

RELATIONSHIP AMONG REWARD SYSTEMS, KNOWLEDGE SHARING AND INNOVATION PERFORMANCE

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ABSTRACT

This research attempts to review various researches in term of relationships among reward systems, knowledge sharing and the innovation performance. In this regard, two types of reward are identified, and they are intrinsic reward and extrinsic reward. Extant research showed that reward can affecting innovation performance, so this study proposes a new framework based on mediating role of knowledge sharing. The extrinsic and intrinsic rewards found that they are positively related to the overall innovation performance. This article presents a survey and synthesis of literature on the effects of extrinsic and intrinsic reward on innovation performance and knowledge sharing. The motivational contexts of extrinsic and intrinsic rewards are examined with the purpose of helping the recognize and avoid the potentially harmful effects of poorly designed reward systems. It further found that rewards are positively related to each form of innovation, i.e., product innovation. Research between intrinsic and extrinsic motivation of employees and the expectation of a performance-based reward claims that this study has a better research design. However, it has been proven, with help of questionnaire surveys, that many enterprises still do not measure innovation performance despite the importance of innovation as an engine of growth. Only a few organizations appear to have an effective system for measuring their overall innovation performance.

Keywords: Rewards, Knowledge sharing, innovation Performance.

INTRODUCTION

In the theory of the firm based on knowledge, knowledge is the main source of competitive advantage. The organizations are viewed as entities involved in the coordination and management of the warehouse of knowledge (Grant, 1996). Recent developments and advances in information technology (it), coupled with the growing interest in organizational knowledge, have resulted by the development of internal knowledge management (km), often accompanied by the development of information systems that facilitate the Innovation, storage, distribution and the application of knowledge. According to Brown & Duguid (2001), advice and market research information technology expenditure on knowledge management could increase from \$2.7 billion in 2002 to \$4.8 billion in 2007.

However, the knowledge is deeply rooted in the people and the processes of knowledge management are highly dependent on the behaviour of employees in organizations. In particular, many studies show that employees resist very often on sharing their knowledge with the rest of the organization (Carter & Scarbrough, 2001). For this reason, many organizations are implementing organizational incentives for knowledge management in the form of extrinsic incentives such as monetary rewards. Indeed, incentives of intrinsic type to the adoption of behaviour of knowledge management may be insufficient (Kulkarni, Ravindran, & Freeze, 2006).

Conjectural studies are the pioneers of the innovation literature that has been grown and matured by the research which tried to elucidate the innovation concepts by defining organizational policies, processes, and characteristics whereby companies test and realize their efforts for innovative and creative ideas regarding their products, processes, and markets (Hwang & Kim, 2007). The global competition, which became particularly tough after 80's, forced the company's focus on their business strategies, especially on innovations (Kubo, Saka & Pam, 2001). At the present time, due to the tough global competition, both individuals and companies begin to evaluate and to apply their innovation strategies and entrepreneurial abilities with the purpose of gaining competitive advantage (Dweck & Leggett, 1988; Hsu, 2006).

