Scientific
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Examining the Probabilities and Magnitude to Which Entrepreneurial Orientation, Industry Forces and Firm's Resources Impact on Hotel Business Performance

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Abstract

In recent times, Entrepreneurial Orientation has been considered an important area that influences most hotel performance. Extant research shows there is a strong connection between business performance and entrepreneurial orientation. The objective of this study was to examine the probabilities and magnitude to which entrepreneurial orientation, industry forces, and a firm's resources impact business performance. A review of the literature about such was used to build the conceptual framework. This study adopted quantitative research and a questionnaire survey technique was used to collect the data from small size hotels. This study used a stratified sampling method to obtain a comprehensive sample. The conceptual model is then tested with a total of 396 completed questionnaires and analyzed using logistic regression analytical model. The results showed that entrepreneurial orientation has a significant and positive correlation with the business performance of small-size hotels. Also, innovativeness, proactiveness, competitive aggressiveness and risk-taking showed significant correlations between each of the variables and business performance. The study covered some novelty aspects of the subject of entrepreneurial orientation and its effects on business performance. Thus, the use of constructs such as industry forces and firms' resources in the theoretical framework enhances entrepreneurial orientation to impact business performance.

Keywords

Entrepreneurial Orientation, Industry Forces, Firms' Resources, Business Performance, Small Size Hotels

1. Introduction

The competitive nature of the hospitality industry in Ghana forces small and medium size hospitality firms to explore other opportunities to survive and thrive. Small-size hotels, in particular, are faced with survival-threatening challenges ranging from inadequate finance, poor infrastructural facilities, inadequate managerial skill, weak and instability of government policies and other presumed factors and challenges causing premature death of small-size hotels (Foss & Peters, 2016). As successive Governments in Ghana invest more funds into the training of skilled personnel as well as reduce taxes on fuel, airport taxes and other taxes that affect travellers, private brands must also take steps to ensure a high maintenance culture and deploy their entrepreneurial competencies to stimulate greater competitive scope and organizational capability to achieve higher performance. Nevertheless, it appears that empirical studies on the interactions of different precursors to the performance of small-size hotels are still largely inconclusive as the direction in which these factors serve as prospects for small-size hotels and those which are real challenges have not been properly identified. The study revisits this case in the context of small-size hotel firms in Ghana to examine the probabilities and magnitude to which entrepreneurial orientation, industry forces and firms' resources impact hotel business performance. This is done using a collection of robust feed-forward.

In other to consider the measures for the external environment there was the need to conceptualize this construct of competitive scope. Earlier studies have quite a lot of measures to understand the external environment and these include market heterogeneity, market demand, product/industry, technological sophistication, market attractiveness, dynamism, life cycle, perceived opportunity, environmental munificence, and competitive concentration (Short, McKelvie, Ketchen, & Chandler, 2009; Wiklund & Shepherd, 2005). This notwithstanding, there is the need to differentiate between the reality of the environment outside the firm and a more perceptual or prejudiced view of the environment (Short, Moss, & Lumpkin, 2009) and in so doing the actual environment facing the firm is expected to be different from the environment perceived by the firm.

The internal factors of competitiveness can be classified into resources and capabilities and these include tangible assets, intangible assets, human specialized skills, communication and interactive abilities (APPIDA, 2002; Bontis, Janošević, & Dženopoljac, 2015). On the contrary, resources in themselves cannot be turned into a competitive advantage unless it is organized into capabilities by the firm. These are related to the organization of the internal and external resources of a firm in building up the firm's capabilities. Thus, the perception of competition in the organizational nous directs the attention to identifying collective capabilities which enable brands to capitalize on prestige, space, and other resources without which an organization can hardly be responsible.

Firms which engage in these variables tend to have higher performance and (Ardichvili, Cardozo, & Ray, 2003), points out that firm with a well-organized

network strategy have a propensity to acquire more competitive information about other firms earlier and this in turn leads to better performance. To Foss & Peters (2016) such providers have to manage with competitive disadvantages, which include poor economies of scale and scope, minimal potential for diversification and innovation, as well as limited access to capital markets. That, a possible way small medium hotels (SMH) can reduce these weaknesses is to change the organizational orientation towards innovative customer experiences. However, (Ambrosini, Bowman, & Collier, 2009; Ardichvili, Cardozo, & Ray, 2003) stated that firms' ability to integrate, build and reconfigure their resources (capabilities) and competencies is on the increase. Nonetheless, the main evidence signifies positive correlations between entrepreneurial orientation, external forces and a firm's resources on business performance (Wiklund & Shepherd, 2005). Adopting Lumpkin and Dess (1996) conceptual framework on "clarifying the entrepreneurial orientation construct and linking it to performance" the researcher replaced the environmental factors with Industry Forces and the organizational factors with Firms' Resources. Further, the researcher selected three items such as sales growth, profitability, and satisfaction from the variables that Lumpkin and Dess (1996) used to measure performance and added her own variable customer retention to measure business performance. The hotel industry is plagued with high business competitiveness with each hotel attracting the same customer. It may seem the hotels are exhibiting the entrepreneurial orientation traits but since no hotel is an island but situated close to each other, the industry factor is high. Unlike physical products, (e.g. book, tables) hotel rooms are highly perishable and lose its value on a daily basis. For instance, a loss in a sale of room per day (2/20/19) is a business lost forever because that day will never come again but the hotel must still pay utilities, salaries, and rentals on those sales that were not accrued. Thus, the environmental factor of Lumpkin and Dess (1996) is replaced with the Industry Forces using Porter 1985 "competitive advantage, creating and sustaining superior performance" due to the competitive nature of the hotel industry. Nonetheless, for the hotel to gain a competitive edge over its rivals, it ought to display certain business characteristics that differentiate its business dealings from the other hotels.

