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Staff Competence, Process Monitoring and Performance of the Automotive Industry in Kenya: A Case Study of Associated Battery Manufacturers East Africa Limited, Nairobi

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ABSTRACT: *The objective of this study was to determine the relationship between staff competence, process monitoring andperformance of automotive industry in Kenya. The results of the study sought to benefit the automotive industry, international bodies like the international automotive task force (IATF), customers in the automotive sector as well as other scholars and researchers. The study was triggered by high cost inefficiency in the automotive industry leading to most of the companies in the sector implementing the ISO/ TS 16949 to reduce production variation and number of defective products.The study employed descriptive research design. The target population for the study was 482 staff at Associated Battery Manufacturers (ABM) East Africa Limited which is currently implementing ISO/TS 16949. During data collection, 145 staff working in the organization were sampled using stratified simple random sampling. Questionnaires were physically administered to the sample population. A pilot study was conducted to test the accuracy of the research instruments to ensure reliability and validity of research data. Descriptive statistics including mean and standard deviation was used to analyse data. The relationship between independent and dependent variables was determined using regression model using Statistical Package for Social Sciences (SPSS) version 20. Research findings were presented using graphs, pie charts and frequency tables. The research findings indicate that process monitoring explains 58.5 percent of organizational performance at ABM (EA) Limited. The process monitoring explains 63.9 percent of organizational performance at ABM (EA) Limited. The research findings further indicated that staff competence did not have statistical significant impact on performance at ABM (EA) Limited. The study therefore concluded that process monitoring had positive and significant impact on performance at ABM (EA) Limited. The researcher therefore recommends that automotive industries should continually improve on their process monitoring activities by carrying out regular audits on the manufacturing process and on the product. The researcher further recommends future comparative research on automotive industries to compare findings from different automotive companies.*

KEY WORDS: *Staff competence, Process monitoring, Automotive industry, Battery manufacturer*

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I. INTRODUCTION

The global Automotive Industry is facing challenges due to the rapid growth of the supply base in emerging markets, and the need to improve performance as reliable and cost effective sources of supply (Peter, Nick & Barry, 2007). Peter et al., (2007) identified the car industry as particularly important because it is the single largest industrial sector in the world economy and it has traditionally led the way in establishing patterns of work organization for other sectors. The necessary competence for personnel performing work affecting conformity to product requirements shall be determined. Organizations must provide training or take other actions to achieve the necessary competence, as applicable. The organization should ensure that personnel with product design responsibility are competent to achieve design requirements and are skilled in applicable tools and techniques (International Organization for Standardization, 2009).According to DaSilva (2008), before a company moves to an international supply base the business must have as a core competence the discipline to plan and execute and the enabling processes and information technology systems to support the new realities.

Monitoring information relating to customer perception as to whether the organization has met customer requirements is one of the measurements of performance of the quality management system(Bevilacqua, Emanuele, Giacchetta and Marchetti, 2011). Monitoring customer perception can include obtaining input from sources such as customer satisfaction surveys, customer data on delivered product quality, user opinion surveys, lost business analysis, compliments, warranty claims and dealer reports. Customer satisfaction can be monitored through continual evaluation of performance of the product realization processes. Performance indicators can include: delivered part quality performance, customer disruptions, including field returns, delivery schedule

performance and customer notifications related to quality or delivery issues. Monitoring the performance of manufacturing processes helps to demonstrate compliance with customer requirements for product quality and efficiency of the process (International Organization for Standardization, 2009).

Bevilacqua et al. (2011) identified five pillars of the ISO/TS 16949 as:production part approval process, advanced product quality planning, failure modes and effect analysis, statistical process control (SPC), andmeasurement system analysis (MSA). Statistical process control is a tool that allows to monitor the process, to promptly identify process drift andto take real time corrective actions avoiding non-complying products and pursuing acontinuous improvement of the quality by involving the entire structure with the mainaim of gaining increased performances and greater competitiveness. Companies must develop and maintain a high degree of coherence among competitive priorities, order-winning criteria, and improvement activities due to the competitive market and customer pressures(Laosirihongthong, 2007).The major strengths against competitors in the automotive industry are consistent quality, quick response system, easy availability of raw materials, cheap labour, competitive prices, technical manpower, better quality, growing domestic market and flexibility in the manufacturing operations (Kathuria& Singh, 2015).

