

Corporate Entrepreneurship and Innovation

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Abstract

There is an increasing interest of research on the area of corporate entrepreneurship recently. But much focus is given to specific areas, like the definitional issues in the field of corporate entrepreneurship (Sharma P, Chrisman JJ 1999), developing and refining an instrument (Kuratko et al, 1990; Hornsby et al, 2002; Morris et al 2001; Tasika, M. Davis 2006; Adonisi 2003), linking corporate entrepreneurship to strategy, structure, and process (Lumpkin and Dess 1999) the relationship between corporate entrepreneurship and strategic management (Barringer and Bluedorn, 1999). An investigation of the internal organizational entrepreneurial climate and its relationship with innovativeness is generally scarce. Thus, by developing a model which relates corporate entrepreneurial variables with innovation, this study investigates the functional relationship between the two. Furthermore, the study tries to analyse the prevalence of corporate entrepreneurship and the level of innovation in Ethiopian leather footwear industry. Using analytical survey design in a cross sectional time, 6 leather footwear companies were selected judgmentally from Addis Ababa. The descriptive analysis showed that all the corporate entrepreneurial variables are below average on a five point likert scale measure. The level of innovation is also rated as average on a similar scale. Results of correlation matrix also indicated a positive association between the corporate entrepreneurial variables and innovation. Furthermore, Regression analysis showed that reward system as well as time availability contributed the highest for innovation than the rest of the variables and evaluation of the regression model indicated around 48 % of the variance in innovation can be explained by the model and that the model was statistically significant. The findings in this study are so important for managers and other policy makers to find out how organizational and managerial variables could be modified in order to facilitate innovation. It is recommended that other studies should try to replicate these findings on different contexts.

Key Words: Competitiveness, Corporate Entrepreneurship, Ethiopia, Innovation, leather.

I: INTRODUCTION

1.1 Background of the Study

In Ethiopia, the focus on the manufacturing sector is increasing from time to time. Under the Growth & Transformation Plan (GTP, 2010) focus areas for medium and large scale sub-industries are identified as (1) textile and garment (2) leather and leather products industry (3) sugar and sugar related industries (4) cement industry (5) metal and engineering industry (6) chemical industry (7) pharmaceutical industry and (8) Agro-processing industry.

The export earnings so far are indications as to why the above areas are prioritized. For example, 45% of manufactured exports were of leather and leather products earning close to 86.9 million US dollars, while textiles and garments earned 63.4 million US dollars and processed agriculture products raised 37.4 million US

dollars. Pharmaceutical and chemical exports took the smallest share of total export earnings with just 5.7 million US dollars (2MerKato.Com, 2009). One of the players in the country's transition from agricultural domination to industrialization is the leather industry. This is because; Ethiopia has the largest livestock production in Africa and the tenth largest in the world, with 45.5 million cattle, 26 million sheep and 21.7 million goats at current estimates. The annual potential supply of hide and skins is estimated at 4.8 million pieces of hide and 12 million pieces of skin.

The GTP plan for Ethiopia for the period 2010/2011-2014/15 aims to expand the production capacity of the leather industry in terms of both variety and quality, as substitutes for imported leather products, increase foreign exchange earnings and strengthen the technological capability of the industry. The plan expected that these objectives will be met mainly by the establishment of new investment projects, expansion of existing operations and by improving the production and productivity of the industry (GTP, 2010). Currently, Ethiopia's leather industry at the forefront of the leather sector development within the Eastern and Southern Africa region. The sector is shifting into semi-processed export products.

On the other hand, the manufacturing industry in Ethiopia, is still struggling with the same challenges that gripped it for decades. For instance Belayneh Begajo, (2013) states that Inadequate and poor quality imported raw materials and technologies, along with low level of technical skills, top the lists of the problems facing the sector. Moreover, the manufacturing industry has neither transformed itself to high tech processing nor is competitive in the international market. For example, average capacity utilization of the textile, leather, agro-processing and pharmaceutical industries in 2009/10 was at 40pc, 10pc, 60pc and 30pc, respectively. And the leather sector, in spite of the fact that the industry seems to try to produce and export leather and leather products, the industry lacks competitiveness both in the domestic and international markets, and this makes it a sluggish and non- innovative industry (Ibid).

Hence, institutional innovations should be encouraged to continue in the future so that the country could quickly depart from its inefficient past and move to a new and dynamic institutional arrangements that are more efficient, effective, sustainable, transparent and impactful. Cognisant of the many challenges the sector bears, what is most needed is an institutional marketing arrangement that will transform the manufacturing sector to a highest level of performance by addressing the challenges in an efficient and cost-effective way (Ibid).

1.2 Statement of The Problem

Corporate entrepreneurship is seen as a dependable way to develop sustainable competitive advantage in today's fiercely competitive business environment. Scholars (e.g Pinchot, 1985; Peter.F. Drucker, 1985), have indicated that innovation in an organization is one of the important strategies for long-term marketplace success, especially in large organizations.

Evidences have it that the competitiveness of Ethiopia's' manufacturing sector is one of the lowest in the world. A competitiveness report for 2011 by the world economic forum shows that Africa is by far less competitive than most developing countries in south East Asia and elsewhere. According to the report Ethiopia is even less competitive than the subcontinent majors like, Kenya, Rwanda and Tanzania. The competitiveness yardsticks among other things include technological readiness, business sophistication as well as innovation (WEF, 2011).

