OPPORTUNITY RECOGNITION AND PERFORMANCE OF VALUE-SYSTEM ACTORS IN THE LEATHER INDUSTRY IN KENYA

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Abstract

The importance of entrepreneurial orientation traits in determining performance of businesses has been empirically established in SME's but little studied in Africa. With the growth of the knowledge economy, factor-based industries have also received less research attention. Adopting an industry ecosystem perspective, this research involved exploratory and diagnostic analysis of the relationship between opportunity recognition and performance of value-system actor businesses in Kenya's leather industry. Mixed sampling was carried out involving a census of members of an industry association in the environs of Nairobi and snowballing of other industry roles in a cross-sectional survey of sixty-eight Kenya leather industry actors. The sample was representative of leather industry ecosystem value-system roles including tanners as primary processors, manufacturers as secondary processors, primary and secondary delivery agents, networking associations, research institutions and the regulatory agent. Fifty-two responses were found to be valid for analysis achieving a 76% response rate. Factor analysis showed opportunity recognition was a unidimensional construct comprising three indicators while performance comprised two dimensions dependent on the wording of measurement items. Regression analysis and hypothesis testing showed opportunity recognition was a significant determinant of performance of value-system actors. Opportunity recognition had a strong positive relationship with performance of value-system actors (r=0.584, p<0.05) and could determine 58.4% of performance (β=0.584, t-statistic 5.090, p-value 0.000) in Kenya's leather industry. The study concludes that enhancement of opportunity recognition of value-system actors determines their performance. It recommends studies and policies for the enhancement of opportunity recognition as an entrepreneurial disposition amongst industry-ecosystem actors for improvement of performance and realization of economic benefits of entrepreneurship the face of globalized competition in traditional industries.

Key words: *Opportunity recognition, entrepreneurial orientation, value-system actors, leather industry, performance, entrepreneurial ecosystem.*

1.1 Background of the Study

The potential of Africa's manufacturing sector in a globalized economy is unrealized and plagued with lack of competitiveness and poor performance (Dinh & Clarke, 2012). Dinh and Clarke

(2012) observe that contribution of manufacturing in African countries' GDP (and exports) is still very low at 13% between 2005 and 2009 compared to other regions in Africa and the world. Kenya's domestic production of finished leather products such as footwear has been on the decline due to import of secondhand footwear and other cheap non-leather substitutes (Hansen, Moon & Mogollon, 2015). Most of the leather-goods manufacturers are in Kenya the vibrant Micro and Small Enterprises (MSE's) clustered around Kariokor market (Mwinyihija, 2015; Hansen *et al.*, 2015). Leather sub-sector of manufacturing in Kenya is expected to increase in value to USD $94 million through development of industrial clusters (MOIT&C, 2016). Given the domestic and global market opportunity, the leather industry in Kenya has much potential for growth and contribution to national socio-economic welfare.

The leather industry value-chain in Kenya comprises levels of actors including producers (livestock breeders), butchers, hides and skins traders, tanners, footwear and leather goods manufacturers. These are illustrated as the leather value-chain in Figure 1.1. Mwinyihija (2015) acknowledges the role of government in and regulation through policy intervention in determining the industry's socio-economic performance. Thus, the value-chain together with all other players with a focus on supporting the industry can be termed as a value-system (Porter, 1985).

(Adapted from Hansen, Moon and Mogollon (2015) and Mwinyihija (2015))

Figure 1.1: The Leather Industry Value-chain

Entrepreneurship is a crux in determining the competitiveness and therefore performance of firms, industries (and economies) in today's dynamic global economy (Audretsch, 2007; Acs, Szerb & Autio, 2015). Mwinyihija (2014) called for holistic interventions that promote SME development in the leather sector in COMESA countries, among them Kenya, in order to address such observed challenges. Despite the potential role of entrepreneurship in developing and enhancing the competitiveness in Kenya's leather industry, a clear focus on this entrepreneurial perspective has not received enough implementation attention in developing performance of the industry (Mwinyihija, 2015; Hansen *et al.*, 2015). The industry value-system roles were studied for their commitment to the leather as a product included tanning (primary processors), leather goods manufacturing (secondary processors), marketers (delivery agents), industry association (networking support), regulatory and research agents. Hansen *et al.* (2015) identified different value-system actors involved in Kenya's leather industry, including Kariokor Market as an important manufacturing cluster. Hides and skins was considered a product of livestock industry in agriculture rather than leather (United Nations, 2008).

