Role of Market Structure on Performance of MICE in Kenya

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Abstract
The purpose of the study was to investigate the role of market structure on performance of Kenya meeting, incentives, conferences and exhibitions (MICE) industry. The specific objectives are to examine the direct effect of market structure on performance of the Kenyan M.I.C.E industry 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 market structure has no effect on 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, and also suggested that the MICE stakeholders and the general public should work on their respective inputs to improve the performance of the MICE industry in Kenya.

1. Introduction
Meetings, Incentive travel, Conferences and Exhibitions (M.I.C.E) industry is a multi-billion dollar industry in developed destinations and complements other forms of tourism like beach and bush. The MICE market is worth over thirty billion US dollars a year worldwide (ICCA, 2014). Lau et al. (2004) and World Tourism Organization (2014) explain that MICE tourism can bring invaluable business to cities, towns and regions in the name of expenditure on local transport, accommodation, and other tourist goods and services.

The global meeting demand is even increasing at an increasing rate as more investments are needed in this subsector. In North Africa and the Middle East for instance, there is increasing demand for events due to the growing awareness of the region’s attractive destinations, high quality developments and improved infrastructure (Benchmark Hospitality International, 2013). Statistics from the Global Association of Exhibition Industry (2012) show that the exhibition industry in Africa is still high despite the global economic downturn and political instability such that it is even projected that the industry in Africa will witness massive growth in the near future.

Dieke (1991) argues that tourism should be planned and managed using the internationally accepted planning methodologies like the Recreation Opportunity Spectrum and the Limits of Acceptable Change. In vulnerable ecosystems, based on these methodologies and relevant background information, tourism should be restricted and where necessary prevented.

The increasing contribution of MICE in the tourism sector and development agenda in general comes at a critical turning point as we shift from the Millennium Development Goals (MDGs) into the Sustainable Development Goals (SDGs) which is the new blueprint for global development. During this crucial time, MICE will be counted on to fulfil its role as an important player in achieving the ambitious goals of sustainable development, green growth and a more resilient global economy.

2. Literature Review
Aleksandrova & Lubys (2004) argue that the S-C-P paradigm has been the primary approach of examining market performance as it postulates that certain market attributes such as market concentration and barriers to entry affect the profitability of a company within the relevant market structure. The S-C-P paradigm is based on the hypothesis that structure influences conduct and conduct influences performance. There are mainly two competing hypothesis under SCP paradigm namely structure performance hypothesis and efficient structure hypothesis. The structure performance hypothesis asserts that the degree of market concentration is inversely related to the level of competition because market concentration presents an incentive to the firms in the industry to collude thus reducing competition. Efficient structure hypothesis on the other hand postulates that performance of the firm is positively related to efficiency and this is because the market concentration emanates from competition where low cost structure increases profits by expanding market share and reducing prices.

Effective collusion between firms increase as industry concentration increases reason being concentration reduces the cost of collusion. Less favourable prices to consumers positively affect firm performance (Berry-Stölzle et al., 2011). Further, Seperich et al. (1994) argue that according to the Structure-Conduct-Performance model, the conduct of firms in any industry is highly informed by the market structure in that particular industry and this therefore directly affects their efficiency level and ultimately dictates their market performance.

Bobel (2010) summarizes the S-C-P paradigm by explaining that there are four main elements of S-C-
P paradigm namely; Basic external conditions of Demand and Supply, Determinants of Market Structure, Determinants of Market Conduct, and Criteria to determine Market (Industry) Performance. From the supply side, some of the elements that define structure, conduct and performance include inputs (raw materials and other inputs like employees skills), production technology, unionization of the employees, product durability, transportation cost of the products to the market, business attitudes and the legal framework in which corporations operate. From the demand side, price elasticity of consumer demand, rate of growth of demand, the existence of substitutes for firm and industry products, patterns and cycles in production and consumer purchases, and marketing type are some of the features that determine structure, conduct and performance of a firm.