With abundant and available raw materials, a highly disciplined workforce and the cheap cost of doing business, Ethiopia's leather sector, including the footwear industry, enjoys a significant international comparative advantage. Despite the potential however, the actual current capacity utilization of firms in the industry is 47.6%, primarily producing men's and children's shoes (Abdulmejjed Umer, 2012). Thus, given the complex, discontinuous, hyper competitive, fast changing world around, it is imperative for Ethiopian leather manufacturers to take risks, and adopt an innovative, creative approach which requires a fundamental internal transformation which can serve as comprehensive solution for coping up with the dynamic business environment.

Studies on Ethiopian leather sector are generally scarce. And the existing ones focus on non-firm level factors, such as dynamics of internationalization of Ethiopian leather industry (Abdulsemed Umer, 2012); competitiveness of Ethiopian shoe industry (Birkinesh gonfa ,2012),value chain analysis (Bekele and Ayele,

2008) ; and those focusing on firm level dynamics say nothing about corporate entrepreneurship (e.g Admasu Shiferaw, 2007).

Elsewhere, the interest on corporate entrepreneurship both as an academic concept and research area is growing from time to timer. But much focus seems going to specific areas. For instance, the definitional issues in the field of corporate entrepreneurship (Sharma P, Chrisman JJ 1999) ,developing and refining an instrument (Kuratko et al,1990; Hornsby et al,2002;Morris et al 2001; Tasika. M.Davis 2006; Hill,2008; Adonisi 2003) linking corporate entrepreneurship to strategy, structure, and process(Lumpkin and Dess 1999) the relationship between corporate entrepreneurship and strategic management (Barringer and Bluedorn,1999) and the like.

On the other hand, an investigation of the internal organizational entrepreneurial climate and its relationship with innovativeness is generally scarce. Thus, by developing a model which relates corporate entrepreneurial variables with innovation, this study investigates the functional relationship between the two. Furthermore, the study tries to analyse the prevalence of corporate entrepreneurship and the level of innovation in Ethiopian leather footwear industry.

II: LITURATURE REVIEW

2.1 Corporate Entrepreneurship

The corporate entrepreneurship phenomenon has been explained in various terms such as intrapreneuring; corporate entrepreneurship; corporate venturing; internal corporate entrepreneurship; strategic renewal; internal entrepreneurship and venturing (Antoncic and Hisrich, 2003; Sharma and Chrisman; 1999).The term intrapreneur was first used by Gifford Pinchot in the late 1980's and refers to individuals who take hands-on responsibility for shaping innovation. He described the intrapreneur as a person who focuses on innovation and creativity and who transforms a dream or an idea into a profitable venture, by operating within the organizational environment. Antoncic & Hisrich (2003) considered the phenomenon as a spirit of entrepreneurship within the existing business.

Pinchot (1985) further described intrapreneurship as entrepreneurship inside the organisation where individuals will champion new ideas from development to complete profitable reality. On the other hand, Ireland et al. (2009) described it as a process through which individuals in an established business pursue entrepreneurial opportunities to innovate, without regard for the level and nature of currently available resources. Another description of corporate entrepreneurship is that it is the process of uncovering and developing an opportunity to create value through innovation and seizing that opportunity without regard to either resources or the location of the entrepreneur (Antoncic and Hisrich; 2001). Sharma and Chrisman describe corporate entrepreneurship as the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization, or instigate renewal or innovation within that organization (Sharma and Chrisman; 1999).

2.2 Organizational Climate for Corporate Entrepreneurship

Corporate entrepreneurship requires a certain set of internal and external variables to be present in order to make it possible for employees to be creative and innovative. It takes a relentless act of trial and error to innovate products, processes and systems. And as such involves a great deal of risk taking act. In the absence of encouraging and supportive organizational environment, such innovative behaviours might be farfetched. Hence, organizations should make sure that appropriate corporate entrepreneurial environment is in place. On a study on corporate entrepreneurship, Nayager and Van Vuuren (2005) indicate that, in order to create innovation, the business must have an internal environment or orientation that supports entrepreneurship.

Kuratko and Hodgetts (1998) suggest that to structure the business for a corporate entrepreneurial climate, businesses need to invest heavily in entrepreneurial activities that allow new ideas to flourish in an innovative environment. Hisrich, Peters, and Shepherd (2005) define an entrepreneurially fostering environment as an environment that enhances organisational members' perceptions of entrepreneurial action as both feasible and desirable. Antoncic and Zorn (2004) point out that one important organisational element that is beneficial to corporate entrepreneurship is organisational and management support for entrepreneurial activities.

Organisational support elements such as management support, work discretion, rewards, time availability and loose intra-organisational boundaries, identified by Hornsby, et al. (1993) have been seen as crucial elements impacting on corporate entrepreneurship. Similarly, Antoncic and Zorn (2004) state that organisational support refers to management encouragement, worker's discretion about their work-related decisions, designating idea champions, establishing procedures to solicit and examine employee ideas, permeability of job boundaries, training, rewards and reinforcement, and availability of time and financial resources for pursuing new ideas or projects.

