Human Resource Management Practices and Firm Performance: A Study of Manufacturing Firms in Kenya

Article · April 2014

DOI: 10.17722/ijme.v3i1.157

Patrick Boniface Ojera
Masinde Muliro University of Science and Technology

Human Resource Management Practices and Firm Performance: A Study of Manufacturing Firms in Kenya

Bulitia Godrick M[1] , K'Obonyo Peter[2], Ojera Patrick B[3]
[1]School of Business and Economics, Maseno University, Kenya
[2]Department of Business Administration, University of Nairobi, Kenya
[3]School of Business and Economics, Maseno University, Kenya
bugodrick@yahoo.com
pkobonyo@uonbi.ac.ke
pbojera@yahoo.com

Abstract- *Manufacturing in Kenya account for the greatest share of industrial production output characterized by relatively low value addition of 7.5 per cent recorded in 2010 to 2.3 per cent recorded in 2011, low employment and capacity utilization and a paltry 25 percent export volumes. However, the share of Kenyan products in the regional market is only 7 percent of the US $11 billion regional market and its contribution to the GDP has remained at about 10 percent since the 1960s. This has given rise to the concern that practicing managers have put little effort to improve the situation. This study therefore sought to establish the relationship between Human Resource Practices and firm performance in the manufacturing firms in Kenya. Used a census survey of the 68 medium and large manufacturing firms whose core activities involved in production and marketing of edible oils, soaps and detergents, beverages or sugar registered in the Kenya Association of Manufacturers directory 2012. Data was collected through self administered questionnaires sent to the Production Manager, Brand Manager, Human Resource Manager, Marketing Manager, or the relevant manager dealing with innovations. The main findings of this study reveals that manufacturing firms apply human resource management practices to different extents. For instance, some models of human resource management practices such as licensing are not commonly used, while others like hiring of skilled employees and teaching company schemes are very common with average composite mean score of 4.00 and 4.08 out of the best score of 5.0 respectively.*

Key words: *Human resource management practices; firm performance; medium and large manufacturing firms; core activities - production and marketing of edible oils; soaps and detergents;beverages or sugar; Kenya; Bulitia*

1. INTRODUCTION

Hiltrop (1996) asserts that HR practices have a powerful influence in causing certain employee attitudes, behaviours and perception that in turn leads to better performance. There is growing evidence on adoption of high-commitment/high-involvement HR practices are associated with positive performance outcomes (Bashir, and Khattak 2008; Pil and MacDuffie 1996; Huselid, 1995), and higher financial success (Lawler et al. 1995). The synergy effect will be more pronounced when these HR practices are implemented as a whole system rather than separate HRM practices in isolation (MacDuffie 1995). Human resource management practice is crucial in meeting the challenges in the formalization of and access to experience, knowledge and expertise that create new capacities, superior performance, and innovation (Beckman 1999). Human resource management practices can support and contribute to the creation, integration and utilization of knowledge. Knowledge-intensive industry faces a dynamic and fiercely competitive environment. Manufacturing in Kenya account for the greatest share of industrial production output and are mainly agro-based - characterized by relatively low value addition of 7.5 per cent recorded in 2010 to 2.3 per cent recorded in 2011, low employment and capacity utilization and a paltry 25 percent export volumes. The sector makes an important contribution to the Kenyan economy and currently employs 254,000 people, which represents 13 per cent of total employment with an additional 1.4 million people employed in the informal side of the industry. However, the share of Kenyan products in the regional market is only 7 percent of the US $11 billion regional market and its contribution to the GDP has remained at about 10 percent since the 1960s. The bulk of Kenya's manufactured goods (95 per cent) are basic products such as food, beverages, building materials and basic chemicals which are not sufficient to meet the nation's population. Only 5 per cent of manufactured items, such as pharmaceuticals, are in high –tech and skill-intensive activities. Large companies in Kenya are mostly multinational corporations concentrated mainly around urban areas and they account for a large proportion of manufacturing sectors output and employment which comprise only 22% of the firms but contribute over 80% of the total manufacturing surplus in Kenya whereas indigenous firms mainly in rural areas comprising 78% of firms contribute below 20% of the total manufacturing surplus. The consumer on the contrary exhibit high demand for such scarce basic products for survival.

Researchers have concentrated on the relationship between HRM and Performance; the relationship between firm innovation and firm performance; predictors of administrative and technological innovations; and the effect of commercializing technological innovation by universities. In all these research done in Kenya, the explanation on why manufacturing firms in Kenya are performing poorly does not give a complete picture of the factors affecting performance of such firms as it has been in developed countries because they have ignored the influence of human resource management practices on the firm performance that have been found impacting the performance of firm in developed countries. It could be this overlooking influence of human resource management practices that are of significance. This study therefore sought to investigate the relationship between human resource management practices and firm performance of manufacturing firms in Kenya.

2. CONCEPTUAL FRAMEWORK

Several researchers have noted that HRM practices leads to firm sustainable competitive advantage and superior performance, and HRM is an important means of gaining this competitive advantage (Schuler and MacMillan, 1984; Barney, 1991; Wright et al., 1994). Thus, there is a close relationship between HRM practices and firm performance. In the long run, efficient human resource management practices enhance firm performance (Huselid, 1995).This study examines how human resource management practices affect firm performance. The conceptual framework consisted of hypothesized relationship

$H1_0$: There is no significant relationship between human resource management practices and performance of manufacturing firms in Kenya; **$H1_1$:** There is significant relationship between human resource management practices and performance of manufacturing firms in Kenya;

This study finds it prudent to use several criteria to measure performance. Lusthaus (2000) discusses performance by splitting it into four main indicators; Relevance, Effectiveness, Efficiency and Financial viability.

The specific objective of the study was;

1. To establish the relationship between human resource management practices and firm performance.

3. METHODOLOGY

This study was based on a census survey of 68 medium and large manufacturing firms whose core activities involved in production and marketing of edible oils, soaps and detergents, beverages or sugar. A census sampling technique was used. The data collection instruments were finally given to all the 68 firms identified out of which 50 responded, giving a response rate of 73.5% hence reliability of the data. Of these, 9 (18%) were indigenous while 41(82%) were multinational firms. The questionnaire was completed by the Production Manager, Brand Manager, Human Resource Manager, Marketing Manager, or the relevant manager dealing with innovations. The questionnaire was supplemented by secondary data from firms' published reports. Likert – type statements anchored by a five – point scale ranging from strongly disagree (1) to strongly agree (5) was used to capture specific indicators for each objective. Composite reliability was used to assess inter-item consistency, which was operationalized using the internal consistency method that was estimated using Cronbach's alpha. Typically, reliability coefficients of 0.70 or higher are considered adequate (Cronbach, 1951; Nunnally, 1978). Nunnally (1978) further states that permissible alpha values can be slightly lower (0.60) for newer scales. Although the constructs developed in this study were measured primarily on previously validated measurement items and strongly grounded in the literature, they were modified somewhat to suit the Kenyan context.