For this reason, the researcher additionally used Barneys 1991 "firm resources and competitive advantage" as hotels Firm Resources in order to differentiate its business activities from the others. However, this study selected three variables each from both Porter 1986 five forces and Barney 1991 firms' resources since extant literature shows these variables are prevalent in the SMEs in which small hotels sector form part. It is in this vein the study sought to examine the magnitude of these variables on business performance.

Figure 1 shows the various types of entrepreneurial orientation (EO), industry Forces (IF), and firms' resources (FR) and business performance (BP). That is, these small-size hotels operate in a competitive environment in a bid to achieve growth. Due to the short life cycle of both firms and product lifespan, firms need to strategize their business activities day in and day out to
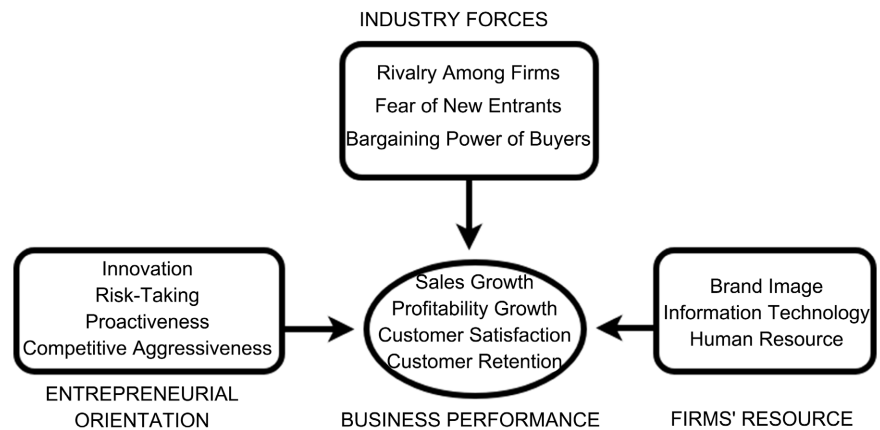
Figure 1. Framework of the magnitude of EO, IF and FR on BP.

continuously survive in a turbulent market environment. Despite the positive implications of entrepreneurial orientation, industry forces, and firms' resources on firm performance, each of these has a crucial part to play. That innovation is linked to entrepreneurship because firms cannot continue to exist without being innovative in their dealings. A firm that is proactive in introducing novel products and services always stays ahead of its competitors as well as sets standards of operation for those operating within similar ventures. This enables the firm to gain a continuous competitive advantage and so leads to the firm's higher performance. Another notion associated with entrepreneurship is risk-taking, proactiveness, and competitive aggressiveness autonomy among others. Every venture involves a certain amount of risk-taking which may either be resource commitment or substantial returns on interest. Risk-taking involves the preparedness of an entrepreneur or a firm undertaking a business venture in anticipation of a significant return on the investment though not certain. Proactiveness refers to the aggressiveness in which an entrepreneur or firm seizes an opportunity and lunch its product or services in anticipation of capturing the market first. In this (Martínez, Galván, & Palacios, 2016; Niu, Deng, & Hao, 2020) are of the view that knowledge transfer in the development of entrepreneurial orientation has an influence on performance, as well as the interaction effect of the family influence. Thus, a proactive entrepreneur or firm is able or foresee a viable need shortly and takes advantage of it ahead of its competitors or competes in a competitive aggressive manner as well as influence his followers through his influences. Such a firm assumes the aggressive position to wade off any competitor preventing its existence as well as its market share. On the other hand, EO has a relationship among small firms in hostile environments—industry forces. Those firms cannot continue to exist without being innovative in their dealings and being proactive in introducing novel products and services always staying ahead of their competitors operating within similar ventures and overcoming industry forces. This enables the firm to gain continuous competitive advantage and so leading to the firm's higher performance. This notwithstanding, the industry forces develop valuable firm resources and skills to yield position advantages and

obtain positive outcomes in terms of market shares and profitability. Analyzing and understanding the actions of rival entities forestalls the strengths and weaknesses of current competitor strategies, helps predict emerging industry opportunities and threats, provides possible strategic alternatives to the organization and assists in the identification of strategic uncertainties that require further monitoring over time.

