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The Role of Kenya's Cluster SMEs in Product Innovativeness

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Abstract: *Little is known about the effect that clustering has on product innovativeness among manufacturing SMEs in developing countries such as Kenya. Applying logistic regression, the results revealed that suppliers' proximity, customer proximity and collaboration were positive predictors of SMEs manufacturing innovative Products. Thus maintaining close "cooperative competition" enables the SMEs in clusters acquire new product knowledge, production technology, and market information from suppliers, customers and collaborating research institutions thereby developing novel and unique products. There is need to invest in product development platforms pivotal to developing, strengthening and enhancing cluster SMEs products innovativeness.*

Keywords: SMEs, Clusters, Product Innovativeness, Kenya

Introduction

Little is known about the effect that clustering has on product innovativeness among manufacturing SMEs in developing countries such as Kenya. In order to remain competitive, SMEs do need to continually improve and enhance their product innovativeness (Gudda, Bwisa & Kihoro, 2013c: Salavou & Avlonitis, 2008). Most of the manufacturing SMEs operate in clusters and manufacture similar products and target the same market, thus their product innovativeness levels seem to be low (Gudda, Bwisa & Kihoro, 2013c). This phenomenon underscores the significance of studying the effect of clustering on product innovativeness among manufacturing SMEs in Kisumu County, Kenya.

Literature

Tang and Murphy (2012) posit that knowledge of specific customer problems involves knowing what customers would prefer and such knowledge is instrumental in developing new products in which potential customers will respond positively. Thus, the study postulates that: ***H*o_1**: *Customer proximity of cluster manufacturing SMEs has an effect on product innovativeness.*

Close contacts with suppliers may help a firm acquire quality materials, good services, benefit from a supplier's, know-how thus resulting in innovativeness and achieve timely delivery (Gudda, Bwisa & Kihoro, 2013a).. The study postulates that:
Ho_2**:** *Supplier proximity of cluster manufacturing SMEs has an effect on product innovativeness.*

Waits (2000) argued that the industry cluster concept has proved to be a powerful framework for firms to organize, collaborate and work with the government to meet their needs and their interests. Within the cluster, firms tend to cooperate not only with other firms in the same cluster but with governments, universities and research institutions (Moyi & Njiraini, 2005). As Folta, Cooper and Baik *(*2006) noted, economies of clusters benefit firms in their ability to innovate by attracting alliance partners and private equity partners. Hence, the study hypothesizes that:
H*o_3:* Collaboration among cluster manufacturing SMEs has an effect on product innovativeness.

Clustering could enable easier sharing of product knowledge, production technology, production process, and market information. Such knowledge spillover to a great extent occurs either voluntarily or involuntarily when carrying out knowledge activities. Knowledge spillover would enable cluster SMEs introduce innovative products at a faster rate than firms operating outside a cluster (Bell, 2005). Hence, the study hypothesizes that:
H*o_4: Knowledge spill over among cluster manufacturing SMEs has an effect on product innovativeness.*

Methods

Using a cross-sectional survey design and specific SMEs as the units of analysis, a sample 196 SMEs was obtained based on Krejcie and Morgan's (1970) table. Hierarchical logistic regression analyses were applied to test the hypothesized relationships. The predictors were entered in three blocks. The first block was the main effect variables: Supplier proximity, customer proximity, collaboration and knowledge spillover. The second block was the moderator variables. EO. The third block consisted of the interaction terms: Cusprox *EO, Supprox *EO, Knospill*EO and Collabo*EO.

Results

Table 1: Results of Moderated Hierarchical Regression Analysis: Direct and Moderating Effects of EO on the relationship between Clustering and Product Innovativeness

Predictors	M0del 1	Model 2	Model 3
Clustering			
Suppliers' proximity	0.362***	0.360***	-0.364
Customers' proximity	0.206**	0.200**	0.716
Collaboration	0.131**	0.082	0.455
Knowledge spillover	-0.081	-0.083	-0.909
Moderator			
EO		0.073	0-.079
Interaction terms			
Supplierpro*EO			0.017
Custpro*EO			-0.012
Collaboc *EO			-0.009
KnospillOve*EO			0.018
Constantt	-12.447	-14.263	-6.423
Test			
Overall model evaluation			
-2 Log likelihood	116.673	113.931	109.135a
Score test	58.001	60.742	65.538
Goodness-of-fit test			
Hosmer- Lemeshow	8.054	6.523	5.598

Key: *** $p < .001$; ** $p < .05$ df =1

The result of model 1 shows three cluster variables had significant positive coefficients: suppliers' proximity (β=.362, $p < .001$) customers' proximity (β=.206, $p < .05$) and collaboration (β=.131, $p < .05$), confirming Ho_1, Ho_2, Ho_3.Nonetheless, knowledge spillover (β=-.081, $p > .05$), contradicts Ho_4.