4. FINDINGS AND DISCUSION

The descriptive measures of firm performance are found in Table 4.13 – Table 4.28. Hiring of skilled employees and teaching company schemes are very common with average composite mean score of 4.00 and 4.08 out of the best score of 5.0 respectively. Taken as a whole, the eight variables (hiring skilled employees, regular training program for staff, managers conducts staff appraisal, hiring of consultants for new ideas, establishment of departments, employee compensation, Management by walking around, formal staff tenure) identified for analysis provide a broad spectrum of measures of HR practices identified in the literature. When these variables were correlated with the major performance measures, the following results were obtained;- on firm effectiveness, the data analysis revealed that having a regular training program for staff was significantly positively correlated with preparation of the firm strategic plan ($r = .681$, $p < 0.01$). In addition, formal staff tenure gave a significant positive correlation with the firm having a mission statement ($r = .416$, $p < 0.01$) and preparing a strategic plan ($r = .826$, $p < 0.01$); on efficiency, the results revealed a significant negative correlation between a regular training program for staff and rate of staff turnover ($r = -.477$, $p < 0.01$); hiring of consultants for new ideas and rate of staff turnover ($r = -.300$, $p < 0.05$); establishment of departments and rate of staff turnover ($r = -.569$, $p < 0.01$); and a significant positive correlation between establishment of departments and frequency of machine break down ($r = .359$, $p < 0.05$); on relevance, the data analysis indicated significant positive correlations between hiring skilled employees and stakeholders' satisfaction on firm's product and services ($r = .288$, $p < .05$), between managers carry out staff appraisal and new products developed by firm ($r = .288$, $p < .05$); and between establishment of departments and

development of new products by the firm (r =.361, p < .05), while on financial viability, the results indicate a significant positive correlation between managers carry out staff appraisal and increased firm sales (r = .282, p < .05).
In general these results led to the rejection of the null hypothesis and acceptance of the alternative hypothesis that Human Resource Management practices significantly influence firm performance. The study findings concur with MacDuffie (1995) that bundle of interrelated HRM practices had more influence on firm performance than individual practices working in isolation. It also supports Becker and Gerhart (1996) findings on why human resource management (HRM) practices are likely to have an important and unique influence on organization performance. Hiltrop (1996) asserts that HR practices have a powerful influence in causing certain employee attitudes, behaviours and perception that in turn leads to better performance. Finally the proponents assert that there is growing evidence on adoption of high-commitment/high-involvement HR practices associated with positive firm performance outcomes (Bashir, and Khattak 2008; Pil and MacDuffie 1996; Huselid, 1995), and higher financial success (Huselid 1995; Lawler et al. 1995). These researchers argued that human resource management practices had an effect on firm performance. Based on their argument the present study leads us to accept alternate hypothesis that there is significant relationship between human resource management practices and performance of manufacturing firms in Kenya and reject the null hypothesis that there is no significant relationship between human resource management practices and performance of manufacturing firms in Kenya.

5. SIGNIFICANCE AND IMPLICATION OF THE STUDY

5.1 RECOMMENDATIONS

The first theoretical contribution of this study is that the managers in manufacturing firms can strive to improve firm performance indicators; efficiency, effectiveness, relevance and financial viability by hiring skilled employees, regular training program for staff, hiring of consultants for new ideas, establishment of departments, Management by walking around and enhancing formal staff tenure on an ongoing basis. Managers should also provide material incentives to attract and retain high skilled workforce. It is essential for manufacturing sector to provide good performance appraisal to their employees. Fair performance appraisal and control while reinforcing employees' motivation leads to increase in firm performance. Managers should also encourage employees to acquire, share, and apply their knowledge in order to achieve the performance appraisal goals which are able to lead to better firm performance.

6. REFERENCES

[1] Aaker, D.A.(1996) *Building Strong Brands*, London; free press business

[2] Abernathy, W.J., Utterback, J.M. (1978), "Patterns of innovation in technology", *Technology Review*, Vol. 80 No.7, pp.40-7.

[3] Allen, F., & Gale, D. (2000). Bubbles and crises. *Economic Journal*, 110(460), 236–255.

[4] Amabile, T.M. (1997), "Entrepreneurial creativity through motivational synergy", *Journal of Creative Behavior*, Vol. 31, 18-26.

[5] Amabile, T.M., Hennessey, B.A., Grossman, B.S. (1986), "Social influences on creativity: the effects of contracted-for-reward", *Journal of Personality and Social Psychology*, Vol. 50, 14-23.

[6] Anderson, J.C., Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103, 411-23.

[7] Antoniou, P.H.and Ansoff, H.I. (2004) **"**strategic management of technology**"** *technology analysis and strategic management*, vol.16 no.2, 275-291.

[8] Andrews, K.R (1987), *the concept of corporate strategy*, third Ed., New York; Mc Graw-hill

[9] Anene M.2002 `*the convergence of telecommunications*, IT and the media and the implication of regulations in Kenya' unpublished MBA research project of UoN, Nairobi, Kenya.

[10] Ansoff, H.I. Mc Donell, E.J.(1990), *implanting strategic management*, 2nd ed., London; prentice hall Europe.

[11] Aosa, E. (1992), *An empirical investigation of aspects of strategy formulation and implementation within large manufacturing companies in Kenya*, Unpublished Ph.D dissertation, university of Strathcylde Scotland.

[12] Argyris, C. (1994),`*good communication that blocks learning*' Havard business review July to Aug., 77-85.

[13] Armstrong, M. (2001). *A handbook of human resource management practice*, 8th Ed. Kogan Page Limited.

[14] Armstrong, M. (1995), *A handbook of personnel management practice*. London: Kogan Page.

[15] Armstrong, M. (1996). *A handbook of personnel management practice*. London: Kogan Page.

[16] Arthur, J.B. (1994), "Effects of human resource systems on manufacturing performance and turnover", *Academy of Management Journal*, Vol. 37 No.3, 670-87.

[17] Bae, J., & Lawler, J. (2000). Organizational and HRM strategies in Korea: Impact on firm performance in an emerging economy. *Academy of Management Journal*, 43(3), 502–551.

[18] Baer, J. (1997), "Gender differences in the effects of anticipated evaluation on creativity", *Creativity Research Journal*, Vol. 10, 25-32.

[19] Barney, J. B., & Wright, P. M. (1998). On becoming a strategic partner: The role of human resources in gaining competitive advantage. *Human Resource Management Journal*, 37(1), 31–46.