Janez, Lidija, Duhovnik, & Marko, (2014) established that market and competition conditions change continuously for manufacturing companies. These call upon workforce who understands their undertaking and close monitoring of the systems as a whole. Owing to the dynamics of external factors, companies are forced to constantly review and optimize product realization processes as well as ensure employee development by offering on-job trainings. According to Janez et al., (2014), only those companies that can offer innovative, competence employee, high-quality and cost-effective products, delivered in the shortest possible times, are successful in the automotive industry.

ABM (E.A) is a Limited battery manufacturing company in Kenya. The company produces automotive batteries and solar batteries (both vented and Maintenance Free). ABM (EA) Limited was established in 1963 by the UK-based Chloride Group to produce batteries in Kenya for a number of British manufacturers including Chloride, Oldham, Lucas and Dunlop. ABM (EA) Limited has a combined workforce of over 700 staff (including casual workers), recovering over 12000 metric tonnes of lead metal, producing over 900,000 batteries and making solar panels with a capacity of over 8,400 kilowatts per year. ABM (E.A) like otherautomotive industry, is facing challenges due to the rapid growth of the supply base in emerging markets and the need to improve performance as reliable and cost effective sources of supply. The cost ineffectiveness in the automotive industries has been mainly as a result of defects and variations during the manufacturing process. A good example is the Toyota recall where in August 2010, Toyota recalled a total of 8.8 million vehicles due to problems with the accelerator which caused crashes and more than 80 deaths (Jaime, Noriega, & Yamashita, 2015). In order to address the issue at hand, the study will be guided by two objectives:

a) To establish the effects of staff competence and performance of the automotive industry at Associated Battery Manufacturers (ABM) East Africa Ltd
b) To find out the effects of process monitoring and performance of the automotive industry at Associated Battery Manufacturers (ABM) East Africa Ltd

II. LITERATURE REVIEW

Theoretical Literature Review

The study will be anchored by Crosby's Theory of Quality Management (1986). Crosby identified fourteen steps that rely on the foundational thought that any money a company spends upon quality improvement is money that is well-spent. In his theory, Crosby (1986) cited four absolutes of quality management. First, a company ought to define quality not as something that is good or something that is exquisite but instead as something that conforms to company, stakeholder, or end-user requirements. Second, quality starts with prevention in that defects should be prevented rather than found after the fact. By preventing defects and other obstacles to quality, companies save money (Crosby, 1986). Third, the standard for performance for any company needs to be zero defects, otherwise, it just doesn't cut it. Fourth, in order to measure quality, rather than relying upon intricate indices, companies need to focus on the Price of Nonconformance. The price of nonconformance, sometimes called the cost of quality, is a measure of the costs associated with producing a product or service of low quality (Crosby, 1986).

Crosby (1986) also identified fourteen (14) steps of that are meant to keep your quality improvement project on track. First and foremost, management must be committed to improving the quality in a company. This commitment must also be transparent to all employees so that proper attitudes towards a Zero Defect product or service line are modeled. Forming a quality improvement team is the second step to achieving total quality management. He advises that the team members who will model quality improvement commitment should be those who are not already over-committed to other projects. The quality improvement team should be able to effectively commit themselves to improvement of quality.Crosby (1986) stated that before establishing a plan for improving quality, you first have to know exactly where your products and services lie when it comes

to conforming to requirements. Thus, the third step on Crosby's list is to measure quality. Determine where there is room for improvement and where potential for improvement exists. You also need to ask yourself how much is the cost of nonconformance to standards as well the cost for quality. By answering these questions, you can demonstrate to all company employees that there is a need for a quality improvement system.

According to Crosby (1986), it is not enough, remember to have "as few as possible" defects. Instead, you really need to have this number at zero and establish a zero-defect tolerance in your company. Ensure that your supervisors can carry out the tasks required of them for maintaining quality. By practicing supervisor training, with quality in mind (and the four absolutes), then you will be more likely to achieve zero-defect status. Hold a quality event, called a zero defects day, where all employees are made aware of the change that has taken place. By holding a zero defects day in your company when implementing a total quality management project, you can be sure that you are increasing awareness for quality in your workplace.

