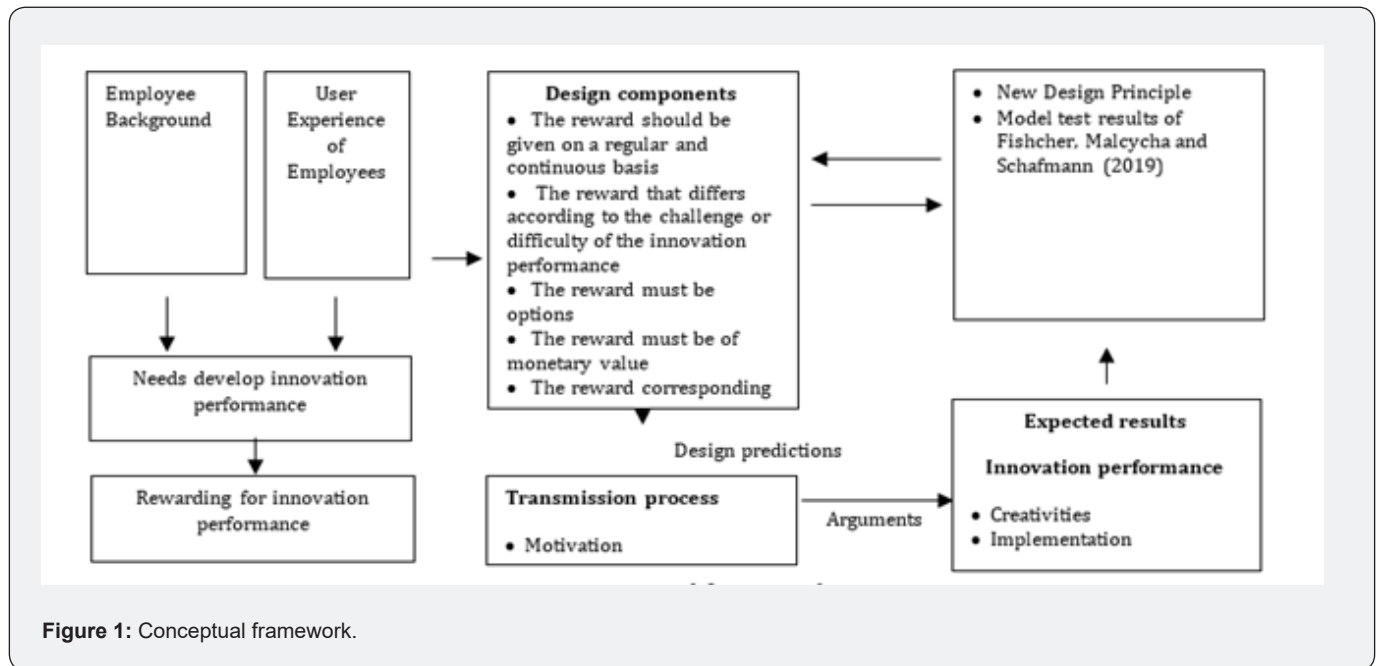


Figure 1: Conceptual framework.

### Phase 2 Prototype Design and Development

Design and development of reward prototype for innovation performance of employees by applying user experience research and design research by defining the design principles, reward prototypes and developing prototypes based on design principles

as specified. Apply the results to formulate the design principles and draw up the design principles. The design of activities according to the core elements is subject to a rational excuse, a belief derived from the theoretical concepts studied in the relevant material to be used in the intervention design (intervention x) (Table 1).

Table 1: Design principles for innovation performance reward.

Intervention ( X):	Reward
The desired effect (Y):	Innovation performance
Context (Z):	Employees of private hospitals that focus on innovation performance
Transmission process (excuse Logical (Arguments) or theoretical predictions) :	Motivation
Intervention characteristics (design principles or design predictions) :	The components of an innovation performance reward include 1) The reward should be given on a regular and continuous basis. 2) The reward that differs according to the challenge or difficulty of the innovation performance 3) The reward must be options 4) The reward must be of monetary value and 5) The reward corresponding to the personal development

Draft innovation performance reward activities based on design principles of innovation performance reward and prototype development based on established design principles

and validate activities with design principles and adjust them according to recommendations. Thereafter, the questionnaire drawn up and used for staff to give their opinion (Table 2).