[20] Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No.1, 99-110.
[21] Barney, J.B. (1986). "Organizational Culture: Can It be a Source of Sustained Competitive Advantage?" Academy of Management Review 11:802-835.
[22] Barney, J.B. (1995). "Looking Inside for Competitive Advantage." Academy of Management Executive 9:49-61.
[23] Barrett, A., & O'Connell, P. J. (2001). Does training generally work? The returns to in-company training. *Industrial and Labor Relations Review*, *54*, 647-662.
[24] Ballot, Gérard, Fakhfakh, F., & Taymaz, E. (2006). Who benefits from training and R & D, the firm or the workers? *British Journal of Industrial Relations, 44*, 473-495.
[25] Basadur, M. (1997), "Organization development interventions for enhancing creativity in the work place", *Journal of Creative Behavior*, Vol. 31, 54-73.
[26] Bashir, S & Khattak, H.R. (2008). Impact of selected HR practices on perceived employee performance, a study of Public Sector Employees in Pakistan. *European Journal of Social Sciences*, *5*, 4, 243-252
[27] Baysinger, B. and Butler, H. 1985. Corporate governance and the board of directors. *Law, Economics, and Organization*, *1*, 101-124.
[28] Becker, G. (1964), *Human capital*, Chicago University, Chicago, IL, .
[29] Becker, B. E. and Gerhart, B. (1996). 'The impact of human resource management on organizational performance: progress and prospects'. *Academy of Management Journal*, **39**, 779–801.
[30] Beckman, and Huselid, M. A. (1999). 'High performance work systems and firm performance: a synthesis of research and managerial implications'. In Ferris, G. R. (Ed.), *Research in Personnel and Human Resource Management*. Stamford, CT: JAI Press, Vol. 16, 53–101.
[31] Beer, M., Spector, B.A., Laurence, P.R., Mills, Q., and Walton, R.E. (1984), *Managing Human Assets*, New York: The Free Press.
[32] Bennett, N.and miles, S.A .(2006)` the 2nd in command; *the misunderstood role of the chief operating officer'* havard business review may, 71-78.
[33] Bennis ,W.G and O. Toole J.(2005) ` *How Business school lost their way*' Havard business review May,96-104.
[34] Berg, P., Appelbaum, E., Bailey, T. and Kalleberg, A. L. (1996). 'The performance effects of modular production in the apparel industry'. *Industrial Relations*, **35**, 356–73.
[35] Bergek, A. (2002), *Shaping and Exploiting Technological Opportunities*: The Case of Renewable Energy Technology in Sweden (Thesis), Chalmers University of Technology, Göteborg, Sweden.
[36] Bergek A., Jacobsson S., Carlsson B., Lindmark S., Rickne A., (2008), *Analyzing the functional dynamics of technological innovation systems*: A scheme of analysis, Research Policy, 407-429.
[37] Bradley, K., Gelb, A. (1981), "Motivation and control in the Mondragon experiment", *British Journal of Industrial Relations*, Vol. 19 No.2, 211-31.
[38] Burns, B and G.M Stalker (1961) *the management of Innovation*, London and Taristock.
[39] Business daily (2007), *telecoms spices market with big price reduction*, nation media group publication 6th July, Nation media group ltd, Nairobi, Kenya.
[40] Blickle, G. (2003). Convergence of agents' and targets' reports on intraorganizational influence attempts. *European Journal of Psychological, 19*, 40-53.
[41] Bloor, K. (2008). Pay'em or flay 'em: Improving productivity in the medical labour market. Conference paper for presentation to *OPI conference on Institutions, incentives and public sector performance OPI 18 January 2008.*
[42] Boxall, P.F. (1995).Building the theory of comparative HRM. *Human Resource Management Journal*, *5*, 5–17.
[43] Brower, H. H., Schoorman, F. D., & Tan H. H. (2000). A model of relational leadership: The integration of trust and leader-member exchange. *Leadership Quarterly, 11*, 227-250.
[44] Budria, S. & Pereira, P. T. (2007). The Wage Effects of Training in Portugal: Differences Across Skill Groups, Genders, Sectors and Training Types. *Applied Economics 39*, 787-807.
[45] Caincross, F (2000) The Death of Distance: *How the Information Revolution is changing our lives*, Harvard Business school press.
[46] Carlsson B., Stankiewicz R. (1991), On the Nature, Function, and Composition of Technological systems, *Journal of Evolutionary Economics*, 93-118.
[47] Christensen, C. (1997), Innovator's Dilemma: When New Technologies Cause Great Firms to Fail, Harvard Business School Press, Boston, MA.
[48] Chow, I.H., Huang, J., and Liu, S. (2008), 'Strategic HRM in China: Configurations and Competitive Advantage,' Human Resource Management, 47, 687–706.
[49] Churchil, G.A, (1991); *Marketing Research: Methodological Foundations.* 5th Ed. The Dryden Press, South Western, Australia.
[50] Ciavarella, M.A. (2003), 'The Adoption of High-involvement Practices and Processes in Emergent and Developing Firms: A Descriptive and Prescriptive Approach,' Human Resource Management, 42, 337–356.

[51] Cimoli, M and G. Dosi (1988) Technology and Development: *some Implication of Recent Advances in the Economic of Innovation for the process of Development*, London: West view/IT publication.
[52] Cohen, W.M. and Levinthal, D.A. (1990), "Absorptive capacity: a new perspective on learning and innovation", Administrative Science Quarterly, Vol. 35 No. 1, 128-52.