Implementation of employee recognition is another step that keep your quality improvement project on track. By regularly recognizing those who participate in quality improvement efforts, employees will be much more likely to continue to participate. By bringing together specialists and employees, you can create a focused effort towards creating lasting quality improvement implementations. Make sure your quality councils meet on a regular basis. Quality improvement does not end because you have run out of the fourteen Steps of Crosby. In order to really make improvements in the quality of your products and services, you will need to do it over again (Crosby, 1986).

ISO/TS 16949 focusses on the development of a quality management system that provides for continual improvement, emphasizing defect prevention and the reduction of variation and waste in the supply chain (International Organization for Standardization, 2009). Crosby's theory of quality management is relevant to this study because the main focus of this theory is improvement and one of the requirements of ISO/TS 16949 is continual improvement which focusses on control and reduction of variation in product characteristics and manufacturing process parameters.

III. EMPIRICAL LITERATURE REVIEW

Staff Competence and Organizational Performance

Srivastava, Sultan and Chashti (2017) study established that innovation competence does influence totalcompetitive performance as a proxy for firm level competitiveness for the processing firms in India. The innovation competence holds a positive relationship with competitive performance. Srivastava et al. (2017) found that the limit of the innovation capabilities had been restricted to the products only, and most of the time entrepreneurs imitated the products of the national and international firms. Srivastava et al. (2017) stated that in cases where it had been established that thecompetitiveness at firm level had an influence of innovation competence, a strategic approach in building innovation capabilities through incubation of various product and process activities could be taken up, both at structural as well as facilitating agencies. Their study derived an insight for the firms to manage their competences and explore their innovation capabilities to remain competitive.

According to Yeh, Pai, & Huang, (2013), the first five essential factors with preferableimprovement during promotion of ISO/TS 16949 are identifying production and servicesupply process to meet the requirements, staff inside organization supports and decidesto participate in ISO/TS 16949, identifying internal customers to meet the requirementsto complete product, cross-functional team having good communication, collaborationand operation, and management level regularly inspects the promotion of ISO/TS16949 bydepartments.Technical demands with preferable improvement in order to successfully promote ISO/TS 16949 by enterprises are sequenced as customerinformation collection, internal audit capability, statistical analysis capability,document recording ability, software and hardware operation ability, and enterprise organizationability (Yeh et al., 2013).It is shown fromthe results that understanding customer demands is still a prior task of promotingquality certification, whereas internal customers are often neglected by enterprises. In order to continuously improve product and service achievement, enhancementof internal audit capability and statistical analysis capability of employees are bothindispensable (Yeh et al., 2013).

According to DaSilva (2008), global operational presence is no longer an option; it is a necessity for business success. However, before a company moves to an international supply base the business must have as a core competence the discipline to plan and execute and the enabling processes and information technology systems to support the new realities. Without these factors in place, significant obstacles emerge as cultural conflicts drive unexpected costs. Given these facts and an understanding that global competition does not only represent low cost economics and volume, but also includes innovation, corporate leaders need to recognize the importance of rapid response capabilities. Dasilva (2008) urges companies to transform to enable execution anywhere, anytime. Corporate managers will need to apply program project management concepts to support the move to a Global Supply Chain and the transition to more comprehensive Supplier Relationship Management in order to achieve and extend competitive advantage.

DaSilva (2008) established that the management of these organizational processes is very different and requires different skills and information technology infrastructure to achieve the necessary global competence that will deliver business results. An improvement in knowledge is necessary to achieve the attitudes and behaviours to be effective in facing diverse cultures in a global market, in combination with effective utilization of continuous improvement tools (Dasilva, 2008).

