



EFFECT OF VERTICAL AND HORIZONTAL MULTI-SKILLING STRATEGIES ON EMPLOYEE PERFORMANCE IN COMMERCIAL BANKS IN KENYA: A CASE OF KISUMU COUNTY

Okeyo, B. A., & Juma, D.

EFFECT OF VERTICAL AND HORIZONTAL MULTI-SKILLING STRATEGIES ON EMPLOYEE PERFORMANCE IN COMMERCIAL BANKS IN KENYA: A CASE OF KISUMU COUNTY

Okeyo, B. A.,^{1*} & Juma, D. O.,²

^{1*} Msc. Candidate, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya

² PhD, Lecturer, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya

Accepted: September 28, 2020

ABSTRACT

Functional specialization has been challenged by the increasingly competitive and changing global business environment. Banks provide key services in the Kenyan economy and their productivity is key to their existence and survival in the wake of increased use of information technology, intense competition, globalization, and business expansion. The human factor adds more value in imparting organizational success and this has led to increased use of human resources to confer a variety of organizational benefits. To attain and maintain productivity, employee performance is a key contribution. Multi-skilling enhances employee response to irregular and emergent events quickly and effectively. The purpose of the study was to establish the effect of vertical and horizontal multi-skilling strategies on employee performance in commercial banks in Kenya, with a case of Kisumu County. The study adopted a survey research design. The target population was two hundred and thirty eight employees of commercial banks in Kisumu County from which sample of one hundred and forty nine employees were drawn through stratified random sampling technique. One hundred and thirteen (113) questionnaires were dully filled, returned and analyzed using Statistical Package for Social Sciences to facilitate descriptive and inferential analysis of the study variables. Linear regression results indicated that vertical and horizontal multi-skilling significantly explained variance in employee performance. Pearson correlation results showed strong positive relationships between vertical and horizontal multi-skilling strategies. Commercial banks carried out management development and delegation of supervisory and administrative tasks selectively; employees were assigned different tasks only within their departments. Core horizontal multi-skilling practices were not done with exception only within the departmental levels, vertical multi-skilling strategies were applied only at the managerial levels. The study concluded that vertical and horizontal multi-skilling strategies play a significant role in employee performance in commercial banks. The study recommended that a combination of these strategies should be utilized for attainment of improved and sustained organizational productivity; and that employees be assigned other job tasks from other departments.

Key Words: Depth multi-skilling, Horizontal Multi-skilling, Employee Performance, Human Resource Flexibility, Organizational Flexibility.

CITATION: Okeyo, B. A., & Juma, D. (2020). Effect of vertical and horizontal multi-skilling strategies on employee performance in commercial banks in Kenya: A case of Kisumu County. *The Strategic Journal of Business & Change Management*, 7(3), 1643 – 1661.

INTRODUCTION

Organizations since time immemorial have placed great emphasis on functional specialization. This was supported by Max Weber's bureaucracy and its ideal elements; specialization being one of them (Cole; 2003) and Francis Taylor's principles of scientific management that advocated for the segmentation of work into narrowly defined jobs. It has been determined that specialization has become very costly and is increasingly challenged by the outsourcing of less important organizational functions to other specialist organizations (Sharma and Khandekar; 2006). Martinez-Sanchez *et al.* (2007) also suggest that firms may outsource in order to obtain workforce flexibility to face environmental uncertainty and improve performance. However, they further state that the impact of outsourcing on firm performance is highly inconclusive.

Research shows that HRM is vital in order for an organization to achieve organizational success (Barney, 1991; Jackson and Schuler, 2000; Pfeffer, 1994). HRM practices and systems play a strategic role by contributing to the creation of a sustained competitive advantage (Arthur, 1994; Gerhart and Milkovich, 1992; Huselid, 1995; Macduffie, 1995; Terpstra and Rozall, 1993). Therefore, it's key that an organization adopt HRM practices that make use of its employees. Managing in a global marketplace, introducing new technology, developing organizational knowledge and improving customer service or product quality requires the utilization of human resources (Pfeffer, 1994). In order to survive and gain competitive advantage, organizations have increasingly adopted the use of human resources as means of gaining and sustaining competitive advantage due to the view that people are a firm's most valuable and inimitable resource.

Flexibility in the management of labour emerged as a key policy debate in the 1980s (Pollert, 1991). Flexibility was seen as a means of enhancing competitiveness and adapting to changes in the business environment (Cordery, 1989; Pinefield and Atkinson, 1988). The need for flexibility in work

arrangements has risen to include multi-skilling to provide for the more effective use of human resources. Jobs today are being designed to require cost reduction measures and organizations increasingly acquire people who are flexible and can adapt to different work or tasks (Atkinson; 1994). Armstrong (2010) argue that human resource management practices can improve productivity by increasing employee skills and abilities, promoting positive attitudes and increasing motivation and providing employees with expanded responsibilities to make full use of their skills and abilities. Multi-skilling has been emphasized on as a human oriented measure to attain flexibility and adaptability so as to gain competitive advantage (Armstrong, 2002).

Multi-skilling is the acquisition of skills, knowledge, competency and experiences which develops and enables the individual to perform tasks outside the immediate job requirements (Davids, 2004). Multi-skilling refers to training of workers to undertake a wide range of jobs hence provides an organization with a flexible and adaptable employee and creates a skilled pool of human resources. Multi-skilling is different from multi-tasking because multi-skilling trains the worker in different skills. Cordery (1995), classified multi-skilling into four types: vertical multi-skilling, horizontal multi-skilling, depth multi-skilling and multi-skilled teams. Beynon *et al.* (2002) say that multi-skilling involves staff undertaking additional work outside the normal remit of their jobs. This study however, focuses only on vertical and horizontal multi-skilling.

Vertical multi-skilling is providing employees with additional skills at a higher level of complexity. It involves employees learning or acquiring supervisory or administrative support tasks (Cordery, 1995). For instance, an employee may learn skills of management, quality control, strategy development and supervisory skills. Multi-skilling is a key ingredient to satisfy qualified employees because it gives them challenges with regard to job content and levels of responsibility (Chen and Wallace, 2011). Vertical multi-skilling offers

employees opportunities for learning and growth as it enables them to undertake work that is of higher responsibility and authority than their traditional jobs such as supervisory or management training. Vertical multi-skilling therefore enhance organizational learning, increase productivity and improve managerial development through developing managers for higher level strategic positions in the organization. Vertical multi-skilling is also achieved by managerial delegation of authority. This dimension of multi-skilling helps employees to acquire skills and knowledge that is suitable for future supervisory and managerial interactions. According to Riley *et al.* (2000), organizations that adopted multi-skilling reported improved work processes, better co-ordination and collaboration between heads of departments.