Formally, innovation is considered as developments and new applications, with the purpose of launching newness into the economic area. It can be conceived as the transformation of knowledge to commercial value. Innovation has great commercial importance due to its potential for increasing the efficiency and the profitability of companies (Hansen, Mors & Lovas, 2005). Actually, the key reason for innovativeness is the desire of firms to obtain increased business performance and increased competitive edge. Companies procure additional 6 competitive advantage and market share according to the level of importance they give to innovations, which are vital factors for companies to build a reputation in the marketplace and therefore to increase their market share. Metcalfe (1998) stated that when the flow of newness and innovations desiccates, firms' economic structure settles down in an inactive state with little growth. Therefore, innovation plays a significant role in creating the differences of performance and competition among firms, regions and even countries. For instance, the study by West, J., and M. Bogers (2014) revealed that innovative countries had higher productivity and income than the less-innovative ones. O'Connor (2008) pointed out that companies that developed innovations in a more decisive way and rapidly, had also more qualified workers, paid higher salaries and provided more conclusive future plans for their employees. In fact, the effects of innovations on firm performance differ in a wide spectrum from sales, market share and profitability to productivity and efficiency (O'Connor, 2008). McAdam and Keogh (2004) investigated the relationship between firms' performance and its familiarity with innovation and research. They found out that the firms' inclination to innovations was of vital importance in the competitive environments in order to obtain higher competitive advantage. Geroski (2005) examined the effects of the major innovations and patents to various corporate performance measures such as accounting profitability, stock market rates of return and corporate growth. The observed direct effects of innovations on firm performance are relatively small, and the benefits from innovations are more likely indirect. However, innovative firms seem to be less susceptible to cyclical sectoral and environmental pressures than non-innovative firms. This study is undertaken to examine the relationship among reward systems, knowledge sharing, and innovation performance. This will focus in the following lines: the importance of reward systems and innovation performance.

Method

Study Design

The study adopted an empirical study design. Empirical studies that aim to highlight statistical associations between variables or to establish the prevalence or incidence of a phenomenon should utilize quantitative methods like cross sectional surveys with an appropriately large sample size. This kind of survey can describe the who, what, and where of a phenomenon (and are thus descriptive) but cannot answer the why question. In order to answer the question of why (causation,) an analytical or experimental study is needed. The research design is a cross-sectional study and employed quantitative approach to examine the relationship among reward systems, knowledge sharing, and innovation performance. It is a cross-sectional in that the study will involve the administration of questionnaires and interviews only to the sample and the data generated on the measured characteristics will be limited to the specific period of the study.

Study Population

The study is conducted at the Telecommunication Equipment Corporation (ZTE) Baidu, and Roche enterprises. In this study, the target population or sample frame of the study constituted employees in these companies.

Sample and Sample Procedure

We focus on the reward and innovative performance of knowledge workers. Therefore, scientific and technological enterprises featuring high Creativity in industries including communication, Internet, scientific research and technological service are sampled. The sample consists of employees from ZHONGXING Telecommunication Equipment Corporation (ZTE), BAIDU, and Roche. 301 copies of questionnaires are distributed in Shanghai and Shenzhen through express delivery, and 301 copies are all collected. Invalid questionnaires (which have seriously incomplete information or contradictory answers) being eliminated, valid questionnaires reach the number of 275, making the effective recovery rate 91%.

Measures of Variables

(1) Extrinsic rewards: The extrinsic reward scale was based on the items from Ryan and Deci (2000), including 8 items (cronbach's alpha=0.85). Such as "When I perform creatively, I receive financial rewards, such as incentive or bonuses". << When I perform creative work, it affects my promotion>> etc.

Extrinsic motivation refers to the performance of an activity in order to attain an outcome, which then contradicts intrinsic motivation. Extrinsic motivation comes from outside of the individual. Common extrinsic motivations are rewards like money and grades, coercion and threat of punishment. Competition is in general extrinsic because it encourages the performer to win and beat others, not to enjoy the intrinsic rewards of the activity. A crowd cheering on the individual and trophies are also extrinsic incentives (Deci & Ryan, 2000).

A more autonomous, or self-determined, form of extrinsic motivation is regulation through identification. Here, the person has identified with the personal importance of a behavior and has thus accepted its regulation as his or her own. A boy who memorizes spelling lists because he sees it as relevant to writing, which he values as a life goal, has identified with the value of this learning activity (Deci & Ryan, 2000).

Finally, the most autonomous form of extrinsic motivation is integrated regulation. Integration occurs when identified regulations have been fully assimilated to the self. This occurs through self-examination and bringing new regulations into congruence with one's other values and needs. The more one internalizes the reasons for an action and assimilates them to the self, the more one's extrinsically motivated actions become self-determined. Integrated forms of motivation share many qualities with intrinsic motivation, being both autonomous and uncomplicated. However, they are still extrinsic because behavior motivated by integrated regulation is done for its presumed instrumental value with respect to some outcome that is separate from the behavior, even though it is volitional and valued by the self (Deci & Ryan, 2000).