**Table 2:** Example of reward activities (draft).

Activity 1	Acknowledge, communicate the rules of reward
	1) Understanding employees know the objectives, details, rules, goals, and timelines of the innovation work with a focus on mutual understanding.
	2) Choose a reward according to your preferences.
	3) Make an innovation agreement to be made.
Activity 2	Easy to start
	Human resource department uses survey results to design reward according to Employees grouped by innovations to be easily exchanged, presented in groups, and rewarded based on design principles: 1) The reward should be given on a regular and continuous basis. 2) The reward must be options 3) The reward must be of monetary value and 4) The reward corresponding to the personal development
	1.1) Mid-Year Performance Assessment reward or at the end of the year on an individual basis.
	1.2) Gift voucher instead of cash.
	1.3) Points accumulation and points can be redeemed for the desired reward by setting points and reward in each criterion. The reward will be rewarded from the compilation of the results of the research questionnaire in Phase 1.
	1.4) Self-development training course
	The reward in this event is suitable for simple innovations, such as small amounts of cash vouchers or a short-term and small self-development training course

**Phase 3 Evaluation and Reflection**

Analyze the suitability of implementing the prototype developed into practice and compare it according to the Motivation variables. The research conducted in this phase by using questionnaires in survey research.

Determine the population groups used in the research. The survey participants divided into 2 groups: the first group of employees, the original sample group that completed the phase 2 questionnaire, number 104 people, and the second group of executives in the organization who were directly involved in innovation performance 8 employees. The data collection and data analysis. Using statistics of mean, percentage and standard deviation.

**Preliminary Analyses**

The results of this research are to analyze the experience and needs of the development of innovation performance among private hospital employees and to design and develop a model

for rewarding innovation performance of employees in private hospitals by applying user experience research and design research presentation of research results and discussion of the results are as follows:

**The Results of the Analysis of the Experience for Receiving the Innovation Performance Reward**

The experience of receiving the innovation performance reward consists of four components: role, emotion, attitude and behavior, with each of the 4 elements Analysis results It was found that the attitude components had the highest mean (M = 3.95, SD = 0.79), followed by emotional (M = 3.94, SD = 0.85), behavior (M = 3.89, SD = 0.84) and role (M = 3.59, SD = 0.93).

**Needs Analysis Results are Needed to Develop Innovation Performance**

It shows that employees lack the courage to start something new (PNI Index = 0.02) is the most necessary to make work more efficient (PNI Index = -0.10).

**Analysis Results for Rewarding for Innovation Performance**

It was found that the overall motivation for innovation performance was an average (M = 4.01, SD = 0.86), with the item with the highest average being the appropriate reward for innovation performance. The reward corresponding to the personal development (M = 4.24, SD = 0.86). The reward must be options (M = 4.22, SD = 0.90). The reward that differs according to the challenge or difficulty of the innovation performance (M = 4.09, SD = 0.71), the reward should be given on a regular and continuous basis (M = 4.05, SD = 0.79) the reward must be of monetary value (M = 4.05, SD = 0.82).

**The Results of a Simple Linear Regression Analysis of Reward Affecting Innovation Performance and Motivation Influencing Innovation Performance**

It was found to have a statistically significant positive correlation at the scale of 0.01, which means that reward and motivation are determinants. Innovation performance trends.

**The Results of the Correlation Analysis of the Observable Variables**

It was found that the correlation coefficients between all variables were they were statistically significant at the .01 level with values between .27 and .72. All variables were directional relationships with positive correlation.

