



**INFLUENCE OF PERCEIVED EMPLOYEES' PRESSURE ON INNOVATION IN THE TEA SUBSECTOR IN KENYA**

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#### ABSTRACT

*A major constraint in decision making in a firm is the power of environmental elements. The power of the dominant coalition in an organization determines the course of strategic action. The dominant coalition can be viewed as a key stakeholder group who greatly influences decisions of a firm. A firm's strategy therefore can be said to be influenced by stakeholder pressure. Stakeholders are known to disagree on the relative importance of innovations and may therefore use their resources to influence other stakeholders and resort to politics and power to affect implementation processes. The different positions of stakeholders and the associated differences in priorities and interests are likely to affect stages of the implementation process of innovation from the first stage of experiencing and defining a problem to looking for solutions. Tea industry in Kenya has identified a type of process innovation which is comparatively cheaper i.e. mechanical tea harvesting technology yet the perplexing thing is that the uptake of this technology is low despite its cost advantages. This study therefore provided an opportunity to empirically test the theoretical basis of this contradiction. It sought to establish the influence of perceived stakeholder pressure of employees' stake holder group on innovation with regards to adoption of mechanical tea harvesting technology. The study employed diagnostic survey research design. The target population was all tea plantation firms in Kenya. The respondents were the managers in charge of these business units. A census enquiry was used due the small nature of the target population. Data collection was done using a semi-structured questionnaire that targeted both qualitative and quantitative data. Data processing and analysis employed both descriptive and inferential statistics which included correlation and logistic regression analysis. The results of the study showed that perceived employees' pressure influence on innovation was negatively significant at 5% level of significance with beta coefficient and p value being -1.463 and 0.016 respectively. The goodness of fit based on Nagelkerke R square of the individual models was 0.248 the findings suggest that the employee stakeholder group is important in the tea subsector in Kenya with regard to firm's decision to pursue innovation as perceived by managers in the industry. The findings are in consonance with expectation from both theory and past empirical research therefore further firming up underlying theories. Based on the findings, it is recommended that those firms wishing to successfully pursue innovation in mechanical tea harvesting technology must engage constructively with employees in order to get full benefits of the innovation.*

**Key Words:** Stakeholder pressure, Perceived employee pressure, Innovation, MTH technology, Adoption

### **Background of the study**

Innovation provides opportunities for businesses to improve their efficiency and effectiveness and even to gain competitive advantage. Bowman and Elfat (1998) have linked performance in business organizations to strategic choice and action. The decision to adopt or not to adopt a specific technology can therefore distinguish performing firms from non performing ones. Olsen and Engen (2007) however posit that technological change is deeply affected by a process of social construction between the main social groups of a socio-economic system. Every new technology is thus a final result of a process of negotiation between these social groups who represent different interests. Rogers (2003) and Bramble *et al.* (2010) argue that successful technological diffusion of innovations is thus a result of a process of mutual adaptation among technology producers, users, and external groups and the system that adopts the innovation.

The business environment comprises of several players whose interests are often conflicting. Schiavone (2012) opines that new changes in an organization have to be filtered in these groups through discourse and negotiations. If the change does not fit into interests and values of the group, adoption is likely not to be feasible. Decisions, especially those that bring radical changes in the way business is run therefore need to incorporate the views of those who stand to be affected by the decisions if successful implementation of change has to occur.

Zakić, Jovanovic, & Stamatovic (2008) posit that employees as internal stakeholders are the implementers of the innovation. Process innovations require the presence of people that take part in the process. People in the organization practically know best the existing processes and the

way they function. The programs of process innovations therefore insist upon staff participation. Innovations and specifically process innovation have big impact on society.

