

# Effects of Firm Conduct on Performance of Kenya Meeting, Incentives, Conferences and Exhibitions (MICE) Industry

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## Abstract

The purpose of the study was to investigate the effects of firm conduct on performance of Kenya meeting, incentives, conferences and exhibitions (MICE) industry. The specific objectives are to identifying the challenges and threats in the Kenyan M.I.C.E industry, to analyse the influence of firm conduct on performance, and to identify ways in which M.I.C.E industry in Kenya can be improved. The study targeted 324 but sampled 179 MICE stakeholders. Data was collected using a questionnaire. Descriptive and inferential data analysis techniques were used. Additionally, factor analysis and multiple linear regression models were used. The study found that firm conduct influence performance of the MICE industry in Kenya. The study recommended that government should develop MICE infrastructure, reduce interest rates, stabilise inflation and curb insecurity for the MICE industry to realize its full potential.

**Keywords:** market structure, firm conduct, performance, tourism.

## 1. Introduction

The Meeting, Incentives, Conferences and Exhibitions (MICE) industry is one of the key drivers of tourism destination development and an important generator of income, employment and foreign direct investment. The sector is also a key driver in knowledge sharing, networking and capacity building. It is also a key driver for intellectual development and regional cooperation (PwC, 2014).

The industry has come of age and has placed itself at the centre of economic development across many countries. Meetings industry provides immense benefits to the broader economy as it generates on average a higher spending level, reduces seasonality, contributes to the regeneration of destinations, spreads knowledge and enhances innovation and creativity (WTO, 2014). The industry comprises of various stakeholders whose role is critical in the performance of the MICE industry. These players include; clients/ delegates, government and suppliers among others. These stakeholders are affected either directly or indirectly by political, environmental and social pressures which shapes their conduct. For instance, competitive pressures resulting from globalisation, the growth of consumer power, scientific revolution of technology and market demand volatility determine the behaviour of each stakeholder in the MICE subsector.

In Africa, Kenya is the country with the second highest number of convention facilities according to the data from the ICCA. Out of Africa's 16 convention venues which are members of the ICCA, 4 are from Kenya, constituting 25 percent of the venues in Africa (ICCA, 2014). In 2012, incoming visitors participating in M.I.C.E. activities constituted 3 percent of all tourist arrivals in Kenya. Data from KIPRA (2013) reveal that the country has over 65,000 hotel beds in 1,700 licensed hotels, with 140 classified hotels.

The MICE subsector has come of age, firmly placing itself at the centre of tourism as one of the key drivers of the sector's development and an important generator of income, employment and investment. The M.I.C.E industry is a relatively emerging industry in the economy, and therefore it has the potential to generate high incomes for the country when invested into and its prospects explored further. It is this significant role of the M.I.C.E subsector and its high growth rate that warrants the need for empirical research to identify the effects of firm conduct on performance of the MICE subsector.

## 2. Literature Review

According to Policonomics (2012), the elements of structure-conduct-performance (S-C-P) paradigm are summarized into three main pillars which include structure, conduct and performance. There is the set of variables that are relatively stable over time and affect the behaviour of buyers and sellers in the market under structure. Concentration of supply and demand, product differentiation and barriers to market entry are what determine the market failures basically. Furthermore, the market structure is determined by the nature of the product and the technology available. Besides, conduct pertains to the way in which buyers and sellers behave both amongst themselves and amongst each other, with each firm choosing its own market strategy, collusion strategy, investment in advertising, and in research and development among others. Finally, performance relates to profitability levels and it is measured by comparing the results of firms along the industry in efficiency terms, and different ratios are used to assess different profitability levels. The product quality, price quantity, production efficiency, and resource allocation among others are some of the variables considered at this level.