Process Monitoring and Organizational Performance

Bevilacqua et al. (2011) identified five pillars of the ISO/TS 16949 as:production part approval process, advanced product quality planning, failure modes and effect analysis, statistical process control (SPC), andmeasurement system analysis (MSA).SPC is a tool that allows monitoring the process, to promptly identify process drift andto take real time corrective actions avoiding non-complying products and pursuing acontinuous improvement of the quality by involving the entire structure with the mainaim of gaining increased performances and greater competitiveness.The SPC is based on the seven basic statistical tools defined by Ishikawa (1985): thefishbone diagram along with the histogram, Pareto chart, check sheet, control charts,flowchart, and scatter diagram.According to Bevilacqua et al. (2011), the control chart is a proven technique for improving productivity. A successful control chart will signal the out-of-control casespromptly so that the number of defectives (scraps and/or reworks) can be reduced.

Bevilacqua et al. (2011),stated that Managers had frequently justified investments inSPC by citing and/or demonstrating the improvements in quality and costs from theeffective implementation and practice of SPC. Theyalso presented conceptual arguments andempirical evidence to further the understanding of the motivational effects that resultfrom the deployment of SPC within production environments. The study thensuggested that the effective implementation and practice of SPC would create more enriched jobsfor process operators that lead to higher levels of work motivation and job satisfaction.According to Bevilacqua et al. (2011), two of the main functions of SPC are process monitoringand process variation reduction. Spencer and Carlan (2008) argued that positive feedback, in the form of deficient preventative maintenance and housekeeping, produced health and safety issues in the local plant environments.

2.4 Conceptual Frame work

The concepts that constitute a conceptual framework support one another, articulate their respective phenomena, and establish a framework-specific philosophy.

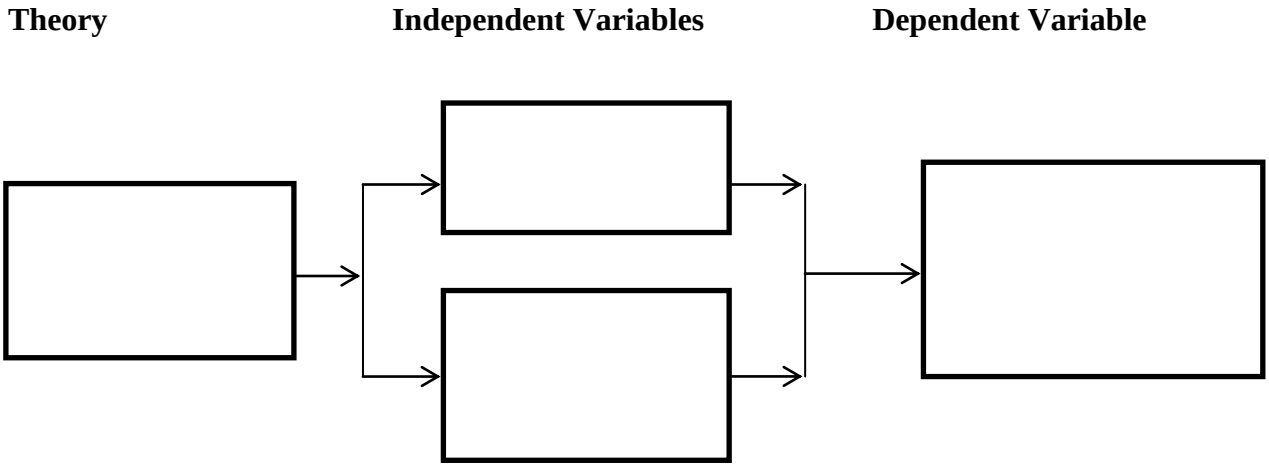

Figure 2.1: Conceptual framework for theory, independent and dependent variables

Hypothesis of The Study

The following hypotheses were used to test the relationship depicted in the study objectives:

H_{01}: Staff competence has not contributed to the performance of automotive industry in Kenya.

H_{02}: Process monitoring has not contributed to the performance of automotive industry in Kenya.

IV. METHODOLOGY

The study was anchored on positivist philosophy and the formulated hypotheses to interrogate the perceived relationships among the variables. The study adopted cross sectional research design in which data was collected at a particular point in time in July and October, 2017. The target population was 482 permanent staff at Associated Battery Manufacturers limited. A sample size of 30% was selected from the target population, which translate to 145 respondents as recommended by Kothari (2004). Stratified sampling

technique was used to put the respondents into various stratas including senior management, middle level management, plant operators and support staff, after which simple random sampling was used to select the individuals from various stratas to form the accessible population.