This paper is founded on the Bain (1951) theory of S-C-P which explains that market structure affects firm conduct and the latter influences performance of an industry. Berry-Stötzle et al. (2011) in their study tested the three major hypothesis explaining firm’s performance namely structure-conduct-performance hypothesis, relative market power hypothesis, and efficient structure hypothesis. Panel data covering twelve countries from the years 2003 to 2007 were used to test the hypothesis. The results strongly supported the efficient structure hypothesis, and there was no support or very little if any for the structure-conduct-performance hypothesis, or the relative market power hypothesis. This means that the efficient firms are in a better position to charge lower prices than competitors, allowing them to capture a larger market share. In this case, consolidation may benefit both firms and consumers because the more efficient firms can charge lower prices and earn even higher profits.

According to Baldwin and Scott (2013), market structure drives technological innovation. They define market structure as encompassing economically important features of business environment including market concentration (number and size distribution of market’s sellers), barriers to entry, firm’s sizes, and diversification. Stiff competition always pushes companies to adopt modern technology in a bid to increase efficiency and be the best in the industry. Competition from the new commodity, new technology, new source of supply, new type of organization is more effective than price competition. The authors further note that industry structure can be viewed as determinants of innovation. It becomes a matter of comparative indifference which company functions more or less promptly and efficiently. Throughout, research and development means firms’ activities directed at the creation of innovations which may be introduced by bringing either new processes into production or new products to the market.

In their study on the structure and performance of the money management Industry in the United States, Lakonishok et al. (1992) focused on the performance and operations of the money industry and the pension funds. They 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 benchmark 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. Some consistency of performance that would enable a firm to pick a better money manager on the basis of past performance is found, although it is not clear that this money manager would be able to beat the market.

Lai & Limpaphayom (2003) in their study on structure and performance, using evidence from the nonlife insurance industry in Japan 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.

Both tangible and intangible benefits from the MICE industry cannot be understated. These may include associated social and cultural benefits to the host destinations, the exchange of ideas, the cultivation of business contacts, the provision of forums for continuing education and training, and the facilitation of technology transfers. It is therefore worth improving MICE industry in any economy (Lee and Back, 2005).

Developing nations can market themselves as exotic locales, yet cost effective where corporate objective can be met in a rejuvenating setting. Hotel properties being converted to conference resorts, as well as upscale resorts opening all over the world, are blending resort spa facilities with full-service business amenities (International Trade Centre, 2001).

Thinking and acting strategically by assessing the needs, anticipating coming challenges and facing them with appropriate measures are discussed by World Luxury Tourism (2015) as some of the methods that the MICE industry could adopt to boost its performance. The Industry must think of events as launch pads for
continued revenue generation, adopt value chain thinking and strive to develop tomorrow’s leaders and managers. In addition the industry must prove its relevance and value by demonstrating that meetings are not the economic problem, but are a vital part of the solution. The industry must be ready to nurture agility and flexibility, personalize and deepen their learning experience. All these lessons are relevant for the MICE industry Kenya.

In order to make meetings more relevant, the U.S Travel Association (2015) explain that there is need to re-establish the ‘value of meetings’ to business leaders, policy makers, and individual consumers. It is clear to both government and business that there is no substitute of a handshake: the tangible and intangible value is clear. Real data, new research and uniting the entire travel industry behind strong messaging is the foundation for the industry’s future success and it is therefore important to ensure that the travel industry is prioritized during transportation planning and policymaking including the development of a new, long-term infrastructure master plan. In addition, investment in modern air infrastructure, streamlining the intermodal transportation projects, reforming aviation taxes and encouraging reinvestment of revenues into the aviation system will come in handy in improving the meetings industry.