Policonomics (2012) further states that it is harder to predict and establish fixed market structures

because of the highly dynamic behaviour of buyers and sellers. Shortage of data and the multiple definitions and extension of markets pose great challenges in explaining the structure–conduct–performance paradigm. The major problem when using this methodology to analyse a market or an industry is in fact the difficulty of defining the limits or boundaries of a particular industry. The most basic questions posed by strategic managers and economic researchers are ‘with whom do firms compete?’ and ‘how do firms compete?’

Structure–conduct–performance (S-C-P) paradigm is a model in Industrial Organization Economics which attempts to explain firm performance given the prevailing economic conditions under incomplete markets. The S-C-P paradigm explains that the market environment has a direct and a short term impact on the market structure. Robinson (1942) and Chamberlin (1948) indicated that the market structure directly influences a firm’s economic conduct and this in turn affects its market performance. Accordingly, feedback effects occur in a way that market performance may influence conduct and structure or conduct may impact on the market structure. Further, other external factors like political and legal interventions affect the market framework and the structure, conduct and performance of the market by extension.

This study is therefore based on the Bain (1951) theory of S-C-P which postulates that market structure affects firm conduct and the latter influences performance of an industry.

Even though many researchers attributes larger market share with higher profits, Wernerfelt (1986) noted that the higher returns from having a larger market share are counterbalanced by a correspondingly high price paid prior to attaining the large market share. Therefore, the market structure and consequently the firm size in terms of turnover, significantly influences the conduct of the firm.

Bain (1951) used S-C-P model to examine inter- industry differences in profitability. His study focused on the American manufacturing industry between 1936 and 1940. The major hypothesis tested was that the firms in industries with high concentration have relatively higher profit rates than those firms in industries of lower concentration. It was found that the association of concentration to profits was such that there was a rough division of industries into those with more and less product value. Less than 70% of value product was controlled by eight firms. There was no significant relationship between the size of the firm and profit rates. This implies that the larger market share may not be the only ticket to high profits.

Contrary to Bain (1951) and other researchers, Demsetz (1973) proposed an alternative explanation for the positive correlation between profitability and market concentration. The author postulated that the most efficient firms obtain greater profitability and market share and this makes the market more concentrated. He claimed that rapid changes in concentration are brought about by change in cost conditions and not alterations in the entry barriers heights. Industries with rising concentration should display greater disparities between small and large rates of return because of the significant cost differences which are the root cause of rapid alterations in the market structure of an industry. Schneider & Lenzenbauer (1993) carried out a similar study on the relationship between efficiency and profitability with respect to the size of firms. They concluded that the profitability of small firms is higher than the one of medium sized and large firms.

Hannan (1991) sought to examine the foundations of the Structure-Conduct-Performance Paradigm in banking. The main goal for this study was to employ S-C-P model and evaluate the performance of the banking industry putting into consideration the market structure in the banking industry. To achieve this, the author included the relationships between market structure on one hand and bank deposit rate, bank loan rates and bank profit rates on the other. Special emphasis was given to the roles of market concentration and market share, which was allowed to differ across the markets in which the banks operate as implied by S-C-P paradigm. The author found out that the total bank profits are additive attributable to each of a potentially large number of markets. These findings were similar to those by Neuberger (1997) which shown that the competitive conditions are different in different market segments, and significantly influences the profitability of the respective banks in a given economy.

Lakonishok et al. (1992) carried out a study on the structure and performance of the money management Industry in the United States. They focused on the performance and operations of the money industry and the pension funds. The authors described the industrial organization of the industry in light of agency problems and the elusiveness of good performance. They further look at the role of the agency approach in explaining other key features of the tax-exempt money management industry. The study employed secondary data from the performance and search databases. Performance in the study is measured using actual returns before management fees. To minimise the problems associated with finding the proper bench-mark against which to compare the returns, the authors looked at the performance only of all-equity funds. The authors concluded that as far as performance is concerned, pension fund equity managers seem to subtract rather than add value relative to the performance. There is some consistency of performance that would enable a firm to pick a better money manager on the basis of past performance, but even so it is not clear that this money manager would be able to beat the market. According to the author, the conduct of the agents, the management and the shareholders are very important in determining the performance of the firm.