2.3 Corporate entrepreneurship and innovation

The relationship of innovation and entrepreneurship is understood in all the studies in the area of entrepreneurship and much of entrepreneurial endeavour is inseparable from innovation. Schumpeter (1934) states innovation broadly as the introduction of a new product or a new product quality; the introduction of a new production; the opening-up of a new market; the use of new raw materials or sources of semi-manufactures and the creation of a new industry business such as the establishment of a monopoly situation for the breakdown of a monopoly. One of the leading authorities in the area, Peter Drucker describes innovation as the means by which organizations create value-producing resources or endows existing resources with enhanced potential for creating value. It is the effort to create purposeful, focused change in an enterprise's economic or social potential (Drucker, 1985.).

According to authors such as Pinchot and Pellman (1999) and Robbins (1997), Innovation involves finding a new and better way of doing something. Much of our modern society is based on innovations that have occurred in the past that provide us with the standard of living we enjoy today. And Innovation has always been at the centrepiece of competitiveness. The new technologies competition, time and speed are used to explain the dynamics of competition. Thus there is a large focus on the concept of innovation in organizations.

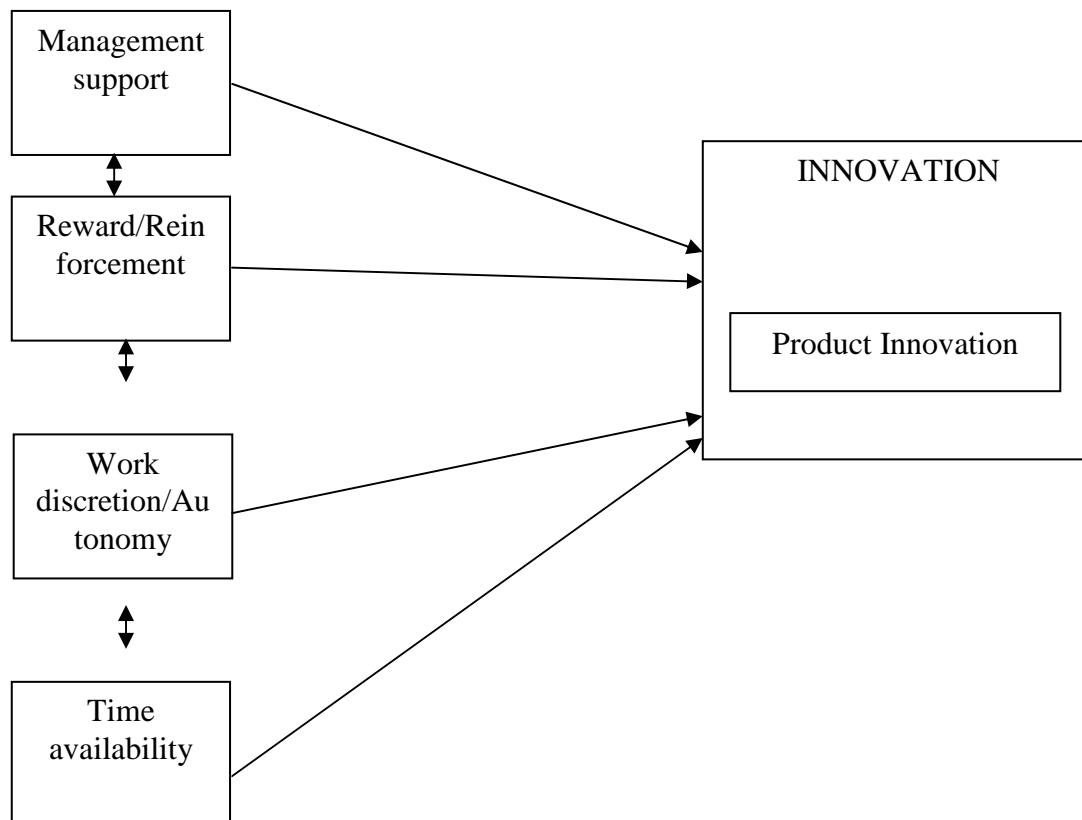
2.4 The Conceptual framework for the study

As shown in the literature review part, several internal organizational variables were identified by different authors to explain the internal ecosystem for corporate entrepreneurship. For example, Hornsby et al (1990), identified five variables namely management support, work discretion/autonomy, reward/reinforcement, time availability as well as organizational boundaries and validated the instrument in 2002 (Hornsby et al, 2002). Adonisi (2003) also reported all but one of the above factors to be reliable factors. Furthermore, Rhoads (2005) provided similar findings. Other studies are also documented using similar factors in studying corporate entrepreneurship. For instance Noor et al (2011), studies corporate entrepreneurial internal ecosystem using organizational climate, management support as well as reward and resource availability. On the other hand Tasika. M.Davis (2006), reported a validated result of Hornsby et al's(2002) CEAI and showed that with the exception of organizational boundaries, the other variables are highly reliable in forming a measure to assess internal corporate entrepreneurial environment. Hence, in this study out of the five variables in Hornsby et al (2002) CEAI, four of them namely management support, reward/reinforcement, time availability as well as work discretion are considered.