### **Statement of the problem**

The tea subsector in Kenya is one of the main drivers of the economic growth. It contributes to about 2.5 percent of GDP in Kenya (RoK, 2015). Tea is also the leading foreign exchange earner in Kenya. In 2013, tea earned the country Kshs 100 billion. It accounted for 10 percent of the agriculture and forestry sector contributions to gross domestic product (RoK, 2015). It also provides a means of livelihood to about 10 percent of the population (TBK, 2008). The greatest challenge in the tea subsector however is the high labour cost which constitutes about 55 percent of total cost of production out of which 75 percent relates to the manual harvesting of the crop (van de Wal, 2008). RoK (2015) shows that Kenyan tea prices declined by 23% between 2011 and 2014. The high labour cost coupled with declining tea prices as observed by Ongong'a and Ochieng (2013) depicts declining profitability trend and spells doom to the livelihoods that depend on the subsector. The tea subsector however, has identified innovation as an intervention of taming the declining profitability. This is through adoption of mechanical tea harvesting technology (van de Wal, 2008). The technology which is largely a process innovation is relatively labour efficient. A comparative analysis shows that mechanical tea harvesting technology is approximately 50 percent cheaper compared to the alternative manual tea harvesting (Maina & Kaluli, 2013). The uptake of this technology however, is surprisingly low and stands at 32 percent of the total crop harvested in tea plantation segment (Misoj & Wario, 2014).

Extant literature shows that management decisions in organizations are actually a reflection of stakeholders' interest which at times conflict (Freeman, 2004). The decision to adopt a particular innovation therefore may vary between stakeholders because individual stakeholders may disagree on the costs and benefits involved. This study therefore focused on an important stakeholder group which is the employees and sought to establish the influence of employee pressure on innovation as perceived by managers of the organization in the Kenya's tea subsector and has understood in the context of adoption of mechanical tea harvesting technology.

### **Research Objectives**

To determine how perceived employee pressure influences innovation in the tea subsector in Kenya.

### **Research Hypothesis**

H<sub>0</sub>: Perceived employees' pressure do not influence innovation in the tea subsector in Kenya.

## **LITERATURE REVIEW**

### **Theoretical review**

The independent variable of perceived employee pressure was anchored on the attribution theory as the basis of understanding management perception, the stakeholder theory as the theory that identifies employee as a stakeholder group and change management theory as the premise for employee pressure.

### **Attribution theory**

The attribution theory is the basis of perception and explains that people interpret behaviour in terms of its causes and that these interpretations play an important role in determining reactions to the behaviour. It further points out that antecedents of attributions are prior information, the individual set

of beliefs and motivation (Kelley & Michela, 1980). The attribution is affected by information about the consequences of the action as these are compared with the consequences of other actions. Secondly, the attribution is affected by the perceiver's beliefs about what others would do in the same situation. Thirdly, attribution has to do with motivation. If the action affects the perceiver's welfare, there is a greater likelihood a disposition will be inferred from it. This occurs because the impact on the perceiver's welfare becomes a focal effect to which the other effects are assimilated. The perceiver's motivation is believed to affect the processing of information about action. Child (1972) suggests that perceptions are responsible for the choices which managers make in fitting the organization and its environment. Following Child's argument, it can be deduced that the way management perceive stakeholder pressure of owners therefore can determine the choices of management with regard to innovation.

### **Stakeholder Theory**

Stakeholder theory can be understood to be a model that seeks to describe what a corporation is, a framework for examining linkages between practice of stakeholder management practice and performance and stakeholders as persons or groups with legitimate interests which are of intricate value (Donaldson & Preston, 1995). Stakeholder theory therefore views a corporation as an organizational entity through which numerous and diverse participants accomplish multiple and not entirely congruent purposes. Since the conflicting interests have to be managed, it follows therefore that the key attribute of stakeholder management as envisaged in stakeholder theory is the attention to legitimate interests of appropriate stakeholders in decision making.