According to the International Labour Organization (2010) diversity and innovation are the major ways in which tourism can be improved. Use of effective and high speed Information Communication Technology (ICT) infrastructure and software applications can greatly improve the MICE industry since it allows supply chain management and customer–management relations to be combined into a single source that facilitates a variety of operations namely; ordering, product selection, tracking, fulfillment, payment and reporting – to be performed with one easy-to-use tool. This ultimately cut costs by enabling the provider to be in direct contact with the consumer and also impact employment through the need for required maintenance of ICT equipment. Additionally, managers in the MICE industry can enhance the efficiency of employees in the workplace through ICT (through things like online reservations) which ultimately leads to staff reductions which has positive cost saving implications.

International Trade Centre (2001) explains that providing business support facilities that allow travellers to transact business efficiently 24 hours a day can encourage extended stays in hotels. An increasing number of hotels embracing the concept of business-class rooms that feature enhanced work space and lighting, Internet access via the TV, data ports, two-line cordless phones, and private faxes are coming up or have already been established. A case in point is a hotel chain in the US which became the first to take its business class rooms abroad in 1997, and now offers such rooms in 29 other countries. When coupled with 24-hour business service centres, the result is often an increase in guests who extend their stay and engage in tourism activities.

3. Research Methodology

Research philosophy is defined by Cooper & Schindler (2013) as the way in which data of a certain phenomenon can be collected and analysed. This study uses the positivism research philosophy since this research philosophy enables the researcher to test the hypotheses and generalize the findings. Further, under positivism research philosophy one can use observed data to predict about the future. This philosophy fits the study objective of understanding relationship between market structure and performance of M.I.C.E industry in Kenya and also to predict. Therefore, there is need to translate the underlying concepts into measurable forms such as developing indices for market structure and performance.

According to van Wyk (2012), research design is the overall plan for connecting the conceptual research problems to the appropriate empirical research i.e. it explains the data that is required, the methods that are to be used in collecting and analysing that particular data, and how all of this is going to answer the researcher’s study question. This study uses the explanatory research design to estimate the magnitude and direction of effect of market structure on performance through firm conduct.

This study wishes to study all MICE stakeholders in Kenya. There are 324 registered firms that are in the MICE industry across the country. The target population for this study composed of 324 MICE stakeholders in Kenya. A sampling frame lists the names of all the items in a universe (Kothari, 2004), and it is universally organised in the form of a physical list of population elements (Ross, 2005). 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. This study aims at collecting data from a sample that is a good representation of the population in order to avoid biased parameter estimates. According to Blumberg, Cooper & Schindler (2014), 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). This study used simple random sampling to identify 179 firms that were to be interviewed. After identifying 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.
In this study, we used a questionnaire as an instrument of collecting data from the selected 179 firms. Questionnaires are a low cost method, free from the bias of the interviewer since the answers are in respondents' own words, however, having appropriate time to give well thought-out answers, respondents can also be reached conveniently; however, they may not be easily approachable, and finally, large samples can be made use of and therefore the results can be made more dependable and reliable (Kothari, 2004). 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, section two collected information on both financial and non-financial measures of performance, section three collected data on 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.

The study developed the research questionnaire that was approved by the supervisors and used it to collect data for pilot testing. Pilot testing is used to pre-test the questionnaire and tests for its validity and reliability (Blumberg, Cooper & Schindler, 2014). 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 the design or layout of the questions in the questionnaire. Mugenda & Mugenda (2008) recommended a 10 percent of the sample as adequate enough for pilot testing. The researcher recruited two research assistants who assisted with data collection at pilot and main survey stages. The researcher called the CEOs of 18 (10% of 179) selected firms to book appointment in order to administer questionnaires. After booking an appointment, 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.

A pilot study was conducted in order to evaluate things such as time and to see what part of the study design could be improved or changed to ensure the results obtained from the questionnaires most accurate. A target of 18 responses was set and actually obtained.