As elucidated by Berger & Humphrey (1997), performance of firm narrows down to even decision

making process and the quality and accuracy of the decisions made. In their study, the authors surveyed one hundred and thirty studies that apply frontier efficiency analysis to financial institutions in twenty one countries. According to the author, frontier efficiency analysis is analysing and assessing a set of optimal portfolios that offers the highest expected return for a defined level of risk or the lowest risk for a given level of expected return. The primary goal was to summarize and critically review empirical estimates of financial institution efficiency and to attempt to arrive at a consensus view. The authors found that the various efficiency methods do not necessarily yield consistent results and suggest some ways that these methods might be improved to bring about findings that are more consistent, accurate, and useful. Secondary goals were to address the implications of efficiency results for financial institutions in the areas of government policy, research, and managerial performance. They concluded that efficiency significantly influences performance.

Maudos (1998) applied for the first time direct measures of efficiency obtained through the estimate of a stochastic cost frontier to examine the relationship between profitability and market structure in the Spanish banking industry. A sample used of 353 observations was selected from the period spanning from 1990 to 1993. The results obtained suggest that even though the main determinant of profitability is efficiency, market power, which in this study was measured by market share, also affects profitability. These results support the modified efficient structure hypothesis and disapproves market share as an adequate proxy for efficiency.

Cole & Mehran (1998) sought to examine the effect of changes in ownership structure on performance of firms using evidence from the thrift industry. According to these two authors, restrictions on stock ownership may harm the performance of a company. This is because restrictions hinder company owners from choosing an optimal structure. The authors examined the stock-price performance and ownership structure of a sample of thrift institutions that had converted from mutual ownership to stock ownership. They concluded that after conversion and the expiration of restrictions on the ownership structure, firm performance improved significantly, and the portions of the firm owned by managers and the firm's employee stock ownership plan increased. Changes in performance are positively associated with changes in ownership by managers, but negatively related with changes in ownership by employee stock ownership plans.

Lai & Limpaphayom (2003) carried out a study on structure and performance, using evidence from the nonlife insurance industry in Japan. The study examined the impact of organizational structure on firm performance, incentive problems, and financial decisions in the Japanese nonlife, also known as property-casualty, insurance industry. Stock companies that belonged to one of six horizontal keiretsu groups had lower expenses and lower levels of free cash flow than independent stock and mutual insurance companies. Keiretsu insurers also had higher profitability and higher loss ratios than independent insurers. Even with a limited sample size, the authors found some evidence that mutual insurers had higher levels of free cash flows, higher investment incomes, and lower financial leverage than their stock counterparts. Overall, empirical evidence suggested that each structure had its own comparative advantage.

However, it is worthwhile noting that performance does not only depend on the structure and conduct of a firm. Gardner & Grace (1993) estimated hybrid trans-log cost functions for five hundred and sixty one life insurers using six years data, from 1985 to 1990. The authors examined the resulting residuals to determine the relative efficiency of insurers in the sample. They then tested the residuals to see if there were efficiencies because of external and internal monitoring, or due to other factors related to rent seeking. Their results showed that inefficiencies were more persistent among sample firms, and that the inefficiencies related to some internal and external.

Kozak (2005) assessed the expectations of exhibitors in tourism, hospitality and the travel industry. The main objective of the study was to reveal the differences among dimensions regarding the exhibit objectives of the East Mediterranean Tourism and Travel Exhibition (EMITT), which has been the largest in tourism, hospitality, and travel trade shows in Turkey. The study relied on primary data collected by a questionnaire administered to all exhibitors that joined EMITT in Turkey in 2004. The author found that the exhibitors in the working areas of hospitality, tourism, and the travel industry in Turkey have contributed much to the tourism sector and to the economy as a whole. The results indicated that the exhibitors join the exhibitions for research-related activities. Therefore, enhancing company's personnel morale and collecting information about competitors were the important objectives which motivate the exhibitors.