(2) Intrinsic rewards: The intrinsic reward items were developed by Thomas and Tymon (2009, first published in 1993), including 4 items (cronbach's alpha=0.92). Such as "I am performing competently" << I am making good progress on my project>> etc.

Intrinsic motivation refers to motivation that is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on any external pressure. Employees who are intrinsically motivated are more likely to engage in the task willingly as well as work to improve their skills, which will increase their capabilities. Employees are likely to be intrinsically motivated if they:

- attribute their educational results to factors under their own control, also known as autonomy,
- believe they have the skill that will allow them to be effective agents in reaching desired goals (i.e. the results are not determined by luck),

- Are interested in mastering a topic, rather than just rote-learning to achieve good grades.

In humans, intrinsic motivation is not the only form of motivation, or even of volitional activity, but it is a pervasive and important one. From birth onward, humans, in their healthiest states, are active, inquisitive, curious, and playful creatures, displaying a ubiquitous readiness to learn and explore, and they do not require extraneous incentives to do so. This natural motivational tendency is a critical element in cognitive, social, and physical development because it is through acting on one's inherent interests that one grows in knowledge and skills. The inclinations to take interest in novelty, to actively assimilate, and to creatively apply our skills is not limited to childhood, but is a significant feature of human nature that affects performance, persistence, and well-being across life's epochs (Ryan, Kuhl, & Deci, 1997). Basic experimental research (Deci, 1971) has rested primarily on a behavioral measure of intrinsic motivation called the "free choice" measure. In experiments using this measure participants are exposed to a task under varying conditions (e.g., getting a reward or not). Following this period, the experimenter tells participants they will not be asked to work with the target task any further, and they are then left alone in the experimental room with the target task as well as various distractor activities. They thus have a period of "free choice" about whether to return to the activity, and it is assumed that, if there is no extrinsic reason to do the task (e.g., no reward and no approval), then the more time they spend with the target task, the more intrinsically motivated they are for that task. This measure has been the mainstay through which the dynamics of intrinsic motivation have been experimentally studied.

The other common approach to the measurement of intrinsic motivation is the use of self-reports of interest and enjoyment of the activity per se. Experimental studies typically rely on task-specific measures (Ryan, 1982; Harackiewicz, 1979). Most field studies have instead used more general, "domain" focused measures, such as one's intrinsic motivation for school (Harter, 1981).

(3) Knowledge sharing: The knowledge sharing scale was based on the items from Quinn (1992), including 8 items (Cronbach's $\alpha=0.707$). Such as "I share the useful experience and technology". << I never easily will share my work with other >> etc.

The key factors in knowledge sharing include people, organization, and technology. That is because we consider knowledge sharing as a social interaction between people. Furthermore, (information and communication) technology is an important facilitator of knowledge sharing. The social organizational and technological conditions that we recognize as enablers of knowledge sharing (Brink 2001).

The human factor in knowledge sharing focuses on the drivers that trigger people to do what they do, on the possible skill levels of a person, and on the roles an individual can play in an organization. These include; care, appraisal, empowerment, trust, competence leverage, and knowledge crew. We exploit the 7S framework by McKinsey (that consists of seven organizational factors: strategy, structure, systems, staff, skills, style, and shared values) to distinguish which organization related conditions facilitate knowledge sharing.

A major objective of information and communication technology in facilitating knowledge sharing is to connect people with other people or with explicit knowledge (possibly irrespective of time and place). We distinguish three, related dimensions. One dimension is to have information and explicit knowledge components online, indexed and mapped, with easy access and accurate retrieval for all users, in this situation the emphasis is put on explicit knowledge. Another dimension is to improve coordination, communication, and collaboration between people, teams, or groups to transfer the knowledge from those who possess this to people who need or can use this (McGee 1996), here the emphasis is on tacit knowledge. The third dimension is to offer pointers to people with a special expertise or to documents that describe knowledge — in this dimension the emphasis is on both tacit and explicit knowledge.