The study seeks to borrow from Freeman (1984) generic stakeholder groups model and as applied by Agle, Mitchell and Sonnenfeld (1999) i.e. shareholders, employees, customers, community and government bodies as groups who have interests in the firm and that the interests may conflict in the process of adoption of technology in the tea subsector in Kenya thus affecting the uptake of the technology. The basis of stakeholder group identification and prioritization is the stakeholder core attributes of power, urgency and legitimacy as posited by Mitchell, Agle and Wood (1997). Mitchell *et al* (1997) defines power as the stakeholder's ability to influence the firm's behaviour whether or not it has a legitimate claim, whereas legitimacy of a claim on a firm is based upon contract, exchange, legal title, legal right, moral right, at risk status or moral interest in the harms and benefits generated by company actions. The attribute of urgency on the other hand is the degree to which a stakeholder's claim calls for immediate action.

### **Change Management Theory**

Human beings have a set of needs that must be satisfied. If change threatens these needs, cooperation in the change process will not be expected. Innovation and specifically adoption of a new technology is a change process and Kotter's change management model thus find relevance and forms the theoretical basis of this study. Kotter's fifth step of change management calls for removing obstacles and empowering people to move forward. Structurally, this is a matter of identifying rules, roles, procedures and patterns that block progress of change and then working to realign them (Bolman & Deal, 2008). The perspective of resistance to change is overly anthropocentric (Langstrand & Elg, 2012). Robbins and Judge as cited in Alasadi and Askary (2014) posit that individual sources of resistance reside in basic

human characteristics such as perceptions, personalities and needs.

When change recipients therefore perceive that the proposed change is threatening the needs in their hierarchy of needs, it evokes fear and these results in resistance of the change. Rosenberg and Mosga (2011) list attitude toward change, fear of the unknown, cognition, fear of failure, perceived loss of security and status as some of human actors that can lead to resistance to change. Jacobs *et al*. (2013) posits that shared expectations between organization and its employees can successfully influence and sometimes even orient organizations.

### **Independent variable of perceived employee pressure**

According to Freeman (1984) stakeholders are any group or individual who can affect or is affected by the achievement of the firm's objectives. They may be either primary i.e. those that have a direct impact on the firm or secondary i.e. those that are not directly involved with the firm but may indirectly influence the firm via primary stakeholders. Stakeholders have also been categorized as either internal stakeholders i.e. those who are actively involved in implementation of a technology and external stakeholders i.e. those who are affected by the technology (Mathur *et al*, 2008). Internal stakeholders therefore include employees, managers, owners, and shareholders whereas external stakeholders include community, consumer groups and regulators/government (Hyatt, 2011).

A key issue facing stakeholder management is the identification of which stakeholders are most important. Mitchell *et al*. (1997) argue that salient stakeholders are those that possess power i.e. the ability of one entity to influence another, legitimacy i.e. socially accepted and expected

behaviour and urgency i.e. the degree to which an issue is regarded as important or time sensitive. It is important to carry out stakeholder analysis especially in technology development as there is a variance in interests and perspectives among stakeholders. Earlier work by Dill (1975) and Freeman and Reed (1983) looked at the ability of stakeholders to influence the organization in terms of the nature of their claims and source of their power. Mitchell *et al.* (1997) later identified urgency, power, and legitimacy as factors that determine how management prioritizes various stakeholders.

Ayuso *et al.* (2011) observe that attention of most literature on innovation and its management is given to human resource management (HRM) issues, such as recruitment and selection, training and development, feedback, reward and recognition of employees. A firm's ability to produce new products and services is inextricably linked to how it organizes the engagement with its main internal stakeholder; the employee. Zakić *et al.* (2008) argue that employees as internal stakeholders are the implementers of the innovation. Russo and Perrini (2010) suggest that cultivation of close relationships with workers and the social or business environment makes it possible to establish expectations in social relationships. Since employees play an integral role in shaping work practices in firms they also look for signals that management listen to their concerns.