[53] Cohen, W. M. (1995): "Empirical Studies of Innovative Activity,." **Pp.** 182-264 in *Handbook of the Economics of Innovation and Technological Change***,** edited by Paul Stoneman. Oxford, U.K.: Basil Blackwell.
[54] Cohen, W. M. and S. Klepper (1996): "Firm Size and the Nature of Innovation within Indushies: The Case of Process and Product R&D." *Review of Economics and Stntistics* 78 (2): 232-243.
[55] Cohen, W. M. and D. A. Levinthal (1989): "Innovation and Learning: The Two Faces of
[56] Conner, K., and Prahalad, C.K. (1996), 'A Resource-based Theory of the Firm: Knowledge Versus Opportunism,' Organization Science, 7, 477–501.
[57] Cooper, R.G. and Kleinschmidt, E.J. (1986), "Benchmarking the firm's critical success factors in new product development", Journal of Product Innovation Management, Vol. 3, 71-85.
[58] Cooper, D.R. and schindler,P.S. (2001) *business research method*, 8th ed. New Delhi; Tata McGraw hill.
[59] Cronbach, L.J. (1951), *"Coefficient alpha and the internal structure of tests"*, Psychometrika, Vol. 16, 297-334.
[60] Damanpour, F. and Gopalakrishnan, S. (1998), "Theories of organizational structure and innovation", Journal of Engineering & Technology Management, Vol. 15 No. 1, pp. 1-24.
[61] Dauda, Y. A (1997) *Analysis of Engineers and Technician Performance in the achievement of company objectives in Ogun territory of the Nigeria Telecommunication limited*; unpublished.
[62] Dauda, Y. A (2010): *Technological Change and Employment Relation in Nigeria*: The Case of the Nigerian Dockworker 47th Canadian Industrial Relations association (CIRA); International Research Centre on Globalization (CRIMT) Conference on Employee Representative in the New World of Work; The Dynamic of Rights, Voice, Performance and Power, University, Laval Quebec, Canada 16th – 18th June.
[63] Dauda, Y. A (2010): *Technology Innovation and Sustainable Economy*: Research and Development Programme in ECOWAS Region; Labour and Sustainable Development; 7th Congress of the International Network Regional and Local Development of Labour. School of Labour and Human Resources Renmin University Pekin, China, 10th –13th June.
[64] Dauda, Y. A. (2009): *Managing Global Technology Innovation and Work System Dynamics:* Implication for Employment Relations in Nigeria 15th International Industrial Relations World Congress, Sydney, Australia. Monday 24th-Thursday 27th August 2009.
[65] Dauda, Y. A. (2010). *Technological Innovation and Organisational Performance*: Employee Relation Strategies, Nigerian Journal of Industrial Relations, Vol. 11, 96-110
[66] Dauda, Y.A (2000), *Investment in Technological Innovation and Improved productivity of the Nigerian Telecommunication*, A PhD Thesis, submitted to the Faculty of Education, University of Ibadan, Nigeria, October unpublished.
[67] Dauda, Y.A, (2009), *Managing Technology Innovation*, Berlin: Peterlang International Publisher
[68] Deery, S. and H. De Cieri (1991). "Determinants of Trade Union Mem- bership in Australia." *British Journal of Industrial Relations* 29(l):59-73.
[69] Delaney, J.T. and A.M. Huselid (1996). "The Impact of Human Resource Management Practices on Perceptions of Organizational Performance." *Academy of Management Journal* 39:949-969.
[70] Delaney, J.T., D. Lewis, and C. Ichniowski (1980). *Human Resource Policies in American Firms*. Washington, D.C.: Government Printing Office.
[71] Delery, E.J. and H.D. Doty (1996). "Modes of Theorizing in Strategic Human Resource Management: Tests of Universalisée. Contin- gency, and Configurational Performance Predictions." *Academy of Management Journal* 39:802-835.
[72] Dougherty, D. and Hardy, C. (1996), "Sustained product innovation in large, mature organizations: overcoming innovation-to-organization problems", Academy of Management Journal, Vol. 39, pp. 1120-54.
[73] Doty, D. H., & Glick, W. H. (1998). Common methods bias: Does common methods variance really bias results? *Organizational Research Methods*, 1(4), 374–406.
[74] Drucker, P (1985), *Management, Tasks, Responsibilities and Practice*; London: Pan Book.
[75] Drucker, P.F. (1955), *the practice of management*, Oxford Butterworth-Heinemann
[76] Drucker ,P.F.(1964), *managing the result*, Oxford; Butterworth –Heinemann.
[77] Drucker P.F (1980), *Managing in turbulent times*, Oxford; Butterworth Heinemann
[78] Drucker P.F (1982), *the changing world of executive*, Oxford Butterworth Heinemann.
[79] Drucker, P.F (1986), *the frontiers of Management*, Oxford ; Butterworth Heinemann
[80] Drucker .P.F(2002), *managing in the next society*, Oxford; Butterworth Heinemann
[81] Dudeck, S.Z. and Hall, W.B. (1991), "Personality consistency: eminent architects 25 years later", *Creativity Research Journal*, Vol. 4, 213-32.
[82] Dutton, E. et al, (1994) *Organization images and membership commitment*
[83] Economic Survey of Kenya 2012
[84] Edquist C., Johnson B. (1997), *Institutions and organisations in systems of innovation*, in: C. Edquist (Eds.), Systems of Innovation - Technologies, Institutions and Organizations Institutions and organisations in systems of innovation, Pinter, London.
[85] Eisenberger, R. and Cameron, J. (1996), "Detrimental effects of reward: reality or myth?", American Psychologist, Vol. 51, pp. 1153-66.
[86] Estrin, S. and Rosevear, A. (1999). Enterprise performance and corporate governance in the Ukraine. *Journal of Comparative Economics*, *27*,3, 442-458.

[87] Feller, R. (1999), " Firm size, university based research and the returns to R & D". *Small Business Economics*, Kluwer Academic Publishers; Vol. 22.

[88] Fleetwood, S., and Hesketh, A. (2006), 'Beyond Measuring the Human Resources Management–Organizational Performance Link: Applying Critical Realist Meta-Theory,' Organization, 13, 5, 677–699.

[89] Fleetwood, S., and Hesketh, A. (2007), 'HRM-Performance Research: Under-Theorised and Lacking Explanatory Power,' International Journal of Human Resource Management, 17, 12, 1977–1993.

[90] Flippo E.B. (1984) *Personal Management*, 6th edition Singapore; mc graw hill.

[91] Forbringer, L., and Oeth, C. (1998), 'Human Resources at Mercantile Bank Corporation Inc.: A Critical Analysis,' Human Resource Management, 37, 2, 177–189.

[92] Foster, R.N (1986) Innovation: *The Attacker Advantage*, London: Guild Publishing.

[93] Frant, H. (1996). High-powered and low-powered incentives in the public sector. *Journal of Public Administration and Theory* 6, 365–381.

[94] Freeman C., (1995), the 'National System of Innovation' in historical perspective, *Cambridge Journal of Economics*, 5-24.

[95] Guest, D.E. (1987), Human resource management: when research confronts theory. *International Journal of Human Resource Management*,12, 1092-1106.

[96] Guest, D.E., Michie, J., Conway, N., & Sheehan, M. (2003). Human resource management and corporate performance in the UK. *British Journal of Industrial Relations*, 41, 291-314.

[97] Hair, F., Anderson, R., Tatham, R., & Black, W. (1995). *Multivariate Data Analysis with Readings.*(4th ed.). London: Prentice-Hall.

[98] Hall, L.A. and Bagchi-Sen, S. (2007), "An analysis of firm-level innovation strategies in the US biotechnology industry", *Technovation*, Vol. 27, 4-14.

[99] Hall, L., and Torrington, D. (1998), 'Letting Go or Holding On: The Devolution of Operational Personnel Activities,*' Human Resource Management Journal*, 8, 1, 41–55.