Horizontal multi-skilling is the acquisition of skills from another discipline or function within an organization (Cordery, 1995). This enables an employee to perform a wide range of tasks emanating from the employees extended skill base. For instance, an electrician may learn mechanical tasks. Horizontal multi-skilling consists of two main types: Skill broadening and Cross skilling or dual skilling. Skill broadening refers to where minor elements and tasks are learnt on top of the predominant activity/ major task. Hence an employee maintains expertise in the major task with elements added to increase efficiency. For instance, a mechanical engineer may learn electrical tasks to avoid the use of a technician. Skill broadening offers variety of tasks and learning opportunities for employees as this aspect of multi-skilling aims to expand the employees skill and knowledge base. This then provides the employees with the ability to confer broader based efficiencies to the organization rather than employees who are single-skilled. It improves quality of work, task coordination and improves error detection. Such multi-skilled employees are able to put in their effort and detect errors and so eliminate them earlier or anticipate errors in the various work processes they handle and so devise ways of

preventing their occurrences. Skill broadening offers individuals with a range of different types of tasks hence it highly effective during emergency or incident management scenarios. Cross skilling refers to where another major activity is learnt in addition to the main craft and a person is considered competent to carry out any activity in these two main disciplines. For instance, employees in a production industry who are competently able to carry out both mechanical and electrical tasks. This dimension of multi-skilling provides employees with opportunities to learn new skills, a greater understanding of other departments work processes and wider experience. With employees possessing these cross functional skills, they can facilitate the attainment of short-term objectives such as provision of replacement for other staff on leave. Cross-skilling seeks to broaden employees' range of skills and prevent task over-specialization in order to assist organizations to remain in business in the event of sudden internal and external changes (Carmen and Zane, 2010).

Flexibility in its various forms has been cited by researchers as a core practice that firms could adopt to attain various benefits. The use of human resources to enhance organizational flexibility is another approach to improve competitive advantage and enhance survival in business uncertainty. Multi-skilling is an essential human-oriented approach in creating flexibility in organizations (Bernadin and Russel; 1998). This is consistent with other researchers who also concur that multi-skilling is an efficient response to uncertainty and pressures in the business environment that enhances labour productivity (Fox and Yuen, 2004; Kim and Park, 2003).

Just like other organizations, the global banking sector has been facing unprecedented challenges due to the wave of privatization and globalization (Aldaibat and Irtaimeh, 2012). Banks around the world face massive regulatory reform, constant change and ever-present uncertainty (Ngui, 2014). They operate in an environment of limited economic growth, shifting consumer demands and

demographics, conflicting expectations from shareholders and consumers and various regulators (Central Bank of Kenya, 2010; Nyamongo & Temesgen, 2013). Banks are increasingly under pressure to simultaneously improve the customer experience, meet compounding regulatory requirements and at the same time reduce operating costs.

According to a Central Bank of Kenya Report (2019), there are only forty three (43) licensed commercial banks and one mortgage finance bank in Kenya. Out of these forty three (43) licensed commercial banks, twenty three (23) of them operate in Kisumu County. (Bank Branches Report, 2019). The Kenyan banking sector plays an important role in the growth of the Kenyan economy due to its key role in provision of credit source. These banks are increasingly facing a myriad of emerging developments such as climate change, geopolitical tensions such as Brexit, changing customer demands, massive regulatory reform such as those that arise from international standards, globalization, cyber-security threats due to heavy reliance on information technology (CBK, 2019) and other economic challenges such as inflation.

New technology enables production to be quickly tailored to customer requirements. Organizations need workers to be more flexible, to co-operate with others, to operate sophisticated technology and to be more adaptable. In addition, the complexity of operations, commerce and services created by diverse pressures in the business environment make them beyond the expertise and control of one individual. Commercial banks operate in a highly competitive business environment. They reported that they are undertaking a lot of innovations and technological developments summed up as Financial Technology (FinTech) such as blockchain technology, chatbots, video teller machines, cloud computing, internet of things, cloud computing, machine learning and artificial intelligence to improve their customers' experience and sustain growth and profitability (CBK, 2018). Therefore in such circumstances,

multiskilling becomes not just desirable but very essential to support innovation, implementation as well as successful utilization of such technology. Multi-skilling enables the maximizing of the different strengths and skills of employees so that they are able to tackle a greater variety of tasks.

Statement of the Problem

The Kenyan banking sector is increasingly facing competition and myriad of challenges attributed to globalization such as climate change, geopolitical tensions such as Brexit; changing customer demands; massive regulatory reform such as those that arise from international standards; cyber-security threats due to heavy reliance on information technology as well as other economic challenges which has affected the performance of banks (CBK, 2018). With the increase of such emergent developments, employee productivity is a big concern for banks. Kenyan banks have cited inadequate technical skills and modeling capabilities (CBK, 2018) that culminated into low employee performance hence affected overall profitability of banks. The situation is worsened by the high cost implication for personnel training (CBK, 2018) hence limiting employee development programmes that would enhance employee performance.

Paradoxically, banks cited increasing staff capacity through training as a mitigation measure (CBK, 2018). However a number of research on training have shown that it influences employee performance but no regard was given to multi-skilling as an internal, cost-effective and efficient way for skills training to improve employee job performance. Research concur that multi-skilling is an efficient and cost-effective response to uncertainty and pressures in the business environment that enhances labour productivity (Fox and Yuen, 2004; Kim and Park, 2003). However, such studies were done in different country, industry and organizational contexts.

Most studies done in Kenya on employee performance focused on change management, leadership styles, talent management, training,

coaching, career development, performance appraisal, downsizing, motivation, diversity in workplace and workplace environment in various organizations.. Minimal research exist on multi-skilling and employee job performance. Murei (2008) studied the effect of multi-skilling on service delivery in Safaricom Head Office.

Further, studies done in various individual and selected commercial banks in Kenya on employee performance focused on organizational downsizing (Kagure, 2018), coaching (Muriithi, 2016), motivation (Alusa & Mbugua, 2019), workplace environment (Gitahi *et al.*, 2015), career progression (Mugaa *et al.*, 2018), performance appraisal (Wagacha & Maende, 2017; Wanjala & Kimutai, 2015) change management (Kinoti, 2015), leadership styles (Anyango, 2015) on employee performance. A study by Asaasira (2016) in its conclusion only mentioned that multi-skilling and staff empowerment as aspects under the growth and learning perspective of the balanced score card, enhances strategy implementation in tier-one commercial banks. Despite the use of multi-skilling in strategy implementation as a growth and learning perspective, its influence on employee performance in commercial banks is not known. There are empirical and contextual gaps on the link between multi-skilling and employee performance, even in branch setups of commercial banks. This study filled these gaps by investigating the effect multi-skilling strategies on employee performance in commercial banks in Kenya, with a case of Kisumu County.