Hodur & Leistriz (2007) sought to examine the economic impact of event tourism. The authors chose a study area which approximate a self-contained local trade area and a study area which includes the locations where most of the spending associated with the event will occur. Using primary data, they found that consideration of a few fundamental issues related to economic impact assessments can lead to reliable, defensible estimates of the economic impacts of tourism events. If the key considerations such as defining the study area, obtaining a representative sample, clarifying event participants' motivation for attending an event, and selecting an appropriate secondary impact assessment technique are carefully addressed, the Economic Impact Assessment (EIA) methodology can be effectively applied in a wide variety of circumstances and provide valuable insight for event planners, managers, and sponsors, economic development professionals, decision and

policy makers, and other interested parties. They concluded that since visitors spending can contribute to revenue and growth of the local economy, many communities seek to enhance tourism and visitor-oriented activities. Consequently, estimates of the economic impact of event tourism are of interest to a wide variety of interested parties.

Lee (2007) conducted analytical reflections on the Economic Impact Assessment of Conventions and Special events. The author reviewed in details the economic impact studies in the convention and event tourism sector; from which he discusses the Input-Output model framework. However, the author warns that the input output models can provide misleading results if certain issues are not carefully addressed namely the inherent assumptions, the sampling variability, expenditure switching, and the choice of economic variables. However, this notwithstanding, the author concluded that there are benefits accruing to host of MICE activities in the name of increased income, employment, increased tax receipts and infrastructure.

Elango & Pope (2008) investigated the diversification-performance relationship in the United States property-liability insurance industry. The study employed secondary data spanning from 1994 through to 2002. Using various measures of product diversification and firm performance, the authors found that the extent of product diversification shared a complex and nonlinear relationship with firm performance. Their findings suggested that performance benefits associated with product diversification were contingent upon an insurer's degree of geographic diversification. Robustness tests using subsamples and market returns for public firms confirmed consistency of the results.

Bauer et al. (2001) carried out a study of government intervention in the Australian MICE industry. The study was conducted on Australia and in seven Asian countries. Using primary data, the study identified the need for the players in the industry to clearly communicate their economic significance, in terms of revenue and job creation, to the governments in a language that the political decision makers can easily understand. The authors introduced a diversity of support schemes that is available to the MICE activities planners across the region under study. It is worth noting that despite the criticism that many governments do not fully support the MICE subsector, the governments of the countries investigated were found to be generally supportive of the efforts of the MICE industry.

Davidson et al. (2002) conducted a study on the use of Information and Communications Technology (ICT) by the European Meetings, Incentives, Conferences, and Exhibitions (MICE) Sectors. They conducted an online survey on the European membership lists of Meeting Professionals International and the Society for Incentive and Travel Executives. They got eighty responses in total representing a return rate of around 10 percent. They observed that MICE sectors are fully utilizing the opportunities created by ICT. They use ICT to market and disseminate information more widely and effectively to participants and potential participants. In turn, these participants are using internet more to register for such events and provide direct feedback on them. They observed that ICT has the potential to displace and replace actual travel for business related purpose.

Weber & Ladkin (2005) sought to analyze the trends affecting the Convention Industry in the 21st Century in the United Kingdom and Australia. By employing the Delphi technique, they established the principal business, technology, social and political trends surrounding the Convention Industries in these two major markets. They further discussed the similarities and differences of the results from Australia and the UK. They concluded that the future prospects of the convention and meetings industry in Australia and United Kingdom clearly depends on wide range of external factors; some of which are country specific whereas others are applicable to both countries. In spite of the different economic status of these countries, similar strategies are required to take full advantage of the opportunities and counter potential threats. This includes upgrading conference venues, investment in human resource, adoption of new and better technologies, marketing and lobbying for government support.