[100] Hall, L., & Torrington, D. (1998). *The human resource function: The dynamics of change and development.* London: Financial Times/Pitman Publishing.

[101] Harel, G.H., & Tzafrir, S.S. (1999). The effect of human resource management practices on the perceptions of organisational and market performance of the firm. *Human Resource Management*, 38, 185-200.

[102] Harman, H.H. (1967). *Modern factor analysis.* Chicago, IL: University of Chicago Press.

[103] Harney, B., & Jordan, C. (2008). Unlocking the black box: Line managers and HRM performance in a call centre context'. *International Journal of Productivity and Performance Management*,57, 275-296.

[104] Hart, P.M. (1994). Teacher Quality of Work Life: Integrating Work Experiences, Psychological Distress and Morale. *Journal of Occupational and Organizational Psychology*, 67, 109-132.

[105] Harter, J.K., Schmidt, F.L., & Hayes T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268-279.

[106] Hassan, A. (2007). Human resource development and organizational values. *Journal of European Industrial Training*, *31*, 6, 435-448.

[107] Hazlewood, F. (1979), " Recent Trends in the Size Structure of Italian Manufacturing firms". *Small Business Economics*, Kluwer Academic Publishers; Vol. 9.

[108] Hekkert M.P., R.A.A. Suurs, S.O. Negro, S. Kuhlmann, R.E.H.M. Smits, (2007), *Functions of Innovation systems: A new approach for analysing technological change, Technological Forecasting & Social Change* 413-432.

[109] Hiltrop, M. (1996), "The impact of human resource management practices on turnover,

[110] productivity, and corporate financial performance", *Academy of Management Journal*,

[111] Vol. 38, 635-72.

[112] Hoque, K. (1999). New approaches to HRM in the UK hotel industry. *Human Resource Management Journal*, 9(2), 64–76.

[113] Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38, 635–672.

[114] Ian, B. Jim, J., & Will, H. (2004). *Human Resource Management.* New York Prentice Hall.

[115] Ichniowski, C., Shaw, K., & Prennushi, G. (1997). The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines. *The American Economic Review*, *87*, 3, 291-313.

[116] Imoisili, I.C., (1978); "Key success factors in Multinational and indigenous companies in Nigeria: A comparative Analysis". *Columbia Journal of world Business.*

[117] Ito, M (1995) The R & D system behind Japan high Technology products- Technology, *Human Resources and work Organization in Technology management and corporate strategies a Tri continental perspective*, Al-louche, J.et al (ed.), 271-312.

[118] Jacobsson S., A. Johnson, (2000), The Diffusion of Renewable Energy Technology: *An Analytical Framework and Key Issues for Research*, Energy Policy p. 625-640.

[119] Jensen, M. C., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

[120] Kalleberg, A.L., & Moody, J. W. (1994). Human resource management and organisational performance. *American Behavioural Scientist*, 37, 948-962.

[121] Katou, A.A., & Budhwar, P.S. (2006). Human resource management systems and organisational performance: A test of a moderating model in the Greek

manufacturing context. *International Journal of Human Resource Management*, 17, 1223-1253.

[122] Katou, A.A., & Budhwar, P.S. (2007). The effect of human resource management policies on organisational performance in Greek manufacturing firms. *Thunderbird International Business Review*, 49, 1-35.

[123] Kanter, R. M. (1982). The middle manager as innovator. *Harvard Business Review,60*, 95-105.

[124] Kellermanns, F. W., Eddleston, K., Barnett, T., & Pearson, A. W. (2008). An exploratory study of family member characteristics and involvement: *Effects on entrepreneurial behavior in the family firm*. Family Business Review, 21(1), 1–14.

[125] Kotler, P and Armstrong, G., (2001); *Principles of Marketing*, 9th Edition, Prentice Hall of India, New Delhi.

[126] Krueger, A., & Rouse, C. (1988). The effect of work place education on earnings, turnover, and job performance. *Journal of Labor Economics*, 16(1), 61–94.

[127] Kuratko, D. F., Hornsby, J. S., & Naffziger, D. W. (1997). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management, 35*, 1, 24-33.

[128] Lau, C. M., & Ngo, H. Y. (1996). One country many cultures: *Organizational cultures of firms of different country origins*. International Business Review, 5(5), 469–486.

[129] Lau, C. M., & Ngo, H. Y. (2004). *The HR system, organizational culture, and product innovation*. International Business Review, 13(6), 685–703.

[130] Lau, C. M., & Woodman, R. W. (1995). Understanding organizational change: A schematic perspective. *Academy of Management Journal*, 38(2), 537–554.

[131] Lawler, E. E. (1986). *High Involvement Management*. San Francisco, CA: Jossey-Bass.

[132] Lawrence, T.B., Mauws, M.K., Dyck, B. and Kleysen, R. (2005), ''The politics of organizational learning: integrating power into the 4I framework'', Academy of Management Review, Vol. 30, 180-91.

[133] Lee, H., Smith, K.G. and Grimm, C.M. (2003), ''The effect of new product radicality and scope on the extent and speed of innovation diffusion'', Journal of Management, Vol. 29, 753-68.

[134] Leiblein, M.J. and Madsen, T.L. (2009), ''Unbundling competitive heterogeneity: incentive structures and capability influences on technological innovation'', Strategic Management Journal, Vol. 30, 711-35.

[135] Leiponen, A. (2008), ''Control of intellectual assets in client relationships: implications for innovation'', Strategic Management Journal, Vol. 29, 1371-94.

[136] Leiponen, A. and Helfat, C.E. (2010), ''Innovation objectives, knowledge sources, and the benefits of breadth'', Strategic Management Journal, Vol. 31, 224-36.

[137] Lengnick-Hall, C.A. (1992), ''Innovation and competitive advantage: what we know and what we need to learn'', Journal of Management, Vol. 18, 399-429.

[138] Liebeskind, J. P. (1996). Knowledge, strategy, and the theory of the firm. *Strategic Management Journal*, 17 (Winter Special Issue), 93–107.

[139] Legge, K (1995), *Personnel Management in recession and recovery*, Personnel review, Vol.17, No. 2.

[140] Li, Y., Zhao, Y., & Liu (2006). The relationship between HRM, technology innovation and performance in China. *International Journal of Manpower, 27*, 7, 679-697.

[141] Lin, C. Y. Y., & Chen, M. Y. C. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News, 30*, 2, 115-132.

[142] Loewenstein, M. .A., & Spletzer, J. R. (1999). General and Specific Training: Evidence and Implications. *Journal of Human Resources 34*, 4, 710-733.

[143] Lusthaus, C., (2000); *Enhancing Organizational Performance*. Vikas Publishing house PVT Ltd, New Delhi.