The study tested for reliability of the questionnaire based on 18 managers from firms in the MICE industry. The results show that the Cronbach alpha for firm performance construct was 0.872, for market structure was 0.705 and market conduct had a Cronbach alpha of 0.801 (Table 3.1). This indicates that the value of Cronbach alpha for each measurement construct was greater than 0.7 suggesting that the construct is reliable. The study also estimated the overall Cronbach alpha for the whole questionnaire and found that it was 0.872. This indicated that the questionnaire was reliable.

### Table 3.1: Values of Cronbach alpha for Measurement Constructs

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value of Cronbach alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Performance</td>
<td>0.872</td>
<td>4</td>
</tr>
<tr>
<td>Market Structure</td>
<td>0.705</td>
<td>6</td>
</tr>
<tr>
<td>Market Conduct</td>
<td>0.801</td>
<td>8</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>0.872</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

To establish the validity of the research instrument, the researcher sought opinions of consumers, supplies, and law enforcers. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity. Furthermore, the study assessed the responses and non-responses per question to determine if there was any technical dexterity with the questions asked.

In this study, factor analysis, correlation analysis, univariate analysis and multivariate analysis were used. Additionally, 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). Analysis was done using SPSS. The regression model used to determine whether market structure has an effect on the performance of the Kenyan M.I.C.E industry is such that \( P = \beta_0 + \beta_1 S + \varepsilon \).

Where, \( S \) 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 \( i \), \( \beta \)'s are the parameters to be estimated and \( \varepsilon \)'s are the error terms.
4. Results and Findings

4.1 General Information

The study found that a majority of 81 percent of the MICE stakeholders were independent businesses entities while corporations comprised of 15 percent. The remaining 2 percent of the respondents were corporate parent entities. This suggests that most of the stakeholders interviewed make independent decisions since they are dependent entities.

The oldest institutions in the sample were established in the year 1910 and comprised 1 percent of the total firms surveyed. The latest firms to be established in the year 2014 made up 2 percent of the total firms surveyed. The year within which most firms were established was 2000, with 46 firms that accounted for 23 percent of the total firms. Having these institutions with different years of existence and over 100 years of difference in years of establishment and 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 Effect of market structure on performance

The value of R squared is 0.06. This means that only 6% of the variances that occur in firm performance can be explained by market structure. This is a relatively low percent and implies that market structure is a poorly fits the regression model. The F statistic in this case is 5.732.

The coefficient is -0.29 and this means that market structure and firm performance have a negative performance. This implies that an increase in a unit of market structure leads to a decrease in firm performance by 0.29. The p value is less than 0.05 and thus implies that the relationship between market structure and firm performance is statistically significant.

4.3 Ways of improving MICE Industry in Kenya

A significant number of respondents (23.3%) believe that improving infrastructure, transport and communication sectors respectively would play a big role in improving the MICE industry. 13.64% believe that government intervention, especially where the government comes up with regulations favourable to the MICE industry and also those that help improve the state of security in the country. This is because security plays a really big role in the MICE industry. Other ways that the MICE industry can be improved that were mentioned include: quick adaptation technological changes, increasing MICE awareness campaigns, increasing rate of economic growth, reducing inflation and interest rates, increasing MICE infrastructure investment, developing human capacity on MICE, reducing taxes and emphasising on local tourism as some of the key ways in which Kenyan MICE could be improved.

5. Summary, Discussion, Conclusion and Recommendations

The direct effect of market structure on performance was also another objective of the study. Table 4.25 shows the results obtained after a regression analysis was done. A negative relationship is portrayed by a coefficient -0.29. However, p value 0.000(p>0.05) shows that their relationship is statistically significant. Therefore, market structure as an individual component directly affects performance of the MICE industry in Kenya.

The study was also keen to find if there are any ways in which the MICE industry can be improved. Data was collected in form of a questionnaire. The particular question was an open-ended one where respondents could give as many answers as possible. It was concluded that indeed, there is a variety of ways in which the MICE industry can be improved. To improve the MICE industry in Kenya, respondents noted that there was need for more research, quick adaptation to economy and technology changes, conducting awareness campaigns, building good roads, forming of SACOS by members within the industry, beefing up security, reducing interest rates to allow adequate financing, lower taxation rates within the industry, and putting more emphasis on local tourism among others.