Subramaniam and Youndt (2005) studied 93 companies in various industries and found that human capital influence incremental and radical innovative capabilities. Human capital itself was negatively associated with radical innovative capability. This finding is logical given that organizational changes imply certain risks. Technological changes may mean staff reduction is

inevitable. Quite often, automation of work causes redundancies. In such conditions, the reaction of employees is resistance. For example, Chapman (2002) observed that the striking knitters in the Luddite movement in the nineteenth century in Nottingham took to rioting and breaking the new more efficient machines located in factories because they feared that the new machines would destroy their livelihoods.

Operationalization of the variable was made possible by measurement of perception of the pressure of the stakeholder group using a likert scale with items that sought to capture power, legitimacy and urgency as proposed by Mitchell *et al.* (1997).

#### **Dependent Variable of Innovation**

Rodgers (2003) defines innovation as the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. Hoffmann (2005) considers it as not only new products and equipment but also new methods and ideas. OECD (2005) also defines innovation as the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. In both cases innovation is viewed as a process and an outcome.

Two major aspects of innovation can therefore be distinguished in general. First, innovation as a process that encourages change otherwise referred to as process innovation and secondly innovation as an event, object, or a discrete product characterized by novelty otherwise referred to as product innovation (Cooper, 1998; Gopalakrishnan &

Damanpour, 1997). Lambooj and Hummel (2013) points out that adoption of an innovation is experienced when an actor start to use or implement an innovation, a view shared by Heunks (1998) who described innovation as the successful technical and economic implementation of an idea. The goal of innovation therefore is value addition and having positive impact on the operation and development of organizations and may include only the changes that have favorable consequences for organizations (Kotsemir & Abroskin, 2013).

Empirical studies demonstrate that innovative firms show higher profits, higher market value, better credit ratings, higher market share, and higher probabilities of survival in the market (Foss, Laursen & Pedersen, 2011). The ultimate reason for innovation in an organization therefore is to make profit. The contribution of new technology to economic growth can only be realized when and if the new technology is widely diffused and used. Diffusion itself results from a series of individual decisions to begin using the new technology, decisions which are often the result of a comparison of the uncertain benefits of the new invention with the uncertain costs of adopting. Rodgers (2003) argued that all firms or individuals who get exposed to technology must make a decision about whether to adopt or reject. This can be one instantaneously or through a process.

Adoption of technology can therefore be seen as the cumulative or aggregate result of a series of individual calculations that weigh the incremental benefits of adopting a new technology. This study looked at process innovation in the tea subsector in Kenya in the context of adoption of mechanical tea harvesting technology which is distinct from the manual harvesting of tea which involves the removal of the tender, growing shoots from the surface of the tea bush.

## **RESEARCH METHODOLOGY**

### **Research design**

The design applied in this study was diagnostic survey design. It was deemed the most appropriate because it is concerned with associations or relationships between variables. It seeks to minimize bias, utilize largely a structured instrument and apply a preplanned design for data analysis. Also, the study sought to obtain information that describes existing phenomena by asking individuals questions about their perceptions as well as explaining the status of two or more variables at a given point.

### **Target population**

Population refers to the entire group of people or things of interest that the researcher wishes to investigate (Kothari & Garg, 2014; Sekaran, 2010; Mugenda & Mugenda, 2003). The target population therefore was all plantation tea estates in Kenya because of their potential to adopt mechanical tea harvesting technology. The target respondents were therefore 55 managers in charge of the 55 plantation tea estates. The choice of managers as respondents was mainly due to their decision making and implementation roles.

### **Census enquiry**

Owing to the small nature of the population i.e. the 55 plantation estates, the study adopted the census enquiry approach following Kothari and Garg (2014) who suggested that if the target population is not so large, census survey may provide better results than sample surveys. Furthermore, it is assumed that in such inquiry, no element of chance is left and highest level of accuracy is obtained. The use of census approach thus eliminates the fears of not achieving external validity that is normally associated with sampling since the entire population is used.