[144] Lynch, L. M (1992). Private-Sector Training and the Earnings of Young Workers. *American Economic Review,82* ,299-312.

[145] Lynch, L. M., & Black, S. E. (1995). Beyond the incidence of training: Evidence from a national employers' survey. NBER working paper 5231.

[146] MacDuffie, J.P. (1995), 'Human Resource Bundles and Manufacturing Performance: *Organisational Logic and Flexible Production Systems in the World Auto Industry,' Industrial and Labor Relations* Reviews, 48, 197–221.

[147] MacDuffie, J., and Kochan, T. (1995), 'Do US Firms Invest Less in Human Resources?: Training in the World Auto Industry,' Industrial Relations, 34, 2, 147–168.

[148] Mbugua L. (1989), the effect of commercializing technological innovation by universities in Kenya, *Academy of Management Journal* 34(4): 689–713.

[149] McEvily, B., and Akbar Z., (1999); "Bridging Ties: A source of firm Heterogeneity in Competitive Capabilities". *Strategic Management Journal*, Vol. 20, 1133-56

[150] Mercer HR Consulting (2005), Works Working in China, New York: Mercer HR Consulting. *The International Journal of Human Resource Management*

[151] Meyer, J.P., Stanley, D.J., Herscovitch, L., and Topolnytsky, L. (2002), 'Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences,' *Journal of Vocational Behavior*, 61, 20–52.

[152] Milliman, J.F, Von Glinow & Nathan, (1991), "In search of 'best practices' in international human resource management: research design and methodology", Human Resource Management, Vol. 41 No. 1, 5-30.

[153] Minbaeva, D. (2005), '*HRM Practices and MNC Knowledge Transfer*,' Personnel Review, 34, 1, 125–144.

[154] Minbaeva, D., Pedersen, T., Bjorkman, I., Fey, C.F., and Park, H. (2003), 'MNC Knowledge Transfer, Subsidiary Absorptive Capability and HRM,' *Journal of International Business Studies*, 34, 586–599.
[155] Mugenda, O.M and Mugenda A.G (2003), *Research methods*, quantitative and qualitative approaches, acts press, Nairobi
[156] Miller, G. J., & Whitford A.B.(2006). The principal's moral hazard: Constraints on the use of incentives in hierarchy. *Journal of Public Administration Research and Theory* 2007 *17*(2), 213-233

[157] Mulaki, A., (2000), " An Assessment of the use of Value Analysis Method by Companies Quoted in the Nairobi Stock Exchange", *Unpublished MBA Research Project of the University of Nairobi*, Nairobi Kenya.
[158] Mullins, J. L. (2002). *Management and Organizational Behaviour*, Prentice Hall.
[159] Mumford, M. D. (2000). Managing creative people: Strategies and tactics for innovation. *Human Resource Management Review,10*, 3, 313-351.
[160] Nachmias, V.F and Nachmias D. (1996), *Research methods in the social sciences*, Nairobi journal of management role, 1st July Pitman publishing 2nd ed.
[161] Nankervis, A. R., Compton, R. L., & McCarthy, T. E. (1999). *Strategic Human Resource Management*, (3rd Ed.), Nelson ITP, Melbourne.
[162] Negro S.O., (2007), *Dynamics of Technological Innovation Systems* - The case of biomass energy (Thesis), Utrecht University, Utrecht.
[163] Nickell, S. (1995). *The performance of companies*. Blackwell: Oxford Press.
[164] Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2000). *Human Resource Management.* Chicago, IL: Irwin.
[165] Nohria, N., & Gulati, R. (1996). Is slack good or bad for innovation? *Academy of Management Journal*, *39*, 245-264.
[166] North D.C., (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, New York.
[167] Nunnally, J. C. (1978). *Psychometric Theory*. New York: McGraw-Hill.
[168] Ojwang K. (1989), "Generational technological change: effects of innovation and local rivalry on performance", *The Academy of Management Journal*, Vol. 39, pp. 1185-217.
[169] Ojera P. (2011), *Impact of strategic control practices and strategic orientation on organizational performance of sugar firms in Western Kenya*, Unpublished Ph.D dissertation, Maseno University.
[170] Pavett, C., & Lau, A. (1983). Managerial work: The influence of hierarchical level and functional specialty. *Academy of Management Journal*, *26*, 170-177.
[171] Pavitt, F. (1990), "The adoption of technological, administrative, and ancillary innovations: impact of organizational factors", *Journal of Management*, Vol. 15.
[172] Pendrose E.T. (1959), *The theory of the growth of the firm*, Oxford, England; basil Blackwell
[173] Porter M.E (1990), *competitive strategy; techniques for analyzing industries and competitors*, free press. New York.
[174] Porter M.E (1985), *competitive advantage; creating and sustaining superior performance*, New York; the Free Press
[175] Prahalad, C.K Hamel G (1994), *strategy as a field of study; why search for a new paradigm?* Strategic management journal 15(1); 5-16
[176] Prahalad C.K Hamel G. (1990) *Core competence concept*, Harvard business review
[177] Pfeffer, J. (1998), '*Seven Practices of Successful Organizations*,' California Management Review, 40, 96–124.
[178] Pil, F.K., and MacDuffie, J.P. (1996), *'The Adoption of High-involvement Work Practice,'* Industrial Relations, 35, 3, 423–455.
[179] Podsakoff, P.M., Mackenzie, S.B., Lee, J.Y., and Podsakoff, N.P. (2003), *'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies,'* Journal of Applied Psychology, 88, 5, 879–903.
[180] Ramsay, H., Scholarios, D. and Harley, B. (2000). 'Employees and high-performance work systems: testing inside the black box'. *British Journal of Industrial Relations*, **38**, 501–31.
[181] Republic of Kenya; Economic Survey, 2009. Kenya Bureau of Statistics, Ministry of Planning and National Development. Government Printer.
[182] Republic of Kenya; Economic Survey, 2012. Kenya Bureau of Statistics, Ministry of Planning and National Development. Government Printer.
[183] Republic of Kenya; National Development Plan, 2002 – 2008: "Effective Management for sustainable economic growth and poverty reduction".
[184] Republic of Kenya; Statistic Abstract, 1995. Central Bureau of Statistics.
[185] Restubog, S. L. D., Hornsey, M. J., Bordia, P. and Esposo, S. R. (2008). 'Effects of psychological contract breach on organizational citizenship behaviour: insights from the group value model'. *Journal of Management Studies*, **45**, 1377–400.
[186] Rousseau, D. M., & Wade-Benzoni, K. A. (1994). Linking strategy and human resource practices: How employee and customer contracts are created. Human Resource Management, 33(3), 463–463.
[187] Rhoades, L. and Eisenberger, R. (2002). 'Perceived organizational support: a review of the literature'. *Journal of Applied Psychology*, **87**, 698–714.
[188] Rogg, K. L., Schmidt, D. B., Shull, C. and Schmitt, N. (2001). 'Human resource practices, organizational climate, and customer satisfaction'. *Journal of Management*, **27**, 431–49.
[189] Schein, E. H. (1988). Organizational culture and leadership: A dynamic view. San Francisco: Jossey- Bass.