(4) Innovation performance: The innovation performance scale was based on the items from Carmeli and Schaubroeck (2007), including 6 items (Cronbach's $\alpha=0.89$). Such as

“Demonstrates originality in his/her work work”. <<Easily modifies previously existing work processes to suit current needs>>etc.

Innovation as an intuitive and creative process is a difficult process to measure. Innovation, which is considered an art, is measured historically in terms of financials or counts. Financial measurements include new product- or service specific sales or revenue growth, and count-type measurements include items like the number of patents, trademarks, articles, and product or service versions produced. However, experience shows these measurements do not correlate to the innovation activity; therefore, they do not appear to be sufficient measures of innovation performance for a business. For measurement it is necessary to understand and describe the whole innovation process and to identify factors that may affect the ultimate realization of innovation. Measuring output includes for example number of newly listed products, changes in market share, growth in sales and profit growth from

Data Analysis

The quantitative data from the survey will be first edited, cleaned for easy analysis. Open ended questions were transcribed to make the analysis easy and concise. This helps to read meaning into the data that will be collected. Statistical Product and Service Solution (SPSS version 21) is used to analyze the result of the analysis will be displayed using Microsoft Excel and Microsoft Word. The quantitative analysis involves labeling, use of frequency tables, charts and so on to present the gathered data in a simple, easy and understandable graph form and also makes similarities and differences made known. Multiple regressions and bootstrapping method were employed to test these hypotheses. The discovery has shown that information technology has a positive influence on both the sharing of knowledge and innovation. With regard to knowledge sharing, the results have shown a positive influence on innovation, while it also has a positively mediated influence on the relationship between the reward system and business innovate.

Study Results

Demographic Analysis

This section consists of information about the Gender, Age, Degree of Education Professional types, Working Seniority and Monthly Average Income.

Table 5.1: Demographic Analysis

Variable	Type	Value	Percentage (%)
Gender	Male	154	56.0%
	Female	121	44.0%
Age	Below 25	38	13.8%
	25-29	102	37.1%
	30-39	111	40.4%
	40-49	16	5.8%
	Over 50	8	2.9%
Degree of Education	High school or below	14	5.1%
	Specialist and undergraduate	176	64.0%
	Master or above	85	30.9%
Professional Types	Management	55	20.0%
	Technology and Development	89	32.4%
	Marketing	57	20.7%
	Accounting	22	8.0%
	Else	52	18.9%
Working Seniority	Below 3 years	78	28.4%
	3-6 years	83	30.2%
	7-15years	98	35.6%
	Over 15years	16	5.9%
Monthly Average Income	Below5,000	23	8.4%
	5,000-10,000	83	30.2%
	10,000-15,000	108	39.3%
	15,000-20,000	38	13.8%
	Over 20,000	23	8.4%

From table it can be seen that majority (56%) of the participants were male whilst 44% of the participants were female. This shows that the population of males dominated in the study with a ratio of 4:1. Moreover, majority (40.4%) of the participants were between 30-39 years while few (2.9%) of them were over 50 years. Additionally, 37.1% were between 25-29 years, 13.8% were also below 25 years and 5.8% of the participants were between 40-49 years.

Regarding the degree of education of participants, most (64%) of them were specialist and undergraduate, 30.9% of them also had Master or above degree, and only 5.1% of them had high school or below educational level. Furthermore, most (32.4%) of the participants were Technology and Development professionals, 20.7% of them were marketers, 20% of them were also managers, 8% of them were accountants, and the remaining 18.9% were other professionals.

Concerning the working seniority, majority (35.6%) of the participants had worked for 7-15 years, 30.2% of them had worked for 3-6 years, 28.4% of them had also worked for less than 3 years, and 5.9% of the participants had worked for over 15 years.