### **Data collection instruments**

Creswell (1998) defines data collection as a means by which information is obtained from the selected subjects of an investigation. Kothari and Garg (2014) states that in survey designs, the appropriate data collection instruments may be observation, interview or questionnaires. The questionnaires were therefore used and they consisted of structured and open ended questions. The significance of inserting open ended question on the questionnaire as suggested by Kothari and Garg (2014) was that it provided a complete picture of respondent's feelings and attitude which is critical for this particular study.

### **Operationalization of variables**

For the purpose of capturing the dependent variable of innovation, this study built on the construct for measuring process innovation on the basis of criterion which was conceptualized and used in previous empirical studies of innovation such as Zerenner (2008) and Gammal, Salah and Elrayyes (2011) that used sales volume of the new product. This however had a slight modification to suit the tea industry and nature of innovation as captured by Misoi *et al.* (2015). This study measured aspects of adoption by computing the percentage of total production volume of tea harvested using mechanical harvesting technology. Additional measures for the dependent variable were the proportion of the total production area that had been put under mechanical tea harvesting and the proportion of the overall budget that is related to research and development in mechanical tea harvesting technology. The purpose of these metrics is that they could indicate how successful the uptake of the innovation is. Innovation was then collapsed into a binary variable of adoption to aid in inferential analysis. This was possible following Rogers (2003) definition of adoption which is the

first or minimal level of behavioural utilization. The adopters of MTH (technology) were assigned a dummy variable of 1 whereas the non adopters were assigned a dummy variable of 0.

### **Data processing and analysis**

All qualitative responses were analyzed using content analysis whereas descriptive and inferential statistics was used for the quantitative variables. The statistical package for social sciences (SPSS) was employed in the analysis. The quantitative data was summarized using the descriptive statistics of means and the standard deviations and secondly analyzed using correlation to establish whether there is a relationship between the dependent variable of innovation and the independent variables of perceived employee pressure and logistic regression analysis which could indicate the predictive value of the resultant model. The resultant statistic computed were checked for significance at 5% level of significance in order to test the hypothesis that perceived owners' pressure does not influence innovation in the context of adoption of MTH technology in the tea subsector in Kenya was then carried out.

## **RESEARCH FINDINGS AND DISCUSSION**

### **Response Rate**

Forty nine questionnaires were hand delivered to tea plantation estates across the Kenya tea industry. This excluded 6 estates that had been used to carry out the pilot study. 35 were successfully filled and returned giving a response rate of 71%. This was deemed adequate for the study based on Neuman (2000) and Mugenda and Mugenda (2003) who opined that response rate of above 50% is adequate for a survey study. In fact, Mugenda and Mugenda suggested that 50% response rate is adequate, 60% is good and above 70% very good for a survey study.



**Innovation**

Innovation in the study was understood in the context of process innovation and specifically on mechanical tea harvesting (MTH) technology. In this case, the level of adoption of mechanical tea harvesting was captured by computing the percentage of total production volume of tea harvested using mechanical harvesting technology. Additional measures for the dependent variable

used were the proportion of the total production area that has been put under mechanical tea harvesting and the proportion of the overall budget that is related to research and development in mechanical tea harvesting technology. The percentage mean tea area under mechanical tea harvesting as shown in Table 1 was 31.77 with some estate having zero percent whereas others having up to 100%.