Innovation takes several forms: in products, services, production processes and management systems. Innovation in products and services is related to "Research & Development" and meeting consumers' needs. Product innovation refers to the ability of a company to create new products or to modify existing ones to meet the demands of current or future markets (Zahara & Covin, 1995). Innovation with respect to processes relates to changes in machinery and other elements not directly associated with employees and have the aim of increasing productivity and efficiency. Business innovation deals with innovation in management thinking and its primary purposes are to create new value and wealth for all stakeholders and thereby increase economic prospects. In this study product and process innovation are considered to make up the dependent variable innovation.

Based on these empirical evidences therefore, the following conceptual framework is developed for this study.

Fig.1. The conceptual Model of the Study



Source: Developed for this study, based on available literature.

The hypotheses developed for the study are:

H1: Management support has a significant positive effect on innovation.

H2: Reward/Reinforcement has a significant positive effect on innovation.

H3: Work discretion/Autonomy has a significant positive effect on innovation.

H4: Time Availability has a significant positive effect on innovation.

H5: Internal Environment for Corporate Entrepreneurship will significantly contribute to the deviation on innovation.

III: METHODS

3.1 Research Design

According to (Creswell, 2002), a research design is a plan of action that links the philosophical assumptions to the specific methods. This study follows the mixed methodology as a philosophy and survey study as the appropriate design. Many authors support that the survey research design goes along the mixed method approach (e.g Gill & Johnson 2002). According to Lancaster (2005) survey research is essentially an approach to data collection that involves collecting data from large numbers of respondents, which is a case in this study.

Lancaster (2005) also argues that the survey research design may be used to investigate any organizational issue or problem either inside or outside of the organization or both. This makes the design appropriate for this study, which focuses on the internal organizational issue of corporate entrepreneurship. With regards to time horizon, the study is a cross-sectional study. There is sufficient support for the congruence of survey design for cross-sectional data and cross-sectional studies often employ the survey strategy.

3.2 Unit of Analysis and Population

The basic purpose of this study is characterising the state of corporate entrepreneurship and innovation in Ethiopian leather footwear industry. Hence, in this study, the population is the leather footwear industry in Ethiopia and the formal medium and large footwear companies are unit of analysis.

3.3 Sampling Design

All but one company recently in the medium and large footwear category are located in Addis Ababa. Some are still government and others are private. Foreign ownership is also present. Hence, to provide participation of different categories, based on proportion, judgemental sampling is employed to select companies. Then based on the total population of lower and middle managers in the sampling frame, sample size is determined using standard formula.

Sample size determination

The actual sample size for the study is estimated to be 332 and is drawn applying the following formula provided by (Kothari 2010).

$$n = \frac{z^2 p q N}{e^2 (N-1) + z^2 p q} = 332$$

Where: N= population size (2448)

n= sample size

z = standard variant at a given confidence level (1.96)

e= acceptance error (5%)

p= sample proportion (0.5) and q=1-p (0.5).

Next, the method of proportional allocation is applied, under which the sizes of the samples from each company were kept proportional to the size of the strata (Kothari 2010).

3.4 The variables

Table 1: The independent variables

The construct	The variables	Contributing Authors
Corporate entrepreneurship	Management support	Hornsby et al (2002). Adonisi(2003), Roads(2005), Noor et al (2011), Tasika. M.Davis (2006).
	Reward/reinforcement	
	Time availability	
	Work discretion/autonomy	

Source: Developed for this study, based on available literature.

Table 2: The dependent variable

The construct	The variables	Contributing Authors
Innovation	Product Innovation	Morris (2001), Zahara and Covin(1995), Drucker(1985), Pinchot and Pellman (1999), Robbins (1997).
	Process Innovation	

Source: Developed for this study, based on available literature.

3.5 Model specification

For regression analysis independent variables include; management support, reward systems, work discretion/autonomy as well as time availability. The Dependent variable is innovation.

$$Y = \alpha + \beta_{x1} + \beta_{x2} + \beta_{x3} + \beta_{x4} + \varepsilon$$

Y= innovation (dependent variable)

ε = Error Term, Where x_1 , x_2 , x_3 , and x_4 , are independent variables.

X1= Management support

X2= Reward/reinforcement

X3= Work discretion/Autonomy

X4= Time Availability

α = Constant (the estimated value of Y when the independent variables are zero).

β_1 to β_4 refer to the partial regression coefficients for management support, Reward/Reinforcement, Work discretion/Autonomy as well as time availability respectively indicating the average change on the dependent variable (innovation) holding the other for each constant.

3.5 Method of Analysis

A descriptive data analysis with a quantitative focus was employed in the study. To assess the corporate entrepreneurial variables and the innovation intensity, the questionnaire were developed on a five point likert scale. Hence as indicated by Vichea (2005), the interval for breaking the range distances were calculated as follows:

$$\frac{(n-1)}{n} = \frac{(5-1)}{5} = \frac{4}{5} = 0.8 \text{ Hence, based on the range of prevalence is classified as:}$$

1.0-1.8 = very low prevalence, 1.9 – 2.6 = as low prevalence, 2.7 – 3.4= moderate prevalence, 3.5 – 4.2= high prevalence and 4.3 – 5.0 = very high prevalence.

Inferential statistics was used to test the model.

