INFLUENCE OF KNOWLEDGE CREATION ON PERFORMANCE OF EMPLOYEES AMONG TWO-STAR HOTELS IN ELDORET, KENYA

Lillian Ouma Nabwire1*,
Geoffrey Kimutai2,
Jennifer Munyua3

1MBA (Human Resource Management), Catholic University of Eastern Africa, Kenya
2Dr., Faculty of Business and Economics, Kisii University, P.O Box 408-40200, Kisii, Kenya
3Dr., Faculty of Education, Catholic University of Eastern Africa, P.O Box 908-30100, Eldoret, Kenya

Abstract:
The instability of the business environment and poor performance of employees in the hospitality industry has become a major challenge that most hotels struggle with. In their effort to contain this, hotels are now seeking to identify the root cause to the problem, a realisation that drives them to the growing need for Knowledge Management (KM). This paper is drawn upon a study that sought to examine the influence of knowledge creation on the performance of employees in two-star hotels in Eldoret, Kenya. Guided by the knowledge spiral theory as developed by Nonaka and Takeuchi, the authors employed use of cross-sectional research design. Human Resource Managers (HRMs) and employees made up the target population of 477 from which a sample of 148 respondents were drawn. Seven 2-star hotels in Eldoret town based on the Kenya Gazette September, 2015 hotel classification by the Tourism Regulation Authority participated in the study. The sample size was obtained using census method for 7 HRMs and proportionate convenience sampling for 141 employees. A questionnaire guide was used for data collection after testing for reliability and validity in a pilot study. Analysis of the collected data was then done by descriptive statistics in form of frequencies, percentages, mean and standard deviation; and presented in tables. Inferential statistics was also used to conduct a multiple regression analysis to describe the relationship between the independent and dependent variables.

* Correspondence: email lillianabwire@gmail.com
The study findings indicated that knowledge creation ($\beta=0.325$, $p=.010$) has a significantly positive influence on employee performance. The study recommends that hotels adopt a policy to embrace the knowledge economy by creating more knowledge that can be used by employees to improve their performance.

**Keywords:** knowledge creation, employee performance, cross-sectional research design, two-star hotels, Kenya

1. **Introduction**

One of the most argued management concepts that have sparked interest across the globe over time is the emergence of the knowledge economy. While several organisations in response have implemented knowledge management policies, evidence has it in literature that most organisations are still struggling to get it right while others have no idea where to start (Balogun & Jenkins, 2003). One of the sectors in Kenya facing this challenge is the hotel industry which despite being a significant contributor to the country’s economy serving both local and international tourists, lacks proper leverage on knowledge assets (Onyango, Kieti & Mapelu, 2016). Citing the 70% estimate by WHO (2006), on increasing level of food borne diseases, the trio attribute the cause of diseases to lack of proper knowledge leverage by food handlers in the hotel industry among other factors (Onyango et al., 2016).

Knowledge possessed by employees is a vital asset for hotels and significant to their performance. As supported by Aziri, Veseli & Ibraimi (2013), employees’ success in performance is dependent on the HRMs exercising the highest efforts to improve knowledge management within their organisations. However, with poor knowledge management practices, hotels often fail to replicate sustainable practices leading to employees repeating the same mistakes over and over. This in turn leads to low learning rates among the employees with the hotels losing critical knowledge to employee retirement, job hopping, downsizing or job transfers while others end up offering poor services as they fail to learn from past mistakes to make better their performance (Torabi, Fyani & Falakinia, 2016; Thuo, 2013). Organisations therefore need to create knowledge and provide best practices that enable employees to achieve high performance founded on the knowledge economy. In line with this, this paper sought to examine the influence of knowledge creation on performance of employees in two star hotels in Eldoret, Kenya.