Objectives of the Study

The objective of the study was to examine the effect of multi-skilling strategies on employee performance in the commercial banks in Kenya, with reference to bank branches in Kisumu County. The specific objectives were;

- To establish the effect of vertical multi-skilling on employee performance in commercial banks in Kisumu County

- To establish the effect of horizontal multi-skilling on employee performance in commercial banks in Kisumu County

This study was guided by the following hypotheses:

- **HO1:** Vertical multi-skilling has no significant effect on employee performance in commercial banks in Kisumu County.
- **HO2:** Horizontal multi-skilling has no significant effect on employee performance in commercial banks in Kisumu County.

LITERATURE REVIEW

Theoretical Framework

Harvard Model of Human Resource Management (soft model)

Proponents of this model (Beer *et al.*, 1984; Boxall, 1992) contend that stakeholder interests and situational factors can be attained when HR policy choices and outcomes ensure employee well-being. It takes the view that employees are the major source of competitive advantage in an organization.

The model holds that the business pressures experienced today has created a perspective in which people are considered as potential assets rather than a variable cost. The model has considerably contributed to the regard of human resources as a key strategic resource in management that is neither determined by situational nor environmental factors hence cannot be ignored. The model is significant as it proposes mutually reinforcing trade-offs for stakeholders through HR outcomes and policy choices hence provides the understanding of a social exchange relationship (Boxall, 1992; Purcell, 2003).

This model of Human Resource Management provides a basis for the study as it sees human resources as a source of competitive advantage. Competitive advantage is attained through sustained and long-term utilization of the inimitable and non-substitutable human resources through flexibility arrangements such as multi-skilling (Armstrong, 2010).

Resource Based View

Resources available to organizations are both tangible and intangible resources. Tangible resources include financial, technological, physical and human resources while intangible resources include goodwill or reputation, brand and knowledge. Resources result into competitive advantage when they are rare, valuable, inimitable, and non-substitutable. In spite of the financial, technical, and physical resources capability of creating value, they are imitable and can be easily acquired by other organizations (Barney, 1991). Human resources are incapable of imitation and substitution due to the complex web of social, psychological and behavioral systems entailed in human resources. A firm's possession of a human resource pool that cannot be imitated and substituted by rivals provide organizations what Boxall (1996) refers to as 'human capital advantage'.

The resource based view of the firm focuses on the resources and capabilities held by a firm as sources of competitive advantage (Perce and Robinson, 2007). This view of the firm focuses on the quality of human resources available to the organization and their ability to learn and adapt more quickly than competitors. These human resources include resources such as training, experience, intelligence, relationships and insights of managers and employees in the organization. The sum of people's knowledge and experience, social relationships has the potential to provide non-substitutable capabilities that serve as a source of competitive advantage (Capelli and Singh, 1992).

According to Armstrong (2006), training and developing employees by the employer is a means of retaining human capital and ensuring the organization makes improvements in productivity, flexibility and capacity to innovate that emerge from an enlargement in the skill base, increased levels of knowledge and competence. This perspective is supported by Schuller (2000) and Reich (1991).

The resource based view points out that organizations can sustain competitive advantage

only by creating value from their resources in a way that is rare and difficult for competitors to imitate. According to Joo & McLean (2006), human resource systems can contribute to sustained competitive advantage by facilitating development of competencies that are firm specific, promote complex social relationships and generate tacit organizational knowledge. The resource based view is relevant to this study as it supports the view that human resources flexibility provides benefits to organizations which include ability of the organizations to improve their profitability and productivity for purposes of sustained competitive advantage (Armstrong, 2010).

The theory is criticized for it takes an imbalanced emphasis on human resources as a resource which is inimitable and non-substitutable (Davenport, 1999). Though human resources are not capable of substitution, they are often headhunted and employed by competitors through offering of better rewards than the other organizations leaving their former employers without the expertise they much relied on. In addition, work arrangements and the need for employees to earn extra reward for their capabilities has resulted into the proliferation of part-time work – hence employees still offer their skills to other competitors.

Human Capital Theory

This theory was proposed by Schultz (1961). The theory posits that knowledge and skill that a worker possesses produce beneficial capital and views people as an asset which adds value to an organization as well as enhancing its competitive advantage in the current turbulent business environment.

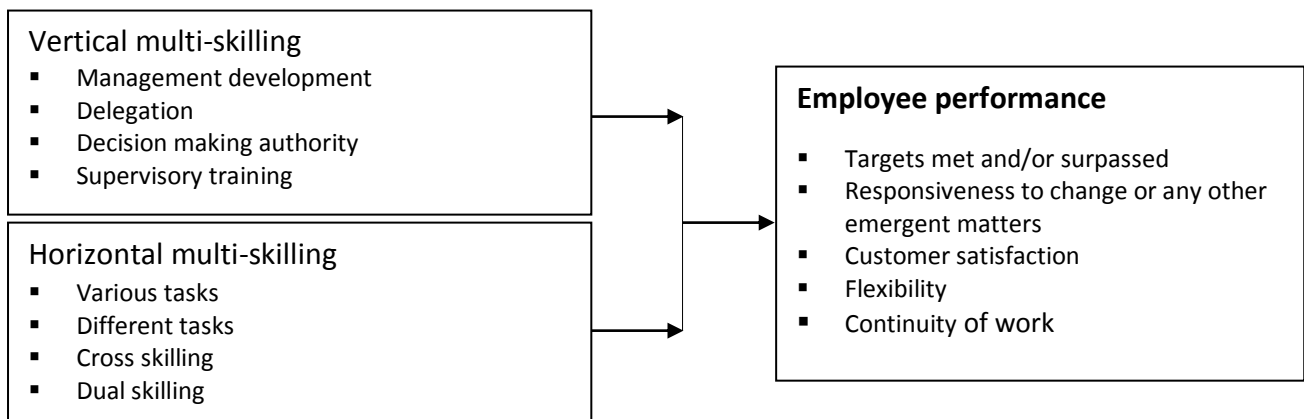
Armstrong (2009) defines human capital as a human factor in organizations which includes the combined intelligence, skills and expertise that give the organization its distinct character. Human capital provides the link between human resources practices and firm performance in terms of assets and is non-standardized, dynamic, context dependent and embodied on people. Features of human capital that are so crucial to firm

performance are flexibility and creativity of employees, their ability to develop skills over time and respond to different contexts. Hence knowledge, skills and abilities of employees create value if emphasis is laid on developing and utilizing them.