1.2 Study Objective

This research was part of a broader study on the influence of entrepreneurial drive on performance of value-system actors in Kenya's leather industry. The objective of this study was to determine the influence of opportunity recognition as an entrepreneurial orientation of value-system actors on the performance of the leather industry in Kenya. The following research hypothesis was developed:

H_a: Opportunity recognition as an entrepreneurial orientation of value-system actors determines performance of the leather industry in Kenya.

This study was carried out on value-system actors associated with Nairobi-based members of the Leather Articles Entrepreneurs Association (LAEA). The value-system roles identified were from tanners, suppliers of finished leather, manufacturers of leather, to retailers of these leather goods, industry associations, government and research institutions linked to this value-chain as primary processors, secondary delivery agents, secondary processors, tertiary delivery agents, networking associations, regulators and research agents respectively.

1.3 Opportunity Recognition as an Entrepreneurial Orientation

The study focused on the opportunity recognition as a psychological trait of firm leaders as principal informants whose role is crucial in entrepreneurship and is tied to performance of firms in different studies. According to Timmons and Spinelli (2007), entrepreneurship is a way of thinking, reasoning, and acting which opportunity obsessed, holistic in approach, and shows leadership balance and purpose. Santos, Ceatano, Baron and Curral (2015) assert that business opportunity recognition is a crucial cognitive process without which there may not be entrepreneurship since it leads to the decision to exploit the same in an entrepreneurial venture.

Guo, Tang, Su and Katz (2016) definition of opportunity recognition can be paraphrased as "an individual's efforts in searching and identifying ideas with potential to be developed into a business form". Guo *et al.* (2016) further assert that opportunity recognition is a key contributor to survival, competitive advantage and superior performance of SMEs. This study adopted the definition of opportunity recognition as "perceiving favourable chances for introduction of changes in processes, product, markets or eco-systems".

1.4 Performance of Value-system Actors

In studying small firms, various scholars affirm the multi-dimensional nature of performance and have used identified financial and non-financial measures of performance as an outcome of entrepreneurship (Zahra, 1991; Zahra and Covin, 1995; Sanchez, 2012; Al-Ansari, 2014). Rauch, Wiklund, Lumpkin and Frese (2009) showed that entrepreneurial orientation correlated positively with financial and non-financial performance indicators of firms. Santos and Brito (2012) drew from stakeholder theory to develop a seven-dimension on performance as a manifestation of competitive advantage: profitability, growth, market value, customer satisfaction, employee satisfaction, environmental performance and social performance. A study by Wang, Ellinger and Wu (2013) found that entrepreneurial opportunity recognition significantly influenced individual-level innovation performance of R&D personnel in Taiwanese high technology firms. Wang *et al.* (2013) recommended extension to other industries.

1.5 Critique of Existing Literature

Various authors have discussed opportunity recognition as a personality trait of entrepreneurs and therefore central to entrepreneurship (Rauch & Frese, 2007; Jain, 2011; Kuratko, 2014). Baron (2006) describe opportunity recognition as a cognitive process (or processes) through which entrepreneurs identify or perceive unexploited means of generating economic value. Santos *et al.* (2015) assert that business opportunity recognition is a crucial cognitive process without which there may not be entrepreneurship since it leads to the decision to exploit the same in an entrepreneurial venture. Hubert as reported by Wasdani and Mathew (2014) defined opportunity recognition as the ability to perceive "the chance to meet an unsatisfied need that is potentially profitable". Acs *et al.* (2015) identify opportunity perception as an attitude (and therefore psychological) pillar of entrepreneurship. Despite their objective existence, entrepreneurial opportunities are not discovered by everyone because they require access to asymmetric information and the cognitive appreciation of its commercial value (Shane, 2000). Guo *et al.* (2016) assert that opportunity recognition is a key contributor to survival, competitive advantage and superior performance of SMEs. Further, proactive search for opportunities is a necessity for SMEs but they require exploitative actions in the form of business model innovation for appropriation of value to be realized (Guo *et al.*, 2016).

Performance measures in literature are analyzed at firm level and most studies advocate use of diverse measures that include both financial and non-financial indicators (even innovation), which may be archival, self-reported or secondary even with possible distinction between growth and profitability measures (Rauch *et al.*, 2009). Jain (2011) includes overall firm growth and behavioral outcomes to the list of performance dimensions. In discussing performance of firms, including their importance to aggregate industry and country effects in the face of globalization, De Loecker and Goldberg (2014) argue that there is need to distinguish between profitability and efficiency as performance measures.