2. Method of Analysis

The study adopted the logistic regression analytical model in analyzing the data. This method has been used by various authors in solving similar problems; albeit in different industries and countries and therefore the researcher deemed it fit to employ a similar approach. For instance, when the impact of EO on firm performance has been studied, regression analysis has been used as means to do so. Regression analysis is a way to predict an outcome variable based on either one or several predictor variables. In (Franco & Haase, 2013; Halabi & Lussier, 2014) it predicted that, several resources and some dimensions of entrepreneurial orientation are linked with collaborative entrepreneurship, but the effects are rather mixed. In particular, internet, starting with adequate working capital, financial, commercial and administrative resources, as well as innovative potential and collective capability. Also, Speckbacher, Neumann, and Hoffmann (2015) and (Meurer & Tolles, 2017) used a logistic regression model to analyze the effects of firms' resources concerning starting a new venture, stating synergies from complementary resources can be exploited more easily within firm boundaries than across an alliance interface. However, certain partner characteristics can substitute in part for belonging to the same firm

Data was collected through a questionnaire administration emailed to small-size hotels in Ghana. These small size hotels were made up of two-star hotels, one-star hotels, guest houses and budget hotels with a population size of two thousand nine hundred and ninety-five (2995). A total sample of three hundred and ninety-six (396) hotels answered the questionnaire which was used for the analysis. To augment the data from the questionnaire, 44 owners/managers were randomly selected and telephone interviewed about the probability and the magnitude to which entrepreneurial orientation, industry forces and firms' resource impact business performance. Since the main objective of the study was on the owner/manager, the focus was limited to them. The outcome of the interview was used to augment the data collected from the questionnaire administration for the analysis of the study. Secondary data was also procured from a well-documented source from the Ghana Tourism Authority to complement the data from the questionnaire administration and the interview. The author adopted but modified items to establish the construct of entrepreneurial orientation (EO), industry forces (IF), firm resources (FR) and its effect on business performance (BP) from the extant literature. This was constituted into a close-ended questionnaire that was tested and modified before administering to the selected respondents. The construct measurements were identified, measured and cate-

gorized appropriately as EO, IF, FR, and BP examined based on the extant literature.

3. Analytical Procedure

The suitability of the data for factor analysis was determined by employing the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO-MSA) and Bartlett's Test of Sphericity (BTS) (Table 1). The recorded KMO value was above 0.60 and a significant value for the BST. Varimax rotation was performed and principle components analysis for factor analysis (Table 2). All the factors that had factor loadings lower than 0.50 were eliminated after which Cronbach's alpha reliability analysis was conducted. It was ensured that all measures of sampling adequacy exceeded Cronbach's alpha reliability value threshold level of 0.70 and large and significant Bartlett's Test of Sphericity. All fourteen items concerning the factor analysis (principal component analysis) were maintained since they had a factor loading to be respectively more than 0.50.

Table 1. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of Sphericity.

KMO measure of sampling adequacy test value		0.697
Bartlett's test of Sphericity	Approx. Chi-Square	2791.074
	Df	91
	Sig	0.000

Table 2. Principal component analysis.

	Component				Cronbach's alpha
	1	2	3	4	
INN	0.714				
RT	0.916				0.820
PRO	0.785				
CA	0.962				
RAF		0.705			
FNE		0.844			0.757
BPB		0.727			
BI			0.764		
IT			0.825		0.705
HR			0.778		
SG				0.932	
PG				0.774	0.719
CR				0.763	
CS				0.932	

Note: INN—Innovation, RT—Risk-Taking, PRO—Proactiveness, CA—Competitive Aggressiveness, RAF—Rivalry Among Existing Firms, BPB—Bargaining Power of Buyers, BI—Brand Image, IT—Information Technology, HR—Human Resources, SG—Sales Growth, GP—Growth Profitability, CR—Customer Retention, CS—Customer Satisfaction.

4. Descriptive Statistics

Descriptively, the means and standard deviation values of the explanatory or independent variables are shown in Table 3 as follows.

5. Logistic Regression

In all, a binary logistic regression model was designed by considering the situation where the dependent variable is the nominal scale and dichotomous (i.e., measured at two levels) with the independent variables being continuous or categorical. Logistic regression sometimes called the logistic model, analyses the relationship between multiple independent variables and a categorical dependent variable and as well estimates the probability of occurrence of an event by fitting data. There are two methods of logistic regression which include the binary logistic regression and the multinomial logistic regression. Binary logistic regression is used specifically when the independent variables are either continuous or categorical with the dependent variable being dichotomous. On the other hand, when the dependent variable is not dichotomous but comprises more than two categories, a multinomial logistic regression model is used. This study, therefore, employs the binary logistic regression model instead of the multinomial logistic regression since the response variables to be used are all dichotomous.

Since the logistic regression calculates the probability of an event occurring over the probability of an event not occurring, the impact of an independent variable is usually explained in terms of odds which is given by:

$$\text{odds of event} = \frac{p}{1-p} \tag{1}$$

With logistic regression, the mean of the response variable p in terms of independent variables $x_1, x_2, \cdots, x_k$ is modelled relating p and the explanatory variables ($x_1, x_2, \cdots, x_k$) through the equation; $p = \alpha + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_k x_k$. This

Table 3. Descriptive statistics.