IV: FINDINGS AND DISCUSSION

4.1. Demographic profile of the companies and respondents

The information obtained from Ethiopian leather industries Association (ELIA) indicated that there are about fourteen leather footwear companies which are members of the Ethiopian Leather Industries Association, of which one is found outside of the capital city, thus it is excluded from the study. One of the members is also a cluster formed by several crafts leather footwear makers. A discussion with the secretary general of ELIA suggested that this cluster is formed only very recently. In addition to that regarding the nature of the cluster and its organization, it is not found to be convenient to this study. As this study considers only the mechanized middle and large manufacturing companies, the cluster is excluded. Furthermore, one of the member companies focuses on producing shoe soles than leather footwear. Thus as the study focuses on predominantly leather footwear companies, this company is also excluded from the study. Therefore only the eleven companies are found to be representatives of the industry. Therefore empirically the study uses these eleven companies for the sake of generalization. The sample contains 6 companies selected judgmentally.

As per the information obtained from ELIA, totally the mechanized manufacturing level leather footwear industry in Addis Ababa employs around 6500 workers and there are 2448 in the sample companies. Thus from 2448 employees, 332 are taken for the study using proportional random sampling technique. To secure maximum response rate, the researcher used a controlled structured questionnaire.

From the demographic analysis it is found that there is equal number of male and female respondents included in the study i.e. 50% each. There are 165, 115 and 52 respondents with ages of 18-30, 31-40 and 41-60 respectively. As far as educational qualification is concerned, 30.7 percent of the total respondents are at the less than 10+2 level of education, where as 33.9% and 28.4% percent are at the 10+2 and diploma levels respectively. Only 7 percent from the total respondents are degree holders and all of them are found at supervisory positions. Regarding work experience, 17.8 percent of the respondents possess only 6 months to 2 years experience in their companies, whereas 35.6 percent are 3 to five years experienced in their companies. 37.8 percent have 5 to 10 years work experience at their disposal. On the other hand, 8.8 percent have a luxurious experience of 10 years or more.

4.2 Descriptive analysis

The assessment of a corporate entrepreneurial environment is a prerequisite for the successful implementation of an entrepreneurial strategy, which will help in identifying internal actions to be taken in order to support and enhance corporate entrepreneurship (Hornsby et al., 2008; Morris et al., 2008). Measuring their corporate entrepreneurship levels enables businesses to evaluate the entrepreneurial status quo and appropriately apply knowledge management practices to proactively implement and maintain a dynamic corporate entrepreneurial environment (Hornsby et al., 2008).

Hence the purpose of this study was to assess the firm level environment of the leather footwear sector of Ethiopia from the perspective of corporate entrepreneurship, and relate the result with the level of innovation in the industry. To do this, after an extensive review of literature, based on the corporate entrepreneurship assessment instrument developed by Hornsby et al.(2002), this study identifies four internal variables to assess the corporate entrepreneurial environment, and based on Morris's (2001), entrepreneurial intensity index product and process innovation are investigated to see the level and prevalence of innovation.

Before using the data collected by the above instruments for analysis, the normality of the data was assessed in order to check the possibility of violation of the assumptions underlying multivariate normality (if there are any). In this study, Skewness and kurtosis of the data was investigated to assess the normality of distribution; Skewness assessment helps to know the asymmetry of the distribution whereas kurtosis measures the humpedness of the distribution in a curve (Kothari, 2010). A correlation matrix was generated to examine the potential threats of multicollinearity and singularity, and linearity was addressed by viewing boxplots and histograms for each of the variables.

Table 3: Descriptive statistics of the variables

Variable	Mean	Std.		Skewness	Kurtosis	Histogram	Q-Q Plot
		Dev.					
Reward/Reinforcement	2.5627	.29268		-.086	.091	√	√
Time Availability	2.5190	.29798		.029	-.160	√	√
Management Support	2.7667	.22391		.023	-.366	√	√
Work Discretion/Autonomy	2.4976	.27731		.212	.225	√	√
Process innovation	3.1565	.30275		.302	-.345	√	√
Product Innovation	2.8275	.22675		.296	-.295	√	√

Source: Computed Based on Survey data (2013)