### 3. Research Methodology

This study uses the positivism research philosophy since this research philosophy enables the researcher to test the hypotheses and generalize the findings. Moreover, under positivism research philosophy one can use observed data to predict about the future. This philosophy fits our objective of not only understanding relationship between market structure, firm conduct and performance of M.I.C.E industry in Kenya but also to predict. Therefore, there is need to translate the underlying concepts into measurable forms such as developing indices for market structure, firm conduct and performance.

In this study, we use both explanatory and descriptive research designs. Descriptive research design is used to establish and describe the relationship between structure, conduct and performance of MICE industry in Kenya while explanatory research design is used to estimate the magnitude and direction of effect of market structure on performance through firm conduct.

Target population is defined as all elements or people that the researcher wishes to study (Zikmund et al, 2012). This study wishes to study all MICE stakeholders in Kenya. There are 324 registered firms that are in the MICE industry across the country (Kenya MICE Directory, 2015). The target population for this study



composed of 324 MICE stakeholders in Kenya.

The sampling frame for this study comprised of all MICE stakeholders in Kenya. This implies that the sampling frame is the entire list of three hundred and twenty four firms as listed in the Kenya MICE directory. The study aims at collecting data from a sample that is a good representation of the population in order to avoid biased parameter estimates. Blumberg, Cooper & Schindler (2014) noted that unbiased parameter estimates enables one to make correct policy recommendations. The study used probability sampling methods to choose firms to be included in the sample. Specifically, the study will use simple random sampling method to choose firms from a population of 324 MICE stakeholders in Kenya. Simple random sampling ensures that the sample collected is a good representation of the population (Saunders et al., 2012). Simple random sampling was used in the study to identify 179 firms that were to be interviewed. After identifying the 179 firms to be included in the sample, the study collected data from Chief Executive Officers (CEO) of these firms. The researcher assumed that CEOs had information regarding performance, firm conduct and market structure of the MICE industry.

The study used questionnaire as an instrument of collecting data from the selected 179 firms. Face to face method of questionnaire administration was used to gather data on performance, conduct and structure among other information from CEOs of the selected MICE stakeholders. The questionnaire was divided into four sections where section one collected data on demographic characteristics of the respondents, the second section collected information both financial and non-financial measures of performance, section three collected data market structure and finally section four collected data on market conduct. The five point Likert scale was used to rate various items with value one indicating low rating and 5 indicating high rating.

This study developed the research questionnaire that was approved by the supervisors and used it to collect data for pilot testing. Blumberg, Cooper & Schindler (2014) explain that pilot testing is used to pre-test the questionnaire and tests for its validity and reliability. Pilot study was used to assess the feasibility and reliability of the constructs such as conduct, structure and performance. Dillman (2000) argued that pilot study pre-tests all measures used in the questionnaire with the aim of identifying errors thereby improving on validity and reliability of the measurement constructs. Pilot study enables the researcher to identify the problems that may arise from design or layout of the questions in the questionnaire. A 10 percent of the sample as good enough for pilot testing is recommended by Mugenda & Mugenda (2008).

The researcher recruited two research assistants who assisted with data collection at pilot and main survey stages. The researcher called the CEOs of 18 selected firms (10 percent of 179) to book appointment in order to administer questionnaires. Afterwards, the researcher visited to firms and administered the questionnaires. Once the data for pilot study was collected, the researcher guided the research assistants on how to code it, enter data and clean it. The study tested for reliability and validity and thereafter collected data for the main survey.

Based on the 18 responses from data collected, the study tested for reliability and validity of the research instrument. Reliability of the questionnaire was tested using the Cronbach alpha. Where values of Cronbach alpha greater or equal to 0.70 indicate that the questionnaire is reliable while values less than 0.70 indicate the questionnaire is unreliable need modification. Regarding the validity of the research instrument, the study tested for external validity by administering the questionnaire to the professor and experts in the area of MICE.