From table 4.1, it can be seen that most (39.3%) of the participants had monthly income of 10,000-15,000RMB, 30.2% of them had monthly income of 5,000-10,000RMB, 13.8% of them also had monthly income of 15,000-20,000RMB, and 8.4% of the participants had monthly income of over 20,000RMB.

Validity

Table 5.2: KMO and Bartlett's Test

Variable	KMO	Approx. Chi-Square	Df	Sig.
intrinsic reward	.822	476.373	6	.000
Extrinsic Reward	.858	990.037	28	.000
Knowledge Sharing	.770	659.758	28	.000
Creative Performance	.887	702.373	15	.000

The construct validity of the scales was then explored using principal component analysis. The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were used to determine the suitability of the data for the procedure. was considered suitable if the KMO was greater than .50 and Bartlett's test of sphericity was significant. Only factors with eigenvalue greater than 1 were taken into account (Kaiser, 1970) and factor loadings of greater than .30 were considered significant (Kline, 1986).

The KMO and Bartlett's tests demonstrated that the data was appropriate for principal component analysis to be employed. Each scale had only one emerging component with eigenvalue greater than one and all items loaded significantly on this component (Table 5.2). The expected unidimensionality of each scale was thus confirmed and item responses were averaged into overall scale scores.

The KMO and Bartlett's tests for the scale for intrinsic reward was .822 with degree of freedom of 6 and approx. Chi-Square of 476.373. The author found good convergent and discriminant validity for the scale when correlating participants' results with other measures. A high score on the scale indicates that employees are highly motivated. Although Kim et al. provided no indication of the scale's validity it was chosen because of its high face validity. A high score on the scale indicates that an employee experiences a high level of job satisfaction.

The KMO and Bartlett's tests for coefficient for the Extrinsic Reward scale was .858 in Spector's research, demonstrating high internal consistency. A high score on the scale means that employees are highly satisfied with the rewards offered by the organisation. The results thus support Hypotheses 1 and 4: The more employees perceive rewards as favourable the more motivated and committed they are to their employer. In addition, a medium correlation was also observed between Knowledge Sharing (.770) and Creative Performance (.887). A high score on the scale indicates that an employee knowledge sharing experiences a high level of creative performance.

Factor Analysis

Reward

	Ingredients	
	1	2
Q1	.783	
Q2	.847	
Q3	.791	
Q4	.801	
Q5		.589
Q6		.835
Q7		.839
Q8		.541
Q9		.511
Q10		.679
Q11		.598
Q12		.203

Innovation performance

	ingredients
	1
Q13	.796
Q14	.775
Q15	.825
Q16	.794
Q17	.820
Q18	.781

Knowledge sharing

	ingredients
	1
Q49	.650
Q50	.712
Q51	.789
Q52	.770
Q53	.690
Q54	.737
Q55	.680
Q56	.738

*Reliability***Table 5.3: Reliability inspection**

Variable	Cronbach's Alpha	Number of items
intrinsic reward	0.871	4
Extrinsic Reward	0.856	8
Knowledge Sharing	0.707	8
Creative Performance	0.886	6
Total	0.917	26

Cronbach's alpha was used to determine the internal reliability of the questionnaire used in this study. The coefficient alpha ranges in value from 0, meaning no consistency to 1 meaning complete consistency (all items yield corresponding values). Generally speaking, scales with a coefficient alpha between 0.80 and 0.95 are considered to have very good reliability. Scales with a coefficient alpha between 0.70 and 0.80 are considered to have good reliability, and alpha value between 0.60 and 0.70 indicates fair reliability. When the coefficient alpha is below 0.7, the scale has poor reliability. All the alpha coefficients ranged between and as shown in Table 5.3. Based on the coefficient values, the items tested were considered reliable for this study.