Data was collected using the semi-structured questionnaire. Prior to data collection pilot study was carried out in Amara Raja Batteries company using 10 randomly selected staff. The data obtained from the pilot test was used to measure the validity and reliability of the research instruments. Specifically construct validity was ensured by having questionnaire subdivided into various sections where each section addressed specific objective. In addition content validity was ensured using the experts input by suggesting various changes needed to be done on the questionnaire for content validity. On the other hand, reliability was ensured using Cronbanch alpha which according to Esposito (2002), reliability coefficient of more than 0.7 indicated reliability of the research instrument. As per the table 3.1, it shows that the research instrument was reliable.
The results are as shown in table 3.1 below:

Table 3.1: Reliability Test Results

Variable	No. of Items	α = Alpha	Comments
Staff Competence	10	0.763	Acceptable
Process Monitoring	10	0.812	Acceptable
Organizational Performance	10	0.801	Acceptable

Descriptive statistics including mean and standard deviation was used to analyse data as received from the respondents. Regression statistical analysis of data was done to determine the relationship between the independent and dependent variables and to highlight the key findings. The quantitative data was coded into Statistical Package for Social Sciences (SPSS) version 20.0 for analysis.
The regression model used was as follows:

$Y=\beta_0+\beta_1X_1+\beta_2X_2+e,$

Where: Y is the dependent variable (performance in automotive industry),
(Bi =1, 2)= The coefficients for the various independent variables
X_1= Staff competence,
X_2= Monitoring process
e = error term.

The data was presented using frequency tables. As part of the ethical consideration, the respondents were given the consent forms for signing indicating they accepted to participate in the study. In addition, the confidentiality of the information obtained was assured and the anonymity of the respondents was adhered to in order to avoid victimisation.

V. RESULTS OF THE STUDY

Staff Competence and Organizational Performance

Seven statements were presented to staff to state the level to which they disagreed or agreed with regard to staff competence and performance. Likert scale of 1-5 was used to rank the responses where 1=strongly disagree (SD), 2=agree (A), 3=uncertain (U), 4=agree (A) and 5=strongly agree (SA). The closer the responses to a mean score of 5 indicated that staff strongly agreed on the relationship between process monitoring and performance. A lower mean score below 3 means that staff disagreed on the relationship between staff competence and performances.

Table 4.1:Responses on Staff Competence

Competence statements	**SD**	**A**	**U**	**A**	**SA**	**Mean**	**Std deviation**	
Staff training needs are identified	3.1%	5.1%	12.2%	58.2	21%	3.90	0.902	
Staff are trained as per the training needs	4.1%	5.1%	8.2%	54.1%	28.6%	3.98	0.974	
On-the-job training is provided	2%	7.1%	6.1%	53.1%	31.6%	4.05	0.924	
Effectiveness of the trainings is evaluated		5.1%	5.1%	10.2%	56.1%	23.5%	3.88	0.998
Staff designing products are competent to achieve design requirements		1%	5.1%	14.3%	57.1%	22.4%	3.95	0.817
Staff designing products have skills on design tools and techniques	4.1%	5.1%	12.2%	53.1%	25.5%	3.91	0.975	
Products are designed by experienced staff	8.2%	4.1%	6.1%	54.1%	27.6%	3.89	1.111	

Descriptive Statistics

Table 4.1 shows that the statement with the highest mean score observed in the results was On-the-job training is provided (Mean=4.05; Standard Deviation=0.924). The second most ranked statement was Staff are trained as per the training needs (Mean=3.98; Standard Deviation=0.974) followed by Staff designing products are competent to achieve design requirements (Mean=3.95; Standard Deviation=0.817). All the statements for staff competence had mean scores of more than three. These findings showed that staff generally agreed with the statements on the relationship between staff competence and performance.