Independent variables	N	Mean	Std. Deviation
INN	396	5.90	0.413
RT	396	1.93	0.449
PRO	396	2.69	0.892
CA	396	4.07	0.294
RAF	396	1.01	0.107
FNE	396	3.91	0.253
BPB	396	4.90	0.341
BI	396	5.80	0.332
IT	396	2.79	0351
HR	396	4.91	0.418

is unfortunately not a good model since extreme values of the independent variables will give values of $\alpha + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_k x_k$ does not fall between 0 and 1. The logistic regression solution to this problem is to transform the odds using the natural logarithm (Peng, So, Stage, & St. John, 2002). The natural log of the odds is modelled as a linear function of the explanatory variables;

$$\text{logit}(y) = \ln(\text{odds}) = \ln\left(\frac{p}{1-p}\right) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_k x_k \qquad (2)$$

where p is the probability of interested outcome and $x_1, x_2, \cdots, x_k$ are the explanatory variables. The parameters of the logistic regression are $\alpha, \beta_1, \beta_2, \cdots,$ and β_k.

Taking the antilog of Equation (2) on both sides, we can derive an equation for the prediction of the probability of the occurrence of the interested outcome;

$$p = P(Y = \text{interested outcome} / X, \text{a specific value}) = \frac{e^{\alpha + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_k x_k}}{1 + e^{\alpha + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_k x_k}} \qquad (3)$$

When a logistic regression is calculated, the regression coefficient (b_1) is the estimated increase in the logged odds of the outcome per unit increase in the value of the independent variable. In other words, the exponential function of the regression coefficient (e^{b_1}) is the OR associated with a one-unit increase in the independent variable. The OR can also be used to determine whether a particular exposure is a risk factor for a particular outcome and to compare the magnitude of various risk factors for that outcome. OR = 1 indicates exposure does not affect the odds of outcome. OR > 1 indicates exposure associated with higher odds of outcome. OR < 1 indicates exposure associated with lower odds of outcome. Logistic regression is one way to generalize the OR beyond two binary variables (Peng et al., 2002). Suppose we have a binary response variable Y and a binary predictor variable X, and in addition, we have other predictor variables $Z_1, \cdots, Z_k$ that may or may not be binary. If multiple logistic regression is used to regress Y on X, $Z_1, \cdots, Z_k$, then the estimated coefficient β_X for X is related to a conditional OR. Specifically, at the population level:

$$e^{\widehat{\beta_x}} = \frac{P(Y = 1 / X = 1, Z_1, \cdots, Z_k) / P(Y = 0 / X = 1, Z_1, \cdots, Z_k)}{P(Y = 1 / X = 0, Z_1, \cdots, Z_k) / P(Y = 0 / X = 1, Z_1, \cdots, Z_k)} \qquad (4)$$

so $e^{\widehat{\beta_x}}$ is an estimate of this condition's odds ratio. The interpretation of $e^{\widehat{\beta_x}}$ is an estimate of the odds ratio (OR) between Y and X when the values of $Z_1, \cdots, Z_k$ are held fixed.

6. Model Fitness Assessment Based on the Logistic Regression Analysis

The table below depicts the measurement of the model fitness concerning Sales growth, Growth profitability, Customer retention and Customer satisfaction using the Omnibus test as well as the Hosmer and Lemeshow test. The Omnibus test as well as the Hosmer and Lemeshow test together gives the overall indication of how well the model performs over and above an empty model (model

with no predictors) and its significance. The only difference between these two goodness of fit test is that for the Hosmer and Lemeshow test good fit is indicated by a significance value greater than 0.05 whilst Omnibus measure good fit base on a significance value less than 0.05. Based on the findings from the table below all the models for Sales growth, Growth profitability, Customer retention and Customer satisfaction are all statistically significant and fit well better than an empty model since all their receptive significant values are greater and less than 0.05 per the Omnibus and Hosmer and Lemeshow test respectively.

7. Model Specification

To identify the key determinants or contributors to the likelihood of occurrence of Sales Growth (SG) the researchers computed a dichotomous variable for Sales Growth which is given as;

$$SG = \begin{cases} 1 & \text{if sales growth occurs} \\ 0 & \text{if sales growth does not occur} \end{cases}$$

Hence by using a logistic regression model, the likelihood that sales growth will occur in the presence of the various predictors of EO, IF, FR is formulated as

$$SG = \frac{\exp(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA + \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR)}{1 + \exp(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR)} \quad (5)$$

where $\beta_1, \cdots, \beta_{10}$ are the parameter estimates of the predictor variables which includes; Innovation, Risk-Taking, Proactiveness, Competitive Aggressiveness, Rivalry among Firms, Fear of New Entrants, Bargaining Power of Buyers, Brand Image, Information Technology and Human Resource. Table 4, therefore, depicts the result based on the estimation of the logistic regression concerning the extent to which predictors of entrepreneurial orientation (EO), and industry forces (IF) firms' resources (FR) impact Sales Growth (SG).

Table 5 shows the results of the multiplicative effects of the predictors of EO, IF, and FR on the occurrence of Sales Growth as an aspect of business performance.

In Table 5, the effect of EO, and IF FR on sale growth has been presented. The table shows the various activities and the multiplicative effects on sales growth

Table 4. Model fitness assessment.

Model	Omnibus test		Hosmer and Lemeshow test	
	Chi-square	Sig. value	Chi-square	Sig-value
Model 1	459.898	0.000	10.050	0.212
Model 2	403.614	0.000	3.190	0.922
Model 3	486.616	0.000	1.505	0.993
Model 4	449.588	0.000	6.931	0.544

Note: Model 1, Model 2, Model 3 and Model 4 represent Models for Sales growth, Growth profitability, Customer retention and Customer satisfaction respectively.