The study uses both qualitative and quantitative data analysis methods to test the hypotheses. For qualitative analysis the study used frequencies and graphs to identify areas of improvement, challenges and threats that face MICE industry in Kenya. For quantitative data analysis, the study uses two analytical methods. First the study uses factor analysis to reduce items in each construct to few but highly correlated factors through principal component method and varimax rotation method. Additionally, the components identified by factor analysis are used in multiple linear regression model (Greene, 2012).

Greene (2012) argued that multiple linear regression model can be used to identify the direction and magnitude of the independent variable on the dependent variable.

The step involves testing whether firm conduct affects performance as shown in equation 3.5.

$$P_i = \beta_0 + \beta_1 FC_i + \varepsilon_i \quad (3.5)$$

Where, P denotes performance of MICE stakeholders that is measured by financial and non-financial measures (return on asset, return on equity, operating efficiency, sales growth, marketing, profitability and market share) of firm i, MS denotes market structure and FC denotes firm conduct.  $\beta$ 's are the parameters to be estimated and  $\varepsilon$ 's are the error terms.

The regression model used to determine whether firm conduct has an effect on the performance of the Kenyan M.I.C.E industry is such that  $P = f(C)$ . Therefore:

$$P = \beta_0 + \beta_1 C + \varepsilon$$

Testing for mediation requires that the relationship outlined in step one to three be significant otherwise mediation would not be possible. This analysis will be done in Statistical Software for Social Sciences (SPSS) version 22.

#### 4. FINDINGS

The study sought to collect data from 179 Chief Executive Officers (CEOs) of firms supplying MICE services in Kenya. All the 179 CEOs responded to the questionnaire representing a 100 percent response rate. This impressive response rate signifies the will of the CEOs to improve the MICE industry.

##### 4.1 Demographics

The study targeted both private and public owned enterprises. 92 percent were privately owned while just 8 percent was public owned.

The study found that majority of 81 percent of the MICE stakeholders were independent businesses entities while corporations comprised of 15 percent and only 2 percent of the respondents were corporate parent entities. This suggests that most of the stakeholders interviewed make independent decisions

The oldest institution in the sample was established in the year 1910 and two percent were established as late as 2014. Majority (23 percent) were established in the year 2000. Having these institutions with different years of experience in the sample, we are confident we have captured the views and experiences of all the suppliers of MICE services, whether new or old in the industry.

##### 4.2 Challenges and Threats Facing Kenya MICE Industry

The study tested the following hypothesis to find whether MICE subsector in Kenya faces any challenges and threats:

H0: Kenyan M.I.C.E industry does not face any challenges and threats.

H1: Kenyan M.I.C.E industry faces significant challenges and threats.

A majority of 68 percent of the respondents noted that there are challenges and threats that affect MICE industry. They identified these challenges as; high advertisement and operation cost, inadequate availability of space for big functions, insecurity, financial risks, low number of tourists, lack of government support, political instability, poor infrastructure, high inflation, limited access to credit, spill over effect of Ebola outbreak, inadequate research and slow adoption of new technology.

As regarding the new entrants, 38 percent indicated that there are no factors that hinder new firms from entering into MICE industry, while a majority of 60 percent indicated that indeed there are factors that hinder new firms from entering the industry.

This finding indicates that there are numerous challenges and threats that face Kenyan MICE industry. These problems are faced by new and old firms in the MICE industry, and some of them are so severe that they could lead to some of the suppliers of MICE services to exit the industry.

In addition, a majority of 63 percent noted that there are macroeconomic factors influencing sustainability and growth of MICE business in Kenya. Some of the factors listed include changes in economic growth, prices of food and beverages, cost of borrowing, level of unemployment, level of savings, fluctuations in exchange rate, inflation, investments and wages policy.

Respondents also suggested strategies that could be used to overcome the challenges faced by the suppliers of the MICE services. Among the strategies suggested include quick adaptation to technology changes, adequate and aggressive marketing, improved security, construction of roads and infrastructures, product diversification, monitoring customer satisfaction and embracing flexibility to keep up with the market trends, training the MICE personnel, providing adequate medical facilities, better control measures for external diseases like Ebola, lower the import duty for cars, and government to provide financing and tax holidays especially to the new entrants. This means that the government needs to address these macroeconomic issues to avert the challenges within the MICE industry in Kenya.