Regression Analysis

Table 4.2:Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767[a]	.589	.585	.45999
2	.804[b]	.646	.639	.42894

a. Predictors: (Constant), Monitoring

b. Predictors: (Constant), Monitoring, Employee competence

After regression analysis, Table 4.2 shows the model summary between performance and process monitoring with adjusted R square (R^2) of 0.585. This means that 58.5 percent of performance at ABM (EA) limited is explained by process monitoring. Table 4.2 showed the model summary between performance and two variables-employee competence and process monitoring with adjusted R square (R^2) of 0.639. This means that 63.9 percent of performance at ABM (EA) limited is explained by employee competence and process monitoring.

Table 4.3:Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.811[a]	.657	.646	.42456

a. Predictors: (Constant), Monitoring, Competence

The model summary after including staff competence as the third variable had adjusted R square (R^2) of 0.646 as shown in Table 4.3. This means that 64.6 percent of performance at ABM (EA) Limited is explained by process monitoring and staff competence. The difference after including staff competence was negligible (0.7 percent). This means the effect of staff competence on the overall model was insignificant.

Table 4.4:Excluded Variables[a]

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
Competence	.230[c]	1.723	.088	.175	.206

a. Dependent Variable: Performance

c. Predictors in the Model: (Constant), Monitoring, Resources

Table 4.4 shows regression coefficient for staff competence as 0.230. This means that a unit increase in staff competence led to a 0.230 increase in performance at ABM (EA) Limited with all other factors held constant. Table 4.4 showed the significance value for staff competence as p = 0.088, meaning that means that the relationship between staff competence and performance was insignificant since 0.088 is higher than 0.05. As a result, the variable for staff competence was excluded from the regression model.The finding does not agree with Srivastava et al. (2017) study which established that innovation competence does influence total competitive performance as a proxy for firm level competitiveness for the processing firms in India. DaSilva (2008) established that before a company moves to an international supply base the business must have as a core competence the discipline to plan and execute and the enabling processes and information technology systems to support the new realities.

Process Monitoring and Organizational Performance

Eight statements were presented to staff to state the level to which they disagreed or agreed with regard to process monitoring and performance. Likert scale of 1-5 was used to rank the responses where 1=strongly disagree (SD), 2=agree (A), 3=uncertain (U), 4=agree (A) and 5=strongly agree (SA). The closer the responses to a mean score of 5 indicated that staff strongly agreed on the relationship between resource management and performance. A lower mean score below 3 means that staff disagreed on the relationship between process monitoring and performance.

Table 4.5:Responses on Process Monitoring

Monitoring statements	**SD**	**A**	**U**	**A**	**SA**	**Mean**	**Std deviation**
There is a process for reviewing customer engineering specifications	4.1%	2%	22.4%	55.1%	16.3%	3.78	0.891
There is a process for distributing	4.1%	3.1%	21.5	57.1%	14.3%	3.74	0.889

customer engineering specifications							
There is a process for implementing customer engineering specifications	4.1%	1%	21.4%	53.1%	20.4%	3.85	0.901
Manufacturing process audits to determine effectiveness are carried out	2.0%	2.0%	4.1%	53.1%	38.8%	4.24	0.800
Product audits to verify conformity are carried out	4.1%	0%	8.2%	55.1%	32.7%	4.12	0.877
Customer perception surveys are carried out	5.1%	1.0%	25.5%	49%	19.4%	3.77	0.950
There is a defined process for solving customer problems	3.1%	1.0%	16.3%	52%	27.6%	4.00	0.873
Action plans are developed for addressing nonconforming products	4.1%	1.0%	2.0%	51%	41.8%	4.26	0.889

Descriptive Statistics

Table 4.5 shows that the statement with the highest mean score observed in the results was Action plans are developed for addressing nonconforming products (Mean=4.26; Standard Deviation=0.889). The second most ranked statement was Manufacturing process audits to determine effectiveness are carried out (Mean=4.24; Standard Deviation=0.800) followed by Product audits to verify conformity are carried out (Mean=4.12; Standard Deviation=0.877). All the statements for process monitoring had mean scores of more than three. These findings showed that staff generally agreed with the statements on the relationship between process monitoring and performance.

Regression Analysis

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767[a]	.589	.585	.45999

a. Predictors: (Constant), Monitoring

After regression analysis, Table 4.6 shows the model summary of process monitoring with adjusted R square (R^2) of 0.585. This means 58.5 % of organizational performance at ABM (EA) Limited is explained by process monitoring.