[190] Schendel, D.C.Hoffer Schendel. (1979), *strategic management*; a new view of business policy and planning. Boston little brown and company
[191] Schmidt, U., & Zank, H. (2005). What is loss aversion? Journal of Risk and Uncertainty, 30(2), 157–167.
[192] Schuler, R.S., and MacMillan, S.E. (1984), *Strategic Human Resource Management*, Oxford: Blackwell.
[193] Schuler, R. S., & Jackson, S. E. (2007). *Strategic human resource management*. Oxford: Wiley-Blackwell.
[194] Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). *Agency relationship in family firms*: Theory and evidence. Organization Science, 12(9), 99–116.
[195] Smits R.E.H.M., (2002), *Innovation studies in the 21st century, Technological Forecasting and Social Change*, p 861-883.
[196] Storey, J. (1992), *Developments in the Management of Human Resources*, Blackwell, Oxford.
[197] Storey, J. (1995), ``Human resource management: still marching on, or marching out?'', in Storey, J. (Ed.), *Human Resource Management*: A Critical Text, Routledge, London.
[198] Storey, J., Ackers, P., Bacon, N., Buchanan, D., Coates, D. and Preston, D. (1994), Human Resource Management Practices in Leicestershire: A Trends Monitor, Loughborough, Training and Enterprise Council.
[199] Suurs R.A.A., (2009), Motors of sustainable innovation. *Towards a theory on the dynamics of technological innovation systems* (Thesis), Utrecht University, Utrecht.
[200] Takeuchi, R., Lepak, D.,Wang, H. and Takeuchi, K. (2007). 'An empirical examination of the mechanisms moderating between high-performance work systems and the performance of Japanese organizations'. *Journal of Applied Psychology*, **92**, 1069–83.
[201] Takeuchi, R., Chen, G., W, and Lepak, D. (2003). 'Through the looking glass of a social system: cross-level effects of high-performance work systems on employees' attitudes'. *Personnel Psychology*, **62**, 1–29.
[202] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18: 509-533.
[203] Thompson A.Strickland A.J. (1993), *strategic management*, concepts and cases, Irwin, New York
[204] Thompson Et al, (2007), *crafting and executing strategy*; text and readings 15th ed. Mc Graw hill companies, New York
[205] Van Lente H. (1993), Promising Technology - *Dynamics of Expectations in Technological Developments (Thesis)*, Twente University, Enschede,.
[206] Van Lente H. & Rip A., (1998), Expectations in Technological Developments: An Example of Prospective Structures to be Filled in by Agency, in: C. Disco and B. van der Meulen (Eds.), *Getting New Technologies Together Expectations in Technological Developments*: An Example of Prospective Structures to be filled in by Agency, Walter de Gruyter, Berlin - New York.
[207] Van Dyne, L. and Ang, S. (1998). 'Organizational citizenship behavior of contingent workers in Singapore'. *Academy of Management Journal*, **41**, 692–703.
[208] Vrande, V., Lemmens, C. and Vanhaverbeke, W. (2006), "Choosing Governance Modes for ExternalTechnology Sourcing", *R&D Management*, Vol. 36, No. 3, 347-363.
[209] Von Hippel, E. (1976), *"The Dominant Role of Users in the Scientific Instruments Innovation Process"*, *Research policy*, Vol. 5, 212-39.
[210] W.R. Scott, (2001), *Institutions and Organizations*, Sage Publications, London, UK.
[211] Waldman, D., Ramírez, G. G., House, R. J. and Puranam, P. (2001). 'Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty'. *Academy of Management Journal*, **44**, 134–43.
[212] Walton, R. E. (1985). 'From control to commitment in the workplace'. *Harvard Business Review*, **63**, 77– 84.
[213] Way, S. A. (2002). 'High performance work systems and intermoderate indicators of firm performance within the U.S. small business sector'. *Journal of Management*, **28**, 765–85.
[214] Wayne, S. J., Shore, L. M. and Liden, R. C. (1997). 'Perceived organizational exchange and leader-member exchange: a social exchange perspective'. *Academy of Management Journal*, **40**, 82–111.
[215] Westhead, P., Siegel, D.S, and Wright, M., (2003); "Science Parks and the performance of New Technology – Based Firms: A Review of Recent UK Evidence and an Agenda for Future Research". *Small Business Economics.* Kluwer Academic Publishers; Vol.20, 177-183
[216] Whitener, E. M. (2001). 'Do "high commitment" human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modelling'. *Journal of Management*, **27**, 515–35.
[217] Williams, L. J. and Anderson, S. E. (1991). 'Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors'. *Journal of Management*, **17**, 601–17.
[218] Wood, S. J. and De Menzies, L. D. (1998). 'High commitment management in the UK: evidence from the workplace industrial relations survey, and employers' manpower and skills practices survey'. *Human Relations*, **51**, 485–515.
[219] Wood, S. J. and Wall, T. D. (2002). 'Human resource management and business performance'. In Warr, P. B. (Ed.), *Psychology at Work*, 5th edition. London: Penguin, 351–74.
[220] Wood, S. J. and Wall, T. D. (2007). 'Work enrichment and employee voice in human resource management performance studies'. *International Journal of Human Resource Management*, **18**, 1335–72.

[221] Wright, P.M., Dunford, B.B., and Snell, S.A. (2001), 'Human Resources and the Resource Based View of the Firm,' *Journal of Management*, 27, 6, 701–720.
[222] Wright, P.M., Gardner, T.M., Moynihan, L.M., and Allen, M.R. (1994), 'The Relationship Between HR Practices and Firm Performance: *Examining Causal Order*,' Personnel Psychology.
[223] Wright, P.M., and MacMahan, G.C. (1992), 'Theoretical Perspectives for Strategic Human Resource Management,' *Journal of Management*, 18, 295–320.
[224] Youndt, M., Snell, S., Dean, J., & Lepak, D. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*,39, 836-866.
[225] Young P.V.(1960), *scientific social survey and research*, 3rd ed. New York
[226] Quinn, R. E. (1988). Beyond rational management: *Mastering the paradoxes and competing demands of high performance*. San Francisco: Jossey-Bass.
[227] Quinn, R. E., & McGrath, M. R. (1985). The transformation of organizational culture: *A competing values perspective*. In P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, & J. Martin (Eds.), Organizational culture, 315–344. Beverly Hills, CA: Sage.
[228] Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*, 29(3), 363–377
[229] Quinn, R. E., & Spreitzer, G. M. (1991). The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life. In R. W. Pasmore & W. A. Pasmore (Eds.), *Research in organizational change and development*. Greenwich, CT: JAI.
[230] Zou and Tamer (2004), "Strategic human resources, innovation and entrepreneurship fit: a cross regional comparative model", International Journal of Manpower, Greenwich, CT.