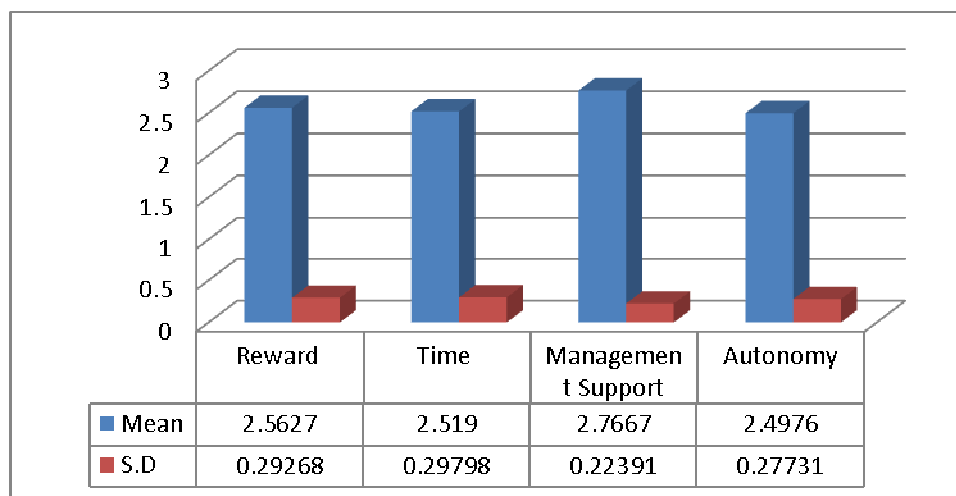
The above table shows that a skewness and kurtosis of the data distribution. Histogram also shows the absence of linearity in the data. Furthermore, there is no problem of multicollinearity on the data as shown on the correlation matrix (table 6). To be able to assess the internal consistency between the items in the research instrument, Cronbach Alpha coefficients were calculated. A Cronbach Alpha coefficient is based on the average correlation of variables within a test. The Cronbach Alpha coefficient should be equal or greater than 0.7 for an acceptable reliability (Cronbach, 1951). In this study, the cronbach alpha coefficients for all the constructs of both corporate entrepreneurial variables CEAI and Innovation measures fall above the cut off point, i.e. 0.7. Accordingly they are found to be acceptable for application in the data analysis.

4.2.1 Prevalence of Corporate Entrepreneurial Variables

One of the objectives of this study was to characterise the internal environment of Ethiopian Leather footwear industry from the perspective of corporate entrepreneurship. This is done to understand whether the industry's environment is conducive for corporate entrepreneurial activities or not. Based on extensive literature review, from the five internal factors developed by Hornsby et al (2002) four variables were used to assess the corporate entrepreneurial environment of the study industry. Additionally, Innovation level is assessed through product and process innovation.

Chart below shows that all the dependent variables (reward/reinforcement, management support, Time availability as well as Work discretion/Autonomy) and the dependent variable (Innovation) score all below 3.4 which show that all the variables are assessed as being between low to medium level by respondents.

Chart 1: Prevalence of Corporate Entrepreneurial Variables



Source: Computed Based on Survey data (2013)

Time Availability

Time availability for employees is considered as one important variable to promote corporate entrepreneurial act and innovation as witnessed by authors such as Hornsby et al, (1993). In support of this, De Jong and Hartog (2007) noted that to stimulate innovative behaviours, allocating necessary time is essential.

Time availability scores the lowest average mean score **i.e 2.52**, and **S.D of 0.29** indicating that employees assess the work environment as allowing insufficient time for think on new and innovative ideas as well to think on wider organizational problems. Furthermore employees feel that they barely have enough time to get everything done and solve long term organizational problems.

Work Discretion/Autonomy

An intrapreneurial organization is one that provides varied duties in the work for employees and makes the job interesting to inspire employees to innovate. According to Zahra and Garvis (2000), in an intrapreneurial organization, employees value their job and are happy with it. Freedom on what employees do and the flexibility on decision making has an effect on the innovation ability of organizations (Antoncic & Hisrich 2001).

In this study, Work Discretion/Autonomy which measures; the level of freedom employees have to decide on what they do on their job and the autonomy on the job, scores a **mean average of 2.5**, and **S.D of 0.277**, showing employees assessment that the organizations provide little chance for employees to be creative and try their own Methods of doing the job. Employees also believe that harsh criticism and punishment result from mistakes made on the job. In addition, the study organizations were assessed as providing less freedom to use employees own judgment and as having little chance to do something that makes use of employees' abilities.

Reward/Reinforcement

Identifying and rewarding entrepreneurial behaviour is crucial to promote innovation. For example, Bhardwarj, Sushil and Momaya, (2007) indicate that one of the organizational variables in corporate entrepreneurship is rewards in terms of recognition, appraisal and/or monetary factors.

In this study Reward/Reinforcement scores a **mean average of 2.56** and **S.D of 0.29**. According to employees' judgement, this shows that the rewards employees receive are not much dependent upon the work on the job and that the supervisor will often increase job responsibilities if they are performing well in their job. Furthermore, they believe that they get little help from their managers to get their work done by removing obstacles. Regarding recognition, they feel that their supervisors rarely give them special recognition when the work Performance is especially good.

Management support

The support of management in problem solving, moral back up and inspiration are crucial to the development of innovative behaviour (Antonicic & Hisrich ,2001; Zahara , 1993; Pinchot III, 1985). Furthermore, the level of risk taking, tolerance to mistakes and the belief in the importance for innovation for organizational growth are important ingredients to innovative behaviour (Antonicic & Hisrich 2001; Zahra, 2000).

In this study, Management support variable scores relatively higher than the rest of the dependent variables. Still the **averages mean score of 2.76** and **S.D of 0.22** shows uncondusive support. According to employees' judgment, Upper management is less aware and very receptive to employees' ideas and suggestions and Promotion rarely follows the development of new and innovative ideas. Furthermore, Individual risk takers are not often recognized for their willingness to champion new projects whether eventually successful or not and there are few options within the organization for individuals to get financial support for their innovative projects and ideas. In addition the study organizations are rated as rarely supporting many small and experimental projects based on employees' ideas and initiatives.