**The Results of the Design and Development of the Prototype Rewarding the Innovation Performance**

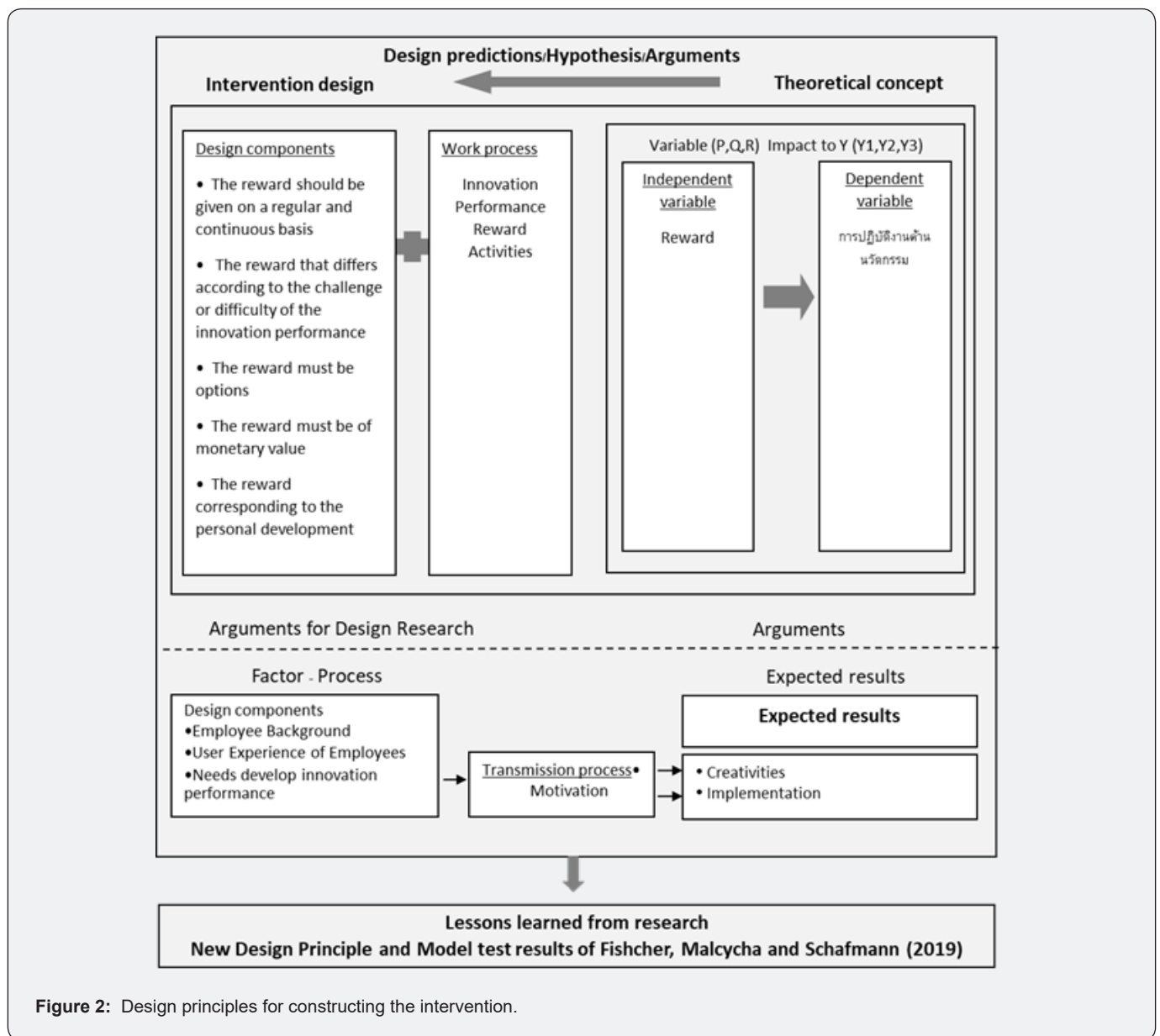


Figure 2: Design principles for constructing the intervention.



From analyzing the nature of this innovation performance reward, it can be an issue in defining design principles, rewarding innovation performance. As the following details;

- a) The reward should be given on a regular and continuous basis
- b) The reward that differs according to the challenge or difficulty of the innovation performance
- c) The reward must be options
- d) The reward must be of monetary value
- e) The reward corresponding to the personal development (Figure 2).