1.1 **Concept and Hypothesis Development**

Based on the conceptual framework presented in Figure 1, the following hypothesis was developed to address the study objective.

\[ H_0: \text{Knowledge creation has an influence on performance of employees.} \]
1.2 Knowledge Spiral Theory

The knowledge spiral theory often known as the SECI model follows a consistent body of information developed by Nonaka and Takeuchi (1995) in defining knowledge creation. The theory was founded on four thoughts, that is; i) knowledge creation is at individual level a direct result of the continuous dialogue between tacit and explicit knowledge; ii) knowledge creation involves four basic knowledge conversion processes which include socialisation, externalisation, combination and internalisation; iii) knowledge creation at the organisational level is based on these four conversion processes and a spiral driving force; iv) there is a shared space Ba for knowledge creation. Ba is defined as a “context in which knowledge is shared, created, and utilised, in recognition of the fact that knowledge needs a context in order to exist” (Nonaka, Toyama & Byosiere, 2001, p.499). This theory posits that there are two types of knowledge i.e. explicit knowledge which is contained in organisational repository and tacit knowledge which only exists in the mind of individuals and is learned only by experience and communicated only indirectly, through metaphor and analogy. This theory thus has enabled transformation of tacit knowledge into explicit knowledge and vice versa hence the spiral aspect. Figure 2 depicts the SECI model of knowledge spiral.
1.2.1 Criticism of the Knowledge Spiral Theory

This theory as postulated by Nonaka and Takeuchi (1995) is based on the four basic processes of knowledge creation dynamics thus socialisation, externalisation, combination and internalisation, and integrating them into a pattern of knowledge conversion is confusing the lines between individuals and groups. Knowledge conversion from tacit to explicit and from explicit to tacit, according to the epistemological dimension (Nonaka & Takeuchi, 1995), is clearly a process developed at the individual level. Yet there is no meaning for such a process to be developed between the tacit knowledge of a given person and the explicit knowledge of another person. However, the knowledge conversion from tacit to tacit; and from explicit to explicit develops between different individuals. If the whole spiral of knowledge creation would be considered for only two individuals, at the limit, it could be understood. But, if it would be considered for a group of people, it is hardly difficult to explain and demonstrate how the knowledge conversion works because of the sequential interplay between strictly individual processes and group processes. To this end, creating knowledge is on an individual basis and that is why organisations need to create a conducive platform and environment that will enable employees to produce tacit knowledge to explicit.

2. Underpinning Literature

The use of internally existing knowledge and other forms of external resources in an organisation to generate new knowledge is considered as creation of knowledge. As posited by Moodysson (2008), knowledge creation entails brainstorming to make the best use of the knowledge assets within the organisation. According to Huang, Liu and Warden (2005), the capability of employees in a firm to create new knowledge plays a fundamental role in improving the performance of that individual at work place. Organisations therefore need to create new knowledge and consistently renew it to prevent the newly acquired knowledge from being obsolete. This can be achieved through generation, integration, development, exploitation and assimilation of new ideas (Mitchell & Boyle, 2010) while incorporating other organisational mechanisms and activities.

According to a survey conducted by Chung, Peng, Liang and Chen (2012) the mediating effect of organisational agility between knowledge creation and the financial performance of a firm was sought using a sample of 134 firms. The study was pivotal on two aspects of organisational agility that included operational and customer agility to establish how the two facilitated the role of knowledge creation on the performance of firm. The study found out that organisational agility significantly mediates the effect of knowledge creation on the firm performance. In conclusion their study implied that there is no relationship between knowledge creation among employees of a firm and performance unless mediated by the organisation’s agility (Chung et al., 2012). The
study was however limited to economic characteristics unique to Taiwan only thus findings cannot be generalised for other countries.

Knowledge creation and organisational performance have been associated especially in the banking industry based on a study carried out by Abadi, Haery, Borandegi and Fatehi (2013). The research recognises that even though knowledge creation is an important part of KM which is essential to an organisation’s success, few studies have been done to investigate the role it plays on performance of organisations. The study adopts Structural Equation Modeling (SEM) and Amos graphic, applying to a sample of 260 employees of Isfahan bank in the private sector. The study findings portray that knowledge creation practice in the service sector industries has a positive effect on the performance of organisations in the sector (Abadi et al., 2013).

Sujatha and Krishnaveni (2017), in a study that was conducted in the southern part of India to examine knowledge creation ba as a determinant of the performance of employees at work, focused on pump manufacturing companies. The study places knowledge creation in a strategic place of a work environment and considers the practice to forming an integral part of an organisation (Sujatha & Krishnaveni, 2017). The authors developed a research model in seeking to establish how various ‘ba’s of knowledge creation affect employee performance. It was found out that of the four studied ‘ba’s, the dialoguing ba depicted a significantly high impact on performance. The others; originating ba, cyber ba and exercising ba showed a minimal impact hence the study concludes that organisations often create new knowledge through employee interaction and dialogues. The descriptive study employed use of questionnaires on a sample of 284 middle level managers and employees scoring work performance in terms of effectiveness, timeliness and efficiency of employees in the pump manufacturing companies. Conclusively, the findings of the study showed that knowledge creation significantly played a role in improving employee work performance with an $r^2$ value of 0.438 implying that knowledge creation contributed to 43.8% of employee performance.