2.0 Research Design

This research was a cross-sectional survey that collected self-reported quantitative data on opportunity recognition of value-system actors and performance of their firms in the Kenya's leather industry. The study explored and refined the entrepreneurship variables then diagnosed their relationships at industry ecosystem level (Kothari & Gaurav, 2014; Bless, Higson-Smith & Kagee, 2006). Fifty-eight members of Kenya's Leather Articles Entrepreneurs Association (LAEA) operating from Nairobi and its environs, together with the system actors they are linked with, were targeted for the study. Value-system players in different roles such as processors, delivery agents, secondary delivery agents, industry network associations, a regulators and research agents were included (Mwinyihija, 2015). Mixed sampling of sixty-eight industry actors using a sampling frame from which a census and snowballing of industry actors was carried out. The census involved fifty-eight leather manufacturers who were members of the Nairobi-based Leather Articles Entrepreneurs Association (LAEA). Additional industry role-actors such as marketing, regulatory and research agents were identified from the initial respondents. Data collected from fifty-two respondents through a persistent interviewing approach with a 76% response rate. A questionnaire with Likert-scale responses was used as an interview guide. Measurement items were adapted from the work of Santos *et al.* (2015), Baron (2006), Rauch *et al.* (2009), and the Carland Entrepreneurial Index (CEI) as applied by Amstrong and Hird (2009) for opportunity recognition, while financial and non-financial measures used by various scholars

were adopted (Santos & Barito, 2012; Ming & Yang, 2009; Al-Ansari, 2014; Stephan, Hart & Drews, 2015). The Delphi technique was applied using nine doctorate scholars in entrepreneurship face validity the measurement variables and research instrument. Questionnaires were administered to value-system enterprise leaders as key informants to collect data, using a combination of drop-and-pick plus interview methods by the researcher or an assistant (Bryman, 2012). A pilot study (n=17) was conducted in the leather goods manufacturer's Micro and Small Enterprises (MSE's) cluster located at Kariokor Market, Nairobi (Hansen *et al.,* 2015). The research instrument showed reliability with items having a Cronbach's alpha coefficient of at least 0.7 and above (Garson, 2012) as shown in Tables 2.1 and 2.2. Opportunity recognition had six indicator items with an overall reliability index of 0.772, while performance had nine indicator items with an index of 0.717.

Table 2.1: Reliability Results for Opportunity Recognition Construct during Pilot Study

Construct	**Items**	**Cronbach's Alpha if Item Deleted**	**Overall Cronbach's Alpha**	**Comment**
Opportunity Recognition	Alertness to Opportunities	0.772	0.772	Reliable
	Opportunity Knowledge	0.763		
	Opportunity Discovery	0.726		
	Tendency to Improve	0.719		
	Knowledge of Opportunities for Success in Industry	0.789		
	Knowledge of Industry	0.689		

Overall Cronbach's alpha for items of the opportunity recognition construct on the main study was 0.802 for all six items showing that the instrument continued to be reliable.

Table 2.2: Reliability Results for Performance Construct during Pilot Study

Construct	Items	Cronbach's Alpha if Item Deleted	Overall Cronbach's Alpha	Comment
Performance	Change in Net Profit	0.604	0.717	Reliable
	Change in Sales Turn-over	0.697		
	Change in Market Share	0.617		
	Change in Production Quantities	0.611		
	Change in Productivity	0.656		
	Change in Product Variety	0.619		
	Change in Operating Expenses	0.851		
	Change in Product Defects	0.764		
	Change in Customer Complaints	0.645		

Overall Cronbach's alpha for the nine items of the performance construct was 0.807 in the main study, showing that the instrument continued to be reliable.

3.0 Research Findings

The majority 55.8% of the respondents' businesses had less than ten employees and therefore could be classified as micro-enterprises. The Kenyan Micro and Small Enterprises Act of 2012 (RoK, 2012) identifies businesses with micro-enterprises as those employing less than ten people; small enterprises as those with employing between ten and 50 people.

3.1 Demographic Statistics

3.1.1 Venture Role in Industry

Majority 65.3% of the firms studied were in processing, 19.2 % were in delivery, 5.8% were producers and 3.8% were industry networking association, 1.9% were regulators and 3.8% in research support. Venture role in the industry is an indication of the businesses' value-system role and results are presented in Table 3.1.