ANNEXURE

Table 4.13: Frequency of complaints about the quality of the products

		Category of Firms		Total
		indigenous	multinational	
how often do clients complain about the qualities of the products	some times	4.0%	12.0%	16.0%
	rarely	14.0%	66.0%	80.0%
	never		4.0%	4.0%
Total		18.0%	82.0%	100.0%

Table 4.14 Frequency of complaints about delay in product service delivery

		Category of Firms		Total
		indigenous	multinational	
how often do client complain about delays	some times	4.0%	24.0%	28.0%
	rarely	10.0%	54.0%	64.0%
	never	4.0%	4.0%	8.0%
Total		18.0%	82.0%	100.0%

Table 4.15 Frequency of complaints about product service delivery

		Category of Firms		Total
		indigenous	multinational	
how often do client complain about the quality of service delivery	some times	4.0%	6.0%	10.0%
	rarely	10.0%	72.0%	82.0%
	never	4.0%	4.0%	8.0%
Total		18.0%	82.0%	100.0%

Table 4.16: Descriptive statistics for indicators of effectiveness

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Firm has a clear mission statement	50	4.32	.078	.551
mission statement is known too by staff	50	3.88	.079	.558
mission statement is operationalized through the current objective and activities	50	4.02	.073	.515
a system is in place to accesses effectively	50	4.08	.069	.488
our products are rated very highly	50	4.10	.043	.303
we prepare strategic plan	50	4.14	.050	.351
we are able to meet all needs of clients	50	3.92	.085	.601
organization closely monitors its effectiveness	50	4.00	.107	.756
Valid N (list wise)	50			

Table 4.17: Frequency of Machine Breakdown

		Category of Firms		Total
		indigenous	multinational	
experience of major machine breakdown	most times		6.0%	6.0%
	some times	4.0%	38.0%	42.0%
	rarely	8.0%	34.0%	42.0%
	never	6.0%	4.0%	10.0%
Total		18.0%	82.0%	100.0%

Table 4.18: Rate of staff turnover

		Category of Firms		Total
		indigenous	multinational	
staff turnover	very high	4.0%		4.0%
	high	12.0%	2.0%	14.0%
	moderate	2.0%	16.0%	18.0%
	low		40.0%	40.0%
	very low		24.0%	24.0%
Total		18.0%	82.0%	100.0%

Table 4.19: Mean scores for common indicators of Efficiency

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
make best use of resources	50	4.08	.048	.340
administration provide good value for cost	50	4.10	.043	.303
make best use of all staff to the best of their ability	50	4.12	.062	.435
all broken machines are repaired on time	50	3.94	.072	.512
experiencing of no stock out as a result of machine brake down	50	3.54	.104	.734
operation machine are continuously serviced	50	3.78	.119	.840
Valid N (listwise)	50			

Table 4.20: Stakeholder level of satisfaction with firm's products and services

		Category of Firms		Total
		indigenous	multinational	
satisfaction of stake holders about product and services	very high	6.0%	24.0%	30.0%
	high	4.0%	46.0%	50.0%
	moderate	8.0%		8.0%
	low		12.0%	12.0%
Total		18.0%	82.0%	100.0%

Table 4.21: Number of new products introduced in the last five years

		Frequency	Percent
Valid	none	2	4.0
	1-2	29	58.0
	3-4	9	18.0
	5-6	5	10.0
	over 6	5	10.0
	Total	50	100.0

Table 4.22: Number of new products withdrawn from the market

		Frequency	Percent
Valid	none	13	26.0
	1	29	58.0
	2	2	4.0
	more than 3	6	12.0
	Total	50	100.0

Table 4.23: Composite mean scores for individual indicators of relevance

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
product/ service revision reflection on changing environment conditions	50	3.76	.133	.938
needs assessment is carried regularly on stakeholders	50	3.94	.101	.712
regular we monitor/adapt to new technology	50	4.16	.052	.370
innovation is strongly encouraged	50	4.04	.086	.605
Valid N (list wise)	50			

Table 4.24: Total Asset to total Liability Ratios

	Interpretation	Frequency	Percent
85:15 - 95:05	Very high	5	10.0
75:25 - 84:16	High	10	20.0
65:35- 74:26	moderate	6	12.0
45:55-64:36	Low	27	54.0
less than 45:55	Very low	2	4.0
Total		50	100.0

Table 4.25: The estimate ratio of net assets to liabilities in the firm

		Interpretation	Frequency	Percent
Valid	85:15 - 95:05	Very high	3	6.0
	75:25 - 84:16	High	24	48.0
	65:35- 74:26	moderate	11	22.0
	45:55-64:36	Low	8	16.0
	less than 45:55	Very low	4	8.0
	Total		50	100.0

Table 4.26: Composition score of the most important indicators of financial viability

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
organization monitors finance on regular basis	50	4.00	.099	.700
suppliers are paid on time	50	3.68	.116	.819
profit margins have been increasing yearly	50	3.86	.099	.700
Got short/long term loans from the financial institutions	50	3.00	.167	1.178
assets are greater than liabilities	50	4.00	.057	.404
No cash flow difficulties have been experienced over the years	50	4.06	.078	.550
our staff are among the best paid in the industry	50	4.04	.070	.493
replace old machines and vehicles on time	50	4.10	.082	.580
sales have been increasing over the years	50	3.98	.132	.937
Valid N (list wise)	50			

Table 4.27: Proportion of management in the organization who are graduates

		Frequency	Percent
Valid	less than 40	8	16.0
	40-60%	16	32.0
	60-80%	16	32.0
	more than 80%	8	16.0
	99	2	4.0
	Total	50	100.0

Table 4.28: Perceived importance of indicators of performance

Overall indicator	Average composition index	Best two specific indicators	Mean	Std. deviation
Effectiveness	3.4	Firm has clear mission statement	4.32	.551
		Preparation of strategic	4.14	.351

		plans		
Efficiency	2.8	Make best use of all staff to the best of their abilities	4.12	.435
		Administration provides good value for cost	4.10	.303
Relevance	2.4	Monitor and adapt to new technologies	4.16	.370
		Encourage and adopt innovations	4.04	.605
Financial viability	3.2	Replacement of old machines and vehicles on time	4.10	.580
		Firm has no cash flow difficulties	4.06	.550