The reliability as measured by Cronbach's alpha was .871 for intrinsic reward. A high score on the scale indicates that an employee experiences a high level of job satisfaction. Also the result reported a Cronbach alpha coefficient of .856 for the 4-item scale. A high score on the scale indicates that employees are satisfied by the support they receive from their supervisor and thus satisfied with their extrinsic rewards.

The Cronbach's alpha coefficient for the overall knowledge sharing scale was .707 and creative performance was .886, demonstrating high internal consistency. An initial reliability analysis for the affective commitment scale revealed an acceptable Cronbach's alpha coefficient of .917 for the four items. Multiplication of (the value of) these enabling conditions indicates that all conditions contribute to knowledge sharing, and it also shows that a low score on one condition significantly reduces the overall level of facilitated knowledge sharing and creative performance.

Correlation Analysis

Table 5.4: Correlation Analysis

Variable	1	2	3	4	5	6	7	8	9	10
1.Gender		-.025	-.091	.166**	-.003	-.141*	.058	.01188	.036	.015
2.Degree of 3.Education			.071	-.231**	-.033	.364**	.290**	.335**	.246**	.385**
4.Age				-.070	.790**	.447**	.052	.113	.064	.178**
5.Occupation					.025	-.180**	-.052	-.107	-.098	-.261**
6.Years of working						.400**	.016	.095	.077	.163**
7.Monthly Average Income							.329**	.235**	.232**	.402**
8.intrinsic reward								.613**	.558**	.614**
9.Extrinsic Reward									.602**	.585**
10.Knowledge Sharing										.631**
11.Creative Performance										
Mean	1.44	2.27	2.43	2.74	2.17	2.80	3.67	4.02	3.51	3.51
Standard deviation	0.50	0.53	0.87	1.34	0.91	0.99	0.74	0.73	0.52	0.69

From the Table 5.4, the findings of the correlation analysis indicated that there was a positive correlation between extrinsic reward and employee knowledge sharing ($r = 0.602$, mean= 3.51 and $sd=0.52$). Therefore, an increase in use of extrinsic reward led to an increase in employee knowledge sharing. Regarding intrinsic reward, the correlation coefficient was also positive ($r = 0.558$, mean= 3.51 and $sd=0.52$). This means that an increase in use of intrinsic reward strategy in remittance firms led to an increase in employee knowledge sharing. Results of the study also showed that there was a significant positive correlation between contingent reward and employee knowledge sharing ($r = 0.614$, mean= 3.51 and $sd=0.69$) implying that an increase in use of contingent reward improved the rate of knowledge sharing of the employee creative performance.

Regression Analysis

Table 5.5: Regression Analysis

Variables		Knowledge sharing		Creativity performance		
		Model 1	Model 2	Model 3	Model 4	Model 5
Control Variables	Gender	0.066	0.019	0.117	0.052	0.043
	Education	0.179**	0.013	0.333***	0.145*	0.140*
	Age	-0.055	-0.049	-0.040	-0.032	-0.011
	Position	-0.017	-0.016	-0.090**	-0.092***	-0.085***
	Experience	0.051	0.050	0.083	0.095	0.073
	Income	0.089*	0.016	0.187***	0.083*	0.076*
Independent variable	Intrinsic reward		0.205***		0.342***	0.254***
	Extrinsic reward		0.290***		0.257***	0.132*
Mediator	Knowledge sharing					0.430***
	R ²	0.093	0.426	0.262	0.533	0.592
	Adj R ²	0.072	0.409	0.246	0.519	0.578
	F value	4.562***	24.675***	15.876***	37.966***	42.757***

* p<0.05, ** p<0.01, *** p<0.001

Regression Analysis provides a means of objectively assessing the degree and the character of the relationship between the independent variables and the dependent variable: the regression coefficients indicate the relative importance of each of the independent variables in the prediction of the dependent variable. Multiple regression analysis was performed to assess the relationship between the dependent variable (knowledge sharing and creative performance) and the independent variables (extrinsic reward and intrinsic reward strategy).