Table 3.1: Distribution of Respondents across Value-system Roles

Respondent Value-system Role	Number of Respondents	Percent	Participants
Producer	3	5.8%	Tanners in Ruai and Sagana
Delivery Agents	10	19.2%	MSE's in Nairobi and Thika being suppliers of leather to manufacturers (primary) and some retailers of shoes (secondary)
Processing	34	65.3%	Leather article manufacturers in Nairobi CBD, Ngara and Thika
Industry Networking Support / Association	2	3.8%	LAEA officials and Cobblers Association
Policy and Regulatory Support	1	1.9%	KLDC
Research Support	2	3.8%	KIRDI, TPCSI

3.2 Descriptive Statistics for the Study Variables

3.2.1 Descriptive Statistics for Opportunity Recognition

The Opportunity Recognition scale consisted of four items. Each item was rated on a five point Likert type scale ranging from 1 for "Strongly Disagree" to 5 denoting "Strongly agree". Average scale ratings ranged from 4.00 to 4.37. This indicated that the respondents believed that they exhibited high levels of Opportunity Recognition. The highest mean rating was 4.37 for the statement "Knowledge of Industry" (SD= .687, n=52). The statement with the lowest mean rating

of 4.00 was "Opportunity Knowledge" (SD= .970, n=52). The average scale total was 4.13 (SD =0.568) which was a high rating indicating that on average, the respondents had high levels of Opportunity Recognition. Table 3.2 shows the respondents' rating of their opportunity recognition.

Table 3.2: Responses for Opportunity Recognition

Code	Description	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean	Std. Deviation
Oalertness	Alertness to Opportunities	2	10	6	50	33	4.02	.980
Oknowledge	Opportunity Knowledge	4	4	12	50	31	4.00	.970
Odiscovery	Opportunity Discovery	0	4	19	44	33	4.06	.826
Oimprovement	Tendency to Improve	0	0	12	54	35	4.23	.645
Osuccess	Knowledge of Opportunities for Success in Industry	0	2	8	67	23	4.12	.615
Oindustry	Knowledge of Industry	0	0	12	40	48	4.37	.687
Scale	**Opportunity Recognition**						**4.13**	**.568**

3.2.2 Descriptive Statistics for Performance of Value-system Actors

Measurement for the performance scale consisted of nine items. Six initial measurement scales was rated on a five point Likert type scale ranging from 1 for "Large Decrease" to 5 denoting "Large Increase". Ratings for subsequent three items – on business expenses, product defects and customer complaints – were given inverted scores ranging from 1 denoting "Large Increase" to 5 denoting "Large Decrease" on a scale of unfavourable to favaourable performance on the measured indicator. Average ratings on performance ranged from 2.19 to 4.00 as shown in Table 3.3. This indicated that the respondents reported that their firms exhibited high levels of innovation. The highest mean rating was 4.00 for the statement "Change in Productivity" (SD= 0.970, n=52). The statement with the lowest mean rating of 2.19 was "Change in Product Defects" (SD= 1.085, n=52). The average scale total was 3.47 (SD =0.647) which was a high rating indicating that on average, the respondents reported that their firms had high levels of performance. This was especially the case with increasing productivity (75% reporting a small to large increase in productivity) and least with reducing product defects (68% reported small to large decrease in defects).

Table 3.3: Responses for Performance of Value-system Actors

Code	Description	Large Decrease (%)	Small Decrease (%)	No Change (%)	Small Increase (%)	Large Increase (%)	Mean	Std. Deviation
BusPerformProfit	Change in Net Profit	6	10	10	52	23	3.77	1.096
BusPerformSales	Change in Sales Turn-over	4	15	6	52	23	3.75	1.100
BusPerformShare	Change in Market Share	4	6	10	58	23	3.90	.955
BusPerformQuantity	Change in Production Quantities	8	6	12	40	35	3.88	1.182
BusPerformProductivity	Change in Productivity	2	6	17	40	35	4.00	.970
BuPerformVariety	Change in Product Variety	2	6	15	54	23	3.90	.891
BusPerformExpenses	Change in Operating Expenses	4	15	23	35	23	3.58	1.126
BusPerformDefects	Change in Product Defects	31	37	17	13	2	2.19	1.085
BusPerformComplaints	Change in Customer Complaints	27	37	23	12	2	2.25	1.046
Scale	**Performance**						**3.47**	**.647**

3.3 Factor Analysis for the Study Variables

Factor analysis was performed on the dependent and dependent variables using Principal Component Analysis (PCA) with Promax rotation for convergent and discriminant validity. A KMO statistic threshold of 0.5 and above was considered adequate for factor analysis. Yong & Pearce, 2013). An iterative process was applied in which items that had high cross-loadings on more than one factor were progressively dropped (Garson, 2012).