The theory of human capital is significant as it emphasizes the value that people add in the organization by regarding employees as assets which when organizations invest in, create returns. Investments in training of employees through functional flexibility arrangements like multi-skilling is a means of utilizing human capital for gaining better returns. Armstrong (2006) contend that

these returns are improvements in performance, flexibility and the capacity to innovate that ought to emerge from an enlarged skill base, increased knowledge and competence.

In spite of the espoused advantages of this theory, Davenport (1999) argues that employees should not be treated as passive asset to be bought, sold and replaced but rather as people who have control over their work lives and are valuable enough to be compared to other resources like plant and machinery. The emergence and existence of knowledge workers also supports the view that employees have control and discretion over their skills, talents, time and energy.



Independent variables

Dependent variable

Figure 1: Conceptual Framework

Source: Author (2020)

Empirical Review

Nicolaides (2013) conducted a study on multi-skilling and service delivery in the Southern Africa hospitality industry. The finding was that multi-skilling can make employees more flexible and efficient and able to cope with a variety of functions relating to hotel operations. His study adopted a quantitative methodology and involved a survey to determine the extent to which training for multi-skilling was common in the hospitality industry, the extent to which multi-skilling led to organizational efficiencies and which skills were required most. The sample population consisted of front-line managers such as supervisors while the sampling

scale focused on eighteen (18) four-star and 5-star hotels. The study reported that employees had exposure to different tasks in their department or they underwent brief alternation in other departments. Respondents asserted that multi-skilling training was done for their functional area or department and to an extent included other functional areas and that alternation to other departments was for a longer duration. The study concluded that there were undoubted benefits from multi-skilling: service quality, organizational productivity and efficiency. In the conclusion, the study pointed out that the maximum effect of multi-skilling is improved service quality provision

and that was critical since better levels of service quality usually leads to greater profits.

Scott and Cockrill (1997) on a comparative study of the use multi-skilling in German and Welsh engineering firms concluded that multi-skilling is typically associated with additional assumption of very broad and deep skill portfolios in German engineering firms, while the concept of multi-skilling was predominantly limited to job specific supplementary elements in engineering firms in Wales. The study reports that in Wales, some of the companies viewed multi-skilling as really appropriate only to indirectly productive occupational areas such as administration or technical supporting functions. This implies the use of forms of horizontal multi-skilling such as cross-skilling and dual skilling in German engineering firms.

Chen & Wallace (2011) conducted a study in Taiwan which laid emphasis on the use of multi-skilling to attain flexibility and its integration in the training strategy as a core component in order to improve performance in the hospitality industry. The study was done in thirty (30) five star hotels and adopted a descriptive survey method. The study found out that multi-skilling of frontline managers in five star hotels was positively correlated with service quality, retention and job satisfaction. Specifically, the study revealed that front-line managers having been given responsibility, empowerment and authority, were able to satisfy customers' diverse needs as well as deal with diverse customer complaints. The study further indicated that front office front-line managers who were multi-skilled were motivated by less routine job tasks; restaurant front-line managers increased their capacity to take on

additional tasks and support other departments when that was required; housekeeping front-line managers could produce the highest output of service productivity by extending their responsibilities in cooperation with other departments.

Nzuve & Njambi (2015), conducted a study on the factors perceived to influence employee performance at Independent Electoral and Boundaries Commission (IEBC). The study which adopted a descriptive research design and was a census of all the 175 employees of the commission, found out that involving employees in decision making, providing them with variety of job responsibilities and authority improves their work performance.

Both studies done by Kemboi *et al.* (2013) in Moi Teaching and Referral Hospital in Eldoret and Ngari *et al.*, (2018) in private equity firms in Nairobi found out that skill variety is positively correlated with employee motivation and consequentially, employee performance.

METHODOLOGY

The study adopted a descriptive survey research design. The target population of the study comprised 238 employees of all the 23 commercial bank branches which operated in Kisumu County (CBK Report, 2019). The sampling frame was each of the 23 banks from which a proportionate sample of 149 employees were drawn through stratified random sampling. Data was collected by use of questionnaires and were analyzed using Statistical Package for Social Sciences (SPSS) Version 23. Descriptive and inferential statistics were used in analyzing the data.

Table 1: Reliability Test Analysis for the Pilot instrument

Variable	Cronbach's Alpha	No of Items	Comment
Vertical Multi-Skilling	.960	10	Reliable
Horizontal Multi-Skilling	.917	12	Reliable
Employee Performance	.931	9	Reliable

The internal consistency of items of both dependent and independent variables were assessed using Cronbach's Alpha. The results were interpreted based on the rule of George and Mallery (2003) in which: value>0.9 (Excellent), value>0.8 (Good), value>0.7 (Acceptable), value > 0.6(Questionable), value>0.5 (Poor) and value< 0.5 (Unacceptable). All the five variables under study were reliable and met the threshold for subsequent data analysis.

FINDINGS AND DISCUSSIONS

Data was collected by use of questionnaires which were distributed to 149 respondents in commercial banks in Kisumu County. After follow-ups, questionnaires from 113 respondents were completed and returned in a form usable for analysis, which constituted a response rate of 75.84%. 36 of the questionnaires were not returned, such constituted 24.16% of the sample size. This response rate was considered good as

suggested by Bryman and Bell (2015) who postulated that 60% is sufficient sample size.

Descriptive Statistics

The results presented in this section are descriptive summary of the responses on statements measuring multi-skilling strategies on employee performance in Commercial banks in Kisumu County. A five point likert scale in which 1 represented strongly agree, 2 represented agree, 3 represented neither agree nor disagree, 4 represented disagree and 5 represented strongly disagree was utilized. Percentages, means and standard deviations of the responses were computed for the independent and dependent variables and represented in the tables below.

Vertical Multi-skilling and Employee Performance

The descriptive results of the summarized responses on the effect of vertical multi-skilling on employee performance in commercial banks in Kisumu County are presented in table 2.