Table 5.5 the coefficient of determination (R-squared) of showed that creativity performance 42% of could be explained by extrinsic reward, intrinsic reward, and knowledge sharing. The adjusted R² of indicates that the extrinsic reward, intrinsic reward and knowledge sharing explained the change in creativity performance by 42.76%, the remaining percentage can be explained by other factors not included in the model. An R of showed that there is strong positive correlation between independent variables (extrinsic reward, intrinsic reward, and knowledge sharing) and dependent variable (creativity performance).

It was revealed that holding extrinsic reward, intrinsic reward, and knowledge sharing to a constant zero, creativity performance increases in extrinsic reward which lead to increase in the employee creativity performance. A unit increases in intrinsic reward would lead to increase in the employee creativity performance. In addition, a unit increases in knowledge sharing would lead to increase in the employee creativity performance. There was positive and significant effect of extrinsic reward strategy and employee creativity performance ($p <$

0.01), there was positive and significant effects of intrinsic reward strategy and employee performance. Moreover, there was positive and significant effects of contingent reward strategy and employee performance. Hence, the most significant factor was extrinsic reward strategy had the greatest effect on the employee creativity performance, followed by intrinsic reward and knowledge sharing. All of the variables were found to be significantly affect creativity performance because they less than ($p < 0.05$).

5.6: Boots trapped mediation results

Model	Creativity performance		
	Point estimate(SE)	95% CI	
		Upper	Lower
Direct effect(ER→CP)	0.305*** (0.047)	0.212	0.397
Indirect effect(ER→KS→CP)	0.184* (0.036)	0.126	0.271

As one would expect from the observed path model, creativity performance was not mediated through intrinsic or identified regulation (bootstrapped lower CI $\frac{1}{4}$.212, bootstrapped higher CI $\frac{1}{4}$.397). By contrast, creativity performance showed a small mediated effect through identified regulation (indirect b $\frac{1}{4}$.036; bootstrapped lower CI $\frac{1}{4}$.271, bootstrapped higher CI $\frac{1}{4}$.126) but not intrinsic reward (bootstrapped lower CI $\frac{1}{4}$.271, bootstrapped higher CI $\frac{1}{4}$.126). Creativity performance, however, showed small mediation effects through both identified (indirect b $\frac{1}{4}$.047; bootstrapped lower CI $\frac{1}{4}$.397, bootstrapped higher CI $\frac{1}{4}$.212) and intrinsic reward (bootstrapped lower CI $\frac{1}{4}$.271, bootstrapped higher CI $\frac{1}{4}$.126).

The result of the linear regression analysis utilizing the Data collected in this research is presented in tables 5.3 and 5.3. Table 5.4 displays R-square, standardized betas and Probability value for the regression model. Table 4.4 shows R-square for the regression model of process innovation, product innovation, organizational innovation, and market innovation, the change in R-square. Simple linear regression used to measure the relationship between process innovation, product innovation, organizational innovation and market innovation with employee performance. In the first time the study regressed independent variable process innovation, product innovation, organizational innovation, and market innovation with employee performance.

H1: Supported Cronbach's alpha was .871 for intrinsic reward. A high score on the scale indicates that an employee experiences a high level of job satisfaction. "Such as I am making good progress on my project"

H2: Supported a Cronbach alpha coefficient of .856 for the 4-item scale. A high score on the scale indicates that employees are satisfied by the support they receive from their supervisor and thus satisfied with their extrinsic rewards. Such as "When I perform creative work it affects my promotion".

H3: Supported The Cronbach's alpha coefficient for the overall knowledge sharing scale was .707 and creative performance was .886, demonstrating high internal consistency. Such as "I share the useful experience and technology".