Table 5. Effect of predictive factors of EO, IF, and FR on sales growth.

		B	S. E.	Wald	df	Sig.	Exp(B)
	INN	0.076	0.054	1.940	1	0.004***	1.079
	RT	0.074	0.189	0.153	1	0.037**	1.071
	PRO.	−0.026	0.126	0.041	1	0.039**	0.975
	CA	−0.152	0.127	1.416	1	0.024**	0.859
	RAF	−0.066	0.072	0.838	1	0.030**	0.936
Step 1[a]	FNE	−0.023	0.104	0.048	1	0.227	0.978
	BPB	0.020	0.075	0.069	1	0.009***	1.020
	BI	0.035	0.074	0.222	1	0.006**	1.036
	IT	0.034	0.113	0.090	1	0.024**	1.035
	HR	0.022	0.059	0.146	1	0.008***	1.023
	Constant	1.132	1.418	0.637	1	0.425	3.101

a. Variable(s) entered on step 1: INN, RT, PRO, CA, RAF, FNE, BPB, BI, IT, HR. ***Significant at 99% Confidence interval, **Significant at 95% Confidence interval, *Significant at 90% Confidence interval. Note: INN—Innovation; RT—Risk-Taking; PRO—Proactiveness; CA—Competitive Aggressiveness; RAF—Rivalry among Firms; FNE—Fear of New Entrants; BPB—Bargaining Power of Buyers; BI—Brand Image; IT—Information Technology; HR—Human Resource.

with innovation at 004, risk-taking at 0.037, proactiveness at 0.039, and competitive aggressiveness at 0.024. This means that the predicting factors of EO are all significant with innovation being 1.079 times likely to influence Sales Growth and this is statistically significant. With regards to the effect of IF predicting factors on sales growth as business performance, the result showed bargaining power of buyers 0.009 with an odd ratio of 1.029 being the highest likelihood of influencing sale growth. Also, brand image, information technology and human resource showed 0.006, 0.024, and 0.008 on sales growth respectively. With an odd of 1.079 and a significant value of 0.004, it is estimated that innovative activities by small-size hotels in Ghana lead to sales growth. In the case of the brand image, the odds of 1.036 denotes a strong likelihood of 0.006 and this is statistically significant. It is estimated from an odd ratio of 1.035 and 1.023 that information technology and human resources respectively positively lead to sales growth and each of these is statistically significant at 95% CI.

This result implies that the introduction of novel product/services by small-size hotels influence the sale growth of the hotel. Again, it improves the hotels' performance to a certain extent as the activities are interrelated to achieve an objective. Further, this growth, as Kotler (1994) emphasized, the main aim of growth is to seek new customers while retaining current customers by providing improved products and services and in these processes, companies develop new, market-ready products and services (Foss & Peters, 2016); Hulbert, Gilmore, and Carson (2013), Again, growth involves supplying new products, venturing into

new markets and/or franchising products of other organizations (Chen, 2016) which is depicted by the individual variables and their corresponding number.

The researchers went further to determine the predictive factors EO, IF, and FR that might be having a significant multiplicative effect on the likelihood of the occurrence of Growth Profitability. To investigate the significance of the effects of the various predictive factors of EO, IF, and FR on the occurrence of Growth Profitability, the researchers also employed a logistic regression model by dichotomizing the dependent variable (GP) as;

$$GP = \begin{cases} 1 & \text{if growth profitability occurs} \\ 0 & \text{if growth profitability does not occur} \end{cases}$$

Hence, the likelihood that Growth Profitability will occur in the presence of the various predictors of EO, IF, and FR is formulated as;

$$GP = \frac{\exp\left(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA + \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR\right)}{1 + \exp\left(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR\right)} \quad (6)$$

where GP (dependent variable) stands for Growth Profitability, $\beta_1, \cdots, \beta_{10}$ are the parameter estimates of the predictor variables which includes; innovation, risk-taking, proactiveness, competitive aggressiveness, rivalry among firms, fear of new entrants, bargaining power of buyers, brand image, information technology and human resource.

Table 6, therefore, depicts the result based on the estimation of the logistic regression concerning the extent to which predictors of entrepreneurial orientation (EO), and industry forces (IF) firms' resources (FR) impact Growth Profitability (PG).

Table 6. Effect of predictive factors of EO, IF, and FR on growth profitability.

		B	S. E.	Wald	df	Sig.	Exp(B)
	INN	0.018	0.054	1.116	1	0.034**	1.018
	RT	0.140	0.193	2.524	1	0.029**	1.151
	PRO	−0.291	0.130	4.984	1	0.014**	0.748
	CA	0.064	0.130	3.240	1	0.026**	1.069
	RAF	−0.063	0.075	0.014	1	0.132	0.939
Step 1[a]	FNE	0.057	0.108	1.282	1	0.035**	1.058
	BPB	0.053	0.078	1.463	1	0.016**	1.054
	BI	−0.017	0.077	1.250	1	0.014**	0.983
	IT	0.001	0.117	1.359	1	0.044**	1.001
	HR	−0.003	0.061	2.210	1	0.019**	0.997
	Constant	0.659	1.463	0.203	1	0.102	1.932

Variable(s) entered on step 1: INN, RT, PRO, CA, RAF, FNE, BPB, BI, IT, HR. ***Significant at 99% Confidence interval, **Significant at 95% Confidence interval, *Significant at 90% Confidence interval. Note: INN—Innovation; RT—Risk-Taking; PRO—Proactiveness; CA—Competitive Aggressiveness; RAF—Rivalry among Firms; FNE—Fear of New Entrants; BPB—Bargaining Power of Buyers; BI—Brand Image; IT—Information Technology; HR—Human Resource.