**Table 1: Percent of tea area under MTH technology**

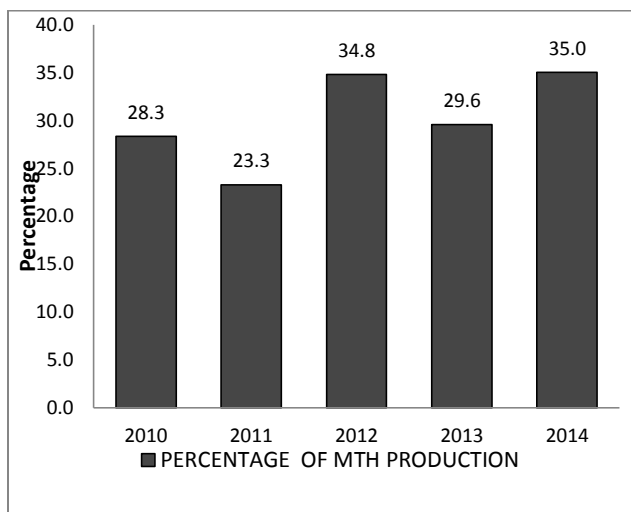
N		Mean	Std. Deviation	Minimum	Maximum
Valid	Missing				
35	0	31.77	30.87	0	100

The total volume of crop obtained in the plantation estate over the past five years i.e. for period 2010, 2011, 2012, 2013 and 2014 compared to that harvested using the MTH technology for the similar period shows that MTH production was 28.3%, 23.3%, 34.8%, 29.6% and 35% in 2010,2011,2012,2013 and 2014 respectively as indicated in Figure 1. These figures confirm that the industry has embraced the technology and the trend is going up.

**Figure 1: Trend of percentage tea Production under MTH technology**

***Transformed Variable of Innovation***

Following Rogers (2003) who defined adoption of technology as the first or minimal level of behavioural utilization, the variable of adoption of mechanical tea harvesting technology was simplified into a binary variable of those who have adopted and those who have not adopted. The adopters of the technology were assigned a dummy variable of 1 whereas the non-adopters were assigned a dummy variable of 0. The collapsing of the variable into groups of adopters and non-adopters easily lent itself to the use logistic regression model. As shown in Table 4.1, 14 plantation estates representing 40% had not embraced the MTH technology whereas 21 estates representing 60% had embraced. The transformed variable of innovation formed the basis of further analysis with the independent variables in which the logistic regression model was used.



**Table 2: Innovation (MTH technology Adoption)**

Innovation	Frequency	Valid Percent
Non Adoption of MTH = 0	14	40.0
Adoption of MTH = 1	21	60.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

**Perceived Employee Pressure**

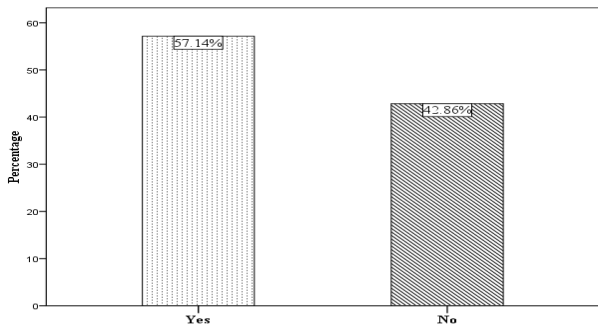
Qualitative respondents’ opinions were sought regarding whether employee pressure influenced innovation in the context of mechanical tea harvesting technology. This was summarized in dichotomous responses as indicated in Figure 2 with a majority making 57.14% responding in affirmative. Those who agreed sited perceived fear of job losses as well as employment pressure by the potential employees. Also the respondents mentioned the agitation by the union who feared for possible economic backlash that could come about due to reduced employee membership numbers given that the union depends on members’ contribution. The effect of employee pressure was also seen as very critical issue at the initial stages of adoption of the technology. The perception mirrored the views of Hunter *et al.* (2002), who observed that if unions or worker representatives have strong influence on a wide range of strategic, technological, and work issues they are more likely to provide valuable input.

**Figure 2: The Respondents opinion on influence of employee pressure on innovation**

The respondents whose response were negative on the hand, had varied reasons i.e. those on management level felt that MTH technology was being pursued by the organization for strategic reasons and employee pressure was least of the company’s concerns. The strategic decisions of the shareholders therefore carried the day. Also, the management expected hostility from employees and therefore preferred ignoring the employees with regard to MTH technology. They further argued that employees did not fully appreciate the importance of innovation and therefore did not deem it necessary to involve them.