## The Results of the Analysis of the Innovation Performance Reward Activities of Private Hospital Employees

it was found that the innovation performance reward activity consisted of 4 main activities. Found that in the view of employees the activity with the highest average was activity 2 understand, create, reward ( $M = 4.96$ ,  $SD = 0.19$ ). Activity with the highest average is activity 2 understand, create rewards activity 3.1 recognize, communicate the rules, rewards activity 3.2 easier to start 3.4 see the value, enjoy every reward activity no. 4 Maintain and sustainable ( $M = 5.00$ ,  $SD = 0.00$ )

## Conclusion

### Summary of Research Results for Phase 1

**The results of the analysis of the experience for receiving the Innovation Performance reward** found the strengths of the employee's innovation performance experience divided into 4 areas as follows:

**Role**, it was found that the work performed by the employees on a daily basis is related to work innovation, design and develop innovation

**Emotional**, employees feel about the experience of receiving an innovation performance reward and the perception of the feelings of others who have received the reward to make employees feel proud of themselves, Happy to receive the reward, Likely to the innovation performance reward always provided by the organization and rewards make employees more inclined to pursue innovation performance.

**Attitude**, the employees' opinions towards receiving the innovation performance reward, it was found that rewarding performance in innovation enabled employees to work in the process of creating and developing innovation until they were able to improve their work in line with their needs as well as fostering an innovation and innovation culture

**Behavioral**, the employee's expressive behavior that demonstrates a shift in innovation work from receiving an innovation performance reward is to work more efficiently.

Employees began to submit innovation works to enter the contest. And employees will try to find Acquire knowledge in innovation development.

**The results of Needs analysis results are needed to develop innovation performance analysis** indicate that the sample is Patient service staff there is a need for courage to start something new, it is the most necessary. In the design of the rewarding activities, employees are given the opportunity to present their innovation work. To support and encourage employees to have the courage to start new things in the practice of innovation.

**The results of rewarding for innovation performance analysis** from the questionnaire in the innovation performance reward questionnaire, it was found that the innovation performance reward guidelines can be divided into 5 items: 1) Reward should be given on a regular basis and 2) Reward that differ according to their needs. The challenge or difficulty of innovation 3) the reward must be optional 4) the reward must be of monetary value and 5) the reward corresponding to personal development.

**The Results of innovation performance motivation analysis** was found that employees are committed to setting goals for themselves. And prefer to work knowing that I am better than challenging jobs.

**The Results of innovation performance analysis** from this study, it was found that employees improved their work in their own organization. Thinking of ways to improve work. To solve problems and improve work efficiency and employees act on the ideas presented with perseverance.

**The results of a simple linear regression analysis of reward** affecting innovation performance and motivation influencing innovation performance showed a statistically positive correlation that Level 0.01, which means Reward and motivation are determinants. Innovation performance trends.

**The results of the correlation analysis of the observable variables were** found that all the variables were correlate with positive correlation values. Especially the relationship of the user experience, needs, reward, and motivation has a positive correlation to innovation performance.

### Summary of the Results of the Research Phase 2

This research developed a prototype to reward innovation performance of private hospital employees by user experience research (UX research) and design research for rational argument and user experience research to be used in formulating design principles and developing the rewarding and designing the rewarding innovation performance model was taken by collecting data from the questionnaire as feedback on the improvement of the reward prototype. The principles were then deciphered together with a team of designers to adjust the principles of rewarding

program design as shown in the picture. The reward characteristic was then applying to design innovation performance rewarding activities as studied from Phase 1.

## Summary of Research Results for Phase 3

The analysis of the innovation performance reward activities of private hospital employees was found that, from the perspective of employees and management, all activities were appropriate, especially those of communication nature and activities that allow employees to participate in setting goals and rewards in the future. Planning innovation and rewarding activities are activities that management believes are appropriate.