3.3.1 Factor Analysis for the Opportunity Recognition Variable

Kaiser-Meyer-Olkin Measure of Sampling Adequacy met the acceptable Kaiser criterion value of for the independent opportunity recognition variable at 0.698 which was above 0.5 cut-off for factor analysis (Yong & Pearce, 2013). Bartlett's Test of Sphericity was 42.682 to 3 degrees of freedom and *p*-value less than 0.05 indicating suitability of data for structure detection (Bartlett, 1954). The data showed opportunity recognition had three items which clustered as one variable. The variable was able to explain 69.965% of the total variance in the study data whose items factor loadings ranged from 0.807 to 0.853. Out of six measures whose reliability was established, three indicator variables were extracted as uni-dimensional measures of opportunity recognition, namely

Oalertness, Odiscovery and Osuccess. Tables 3.4, 3.5, 3.6 and 3.7 present results of exploratory factor analysis on the opportunity recognition variable.

Table 3.4: KMO and Bartlett's Test for Opportunity Recognition

Statistic	Value	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.698
Bartlett's Test of Sphericity	Approx. Chi-Square	42.682
	df	3
	Sig.	.000

Table 3.5: Communalities for Opportunity Recognition

	Initial	Extraction
Alertness to Opportunities	1.000	.719
Opportunity Discovery	1.000	.728
Knowledge of Opportunities for Success in Industry	1.000	.652

Extraction Method: Principal Component Analysis.

Table 3.6: Total Variance Explained for Opportunity Recognition

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.099	69.965	69.965	2.099	69.965	69.965
2	.505	16.843	86.808			
3	.396	13.192	100.000			

Extraction Method: Principal Component Analysis.

Table 3.7: Component Matrix for Opportunity Recognition

	Component 1
Alertness to Opportunities	.848
Opportunity Discovery	.853
Knowledge of Opportunities for Success in Industry	.807

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

3.3.2 Factor Analysis for the Performance Variable

Kaiser-Meyer-Olkin Measure of Sampling Adequacy for the dependent performance variable was 0.796 which was above 0.6 (Kaiser, 1974) threshold, indicating the sample was adequate for factor analysis. The Chi-Square value for Bartlett's Test of Sphericity was 325.913 with 36 degrees of freedom and *p*-value less than 0.05 indicating suitability of data for structure detection (Bartlett, 1954). Performance discriminated into two sub-scales which were able to explain a total of 71.853% of the variance in the study data. One component from positively stated outcome measures had six items (improvement in profit, sales, markets, quantity, productivity, and variety) whose factor loadings ranged from 0.620 to 0.950.

The second component has three items with negative outcomes (business expenses, defects and customer complaints) as proxies of positive performance measures whose loadings ranged from 0.632 to 0.894. Results of factor analysis are presented in Tables 3.8, 3.9, 3.10 and 3.11.

Table 3.8: KMO and Bartlett's Test for Performance

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.796
Bartlett's Test of Sphericity	Approx. Chi-Square	325.913
	df	36
	Sig.	.000

Table 3.9: Communalities for Performance

	Initial	Extraction
Change in Net Profit	1.000	.782
Change in Sales Turn-over	1.000	.905
Change in Market Share	1.000	.685
Change in Production Quantities	1.000	.875
Change in Productivity	1.000	.665
Change in Product Variety	1.000	.396
Change in Operating Expenses	1.000	.488
Change in Product Defects	1.000	.849
Change in Customer Complaints	1.000	.822

Extraction Method: Principal Component Analysis.

Table 3.10: Total Variance Explained for Performance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.499	49.991	49.991	4.499	49.991	49.991	4.487
2	1.968	21.862	71.853	1.968	21.862	71.853	2.036
3	.798	8.867	80.720				
4	.557	6.194	86.913				
5	.434	4.819	91.732				
6	.344	3.820	95.552				
7	.205	2.279	97.831				
8	.133	1.475	99.307				
9	.062	.693	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 3.11: Component Matrix for Performance

	Component	
	1	2
Change in Net Profit	.882	
Change in Sales Turn-over	.950	
Change in Market Share	.826	
Change in Production Quantities	.932	
Change in Productivity	.813	
Change in Product Variety	.620	
Change in Operating Expenses		.632
Change in Product Defects		.894
Change in Customer Complaints		.859

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

3.4 Hypothesis Testing

Tests of statistical assumptions of normality, multi-collinearity and heteroscedasticity showed the data was suitable for linear regression and statistical modeling. Consequently the variables were utilized for hypothesis testing. Results of hypothesis testing are shown on Table 3.12.