**Management Perception of Employee Pressure on Innovation descriptive statistics**

The summary of the scores of all the items in the perceived employee variable as shown in Table 3 indicate a mean rating of 3.80 which means there a fairly high perceived employee pressure.



**Table 3: Descriptive statistics summary for perceived employee pressure**

Variable	N	Mean	Std. Deviation
Perceived Employee Pressure	35	3.80	0.716

**Innovation and Perceived Employee Pressure Correlation**

Pearson correlation was then carried out to ascertain if there is a relationship or some form of association between innovation as captured by the

binary variable of adoption and non-adoption of MTH technology and perceived employees' pressure. Table 4 indicates a negative correlation coefficient of -0.433. This however is significant at 5% level of significance as its p value is 0.009 which is less than alpha value 0.05.

**Table 4: Innovation and perceived employee pressure correlation**

		Innovation	Perceived Employee Pressure
Innovation	Pearson Correlation	1	-0.433**
	Sig. (2-tailed)		0.009
	N	35	35
Perceived Employee Pressure	Pearson Correlation	-.433**	1
	Sig. (2-tailed)	0.009	
	N	35	35

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

**Logistic regression analysis for perceived employee Pressure**

Following the confirmation of existence of a relationship between innovation and perceived employees' pressure, a further binary logistic regression was carried out to find out the predictive power of the perceived employees' pressure on innovation.

Using the logistic model of the form;

$$\ln \frac{(P(Y = 1|X))}{(P(Y = 0|X))} = \text{logit}(Y) = Z = \beta X$$

$Z_{PEP} = \beta_{PEP}X_{PEP}$  is the linear predictor where  $X_{PEP}$  is the predictor variable of perceived employee pressure and  $\beta_{PEP}$  is the respective coefficient, the regression analysis was run and the output presented in Table 5 and Table 6. The model summary in Table 6 indicates a Nagelkerke R square of 0.248. This means that 24.8% of the variation in the response variable of innovation is explained by perceived employee pressure variable.

**Table 5: Perceived employee pressure model summary**

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
40.022	0.183	0.248

The results in Table 4.6 indicate a beta coefficient of -1.463 with an obtained p value of 0.016. This is less than the alpha value 0.05. This means therefore that based on the study, the null hypothesis that perceived employee pressure influence innovation

is therefore rejected. Perceived employee pressure thus negatively but significantly influences innovation.

**Table 6: Logistic regression statistics for perceived employee pressure and innovation**

	B	S.E.	Wald	df	Sig.	Exp(B)
Perceived Employee Pressure	-1.463	0.610	5.753	1	0.016	0.232
Constant	6.079	2.436	6.227	1	0.013	436.640

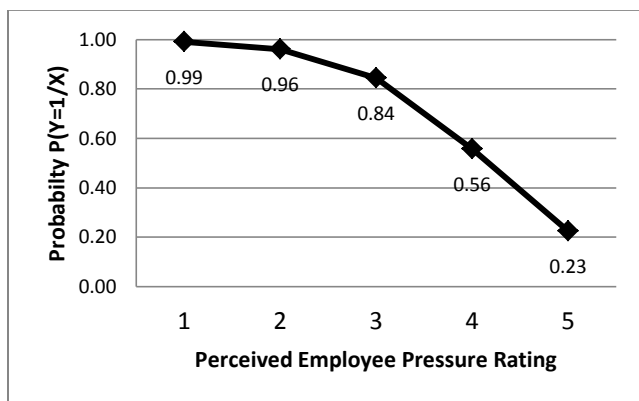
The fitted logistic model is;

$$\ln \frac{P(Y=1|X)}{P(Y=0|X)} = \text{logit}(Y) = Z = 6.079 - 1.463X_{PEP}$$

The fitted model was therefore used to compute probabilities of adoption of MTH technology given the different levels of perceived employee pressure. Figure 3 which is a graphical presentation of the fitted model depicts a negative slope which indicates the negative relationship between perceived employee pressure and innovation just as indicated by the beta value of -1.403. The graph shows estimated probabilities that a firm will adopt MTH technology given various perceived employee pressure rating. For example, for a low employee pressure perception of 1, the probability of a firm adopting MTH technology is 0.99 whereas for a high employee pressure perception of 5, the estimated probability of adoption of MTH technology is 0.23.