## Discussion

### Experience and Needs are Necessary to Develop Innovation Performance of Private Hospital Employees

Day-to-day tasks are tasks with being relevant to innovation in employees' work, perhaps because private hospitals are adjusting to keep pace with this change and leveraging business competition [1]. Receiving a reward for an innovation performance makes employees feel proud of themselves and that the organization recognizes the importance of innovation performance, in line with [10] who say that reward play a key role in promoting innovation practices [21-23] reflects the importance of Providing incentivizing rewards that benefit performance in line with organizational goals. Rewarding impacts the motivation for innovation performance.

### Design and Develop a Model for Rewarding Innovation Performance of Employees in Private Hospitals by Applying user Experience Research and Design Research

Data from user experience research used to define innovation performance reward guidelines that will keep employees motivated to perform innovation tasks. It provides subspecies or intervention components from document analysis and then selects samples of intervention components consistent with previous research by [7,9].

### Possibilities for Implementation of the Reward Prototype

From the opinions from the perspective of employees of private hospitals and managements. Regarding the reward of employee innovation practices based on four designed models, every activity has been found to have a high degree of implementation potential on this issue, consistent with the findings of [7-9] that reward positively correlated with innovation motivation and performance. The results of this research, with the score scale indicate that the mean of innovation performance of private hospital employees in the employee's opinion is 4.90-4.96, and in the management's opinion, the mean score is 4.90-4.96. The level of activity was 4.88-5.00 indicating a feasibility of implementation

of the reward model.

## Design Principles, Prototype Development and Innovation Performance Reward of Employees in Private Hospitals

The principles of design and research output are compelling in four areas: 1) Knowledge of design principles 2) Confirmation of concepts that have been brought as a rational excuse to formulate design principles 3) The roles of those involved and 4) The knowledge gained from research.

## Expected Results

### Practical Benefits

This research provides information about the prototype, innovation performance of private hospital employees. It provides information about the attributes of rewarding innovation performance, such as how to reward. Reward technique types of reward the right moment to reward that is relevant to the context of the private hospital staff and have the opportunity to be put into action using a truly developed prototype.

### Academic Benefits

a) This research is an example of design research that fosters the science of research in industrial and organizational psychology. This is the implementation of user experience research (UX research) with dimensions of psychological variables such as feelings, perceptions, needs, to be used in designing innovation performance reward prototypes.

b) The results of this research will be the reward design principles that influence the performance of innovation among private hospital employees. This will guide other researchers to apply the design principles to the private hospital staff development in other contexts.

### Policy Benefits

This research exposes research users to the source of the use of research for determining rewarding methods for the innovation performance of private hospital employees, including executives, human resources managers, employees, and employees. Guidelines for driving reward features that benefit innovation performance

## Suggestion

Design principles, prototype development and innovation performance reward. There are those who are involved, including hospital Management, Human Resources departments, researchers, and employees have different roles as follows:

### Recommendation for Executives

The hospital administrators are the sponsors of the events and the reward, so they must communicate to the management about

the goals, Work guidelines and the consequences, the innovation performance reward is a concept that incentivized incentive to influence innovation performance is a mediator factor. Therefore, management supports the organization of activities and reward, if the management allows for presentations and reward, the performance of innovation will make employees feel proud of themselves and feel that the organization sees the importance of innovation. The importance of innovation performance.

### The Human Resources Department

It is the sponsor's innovation operational activities and plays a role as a model user, taking part in organizing activities at different stages, introducing a co-designed activity model into practice to motivate employees, resulting in innovation performance in the organization .

### The Non-Clinical Employees

who practice and participate and cooperate in innovation performance also play a role in providing feedback to improve the activity model and improve the innovation performance reward prototype for more efficient and more suitable.

### Suggestions for Further Research

a) The introduction of the prototype design principle, rewarding and implementation of the prototype in a work environment and context similar to this research, will confirm findings from the research. This research can be referenced in a similar context.

b) To successfully implement an innovation performance rewarding prototype, it is important to study the results of the use of the prototype on a real-world example and use the findings to adapt the prototype so that new design principles are appropriate and applied.

c) This research is a study of reward and incentives that influence innovation performance. In the next study the factors associated with intervention or other factors that contribute to innovation operations, such as organizational support or employee engagement, should be studied.