The study found that market structure directly has a significant effect on performance. As shown in table 4.25, the coefficient was negative indicating a negative relationship. This means that increase in competition, for instance, would lead to a reduction in market share, growth in sales, and profitability by 0.29. On the other hand, firms profit and market share decrease with increase in product differentiation. A p value of 0.000 enables us to support that indeed, market structure has a significant effect on performance without having firm conduct as a mediator.

To improve the performance in the Industry, respondents also suggested several measures. Top on the list include more research, quick adaptation to economy and technology changes, more aggressive competition, conducting awareness campaigns, building good roads and general improvement of infrastructure, forming of SACOS by members within the industry, boosting security all over the country especially in areas prone to attacks and inter-community clashes, reduced interest rates to allow adequate financing and easier access to loans, lower taxation rates within the industry, and putting more emphasis on local tourism and encouraging it among others. Additionally, it is important that this growth in the MICE industry be sustainable. A majority of
63 percent indicated that there were macroeconomic factors that influence sustainability and growth of the MICE business. Some of these factors include economic growth, inflation, interest rates, investment, employability and skills, taxes, and savings among others that all affect the MICE industry in Kenya.

5.1 Conclusions

There is a negative direct effect of market structure on performance. In conclusion, an increase in competition implies reduction in market share, growth in sales, and profitability. On the other hand, firms profit and market share decrease with increase in product differentiation.

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 and marketing efforts. There should also be creativity and flexibility in designing MICE packages in a way that all groups of developments, 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 is updated on the current developments in the industry. The government needs to put measures in place to make sure that cheaper loans are available to firms in the MICE industry and also consider giving special rates and guaranteeing loans to firms in the industry, of course observing some threshold. The government may also consider reducing taxes of the firms in the industry such that their operating costs are reduced. The government should also seek to improve the infrastructure network to ensure easy access and thus open up the areas. Members of the public should embrace domestic tourism, and report to police any terror threats. As per our analysis, the policy makers should not be concerned with individual firm conduct. The net effect is zero, that is, one player’s gains will lead to the other player’s loss.

The findings of this study suggest that there is no indirect effect of market structure on performance but the researcher suspects that it is because non-financial measures of performance were used in this case. This was due to unreliability of financial data collected in this study. The researcher also suspects that research done on indirect effect of market structure on performance using financial measures of performance may yield contradictory results from the results that this study produced. Governance can also be used as a mediation variable. Further research can be done to look into the relationship between market structure and performance, using governance as the mediator. This is because governance includes establishment of policies and regulations which define how the industry operates in such a way that it is legal and the competition is free and fair for all. This means that it can greatly influence the market structure which eventually affects how firms perform since governance is bound to change and with it may come changes in the rules and regulations which generally affect the business environment and to some extent define it.

References


van Wyk, B. (2012). Research design and methods Part I. University of Western Cape.

Table 4.26: Market Structure on performance

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
</tr>
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<tbody>
<tr>
<td>Model</td>
<td>3.498</td>
<td>1</td>
<td>3.498</td>
</tr>
<tr>
<td>Residual</td>
<td>52.603</td>
<td>195</td>
<td>0.270</td>
</tr>
<tr>
<td>Total</td>
<td>56.101</td>
<td>196</td>
<td></td>
</tr>
</tbody>
</table>

F =12.97
R-squared = 0.06
Adj R-squared = 0.058
P=0.000

Table 4.27: Coefficient of Market Structure

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.203</td>
<td>0.273</td>
<td>0.000</td>
</tr>
<tr>
<td>Market Structure</td>
<td>-0.29</td>
<td>0.081</td>
<td>0.000</td>
</tr>
</tbody>
</table>