Table 4.7: Analysis of Variance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.100	1	29.100	137.524	.000[b]
	Residual	20.313	96	.212		
	Total	49.413	97			

a. Dependent Variable: Performance

b. Predictors: (Constant), Monitoring

The Analysis of Variance results (Table 4.7) shows that the significance value for process monitoring, p-value = 0.000. This means process monitoring had statistical significant impact on organizational performance at ABM (EA) Limited.This finding agrees with Bevilacqua et al. (2011) who identified five pillars of the ISO/TS 16949 as: production part approval process, advanced product quality planning, failure modes and effect analysis, statistical process control (SPC), and measurement system analysis. SPC is a tool that allows monitoring the process, to promptly identify process drift and to take real time corrective actions avoiding non-complying products and pursuing a continuous improvement of the quality by involving the entire structure with the main aim of gaining increased performances and greater competitiveness.

4.7Regression Model

Table 4.8: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.911	.246		3.709	.000
	Resources	.318	081 .	364	3.925	.000
	Monitoring	.490	.092	.494	5.333	.000

a. Dependent Variable: Performance

Table 4.8 shows the regression coefficients for resource management as 0.318 and that of process monitoring as 0.49. The regression coefficients show the size and the direction of relationship between the independent and dependent variable. Therefore, the regression model is as follows:

$Y=0.911+0.318X_1+0.49X_2+ e$

Where, Y=Performance, a=constant, X_1=Employee Competence and X_2=Process monitoring

The regression model shows that a unit increase in resource management led to a 0.318 increase in performance at ABM (EA) Limited with all other factors held constant. This was significant since the p value for resource management was0.000 as shown on Table 4.8. A unit increase in process monitoring led to 0.49 increase in performance at ABM (EA) Limited with all other factors held constant. This was significant since the p value for process monitoring was0.000 as shown on Table 4.8.

VI. SUMMARY, CONCLUSION AND RECOMMENDATIONS

SUMMARY

All the statements for staff competence had mean scores of more than three. This showed that staff generally agreed with the statements on the relationship between staff competence and performance. The Cronbach alpha coefficient for the statements under staff competence was 0.913 indicating a reliable tool. After regression analysis, the significance value for staff competence was0.088. This means that staff competence did not have statistical significant impact on performance at Associated Battery Manufacturers (EA) Limited.

All the statements for process monitoring had mean scores of more than three. This showed that staff generally agreed with the statements on the relationship between process monitoring and performance. The Cronbach alpha coefficient for the statements under process monitoring was 0.927 indicating a reliable tool. After regression analysis, the researcher established thatprocess monitoring explains 58.5 percentof organizational performance at ABM (EA) Limited

VII. CONCLUSSION

The study confirmed that there was no significant impact of staff competence on performance in the automotive related industry. The researcher therefore concludes that staff competence has no significant impact on performance at Associated Battery Manufacturers (EA) Limited. The study further confirmed that among four independent variables-leadership, resource management, staff competence and process monitoring, staff competence had the second least impact on performance at Associated Battery Manufacturers (EA) Limited.

The study reaffirmed that there is a positive and significant relationship between process monitoring and performance in the automotive related industry. The study therefore concludes that there is a positive and significant impact of process monitoring on performance at ABM (EA) Limited. The study further concludes that among the four independent variables included in the study, process monitoring had the most influence on performance at ABM (EA) Limited.

VIII. RECOMMENDATIONS

The study established that staff competence did not have statistical significant impact on performance. This could indicate that staffs are already competent and skilled in performing their duties. The study therefore recommends that Associated Battery Manufacturers (EA) Limited should maintain the competence of its employees at all levels. This can be done by continually hiring competent and skilled staff.

The study established that process monitoring explains 58.5 percent of performance at Associated Battery Manufacturers (EA) Limited. The study therefore recommends that ABM (EA) Limited should continually improve on their process monitoring activities. This can be done by carrying out regular audits on the manufacturing process and on the product. Corrective actions should be taken without undue delay to address any non-conforming products. Customer perception surveys are also recommended in order to get customer feedback

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