In Table 6, the effect of innovation, risk-taking, proactiveness, competitive aggressiveness, rivalry among firms, fear of new entrants, bargaining power of buyers, brand image, information technology and human resource on growth profitability (GP) has been presented. The table shows that innovation is 0.034, risk-taking 0.029, proactiveness 0.014 and competitive aggressiveness 0.024 all likely to influence growth profitability and this is statistically significant. Also, the odds of fear of new entrants are 1.058, and the bargaining power of buyers is 1.054 influencing the growth profitability among the industry forces at 0.035 and 0.016 respectively, which is significant at 95% CI. With an odd of 1.058 and a significant p-value of 0.016, it is estimated that fear of new entrants with growth profitability (GP) can lead to positive business performance among the small-size hotels in Ghana. Thus, it could be that the presence of a venture entering the competition causes the firms to be innovative in hotel service/product offerings which eventually lead to an increase in the profit margin. This is also the case with firms' resources on the growth profitability in that the odds of 1.001 denotes a strong likelihood of information technology and this is statistically significant. It is estimated from an odds ratio of 1.001 and significant at 0.044 of information technology positively leads to growth profitability and is statistically significant at 95%.

Additionally, the researchers went further to determine the predictive factors of EO, IF, and FR might be having a significant multiplicative effect on the likelihood of the occurrence of Customer Retention (CR). To investigate the significance of the effects, the various predictive factors of EO, IF, and FR on the occurrence of CR, the research also employed a logistic regression model by dichotomizing the dependent variable (CR) as;

$$CR = \begin{cases} 1 & \text{customer repeat business activity} \\ 0 & \text{ccustomer does not repeat business activity} \end{cases}$$

Hence, the likelihood that Customer Retention will occur in the presence of the various predictors of EO, IF, and FR is formulated as;

$$CR = \frac{\exp\left(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA + \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR\right)}{1 + \exp\left(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR\right)} \quad (7)$$

where CR (dependent variable) stands for Customer Retention, $\beta_1, \cdots, \beta_{10}$ are the parameter estimates of the predictor variables which includes; innovation, risk-taking, proactiveness, competitive aggressiveness, rivalry among firms, fear of new entrants, bargaining power of buyers, brand image, information technology and human resource.

Table 7, therefore, depicts the result based on the estimation of the logistic regression concerning the extent to which predicting factors of EO, IF, and FR impact Customer Retention.

In Table 7 the effect of predicting factors of EO, IF, and FR on Customer Retention (CR) has been presented. The table shows that innovations and risk-taking have an influence on customer retention at odds of 1.074, and 1.284 and is statistically significant at 0.015 and 0.017 respectively. In the case of industry

Table 7. Effect of predictive factors of EO, IF, and FR on customer retention.

		B	S. E.	Wald	df	Sig.	Exp(B)
	INN	0.071	0.054	1.760	1	0.015**	1.074
	RT	0.250	0.186	1.818	1	0.017**	1.284
	PRO	0.049	0.124	0.156	1	0.226	1.050
	CA	−0.262	0.127	4.255	1	0.039**	0.770
	RAF	0.109	0.068	2.520	1	0.012**	1.115
Step 1[a]	FNE	−0.091	0.102	0.785	1	0.036**	0.913
	BPB	0.007	0.075	0.610	1	0.022**	1.007
	BI	0.053	0.074	0.510	1	0.015**	1.054
	IT	−0.100	0.113	0.785	1	0.036**	0.905
	HR	−0.011	0.059	0.033	1	0.025**	0.989
	Constant	1.571	1.397	1.265	1	0.261	4.814

a. Variable(s) entered on step 1: INN, RT, PRO, CA, RAF, FNE, BPB, BI, IT, HR. ***Significant at 99% Confidence interval, **Significant at 95% Confidence interval, *Significant at 90% Confidence interval. Note: INN—Innovation; RT—Risk-Taking; PRO—Proactiveness; CA—Competitive Aggressiveness; RAF—Rivalry among Firms; FNE—Fear of New Entrants; BPB—Bargaining Power of Buyers; BI—Brand Image; IT—Information Technology; HR—Human Resource.

forces which is rivalry among firms and bargaining power of buyers, with the odds of 1.115, and 1.007 respectively has a significant effect on customer retention (CR) which is significant at a 95% confidence interval. Further, the odds of 1.054 denote a strong likelihood of brand image at 0.015 and this is statistically significant. Meaning, innovation, risk-taking, rivalry among firms, bargaining power of buyers and the brand image of small-size hotels are likely to influence customer retention.