Table 2: Respondents level of Agreement on Vertical multi-skilling

Statement	SA 1	A 2	NA/ND 3	D 4	SD 5	Mean	Std. Dev.
Bank carries out management development practices	5	33	5	27	29	2.469	1.3098
I am often assigned task that require a higher level of authority to undertake	21	20	6	35	17	3.061	1.447
My Supervisor often delegates supervisory and /or administrative task	24	33	8	19	16	2.708	1.431
My supervisor gives me more authority over delegated work	23	18	16	30	13	2.929	1.393
My supervisor gives me more independence/autonomy over delegated work	27	25	15	25	8	2.611	1.333
My supervisor gives me more control over delegated work	22	28	12	27	10	2.743	1.334
I am often supported to acquire skills within the organization, that will enable me to take higher position in the bank	21	19	6	33	21	2.557	1.619
I perform better due to the higher-level task I undertake in my current position	17	11	12	35	24	2.575	1.400
I perform better in my current job due to authority and responsibility assigned to me in my current position	19	13	17	37	14	2.443	1.356
I perform better in my current job due to the additional competencies I have acquired through management development undertaken by my employer	12	13	15	35	25	2.584	1.450
Aggregate Score						2.67	1.41

From table 2, most of the respondents agreed that the banks carried out management development

practices (33%), my supervisor often delegates supervisory and/or administrative tasks (33%),

supervisor gives me more control over delegated work (28%), while majority of the respondents strongly agreed that their supervisors gave them more independence/autonomy over the delegated work (27%).

On the other hand, majority of the respondents disagreed that they were often assigned tasks that required a higher level of authority to undertake (35%), supervisors gave them more authority over the delegated work (30%), they were often supported to acquire skills within the organization that would enable them to take up higher positions in the bank (33%), they perform better due to higher level of task they undertake in their current job position (35%), they perform better in their current jobs due to authority and responsibility assigned to them in their current positions (37%) and they also perform due to the additional

competencies they have acquired through management development undertaken by the employer (35%).

The aggregate mean score is 2.67 with a standard deviation of 1.41 hence most of the employees agreed that vertical multi-skilling influence employee performance. Such responses indicated that employees are predominantly motivated by job arrangements that provide more autonomy, responsibility, empowerment and authority and allows them to participate in decision-making hence impacts their job performance.

Horizontal Multi-skilling and Employee Performance

The descriptive results of the summarized responses on the effect of horizontal multi-skilling on employee performance in commercial banks in Kisumu County are presented in table 3.

Table 3: Respondents level of Agreement on Horizontal multi-skilling

Statement	SA 1	A 2	NA/ND 3	D 4	SD 5	Mean	Std. Dev.
I do more task in my job	23	53	8	12	4	2.204	1.045
I do a variety task in my job	30	46	7	14	3	2.133	1.082
I am often assigned different tasks within my section/department	27	43	9	19	3	2.274	1.128
I undertake major tasks from another section/department in addition to those in my section/department	10	17	3	32	38	3.424	1.322
I undertake minor tasks from another section/department in addition to those in my section/department	12	17	16	23	32	3.097	1.420
My job is often expanded to accord me additional tasks at the same position	12	12	18	54	5	2.451	1.0176
I am often assigned other tasks from another section/department	10	14	8	32	46	3.0265	1.339
I am often assigned other job task that are not related to those i undertake in my current position	5	10	21	35	28	3.159	1.1065
I am often assigned other job task that are related to those i undertake in my current position	15	41	16	22	6	2.637	1.1654
My performance has improved due to another task I undertake outside my section/department	18	19	19	18	27	2.929	1.380
My performance has improved due to variety skills that i have acquired through an expanded job	14	17	12	25	32	2.664	1.424
My performance has improved due to various task I perform within my section/department	24	42	4	12	18	2.584	1.431
Aggregate Score						2.72	1.24

From table 3, majority of the respondents agreed that they did more task in their job (53%), they did a

variety tasks in their job (46%), they were often assigned different tasks within their

sections/departments (43%), they are often assigned other job task that are related to those in their current position (41%), and performance has improved due to various tasks I perform within my section/department (42%).

On the other hand, majority of the respondents strongly disagreed that they undertake major tasks from another section/department in addition to those in their current section/department (38%), undertake minor tasks from another section/department in addition to those in my current section/department (32%), I am often assigned other tasks from another section/department (36%), My job is often expanded to accord me additional tasks at the same position (54%), I am often assigned other job task that are not related to those I undertake in my current position (35%), My performance has improved due to other tasks I undertake outside my section/department (27%). My performance has

improved due to variety skills that I have acquired through an expanded job (32%). This implies that horizontal multi-skilling was done only within departments, hence employees were not given a chance to work across other departments.

The aggregate mean score is 2.72 with a standard deviation of 1.24 hence majority of the employees agreed that horizontal multi-skilling influence employee performance. This implied that providing employees with expanded and less routine job tasks, increased capacity to take on additional tasks and support other departments whenever is necessary, as well as frequent provision of variety of job responsibilities, improves employee performance.

Employee Performance

The descriptive results of the summarized responses on employee performance in commercial banks in Kisumu County are presented in table 4.

Table 4: Respondents Level of Agreement on Aspects of Employee Performance

	SA	A	NA/ND	D	SD	Mean	Std. Dev.
Statement	1	2	3	4	5		
I am flexible and willing to take on additional responsibilities	35	24	4	19	18	2.009	1.257
I am always responsive to change and any emergent issue	32	24	1	16	18	1.956	1.183
I always meet my targets	24	49	13	13	1	1.974	0.749
I always surpass my targets	15	19	23	32	11	2.788	1.228
The quality of the service to customers is good and they are always satisfied	31	38	4	16	11	2.372	1.351
I always step in for an absent colleague and effectively carry out his/her duties	21	16	3	16	45	2.611	1.595
I understand the work processes or procedures of another department	15	18	4	43	20	1.734	0.469
There is a coordination among employees due to better understanding of organizations work processes	19	11	4	46	20	2.478	1.483
Continuity of work is guaranteed in the organization because employees often handle duties for absent colleagues	11	16	1	26	46	2.593	1.596
Aggregate Score						2.28	1.21

From table 4, most of the respondents strongly agreed that they are always flexible and willing to take on additional responsibilities (35%). Similarly, majority of the respondents agreed that they always meet their targets (49%), and that the

quality of the service to the customer is good and they are always satisfied (38%).

On the other hand, majority of the respondents strongly disagreed that they always surpass their targets (32%), there is coordination among employees due to better understanding of

organization work processes (46%), they understand the work processes of another department (43%), continuity of work is guaranteed in the organization because employees often handle duties for absent colleagues (46%). Majority of respondents (32%) strongly agreed with the statement that they are responsive to change and any other emergent issues. This indicated employee willingness to address emergent changes while majority of those respondents (45%) strongly disagreed with the statement that they often handle duties for absent colleagues.

The aggregate mean score was 2.28 with a standard deviation of 1.21. Such responses indicated that despite employees' willingness to address emergent changes, opportunity was not provided for them to work across jobs. This implied that not only an individual employee's skills but its varieties –hence the employee's multi-skills, positively influence employee performance.

Inferential Analysis

Correlation test was done on the study variables to determine if there is an association among the variables of study using Pearson product moment correlation.