In model 2 suppliers' proximity (β=.360, $p < .001$) and customers' proximity (β=.200, $p < .05$) positively predict the probability of manufacturing highly innovative products. Even though collaboration (β=.131, $p > .05$) and EO (β=.073, $p > .05$) had positive coefficients, their prediction of the probability of manufacturing highly innovative products were insignificant. However, knowledge spillover (β=-.083, $p > .05$), had an insignificant negative coefficient.

Model 3 reduced the predictive power of all cluster variables as well as those of all the interaction terms. Suppliers' proximity (β=-.364, $p > .05$) knowledge spillover (β=-.909, $p > .05$) and EO (β=-.079, $p > .05$) were negative predictors, while customers' proximity (β=.716, $p > .05$) and collaboration (β=.455, $p > .05$) were insignificant though positive predictors of the probability of the SMEs manufacturing highly innovative products.

Even though suppliers' proximity*EO (β=.017, $p > .05$) and knowledge spillover*EO (β=.018, $p > .05$) had positive coefficients, their prediction of the probability of the SMEs manufacturing highly innovative products were insignificant. However, customers' proximity*EO (β=-.012, $p > .05$) and collaboration *EO (β=-.009, $p > .05$) had insignificant negative coefficients, meaning they do reduce the probability of the SMEs manufacturing highly innovative products.

Discussion

This study has shown that, suppliers' proximity has enabled the cluster SMEs develop valuable and unique ties critical in manufacturing innovative products. The researcher concurs that good relationships with suppliers could provide SMEs platforms to exchange information, encourage inter-firm collaboration, and other joint activities that lead to development of novel products.

It is evident that customers primarily drive product innovativeness. The result that SMEs collaborates concurs with the empirical results that it is necessary for firms to collaborate, and work with R&D institutions and universities to enhance product innovativeness.

The study has established that SMEs in Kisumu do constantly scan the environment in their endeavour to manufacture innovative products. Through scanning the operational environment; the SMEs would be able to enhance their creativity and capability to develop novel and unique products.

Conclusions and policy implication

This research makes the following contributions to the theory on SME clustering and product innovativeness. It found that suppliers' proximity, customers' proximity and collaboration have positive effects on the likelihood of the SMEs manufacturing highly innovative products. Nonetheless, knowledge spillover has no effect independently; EO has a significant effect, but not as a moderator of the relationship between clustering and product innovativeness. There is need for the government to invest in research institutions/universities product development platforms as they are pivotal to developing, strengthening and enhancing cluster SMEs products innovativeness

Future studies should be conducted across multiple industries on knowledge spillover and absorptive capacity that are critical in an SMEs ability to translate information into innovative products.

References

Donahue, R., Joseph, P., & McDearman, B. (2018). Rethinking Cluster Initiatives. Metropolitan Woeking Papoer: Brooking.

Gudda, P., Bwisa, H. &Kihoro, J (2013a). "Effect of Supplier and Customer Collaboration on Product Innovativeness: A Focus on SMEs in Kenya": *International Journal of Learning & Development).*ISBN 2164-4063. (October)..Vol 3, No.5 pp. 130-136.

Gudda, P., Bwisa, H. & Kihoro, J (2013b)."Effect of Clustering, Knowledge Spillover and Product Innovativeness Among Small and Medium Enterprises (SMEs) in Kisumu County, Kenya."(September, 2013). Paper presented at The Mount Kenya University Conference, 28th –30th August, Safari Park Hotel, Nairobi. pp 26 - 33

Gudda, P., Bwisa, H. &Kihoro, J *(*2013c)."Effect of Clustering and Collaboration on Product Innovativeness: The Case of Manufacturing SMEs in Kenya": *International Journal of Academic Research in Business and Social Sciences (IJARBSS).*ISBN 2222-6990. (July) .Vol 3, No.7 pp. 42-55.

Salavou, H., &Avlonitis, G. (2008). Product innovativeness and performance: a focus on SMEs. *Management Decision*, *46*(7), 969-985.