Finally, the researchers also determined the predicting factors of EO, IF, and FR that might be having significant multiplicative effects on the likelihood of the occurrence of Customer Satisfaction (CS). To investigate the significance of the effects of the various predictive factors of EO, IF, and FR on the occurrence of CS, the researcher again employed a logistic regression model by dichotomizing the dependent variable (CS) as;

$$CS = \begin{cases} 1 & \text{customer is satisfied} \\ 0 & \text{customer is not satisfied} \end{cases}$$

Hence, the likelihood that Customer Satisfaction will occur is formulated as;

$$CS = \frac{\exp\left(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA + \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR\right)}{1 + \exp\left(\beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 PRO. + \beta_4 CA \beta_5 RAF + \beta_6 FNE + \beta_7 BPB + \beta_8 BI + \beta_9 IT + \beta_{10} HR\right)} \quad (8)$$

where CS (dependent variable) stands for Customer Satisfaction, $\beta_1, \cdots, \beta_{10}$ are the parameter estimates of the predictor variables which includes; innovation,

risk-taking, proactiveness, competitive aggressiveness, rivalry among firms, fear of new entrants, bargaining power of buyers, brand image, information technology and human resource.

Table 8, therefore, depicts the results based on the estimation of the logistic regression concerning the extent to which predictors of EO, IF, and FR impact Customer Satisfaction.

As depicted in Table 8 the effect of EO, IF FR on Customer Satisfaction (CS) has been presented. The table shows that innovation 1.103, risk-taking 1.107, and proactiveness 1.060 likely to influence customer satisfaction and this is statistically significant. With regards to the predictors of IF, the odd bargaining power of buyers 1.019 shows the strongest likelihood of influencing customer satisfaction and is significant at a 95% confidence interval. In the case of the predictors of FR, brand image 1.043 and human resources 1.004 having a significant p-value of 0.015 and 0.009 respectively, it is estimated brand image of a small size hotel and human resources impact positively customer satisfaction.

In summary, the predicting factors of EO are all significant and are likely to influence sales growth and this is statistically significant. Thus, it is estimated that innovative activities by small-size hotels in Ghana lead to sales growth. This result implies that the introduction of novel product /services by small-size hotels influence the sale growth of the hotel. Again, it improves the hotels' performance to a certain extent as the activities are interrelated to achieve an objective.

Table 8. Effect of predictive factors of EO, IF, and FR on customer satisfaction.

		B	S. E.	Wald	df	Sig.	Exp(B)
	INN	0.098	0.054	3.268	1	0.021**	1.103
	RT	0.102	0.188	0.290	1	0.030**	1.107
	PRO	0.058	0.125	0.219	1	0.040**	1.060
	CA	−0.193	0.126	2.338	1	0.026**	0.825
	RAF	−0.050	0.071	0.001	1	0.279	0.951
Step 1ᵃ	FNE	−0.031	0.104	1.291	1	0.013**	0.969
	BPB	0.019	0.075	0.065	1	0.299	1.019
	BI	0.042	0.073	0.331	1	0.015**	1.043
	IT	−0.028	0.113	0.263	1	0.031**	0.972
	HR	0.004	0.059	4.006	1	0.009**	1.004
	Constant	1.534	1.419	1.167	1	0.280	4.634

Variable(s) entered on step 1: INN, RT, PRO, CA, RAF, FNE, BPB, BI, IT, HR. ***Significant at 99% Confidence interval, **Significant at 95% Confidence interval, *Significant at 90% Confidence interval. Note: INN—Innovation; RT—Risk-Taking; PRO—Proactiveness; CA—Competitive Aggressiveness; RAF—Rivalry among Firms; FNE—Fear of New Entrants; BPB—Bargaining Power of Buyers; BI—Brand Image; IT—Information Technology; HR—Human Resource.

Further, the presence of a venture entering the competition causes firms to be innovative in hotel service/product offerings which eventually lead to an increase in the profit margin. This is also the case with firms' resources on the growth profitability in that it denotes a strong likelihood of information technology and it is statistically significant which positively leads to growth profitability.

With regards to the predictors of IF, the odd bargaining power of buyers shows the strongest likelihood of influencing customer satisfaction and is significant. In the case of the predictors of FR, brand image and human resources having a significant *p*-value, it is estimated brand image of a small-size hotel and human resources impact positively customer satisfaction.

8. Practical Implications of the Results

Thus, innovations in small hotels are key to performance. This confirms (Fraj, Matute, & Melero, 2015; Ku, Wu, & Lin, 2011; Nicolau & Santa-María, 2013) that, proactive capabilities enable an organization to rapidly and efficiently adapt to changing markets and technologies, learn from this process leading to innovations that enable the hotel to gain a competitive advantage. However, an entrepreneur/owner-manager should not lose sight that the complacency of the hotels' share of the market could give way to new entrants taking advantage of gaps in product offerings. Although entrepreneurs are risk-takers, small-size hotel owners in most cases become risk-averse regarding R & D, especially when the venture seems to be making a profit. Proactiveness in terms of follow-up on the perceived opportunity and competitive aggressiveness in capturing a greater share of the market scope using a multi-hotel service/product to attract more customers has an impact on the customers' preference for the hotel's product and service (Niu et al., 2020). In a bid to capture a greater share of the market, (Guttentag, 2015; Niu et al., 2020) stated it could be either internal (an expansion of existing markets, products, and services) and/or external (an expansion into new markets, products, and services). In quoting Kotler's 1994, Hulbert et al. (2013), emphasized that the central aim of growth, as in expansion, is to seek new customers while retaining current customers by providing improved products and services.