Table 5: Correlation Test

		Vertical Multi-Skilling	Horizontal Multi-Skilling	Employee Performance
Vertical Multi-Skilling	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	113		
Horizontal Multi-Skilling	Pearson Correlation	.685**	1	
	Sig. (2-tailed)	.000		
	N	113	113	
Employee Performance	Pearson Correlation	.711**	.724**	1
	Sig. (2-tailed)	.000	.000	
	N	113	113	113

** . Correlation is significant at the 0.01 level (2-tailed).

From the findings presented in table 5 below, vertical multi-skilling ($r = 0.711$, $p\text{-value} < 0.05$), horizontal multi-skilling ($r = 0.724$, $p\text{-value} < 0.05$), were all found to have a positive correlation with employee performance and statistically significant, this implied that both independent variable (employee performance) and independent variables (vertical and horizontal multi-skilling) move in the same direction.

The correlation test was important as it determined whether multi-collinearity problem existed. Research suggested that when the correlation coefficient r is near 1 or -1, then there is a multi-

collinearity problem but if the correlation coefficient is less than 0.8, then there is no multi-collinearity problem (Hair *et al.*, 2011). In table 5, the highest correlation coefficient for the independent variables was 0.781 was below the set standard hence there was no problem of multi-collinearity.

Regression Analysis of Multi-skilling strategies and Employee Performance

Simple linear regression analysis was done at 95% confidence level to establish the relationship between the two variables and employee performance.

Effect of Vertical Multi-Skilling on Employee Performance

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711 ^a	.506	.502	.94576

a. Predictors: (Constant), Vertical Multi-Skilling

Table 7: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	101.724	1	101.724	113.727	.000 ^b
	Residual	99.285	111	.894		
	Total	201.009	112			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Vertical Multi-Skilling

Table 8: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.465	.199		2.333	.021
	Vertical Multi-Skilling	.711	.067	.711	10.664	.000

a. Dependent Variable: Employee Performance

From table 6, The Karl Pearson product moment of coefficient of correlation $R=0.711$ is strong and suggests a strong positive relationship. The R Square was .506 indicated that 50.6% of the variance in the employee performance can be predicted by vertical multi-skilling hence other factors account for the remainder of the percentage.

Furthermore, ANOVA results on Table 7 above indicated that the P value (0.000) was less than 0.05. The finding showed that the model was statistically significant at 95% confidence interval ($F=113.727$, $p=0.000 < 0.05$). This therefore implied that there was a significant relationship between vertical multi-skilling and employee performance in commercial banks in Kisumu County. This finding supported the research by Kim and Park (2003) who found out that delegation of authority was positively associated with firm labour productivity growth. Chen (2010), who found out that front-line

managers having been given responsibility, empowerment and authority, were able to satisfy customers' diverse needs as well as deal with diverse customer complaints. These findings are also consistent with findings by Nzube & Njambi (2015), who found out that involving employees in decision making, providing them with responsibility and authority improves their work performance.

The findings from table 8 showed that vertical multi-skilling contribute significantly to employee performance in the model with a p-value of 0.000 ($\beta = 0.711$, $t = 10.664$, $p = 0.000 < 0.05$). This implied that an increase in one unit of vertical multi-skilling strategy leads to an increase an employee performance positively by 0.711 ($\beta = 0.711$). Therefore, vertical multi-skilling is statistically significant in explaining employee performance in commercial banks. Therefore, the model was a good fit.

Effect of Horizontal Multi-Skilling on Employee Performance

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 ^a	.524	.520	.92815

a. Predictors: (Constant), Horizontal Multi-Skilling

Table 10: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	105.386	1	105.386	122.334	.000 ^b
	Residual	95.623	111	.861		
	Total	201.009	112			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Horizontal Multi-Skilling

Table 11: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	.077	.225			.344	.732
	Horizontal Multi-Skilling	.846	.076	.724	11.060		.000

a. Dependent Variable: Employee Performance

As shown in the table, the Karl Pearson product moment of coefficient of correlation $r=0.724$ suggests a strong positive relationship between horizontal multi-skilling and employee performance. The R Square 0.524 indicated that 52.4% of the variation in employee performance is explained by variation horizontal multi-skilling. Other factors therefore account for the remainder of 47.6%.

Furthermore, ANOVA results in Table 10 indicated that horizontal multi-skilling on employee performance was statistically significant ($F = 122.334$, $p=0.000 < 0.05$) and could therefore be used to predict employee performance. This implies a strong positive significant relationship between horizontal multi-skilling and employee performance in commercial banks in Kenya. This finding supported the research by Kim and Park (2003) who found out that inter-workshop and intra-workshop mobility was positively associated with firm labour productivity growth. In particular, Chen (2010) also concluded that skills training activities for frontline managers were done within functional departments and across other functional departments.

The standardized regression coefficients shown in Table 11 below revealed that for every unit increase of horizontal multi-skilling, employee performance increased by 0.846 ($\beta= 0.846$) and was statistically significant ($p=0.000 > 0.05$). An increase in one unit

of vertical multi-skilling strategy leads to an increase an employee performance positively by 0.846($\beta = 0.846$). The model is of good fit.

Test of Hypotheses

Hypothesis One: HO_1 : Vertical multi-skilling has no significant effect on employee performance in commercial banks in Kisumu County.

However from the results, vertical multi-skilling strategy has a positive and significant effect on employee performance in commercial banks ($\beta = 0.711$, $p = 0.000 < 0.05$) hence HO_1 was rejected.

Hypothesis Two: HO_2 : Horizontal multi-skilling has no significant effect on employee performance in commercial banks in Kisumu County.

However from the results, horizontal multi-skilling has a positive effect on employee performance which is statistically significant ($\beta = 0.724$, $p = 0.000 < 0.05$) hence HO_2 was rejected.

CONCLUSION AND RECOMMENDATIONS

The study concluded that vertical multi-skilling significantly contribute to employee performance in commercial banks. The increased practice of vertical multi-skilling practices such as management development, delegation, granting decision making authority and training staff for supervisory and managerial roles, would result into significant improvement in employee performance in

commercial banks. This strategy was selectively used in commercial banks just for employees at the management level. Majority of employees were not supported to acquire skills vertically, in commercial banks.

Similarly, horizontal multi-skilling significantly and positively contribute to employee performance in commercial banks. The increased practice of multi-skilling practices such as assigning various tasks, different tasks within a department, undertaking minor tasks from another department and undertaking major tasks from other department, task relatedness and non-relatedness, expanded job design would result into significant improvement in employee performance in commercial banks. However, core horizontal multi-skilling practices such as undertaking major and minor tasks in other departments were limited. For instance most of the respondents disagreed that they undertake major and minor work from other departments.