**Figure 3: Probabilities of adoption of MTH technology innovation given levels of perceived employees' pressure**

The findings therefore indicate that perceived employee pressure negatively influences innovation in the tea subsector in Kenya. This result are comparable to those of Subramaniam and Youndt (2005) who posited that human capital is negatively associated with radical innovative capacity of a firm. Also, the finding tend to follow Wu et al(2008) who observed that human capital has a mediating effect on innovation. The findings however are in dissonance with that of Zerenner (2008) who established that employee capital had significantly positive relationships with innovation. The likely explanation for this dissonance is the fact that employees view the process innovation as threatening their jobs and will resist such a technology. The explanation compares with the destructive behaviour of striking knitters in Nottingham as observed by Chapman (2002) while protesting the introduction of new machines.



**SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **Summary of the findings**

The study sought to establish the influence of employees' pressure on innovation in the tea subsector in Kenya. The results indicate that there is a negative correlation between employees' pressure and innovation with Pearson  $r$  of -0.433 with a  $p$  value is 0.009. The correlation is thus significant at 5% level of significance. The T test of equality of means indicates that there is a significant difference between the non-adopters and adopters of MTH technology innovation as far as perceived employees' pressure. The  $p$  value of 0.000 is which less than the critical alpha of 0.05 is. This means that there is a relationship between employees' pressure and innovation in the context of MTH technology in the tea subsector. The results from logistic regression depict a negative significant relationship between perceived owners pressure and innovation. The model had a goodness of fit of 24.8% since the Nagelkerke R square was 0.248 with a negative beta coefficient of -1.463 and a  $p$  value of 0.016. The  $p$  value was lower than critical alpha of 0.05. From the fitted model, the estimated probability of a firm in the tea subsector adopting MTH technology innovation given a perceived employees' pressure low rating of 1 is 0.990 whereas the estimated probability of a firm in the tea subsector adopting MTH technology innovation given a perceived employees' pressure high rating of 5 is 0.225. The findings therefore are that perceived employees' pressure therefore negatively influence innovation in the tea subsector in Kenya.

### **Conclusion**

The expectation of perceived employee pressure variable based on the literature was a negative correlation with innovation. This expectation was based on the arguments that the fear of the job losses associated with the technology would create resistance to the

change and drive the firms not to pursue the MTH technology. The findings which showed a negative and significance influence of the variable was also in line with the expectations. The study suggests that the employees' views are largely incorporated in strategic decisions especially regarding innovation in the tea subsector in Kenya.

### **Recommendation**

The study sought to establish the influence of perceived employee pressure on innovation in the tea sub sector in Kenya. Arising therefore from the study findings, it is recommended that a lot of consideration must be given to employees as regards process innovation. The study recommends that since employees are a major constituent of the overall organization, obtaining their support can be of great benefit to the organization. The tea subs sector players should therefore tap into this important resource so as to obtain sustainable innovation.

### **Suggestions for further research**

- The study sought to establish the influence of perceived employee pressure on innovation in the tea subsector in Kenya. The study looked at perception of the stakeholder pressure as perceived by estate managers thus looking at the perception from the lenses of the management. The study could therefore be further corroborated by research that focuses on the perspectives of the employees themselves.
- The study also limited itself to innovation in the context of process innovation and specifically mechanical tea harvesting technology yet innovation comes in various forms. Further research can therefore be pursued on how employees' pressure affects other forms of innovation in the tea subsector.

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