Mehralian, Nazari & Ghasemzadeh (2018), in their study, “The effects of knowledge creation process on organisational performance using the Balanced Score Card approach: The mediating role of intellectual capital,” surveyed companies in the intensive knowledge based industry. The study investigated the contribution of knowledge creation on the performance of firms mediated by the balanced score card and intellectual capital of the firm. The sample of the study constituted 470 respondents of pharmaceutical organisations in Iran. Mehralian et al., (2018) found out that the practice of knowledge creation in organisations results to the accumulation of intellectual capital which in essence in fundamental and positively impacts on the organisation’s balanced score card as a dimension of performance. It is therefore concluded that mediated by intellectual capital, knowledge creation has a positive effect on the performance of an organisation (Mehralian et al., 2018).

Adubasim, Adim and Ibekwe’s (2018) study that involved 291 academic staff in a correlation survey, sought to investigate knowledge creation as a predictor of
performance of employees in the University. Observing that knowledge is a vital asset in organisations, a structured questionnaire was administered to the purposively selected respondents. It was found that knowledge creation depicted a positive and significant association with staff performance at Abubakar Tafawa Balewa University in Bauchi. The study however recommended that the university management needed to conduct training and development among the staff to improve their performance (Adubasim et al., 2018).

3. Methodology

This study is descriptive in nature and the authors adopt use of a cross-sectional survey design. According to Lavrakas (2008), the use of cross-sectional survey design enables one to gather data and make inferences about a given population at one point in time. In this case the authors were interested in explaining the practice of knowledge creation among hotel employees and how this influences their performance. Ultimately, by use of this design a large population of the hotel industry is represented just using a small target sample. More so, this approach provided a stronger and more robust evidence to support the conclusion and propose a set of recommendations for knowledge management through high inference generalisability of findings (Lavrakas, 2008).

The authors targeted 7 two-star hotels in Eldoret town determined by the Tourism Regulation Authority (TRA) rating for the year 2015. Following TRA’s report, out of eight two-star hotels that were listed in the Kenya Gazette, September (2015), one of the hotels had been closed down at the time of this study hence was excluded. The study population and sample constituted human resource managers and employees of the hotels as shown in Table 1 and 2 respectively.

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Human Resource Managers</th>
<th>Employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>78</td>
<td>79</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>86</td>
<td>87</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>63</td>
<td>64</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>58</td>
<td>59</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>65</td>
<td>66</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>470</td>
<td>477</td>
</tr>
</tbody>
</table>

Source: Kenya Gazette (September, 2015)

A census sample was considered for the Human Resource Managers hence all the 7 HRMs participated. Employees on the other hand were sampled through proportionate convenience sampling guided by Johnson and Christensen’s (2012) formula:

\[ n_i = \frac{N_i \times n}{N} \]  

(1)
Where:

- \( n_i \) - Sample size;
- \( N_i \) - Employee population in each hotel;
- \( N \) – Total population;
- \( n \) – Proposed Sample size (141 employees).

<table>
<thead>
<tr>
<th>Table 2: Sample size Determination from each hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRMs</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>G</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Authors (2018)

Data collection was then performed using a structured questionnaire guide to observe uniformity in answering the research questions. (Cooper & Schindler, 2006) tested for reliability on a pilot study that depicted a Cronbach Alpha test score of 0.7 recommended by Hinton, McMurray and Brownlow (2004).

<table>
<thead>
<tr>
<th>Table 3: Instrument Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>.727</td>
</tr>
</tbody>
</table>

Source: Pilot field data (2018)

From the Cronbach Alpha reliability test for piloted instruments, the Alpha (\( \alpha \)) test score of .727 is above the recommended Cronbach Alpha test score of 0.7, thus acceptable for the study.