Finally, the study concluded that multi-skilling strategies is key to enhancing employee performance in commercial banks in Kenya as indicated by the positive correlation values. Vertical multi-skilling strategies were controlled while horizontal multi-skilling was inadequate and limited. Multi-skilling enhances employee participation and enables employees cope with increased sophistication of jobs due to increased reliance on information technology. Multi-skilling enables organizations to deploy employees across tasks according to demand levels. Such employees experience more varied and secure work which motivates them and hence the resultant job performance gains.

The study recommended that in order to improve employee performance, vertical multi-skilling should be applied by commercial banks so as to enhance functional flexibility. This will enable banks to gain adaptability against environmental pressures and changes as most its employees are more flexible. This should be done by encouraging banks to carry out vertical multi-skilling practices such as management development practices and

delegating some of the supervisory and/or administrative tasks to enable employees build up and utilize multiple skills. The employees should be given more independence and authority over the work delegated specifically as it will allow for improved decision making as well gaining of additional skills by employees which in return leads to improved performance in commercial banks.

The popular perception and practice that employees must develop a lot a defined career path has changed. Individual employee career paths more dynamic and dependent upon organizational core business strategies. Therefore the study recommended that to improve employee performance through horizontal multi-skilling strategies, commercial banks should develop work designs that incorporate cross-skilling and skill broadening, which were inexistent in commercial banks. In addition, job tasks should be designed in such a way that enables employees to learn other skills even in other job functions. Enhancing such practices will enhance employee ability to undertake other tasks during periods of staff shortfalls arising from leave, shift working and other unexpected employee absences or customer demands. Commercial banks should enable its employees to broaden their skills through proper structured work designs and plans which will in return improve the quality of work, encourage task coordination and improving error detection.

At these times when banks rely more on technology for sustained competitive advantage, possession of technical skills and modeling capabilities as well as the use of such skills to adjust business models are crucial to improved business performance and sustaining resilience to the changing dynamics. Commercial banks should identify and utilize a combinations that are most ideal as it will be permitted by their situational factors. Multi-skilling is a labour utilization strategy that will provide commercial banks with technical skills and modeling capabilities as well as the ability to modify and adjust business models to changing dynamics sustained employee performance.

Areas for further research

The general objective of this study was to assess the effect of multi-skilling practices on employee performance in the commercial banks. These determinants were not exhaustive, there are other factors that influence employee performance even across various organizations. Further research should be done to identify other factors that affect employee performance in commercial banks in Kenya. Such research should investigate the effect of several factors such as regulation and policies, customer bases, technology, organizational characteristics and other human resource practices such as management style, recruitment practices,

employee participation, industrial labour relations, communication on employee performance in commercial banks in Kisumu County.

Secondly, similar studies should be done to establish the relationship between multi-skilling and employee performance in other non-commercial banks and other institutions in the banking sector such as central depository, regulatory and custodial institutions in order to generalize the findings to the banking sector/industry. Such research literature will impact the use of multi-skilling strategies even at the policy making levels hence give a bigger impact.

REFERENCES

- Akhlaghi, F. and Mahony, L. (1997). Service Integration and multiskilling in facilities management within the UK National Health Service. *Facilities*, 15(4):66-71.
- Andersen, M. K. and Ankerstjerne, P. (2010). *Multiskilling and job satisfaction in outsourcing*. ISS White Paper. August 2010.
- Armstrong, M. (2002). *A handbook of Human Resource Management*. (10th Ed): London: Kogan Page.
- Armstrong, M. (2006). *A handbook of Human Resource Management Practice*. (10th Ed): London: Kogan Page.
- Asaasira, D. (2016). *Balanced Score Card as a Tool for Strategy Implementation and Performance of Tier One Commercial Banks in Kenya*. Unpublished Master of Business Administration Research Project Report. University of Nairobi.
- Atkinson, J. (1984). Manpower Strategies for Flexible Firms. *Journal of Personnel Management*, 16(8):28-30.
- Beardwell, I., Holden, L. (eds). (2001) *Human Resource Management. A Contemporary Approach*. (3rd Ed). Pearson Education Ltd.
- Beaumont, P. (1993). *Human Resource Development: Key Concepts and Skills*. London: Sage Publications.
- Becker, B., Gerhart, B. (1996). The Impact of Human Resource Management on Organizational Performance: Progress and Prospects. *Academy of Management Journal*, 39(4):779-801.
- Bernadin, H., Russel, J. (1998). *Human Resource Management: An Experimental Approach*. (2ⁿ Ed). Singapore: McGraw-Hill.
- Bernadin, H. J. (2007). *Human Resource Management. An Experiential Approach*. (4th Edition). Tata McGraw Hill Publishing. New Delhi.
- Brewster, C. (1998). "Flexible Working in Europe: Extent, Growth and the Challenge for HRM," in Sparrow P., Marchington M. (eds), *Human Resource Management: The New Agenda*. London: Pitman.
- Bryman, A., Bell, E., (2011). *Business Research Methods*. (3rd Ed.). Oxford University Press.