According to these results, we reject the null hypothesis and accept the alternative hypothesis that the MICE industry in Kenya faces challenges and threats. These challenges are faced by both the new and the old firms in the industry. They range from macroeconomic issues to political and insecurity.

##### 4.3 Regression Analysis

The study used regression analysis to test the relationship between firm conduct and performance. Factor analysis was first used for data reduction and to generate indices that were used in the multiple linear regression model. Factor analysis is aimed at identifying underlying factors or variables that explain correlation patterns within a given set of observed variables (Field, 2000). Through factor analysis, data is reduced to small numbers of factors that explain most of the variance that is observed in a much larger number of manifest variables

The regression model used to determine whether firm conduct has an effect on the performance of the Kenyan M.I.C.E industry is thus expressed as:

$$P = \beta_0 + \beta_1 C + \varepsilon$$

In conducting factor analysis, principal component analysis and varimax rotation method were used to reduce firm performance and market conduct constructs. Since there was huge missing data on financial

measures of performance, the study opted to use non-financial measures.

#### 4.4 Influence of Firm Conduct on Performance

The study sought to analyse the effect of firm conduct on performance in the MICE industry in Kenya. To achieve this, the following hypothesis was tested:

H<sub>0</sub>: Firm conduct does not influence performance of the Kenyan M.I.C.E industry.

H<sub>1</sub>: Firm conduct significantly influences performance of the Kenyan M.I.C.E industry.

The results show that the coefficient for firm conduct is -0.80 with a p value of 0.234 indicating that firm conduct does not significantly influence performance of the MICE industry in Kenya. This finding implies acceptance of the null hypothesis suggesting that firm conduct does not affect performance of the Kenyan MICE industry

The preceding sections were testing for the presence of mediation effect of firm conduct. These steps were used to test the zero-order relationships between market structure, firm conduct and performance. Mediation requires that all these zero-order relationships be statistically significant. However, MacKinnon & Fairchild (2009) assert that this rule of thumb cannot be used to rule out mediation because of one insignificant zero-order relationship. Some form of mediation is supported if the effect of the mediating variable remains significant after controlling for the independent variable. If the independent variable is no longer significant when mediator is controlled, the finding supports full mediation. If the independent variable is still significant (that is, both independent variable and the mediation variable both significantly predict the dependent variable) the finding supports partial mediation

A product is then formed by multiplying two coefficients together, the partial regression effect for firm conduct predicting performance,  $B_{FC: Model One}$ , and the simple coefficient for market structure predicting firm conduct,  $B_{MS: Model Two}$ . Therefore the coefficient for indirect effect becomes;

$$B_{Indirect} = (B_{FC: Model One}) * (B_{MS: Model Two}) \\ = (0.016) * (0.765) = 0.01224$$

To test for the significance of the indirect effect coefficient, the study tested the following hypothesis

H<sub>0</sub>: The indirect effect coefficient is zero in the population from which the sample data were randomly drawn.

H<sub>1</sub>: The indirect effect coefficient is not zero in the population from which the sample data were randomly drawn.

The test statistic (TS) is computed by dividing the indirect effect coefficient by its standard error, that is,

$$TS = \frac{\alpha\beta}{\partial_{\alpha\beta}}$$

Where  $\alpha\beta$  is the indirect effect coefficient, and  $\partial_{\alpha\beta}$  is its standard error, which is calculated as follows:

$$\partial_{\alpha\beta} = \sqrt{\{\alpha^2 \partial_{\beta}^2 + \beta^2 \partial_{\alpha}^2\}}$$

Where  $\alpha$  is the zero-order correlation or unstandardized regression coefficient for predicting mediation variable (Firm conduct) from predictor variable (market structure).  $\partial_{\alpha}^2$  is the standard error for that coefficient.  $\beta$  is the standardized or unstandardized partial regression coefficient for predicting outcome (performance) from mediation (Firm conduct) controlling for predictor variable (Market Structure) and  $\partial_{\beta}^2$  is the standard error for that coefficient.