Data was then analysed through descriptive statistics (Mugenda, 2008) to provide primary features of the data on two variables as well as the impetus for carrying out further analyses for which Inferential statistics in form of linear regression was conducted to establish the strength of relationships between knowledge creation and employee performance while testing the hypothesis.

\[
Y = a + bX + \epsilon
\]

(2)

Where:

- \( Y \) represents Employee Performance;
- \( a \) represents (Alpha) which is the Constant;
- \( b \) is the Slope (Beta coefficient) for \( X \);
X represents Knowledge Creation; 
\( \varepsilon \) represents Error term.

The analysis was subjected to the assumptions of linearity, homoscedasticity, and normality in multiple regression (Osborne & Waters, 2002).

4. Findings and Discussion

The aim of the paper was to establish the influence of knowledge creation on performance of employees among 2-star hotels. Based on a likert scale of 1= Strongly Disagree (SD); 2=Disagree (D); 3=Fairly Agree (FA); 4=Agree (A); 5 =Strongly Agree (SA) to address this objective, the authors recoded findings as presented in Table 4.

**Table 4: Features of knowledge creation and employee performance in the hotels**

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Min.</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The hotel often engages employees to participate in meetings and forums as a means of creating knowledge</td>
<td>52</td>
<td>50</td>
<td>15</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>4.20</td>
<td>.871</td>
</tr>
<tr>
<td>I am encouraged by management to develop new applications from my job successes to bring new concepts to work</td>
<td>46</td>
<td>58</td>
<td>8</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>4.14</td>
<td>.894</td>
</tr>
<tr>
<td>I am often encouraged to develop innovative ideas and use innovative methods while undertaking my duties</td>
<td>48</td>
<td>53</td>
<td>15</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>4.17</td>
<td>.830</td>
</tr>
<tr>
<td>Supervisors and employees who know about job processes collaborate with those who don’t know to complete specific tasks</td>
<td>53</td>
<td>50</td>
<td>15</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>4.23</td>
<td>.851</td>
</tr>
<tr>
<td>I am required to write down a detailed report of my daily activities and procedures on how I handle each task</td>
<td>48</td>
<td>42</td>
<td>24</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>4.06</td>
<td>.947</td>
</tr>
</tbody>
</table>

Key: n- Sample Size, Min- Minimum, Max- Maximum, SD-Standard deviation

Source: Authors (2018)

The findings presented in Table 4 show high means for various items that addressed existence of knowledge creation and its influence on the performance of employees. The highest rated factor on knowledge creation was through collaboration with
knowledgeable supervisors and employees on specific job processes to help those who did not understand the job (M=4.23, SD=.851). Majority of the employees strongly agreed and agreed 53(43.4%) and 50(41.0%) on collaboration respectively. The least scored item although still above average was the employees being required to write a detailed report of their daily activities and procedures (M=4.06, SD=.947) with most respondents strongly agreeing, and fairly agreeing to the statement indicated by values of 48(39.3%), 42(34.4%) and 24(19.7%) respectively. The authors also sought to know whether the employees were encouraged to engage and participate in meetings and forums as a means of creating knowledge (M=4.20, SD=.871); encouraged by management to develop new applications from their job successes (M=4.14, SD=.894); and if they were encouraged to develop innovative ideas and use innovative methods while undertaking their duties (M=4.17, SD=.830). The results therefore show that knowledge creation was highly practiced as an influence to performance of employees among 2-star hotels in Eldoret.

Through responses from HRMs, the authors recorded the findings presented in Table 5 to indicate the level of employee performance on a likert scale of 5-excellent, 4-above average, 3-below average, 2-poor, 1-very poor.

<table>
<thead>
<tr>
<th>Table 5: Employee performance at the hotels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee performance measures</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Speed in service delivery</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Time management</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Etiquette and courtesy</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Consistency of employees at work</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Teamwork among the employees</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Influence of employees on others</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| Average Mean                               | 4.22 |

Key: F-Frequency, P-Percentage, n- Sample Size, Min- Minimum, Max- Maximum, SD-Standard deviation

Source: Authors (2018).

All the items measuring the performance of employees at the hotels scored an above average mean with speed in delivery of service and influence of employees on others being the most highly rated aspects of performance denoted by a similar mean and standard deviation of (M=4.57, SD=.535). This was followed by staff etiquette and courtesy and teamwork among the employees with a rating of (M=4.29, SD=.488) and (M=4.29, SD=.756) respectively. Nonetheless, employee performance was also measured by consistency of employees at work and time management by the employees which was rated at (M= 3.86, SD=.690) and (M=3.71, SD=.756). Time management therefore
scored least in the category of items that depict employee performance with majority of
the managers indicating that it was excellent 1(14.3%), above average 3(42.9%) and
below average 3(42.9%) respectively.