- Burleson *et al.* (1998). Multi-skilled labour utilization strategies in construction. *Journal of Construction Engineering and Management*, November, 480-489.
- Burleson, R. C. (2002). *An Analysis of Multiskilled Labour Strategies in Construction*. Unpublished PhD Thesis. University of Texas, USA.
- Carmen, A., Zane, B. (2010). Workforce cross training: a re-emerging trend in tough times. *Journal of Workplace Learning*, 22(8):522-529.
- Carmichael, H. L., Macleod, W. B. (1993). Multiskilling, Technical Change and the Japanese Firm. *The Economic Journal*, 103(416):142-160.
- Central Bank of Kenya, (2015). *Bank Supervision Annual Report*, Central Bank of Kenya, Nairobi.
- Central Bank of Kenya, (2018). *Bank Supervision Annual Report*, Central Bank of Kenya, Nairobi.
- Central Bank of Kenya, (2019). *Bank Supervision Annual Report*, Central Bank of Kenya, Nairobi
- Chen, L. and Wallace, M. (2011). Multi-skilling of Frontline Managers in the Five Star Hotel Industry in Taiwan. *Research and Practice in Human Resource Management*, 19(1):25-37.
- Clark, N. (1989). *Study of Multi-skilling Training Initiatives in Australian Industry*. Australia: New South Wales Department of Industrial Relations and Employment, Australia.
- Cole, G. A. (2003). *Organizational Theory and Behaviour*. (7th Edition). Thomson.
- Cooper, D. R., Schindler, P. S. (2011). *Business Research Methods*. (11th Ed.). McGraw Hill.
- Cordery, J. (1989). Multi-skilling: a discussion of proposed benefits of new approaches to labour flexibility within enterprises. *Personnel Review*, 18 (3): 13-22
- Creswell, J. W. (2006). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle Creek, NJ: Pearson Education.
- Cross, M. (1996). Multi-skilling brings cost and productivity benefits. *Proc, Training Plant Management: 11th National Maintenance Engineering Conference*, UK.
- Curtis, S. and Wright, D. (2001). Retaining employees – the fast track to commitment. *Management Research News*, 24(8/9):59-64.
- Davids, Z. (2004). *Aspects of multiskilling contributing to service quality provision within academic libraries*. America: University of Western Cape.
- DeSimone, R. L., Werner, J. M. (2006). *Human Resource Development*. (4th Ed). Thomson: South-Western.
- Dessler, G. (2008). *Human Resource Management*. (11th Ed). Pearson: Prentice Hall.
- Fox, P. W. and Yuen, R.W.S (2004). *Multiskilling as a Response to Globalization*. Hong Kong, China.
- Shang G., Pheng L. S. & Hui W. J. (2020) Drivers and barriers for multiskilling workers in the Singapore construction industry, *International Journal of Construction Management*, 20:4, 289-304, DOI: [10.1080/15623599.2018.1484851](https://doi.org/10.1080/15623599.2018.1484851)
- Garg, S. *et al.* (2002). Trade-offs between multi-skilling and inventory in assembly line operations under demand variability. *International Journal of Operations and Production Management*, 22(5):565-583.
- Greer, C. (1995). *Strategy and Human Resource: A General Managerial Perspective*. Englewood Cliffs, N J: Prentice Hall.

- Goel, D. (2008). *Performance appraisal and Compensation Management- A Modern Approach*. New Delhi. Prentice Hall India.
- Guest, D. *et al* (2003). Study of Human Resource Management and Corporate Performance in the UK. *British Journal of Industrial Relations*, 41(2).
- Haas, C. T. *et al*. (2001). Implementing a Multiskilled Workforce. *Construction Management and Economics*, 19:633-641.
- Horbury, C. and Wright, M. (2001). *Development of a multi-skilling life cycle model*, HSE Books.
- Huselid, M. (1995). The Impact of Human Resource Management on Turnover, Productivity and Corporate Financial Performance. *Academy of Management Journal*, 38(3): 635-72.
- Kamoche, K. (2004). *Managing Human Resources in Africa*. London: Routledge.
- Kamoche, K. (2003). Riding the typhoon: the HR response to the economic crisis in Hong Kong. *The International Journal of Human Resource Management*, 14(2):199-221.
- Kelliher, C. and Riley, M. (2003). Beyond efficiency: some by-products of functional flexibility. *The Service Industrial Journal*, 23(4):98-113.
- Kim, Y., Park, K. S. (2003). Multi-skilling and Firm Performance. *Seoul Journal of Economics* 16(4):387-422.
- Kothari, C. R. (2004). *Research Methodology. Methods and Techniques*. (2nd Ed.). New Age International Publishers Ltd.
- Lill, I. (2009). Multi-skilling in construction – a strategy for stable employment. *Ukio Technologinis ir Ekonominis Vystymas*, 15(4):540-560.
- Lynn, A., *et al*. (2003). Experiences with multiskilling among non-union craft workers in US industrial construction projects. *Engineering, Construction and Architectural Management*, 10(6):374-381.
- MacDuffie, J. P. (1995). Human resource bundles and manufacturing performance: organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations Review*, 48:197-221.
- Morita, H. (2002). *Multi-skilling, continuous process improvement: A comparative Analysis of U.S. – Japanese Work Organizations*. University of New South Wales, Sydney, Australia.
- Nassiuma, D. K., Mwangi, J. W. (2006). *Statistical Methods and Information Analysis*. Njoro: Egerton University Press.
- Nicolaidis, A. (2013). The Use of Multiskilling in the Southern African Hospitality Environment. *Asian Journal of Business and Management Sciences*, 3(4):64-83.
- Onyango, F. E., Okech, R. N. (2008). *Human Resource systems in Kenya: A Case Study of Hotel Human Resources Performance*. Cornell Hospitality Quarterly. Gale Learning.
- Owan, H. (2001). *Specialization, Multi-skilling and Allocation of Decision Rights*. Washington University, 2001.
- Owen, C. D. (2003). *Multi-skilling. A pilot investigation of the potential impact of practical design and implementation of multi-skilling to optimize employees and achieve improved productivity within the Automobile Manufacturing Industry*. Unpublished Research Report. University of Natal, Durban.

- Pattanayake, B., Verma, H. (1997). *A Textbook of Human Resource Management*. New Delhi: Wheeler Publishing.
- Pattanayak, H. (2008). *Human Resource Management*. (3rd Ed.) New Delhi: Prentice Hall.
- Patten, J. (2004). *Competitive advantage through people: unleashing the power of the workforce*. Boston: Harvard Business School Press.
- Pfeffer, J. (1984). *Competitive Advantage through People*. Boston: HNS Press.
- Pfeffer, J. (1994). *Competitive advantage through people*. London: Harvard Business School Press
- Porter, M. (1985). *Competitive Advantage: Creating and sustaining superior Performance*. New York: Free Press.
- Riley, M., Kelliher, C., Jones, P., (2000). *Multi-skilling*. Hospitality Training Foundation. Unpublished Report.
- Schuler, R. and Jackson, S., (1987). Linking competitive strategies with human resource management practices. *Academy Management Executive*, 1(3):207-19.
- Schuler, R. S. and Jackson, S. E. (2012). *Human Resource Management: Positioning for the 21st century*. (6th Ed.). New York: West Publication Company.
- Scott, P. and Cockrill, A. (1997). Multi-skilling in small and medium-sized engineering firms: evidence from Wales and Germany. *The International Journal of Human Resource Management*, 8(6):807-824.
- Sharma, A., Khandekar, A. (2006). *Strategic Human Resource Management. An Indian Perspective*. New Delhi: Response Books.
- Stone, R. J. (2005). *Human Resource Management. Australia*: Jone Wiley and Sons.
- Torrington, D. et al (2008). *Human Resource Management*. (7th Ed). Pearson Education Ltd.
- Winfield, P. et al (2001). *Core Management*. Oxford: Butterworth-Heinemann.
- Werner, J. M. and DeSimone, R. L. (2009). *Human Resource Development*. (5th Edition). South-Western. Cengage Learning.
- Zikmund, W. G. (2003). *Business Research Methods*. (7th Ed). Thomson South-Western, Ohio.