Therefore,

$$\partial_{\alpha\beta} = \sqrt{\{\alpha^2 \partial_{\beta}^2 + \beta^2 \partial_{\alpha}^2\}} \\ = \sqrt{\{0.765^2 * 0.037 + 0.016^2 * 0.106\}} \\ = 0.14724$$

Therefore, to calculate the test statistic,

$$TS = \frac{\alpha\beta}{\partial_{\alpha\beta}} = \frac{0.01224}{0.14724} = 0.08313$$

This test statistic is usually evaluated by comparing it to the standard normal distribution. The test statistic for the coefficient of indirect effect is 0.08313 and is below the critical value of 1.96. This implies failure to reject the null hypothesis at 95 percent confidence level. The study concludes that the indirect effect coefficient is zero in the population from which the sample data were randomly drawn. This suggests that there was no significant indirect effect of market structure on performance through firm conduct.

This finding indicates acceptance of the null hypothesis that market structure does not have an indirect effect on performance.

#### 4.5 Ways in which MICE Industry in Kenya can be improved

The study sought to identify ways in which Kenyan MICE industry could be improved. To achieve this, the following hypothesis was tested:

H<sub>0</sub>: There are no ways in which Kenyan M.I.C.E industry could be improved.

H<sub>1</sub>: There are ways in which Kenyan M.I.C.E industry could be improved.

The findings shows that increasing research on MICE, quick adaptation technological changes, increasing MICE awareness campaigns, improving security, economic growth, reducing inflation and interest rates, increasing MICE infrastructure investment, developing human capacity on MICE, reducing taxes and emphasising on local tourism as key ways in which Kenyan MICE could be improved.

This finding implies rejection of the null hypothesis and suggests that there are various ways in which MICE industry can be improved.

## 5. Conclusion

Even though Kenya is among the leading MICE destinations in Africa, full potential of the Kenyan MICE industry is yet to be realized. The government, the players in the industry, and the general public has much to put in to fully reap the benefits from the sector.

All the players in the industry need to adapt quickly to changing technology and leverage on the same to offer services more efficiently and reach out to a large clientele in their advertising efforts. The players should also consider uniting by forming SACCOs that could voice their complaints and enhance government supportive measures by emphasizing their importance in the economy. There should also be creativity and flexibility in designing MICE packages in a way that all groups of organizations, small to large are accommodated. In addition, human skills in the industry need to be emphasized through trainings and capacity building to ensure that all staff within the industry are in updated with the current developments in the industry.

The government on the other hand needs to put measures in place to make sure that cheaper loans are available to firms in the MICE industry. The government should consider giving special rates and guaranteeing loans to firms in the industry, of course observing some threshold. Alternatively, the government may consider reducing taxes of the firms in the industry to reduce the operating costs. In addition, the government should consider increasing police presence (through police posts and patrols) in areas faced with terror threats. The police officers in those areas should also be properly equipped to increase their alarm response rate. Proper scanning and identification of people accessing the area should also be implemented. The government should also seek to improve the infrastructure network.

Members of the general public also have a role to play in the MICE industry. They should embrace domestic tourism, and report to police any terror threats. However, as per our analysis, the policy makers should not be concerned with individual firm conduct. The net effect is zero, that is, if one player gains the other one loses.

The study recommends that indirect effect of market structure on performance through firm conduct be evaluated, but now using the financial measure of performance. Researchers may also test for mediation using governance as the mediation variable.

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**Table 4.3: Effect of Firm Conduct on Performance**

	Coefficient	Standard Error	Significance
Constant	4.239	0.243	0.000
Firm Conduct	-0.80	0.067	0.234