4.2.2 The level of Innovation

Ireland, et al. (2006) contend that innovation takes place in businesses in the form of new products, new processes to create products and new administrative structures and routines to help the firm operate efficiently and effectively. And for innovation to happen, an entrepreneurial environment and mind set are important. In this study, to assess the level of innovation, items on product and process innovation were adapted from Morris (2001).

Product Innovation

Responses show that out of the 6 companies included in the study, 50% experience up to 3 new product innovations in the last four years, whereas 33.3% register 3 up to 6 new product innovations in the last four years. Only 1 company representing around 17 percent of the survey indicates that there is no new product innovation in the last four years. (See table 4 below).

Table 4: Product innovation in the last four Years

Number of new Products	Frequency	Percent	Valid Percent	Cumulative Percent
NONE	1	16.7	16.7	16.7
1 UP TO 3	3	50	50	66.7
3 UP TO 6	2	33.3	33.3	100.0
Total	6	100.0		

Source: Survey Data (2013), SPSS OUTPUT

Process Innovation

As it is illustrated on the table below, 2 companies show no new process innovations, whereas the rest experience 1 up to 3 new process innovations in the last four years.

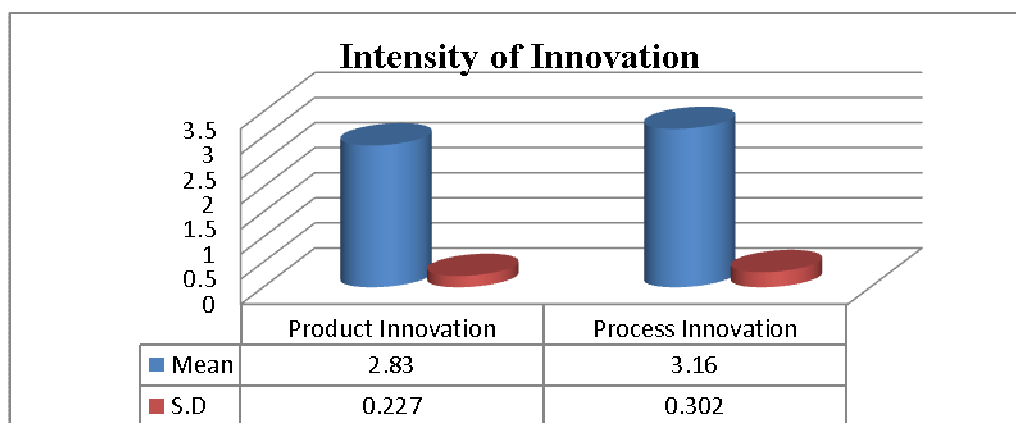
Table 5: process innovations in the last four years

Number of new processes	Frequency			Cumulative Percent
	Frequency	Percent	Valid Percent	
NONE	2	33.3	33.3	33.3
1 UP TO 3	4	66.7	66.7	100.0
Total	6	100.0		

Source: Survey Data (20013), SPSS OUTPUT

The intensity of the level of product and process innovations were assessed using 8 questions i.e. four questions for each, on a five points liket scale ranging 1=very low to 5=very high. Accordingly, there is an average mean score for both i.e 2.83 for product innovation and 3.16 for process innovation.

Chart 2: Intensity of Innovation



Source: Computed Based on Survey data (2013)

4.3 Associations

Hitt, et al. (2001) indicates that there is a strong interrelationship between innovation and entrepreneurship. Lumpkin and Dess (1996) argue that a key dimension of an entrepreneurial orientation is an emphasis on innovation. Accordingly, it is very important to see the relationship between the entrepreneurial variables and the innovation variables in this study. The following parts show the associations.

4.3.1 Correlation analysis

In this study, the four corporate entrepreneurial variables namely management support, reward/reinforcement, work discretion/autonomy as well as time availability are considered as independent variables separately and the process and product innovation items were combined to make up the dependent variable i.e. innovation.

To evaluate the association of the independent variables with the dependent variable, a correlation matrix was generated. Accordingly, it is found that all the four independent variables have a significant positive relationship with the dependent variable. Particularly, reward/reinforcement ($r=.552$, $p<0.001$), and time availability($r=.445$, $p<0.001$) have a strong statistically positive association with the dependent variable (innovation (see table 6 below).

Table 6: Correlation Coefficients of the independent variables against the dependent variable

		SUPPORT	REWARD	AUTONOMY	TIME	INNOVATION
INNOVATION	Pearson Correlation	.084	.552**	.126	.445**	1
	Sig. (2-tailed)	.047	.000	.034	.000	
	N	328	331	308	332	332

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

Source: Survey Data (2013), SPSS OUTPUT

Therefore based on the findings of the correlation analysis given on the above table, the first four hypotheses i.e. H1, H2, H3, and H4, are fully accepted.

4.3.2 Regression Analysis

To determine the functional relationship between the dependent variable i.e. innovation, and the predictors i.e. Management Support, Reward/Reinforcement, Work Discretion/Autonomy as well as Time Availability, the later were regressed against the former. Accordingly, the regressions coefficients indicate that all the independent variables contribute positively and significantly to the deviation on the dependent variable (innovation) (see table 7 below).