There are strong pressures to sell capacity by price-cutting except for weekends and holiday seasons as capacity augmentation exists and disrupts the demand and supply balance leading to intense rivalry sometimes and this is confirmed by (Becerra, Santaló, & Silva, 2013; Cheng, 2013; Urtasun & Gutiérrez, 2017). In the case of the bargaining power of customers/buyers of goods and services from small-size hotels, the concentrative nature of buyers makes them powerful because they are more than the players (hotels). This eventually force down prices in other to reduce the industry's margin. Thus, small-size hotel buyers not only force down prices they increase costs through demand for higher quality products and services as well. Generally, hotel buyers somehow pose a

threat of a backward adjustment especially as a large group of buyers can easily shop around or surf for information regarding nearby hotels. The bargaining power of buyers varies significantly within the small size hotel, depending upon a hotel's target buyer group, but as asserted by (Akwaowo, 2021; Cheng, 2013; Li, 2023) this factor becomes acute in a situation of oversupply or where buyers of hotel rooms are concentrated.

With regards to Firm resources, hotel brand image promotes customer retention and customer satisfaction as buyers more often than not patronize the brand. This is in confirmation to (Kim & Perdue, 2013; Šerić, Gil-Saura, & Ruiz-Molina, 2014), all of whom asserted that a brand is a name, symbol, word, sign, design or a combination of these that differentiates an organization from competitors, attract customers and promote repeat business. The image and positioning of the competitor are deduced in part from its products, advertising, packaging, and action but more importantly customer perception of the products/services provided by the small-size hotel. Hotels must also aim to fill their rooms as profitably as possible, both through room occupancy levels with the relative tariffs applied. The two crucial factors that enable hotels to differentiate themselves are a good location for the relative target market and quality of service. Quality of product and service attracts more buyers to your hotel irrespective of the competition or rivalry among the existing hotels. The success or the failure of any business is affected by the skills and capabilities of owners/managers and these capabilities are inherent in the role that the entrepreneur plays. Hotel owners/managers systematically analyze the product market in which their hotel operates and then adopt a business strategy most appropriate to that market analysis. Although the human resources aspect centred on the owner/manager, there is the need to have more of the characteristics by combining certain values and attitudes in facing the increasing competition than simple skills and abilities. Human resources are the most important firm asset, the ones that research, design, project and differentiate the small-size hotel from other hotels. Porter emphasized that HR are those people and developed systems which are difficult to copy by competitors and so entrepreneurs/managers/employees must be highly skilled. The use of information technology-internet websites has significantly become more concentrated and hotels are more aggressive in pursuing the interests of the end customers. Websites that focus on price comparisons have significantly increased the transparency of hotels across the world and concentrated the buying power of consumers (Kim & Perdue, 2013; Li, 2023). In the comfort of their homes, hotel guests can book or communicate with the appropriate front office personnel and have all the information needed through the web page of small-size hotels.

In the case of business performance, service quality of bed, food & beverage increase sales and profit growth and online enhance hotel business activities. Hotels with strong brand results in higher daily room rates higher hotel occupancy room rate, and higher revenue per available room which in effect contri-

bute to profitability growth for small-size hotels. Small-size hotels with requisite skilled labour attract more businesses which lead to an increase in sales & customer satisfaction. In a bid to build customer retention and discourage customers from switching hotels based on minimal price differentials, small-size hotels must introduce a special package for their customers. These packages offer varied incentives to passengers based on the number of stays, number of people, and types of facilities used. Unfortunately, due to the similarity in the benefits offered by all hotels, very little competitive advantage is now derived from frequent customers and loyalty programs that lead to customer retention. Retention to the specific hotel is now relatively low except for businesspersons who still react to the incentives of customer-loyalty programs.

9. Conclusion

The study examined the probability and magnitude to which entrepreneurial orientation, industry forces, and firms' resources impact the business performance of small-size hotels. Specifically, it established the degree to which innovations, risk-taking, proactiveness, competitive aggressiveness, rivalry among firms, bargaining power of buyers, fear of new entrants, brand image, information technology and human resource impact on sales growth, profitability growth, customer satisfaction and customer retention. A logistic regression was applied to a collection of relevant information to establish the extent of the relationship between them and observed a significant relationship between each.

The analysis results showed that entrepreneurial orientation has a significant and positive correlation with the business performance of small-size hotels. Also, innovativeness, proactiveness, competitive aggressiveness and risk-taking showed significant correlations between each of the variables and business performance. The study covered some novelty aspects of the subject of entrepreneurial orientation and its effects on business performance. First of all, the use of constructs such as industry forces and firms' resources in the theoretical framework enhances entrepreneurial orientation to impact business performance. Secondly, the interaction of industry forces and firms' resources has extended the paradigm shift of broadening the scope of the theoretical and practical concept of entrepreneurial orientation. It, therefore, concludes that crucial factors that enable hotels to differentiate themselves are a good brand image, strategic use of information technology in accessing trendy information regarding the market asymmetries and quality of service. This is dependent upon good management and well-trained staff (human resources). Small-size hotels can provide innovative and considerable opportunities to cross-sell profitable products such as food and beverage, entertainment exhibitions and convention services.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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