A regression analysis with findings presented in Table 6 was therefore
performed to test the hypothesis which stated:

**H0**: Knowledge creation has no influence on performance of employees in hotels.

<table>
<thead>
<tr>
<th>Table 6: Regression coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Knowledge Creation</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Employee Performance

Based on the findings shown in Table 6, there was a significantly positive linear
relationship between knowledge creation and employee performance as depicted by
\( \beta = 0.325, p = 0.010 \). This implies that knowledge creation has a significance influence on
employee performance and contributes to 32.5% of their performance. Based on the
study finding, the null hypothesis (H0) which stated that knowledge creation has no
influence on performance of employees in hotels was rejected. The alternative
hypothesis was therefore accepted and the authors conclude that knowledge creation
has a significant influence on the performance of employees among 2-star hotels.

The high mean scores presented by the knowledge creation feature at the hotels
is a finding that has been supported by various knowledge management scholars
(Nonaka et al., 2000a; Pinto et al., 2017; Lee & Choi, 2003). The regression analysis
showed a positive influence of knowledge creation with employee performance. These
findings also agree with those of Nonaka et al. (2000a) who argue that the knowledge
creation process is an enabler of the firm’s ability to develop internally embedded
knowledge to be used in daily activities for efficiency and value creation which is a
result of employee performance.

Similarly, a study by Lee and Choi (2003) puts emphasis on knowledge creation
as a process that leads to entrepreneurial orientation resulting to enhanced firm
performance. According to the two, a firm with improved knowledge creation practice
can easily connect new knowledge and other distinctive ways that are customer value
based to enhance the performance of the employees in an organisation.

Based on the regression analysis the study was indicative of knowledge creation
as having influence on employee performance as indicated by \( \beta = 0.325 \). Consequently
it was concluded that knowledge creation positively influenced performance of
employees among the studied hotels. Agreeably, Pinto et al. (2017), show that
knowledge creation is a fundamental intangible aspect of value to organisations
especially in creating a competitive advantage.
5. Conclusion

Knowledge creation has a positive and significant influence on the performance of employees. Most employees acknowledged that supervisors and employees who know about job processes collaborated with those who didn’t know to complete specific tasks. However, a worrying concern is that creation of knowledge is not something that can be conducted in groups but at an individual level an indication that most employees would not be willing to undertake, on high chances of hoarding information for individual benefit. It was clear in the findings that they are not encouraged by management to develop new applications from their job successes to bring new concepts to work. Knowledge creation in an organisation is therefore best defined by inception of knowledge explained by employees developing new applications through job successes, creativity by being innovative and bringing new ideas and methods to the organisation and transforming the knowledge through employee participation in meetings and forums as well as collaboration between employees.

6. Implication for Research and Practice

The findings are agreeable and representative of the situation at most organisations portraying the challenges that Human Resource Managers have to incur in line of duty while trying to ensure that their employees are a part of creating knowledge in their organisations. If this is not taken care of, the employers risk losing the best of the knowledge whether acquired through trainings in the organisation or possessed in tacit form by employees. As directed by the knowledge spiral theory, Managers need to create an enabler for individual employees to take part in the whole process of creating new knowledge within their establishments. This is a helpful article to the future researchers to delve further into the inquiry of whether knowledge creation would bring the same results in other organisations or whether moderated by other variables; a task that recommended for further research by the authors.

7. Recommendations

1) Having established that knowledge creation is a spiral process as explained by the knowledge spiral theory; hotels should adopt a policy to promote individual participation in creation of knowledge and reward new ideas tabled by employees to encourage innovativeness.

2) The study also established that knowledge creation predicted only a small percentage of the performance of employees in the hotels thus the authors recommend another study to establish other factors that influence employee performance.
References


Tourism Regulation Authority (2016). East Africa classification criteria. North Rift Region

Lillian Ouma Nabwire, Geoffrey Kimutai, Jennifer Munyua

INFLUENCE OF KNOWLEDGE CREATION ON PERFORMANCE OF EMPLOYEES
AMONG TWO-STAR HOTELS IN ELDORET, KENYA

Creative Commons licensing terms
Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Management and Marketing Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a Creative Commons Attribution 4.0 International License (CC BY 4.0).