Table 7: Regression coefficients of the model

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.053	.715		1.472	.047
	Support	.052	.165	.131	.314	.045
	Reward	.588	.135	.426	5.076	.000
	Autonomy	.236	.130	.158	2.578	.013
	Time	.325	.138	.233	3.085	.003

. Dependent Variable: INNOVATION

Source: Survey Data (2013), SPSS OUTPUT

Analysis of the Beta values show that reward/reinforcement as well as time availability contribute the highest to the variation on the dependent variable with beta values of 0.43 and 0.23 for Reward/reinforcement and Time

availability respectively. Work discretion/Autonomy as well as management support possess a beta value of 0.13 and 0.15 respectively.

Analysis of the coefficient of determination of the regression model shows that there is an R^2 value of 0.48, indicating that 48% of the total variation observed on the dependent variable (innovation) can be explained by the regression equation and that the model as a whole was statistically significant ($p < 0.001$) (table 8 below).

Table 8: Coefficient of Determination of the Regression Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.699 ^a	.488	.444	.28804

a. Predictors: (Constant), REWARD, SUPPORT, BOUNDARY, AUTONOMY, TIME

Source: Survey Data (2013), SPSS OUTPUT

Hence based on the findings of the regression analysis the fifth hypothesis i.e. **H: Internal Environment for Corporate Entrepreneurship will significantly contribute to the deviation on innovation;** is fully supported and thus accepted to be true.

V: CONCLUSION

Available literature on corporate entrepreneurship shows that there are certain firm level characteristics that explain the conduciveness of corporate entrepreneurial environment. These include management support, reward systems and work discretion (Kuratko et al., 1993), incentives and control systems (Sathe, 1985). The basic purpose of this study was to examine the relationship between corporate entrepreneurship and innovation and assess their prevalence in Ethiopian Leather footwear Industry. Furthermore the study aimed to develop a model which combines corporate entrepreneurial variables with innovation intensity.

Based on Hornsby et al's (2002) Corporate Entrepreneurial Assessment Instrument (CEAI); management support, reward/reinforcement, work discretion/autonomy as well as time availability were used as independent variables to assess the corporate entrepreneurial culture in Ethiopian Leather Footwear industry. Furthermore, from Morris's (2001) Entrepreneurial Intensity Index (EII), items used to assess product and process innovation were adopted, to constitute the dependent variable (Innovation).

Results show that on a five point's likert scale measure, the level of corporate entrepreneurial environment is barely conducive to innovation as all the independent variables fall within the low prevalence range of mean score 1.8 to mean score 2.6, with the exception of management support variable which scores a mean of 2.76, which is still moderate. Analysis of the innovation intensity shows that a moderate product and process innovation, with a mean average of 2.83 and 3.16 for product and process innovation exists respectively from a five point's likert scale measure. These findings indicate that the organizational and managerial factors in Ethiopian leather footwear sector were not supportive of innovation as the level of corporate entrepreneurship in the survey was rated between low to moderate.

Literature indicates that corporate entrepreneurship and innovation are linked. For example, Hitt, et al. (2001) indicates that there is a strong interrelationship between innovation and entrepreneurship and Lumpkin and Dess (1996) argue that a key dimension of an entrepreneurial orientation is an emphasis on innovation. Ireland, et al. (2006) also contends that for innovation to happen, an entrepreneurial environment and mind set are important. Congruent with these empirical evidences, a model linking corporate entrepreneurial variables with

innovation was developed and tested.

Accordingly, Correlation and regression coefficients were assessed and results have indicated that all the independent variables (corporate entrepreneurial variables) are positively associated with the dependent variable (innovation). But the highest contribution to the deviation on the dependent variable can be attributed to reward/reinforcement as well as time availability. Furthermore, around 48 percent of the deviation on innovation can be explained by the regression equation and the model as a whole was found to be explanatory of the relationship and was statistically significant.

Generally the findings in this study have two bold outcomes. The first one is which indicates the level of corporate entrepreneurship and innovation in Ethiopian leather footwear sector, which can be extended to the other sectors in the country. Accordingly it serves as a baseline for assessing corporate entrepreneurship and innovation in the Ethiopian context. The second outcome is the one which shows the relationship between corporate entrepreneurship and innovation. In this regard the results of the correlation and regression analysis contribute to the existing corporate entrepreneurship and innovation literature, which lacks focus on relating the two.

VI: RECOMMENDATIONS

Based on these results, it is recommended to operators and policy makers in Ethiopian leather footwear sector that management support systems, work discretion, time availability as well as reward systems should be modified towards entrepreneurial organization. In modifying the management support system, focus should be on a system which creates an organization which is quick to use improved work methods, supportive and problem solving managers who would remove obstacles for entrepreneurial employees as well as those who will allow experimentation and risk taking.

It is also recommended that managers should recognize entrepreneurial act of employees and reinforce innovative ideas and in order to motivate entrepreneurs, the reward system should be modified such that it focuses on awarding based on employees competencies and entrepreneurial behaviour. Organizations should also work on availing time for individual and group activities which involve idea generation and nurturing for innovative outcomes. Furthermore, employees should be allowed to exercise sufficient autonomy and freedom on how they do their job and the decisions involved.

The findings in this study are so important for managers and other policy makers to find out how organizational and managerial variables could be modified in order to facilitate innovation. It is recommended that other studies should try to replicate these findings on different contexts.

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