The following null hypothesis was formulated:

H_0: Opportunity recognition as an entrepreneurial orientation of value-system actors *does not* determine performance of the leather industry in Kenya.

H_a: Opportunity recognition as an entrepreneurial orientation of value-system actors determines performance of the leather industry in Kenya.

Opportunity recognition was regressed on performance obtaining an R-squared of 0.341, meaning that opportunity recognition was able to explain 34.1% variations in the performance of value-system actors in leather industry in Kenya while the rest are explained by the error term (F-statistic is 25.910 with a *p*-value of 0.0000).

The beta coefficient for opportunity recognition was 0.584 (t-statistic 5.090, *p*-value 0.000). This indicates that a unit increase in opportunity recognition would result in 58.4% increase in performance of value system actors in the leather industry in Kenya.

At $p<0.05$ level of significance the null hypothesis was rejected implying that opportunity recognition had a positive and significant influence on performance of value system actors in the leather industry in Kenya.

The regression equation obtained from this output was:

Performance = 1.614 + 1.078 Opportunity Recognition

Table 3.12: Relationship between Opportunity Recognition and Performance of Value-system Actors

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584[a]	.341	.328	.70987

a. Predictors: (Constant), Opportunity_recognition
b. Dependent Variable: Performance_index

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.056	1	13.056	25.910	.000[b]
	Residual	25.196	50	.504		
	Total	38.252	51			

a. Dependent Variable: Performance_index
c. Predictors: (Constant), Opportunity_recognition

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.614	.479		3.370	.001
	Opportunity_recognition	1.078	.212	.584	5.090	.000

a. Dependent Variable: Performance_index

4.0. Conclusion

On the basis of these statistics, the study concluded that there is significant positive relationship between opportunity recognition and performance of value-system actors in the leather industry in Kenya. Santos *et al.* (2015) showed that there are cognitive frameworks used by individuals to recognize business opportunities thus offering an explanation for business success. Guo *et al.* (2016) shows empirical evidence of opportunity recognition having a positive effect on SME performance with business model innovation as a mediator. The relationship is illustrated in Figure 4.1.

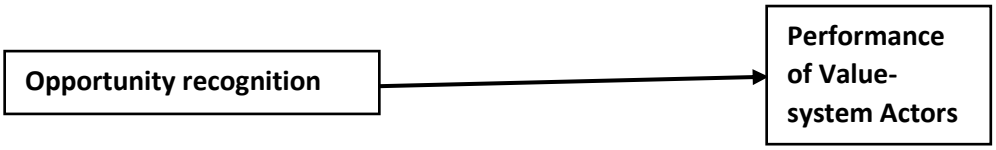

Figure 4.1: Conceptual Model Showing the Empirical Relationship between Opportunity Recognition and Performance of Value-system Actors

This study provided empirical evidence showing that and opportunity recognition as an entrepreneurial orientation is a significant determinant of performance of value-system actors in Kenya's leather industry. Opportunity recognition is established as a uni-dimensional construct comprising Alertness to Opportunities, Opportunity Discovery and Knowledge of Opportunities for Success in Industry as three indicators. This research affirms previous studies showing the significance of opportunity recognition as an individual's cognitive process leading to pursuit decisions either to launch a venture or exploit the business opportunity. Further, the uni-or multi-dimensionality of performance as a variable may be determined by the wording of questions in the research instrument.

This study asserts that practicing entrepreneurs should develop an orientation to recognizing opportunities and act on them for their ventures to be entrepreneurial and achieve superior performance. Policy makers should facilitate entrepreneurs' ability to recognize opportunities if entrepreneurship is to realize its social and economic benefits. This study affirms the significance of studies in opportunity recognition as a cognitive attribute of entrepreneurship. The study makes a contribution towards understanding and development of entrepreneurial ecosystems using leather industry in Kenya. Further cross-sectional studies could be undertaken in diverse industries to test findings and conclusions made here about Kenya's leather industry.

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