DISCUSSION

It has been established that rewards either in terms of monetary and non-monetary serves as an indicator of success in business world. Rewards program are estimated as an important aspect in supporting the cultural orientation, compensating expatriates, employee benefits, and addressing equity in order to meet the business objectives. It is obvious from the literature that fiscal results, efficiency, employee satisfaction, turnover, legal and regulatory conformity can be the substitute for the success on rewards enterprise whether those ventures be in the area of

base salary, short or long term benefits or work-life facilitations. Fiscal goal attainment, is dependent upon the success of various determinants, mainly communicate to target setting, award amount or an effective execution of the reward program.

It was observed after a profound analysis that the “holistic approach” of total rewards attracts most organizations concerning of scarcity in resources and they incline to use the combination of fiscal or non-fiscal resources by combining all the reward mechanisms that employees value in their work liaison. Viewing rewards as a whole result in a number of benefits. First, organizations are able to realize their own untapped potential in terms of benefits and compensation. Secondly, employee involvement results in a program more widely accepted and applauded by the organization. Thirdly, top management support right from the start ensures its buy in and any obstacle met during the course of implementation is expected to be resolved preferably. And finally, a comprehensive compensation strategy is sure to be linked with the business strategy rather than working in isolation, which in turn lead to a workforce willing to go extra mile for their organization.

Theoretical evidence supported the relationships between reward, knowledge sharing and innovation performance. There is positive relationship found in existing literature that implies on product innovation and employees' performance. Positive influence of adaptability and consistency with involvement and mission includes Brockman and Morgan's (2003) that found positive relationship between innovation and performance. Rewards and knowledge sharing supported the hypothesize relationship in the term of innovation performance.

In SPSS (statics package for social science) the Cronbach's Alpha is .79 which is good means that product innovation is good for performance of the employees and the performance of the employee is better than the organization performance should be increase. Product innovation and performance is positive in Correlation table and the Regression analyses beta value is .24 and t value is 3.3 shows that the innovation performance is positive impact on the knowledge sharing of the employees.

CONCLUSION

Human resources that are well managed can be a source of sustainable competitive advantage for organizations (Barney and Wright, 1998). This is necessarily true for companies operating in complex and dynamic competitive environments, where the ability to quickly acquire and assimilate new market and technological capabilities is the key to innovating sustainable benefits over the competition. Compared to this, many studies show that entrepreneurial behavior through innovation and human resources is closely related to competitive advantage (Wang and Zang, 2005).

The major conclusions are that reward for knowledge only increases creativity when recipient's employers clearly discern the necessary trait that needs to be planted in their employees' personalities which is need of achievement. Having this basis support that it has also been suggested that the cognitive style (adaptive or concern) of the recipient may play a part in whether or not the extrinsic motivation will benefit creativity (Baer, Oldham, & Cummings, 2003). The use of rewards in organizations and everyday life are surprisingly large (Hennessey, 2000), considering the detrimental effects many rewards may have on motivation and performance (Deci, Ryan, & Koestner, 1999).

Research suggests that rewards for novel performance increase intrinsic motivation and creativity (Wiesenberger & Shanock, 2003). However, if conventional performance is rewarded it will decrease intrinsic motivation and creativity, explaining the present need of the personal need of achievement awakening. Both theoretical models and empirical studies are consistent with the notion that intrinsic motivation is conducive to creative performance (Amabile, 1979, 1982b, 1983; Amabile, Hennessey & Grossman, 1986; Reeve & Deci, 1996). Persons who engage in an activity for its own sake are intrinsically motivated and characterized by the need of achievement the goal set. When intrinsically motivated, persons are motivated simply to perform an activity and to have the spontaneous experiences of interest, enjoyment, excitement and satisfaction that accompany the behavior. Intrinsic motivation encompasses exploration, spontaneity- it, autonomy and interest in one's

surroundings (Deci & Ryan, 1996; Deci, Ryan & Koestner, 1999).

And that only reward of knowledge isn't helpful enough to boost the needed radical innovative and the reward of knowledge vice versa. But on any occasion both these two variables combined and none of them left behind would impact greatly radical creative view that these two notion aren't acquired once and for all instead they are constantly renewed and work both hand in hand.

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