### Limitation of Research

Due to the limitations on the duration of the trial and the COVID situation, the research was not put into practice in real-life situations as the sample staff had to perform patient care duties. While this research is only a prototype development, several versions need to develop to be able to be put into practice.

### References

- Silva VLdS, Camelo SHH, Soares MI, Resck ZMR, Chaves LDP, et al. (2017) Leadership practices in hospital nursing: a self of manager nurses. *Rev Esc Enferm USP* 51: e03206.
- Kumar V (2011) Impact of health information systems on organizational health communication and behavior. *IJAHSP* 9(2): 8.
- Bhatia S, Purohit B (2014) What motivates government doctors in India to perform better in their job? *Journal of Health Management* 16(1): 149-159.
- Opoku P, Duah HK (2019) Relationship among reward systems, knowledge sharing and innovation performance. *European Journal of Research Reflection in Management Sciences* 7(1): 46-61.
- Samnani AK, Singh P (2014) Performance-enhancing compensation practices and employee productivity: The role of workplace bullying. *Human Resource Management Review* 24(1): 5-16.
- Zhang Y, Begley TM (2011) Power distance and its moderating impact on empowerment and team participation. *The International Journal of Human Resource Management* 22(17): 3601-3617.
- Fischer C, Malycha CP, Schafmann E (2019) The influence of intrinsic motivation and synergistic extrinsic motivators on creativity and innovation. *Front Psychol* 10: 137.
- Tănăsescu CE, Leon RD (2019) Human resources practices in the romanian banking system: Rewards, job satisfaction, and job performance. *Management Dynamics in the Knowledge Economy* 7(4): 469-483.
- Yang Y, Cao Y (2019) Relationship between rewards and employee creativity in advertising agencies: An empirical study. Paper presented at the Proceedings of the 2019 2<sup>nd</sup> International Conference on Data Storage and Data Engineering.
- Hashem M, Gallear D, Eldabi T (2019) The role of motivation in enhancing employees' creativity: A literature review. *KnE Social Sciences*, pp. 64-77.
- Wongwanich S (2020) Design Research in Education. chulalongkorn university press, Bangkok, Thailand.
- Al-Sabi SM, Al-Ababneh MM, Masadeh M (2019) The role of job satisfaction on employees' innovation performance in the jordanian hospitality industry. *Journal of Tourism Hospitality Management* 7(2): 186-201.
- Bos-Nehles A, Bondarouk T, Nijenhuis K (2017) Innovation work behaviour in knowledge-intensive public sector organizations: the case of supervisors in the Netherlands fire services. *The International Journal of Human Resource Management* 28(2): 379-398.
- Pelagio Rodriguez R, Hechanova M, Regina M (2014) A study of culture dimensions, organizational ambidexterity, and perceived innovation in teams. *Journal of Technology Management Innovation* 9(3): 21-33.
- Drucker J, White G (2000) The context of reward management. In: G White, J Drucker (Eds.), *Reward management: A critical text*. Routledge, London, UK.
- Armstrong M, Stephens T (2006) *A handbook of employee reward management and practice*. Kogan Page, London, UK.
- Ryan RM, Deci EL (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* 55(1): 68-78.
- Milne P (2007) Motivation, incentives and organisational culture. *Journal of Knowledge Management* 11: 28-38.
- Tsegaye B (2017) The role of effective compensation and reward system on employee performance in the case of commercial bank of ethiopia. (Doctoral dissertation), Addis Ababa University, Addis Ababa, Ethiopia.
- Armstrong M (2010) *Armstrong handbook of reward management practice: Improving performance through reward*.
- Armstrong M (2019) *Armstrong's handbook of reward management practice: Improving performance through reward*. Kogan Page, London, UK.



22. Hunter JE, Schmidt FLJMK (1990) Individual differences in output variability as a function of job complexity. *Journal of Applied Psychology* 75(1): 28.
23. Saleem M, Tufail MW, Atta A, Asghar S (2015) Innovation workplace behavior, motivation level, and perceived stress among healthcare employees. *Pakistan Journal of Commerce Social Sciences* 9(2): 438-446.



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