

Components of Exogenous Innovation Barriers in Hotels within Nairobi City, Kenya

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Abstract

The aim of this paper was to establish and conceptualize parameters that can be used to measure exogenous innovation barriers. It is important to understand useful indicators that can be used to examine the extent to which the barriers can affect different aspects of management in the hotel sector. The study employed descriptive research design and was conducted in Nairobi city. From a target population of 190 front line employees, 127 formed the sample size for the study. Purposive sampling was used to select three five-star rated hotels in Nairobi, then employees in the hotels were stratified into primary and support departments before systematic sampling was used to select the respondents. Primary data was gathered from employees by use of administered questionnaires. Reliability of data was tested using Cronbach's Alpha resulting in a value above 0.7. Factor analysis reduced the indicators from ten to three. Hence exogenous innovation can be measured using three components namely; change hurdles, administrative obstructions and entrepreneurial blockades.

Key words: Components, Exogenous barriers, Innovation barriers, Innovation

INTRODUCTION

Hadjimanolis (2003) asserts that there are factors or constraints that inhibit innovation. These factors, which place obstruction or inertia in innovation, termed barriers to innovation, can arise for various reasons. Identification and categorization is fundamental since it creates mechanisms to reduce their existence, minimize them, or convert them into facilitators of innovation. Exogenous barriers, also referred to as internal barriers are those that arise inside the company and external barriers, those that arise from the external environment. (Cordeiro and Vieira 2012; Hadjimanolis, 2003; Guijarro, Garcia and Auken, 2009; Stanislawsky and Olczak, 2010). Small and Medium Enterprises are mostly flooded with many similar, often easily substitutable service offerings which make it difficult for customers to differentiate an establishment from its competitors. This situation can decrease the competitiveness of these establishments, the Kenyan hospitality establishments included; hence the need to introduce several radical innovations. However, several studies (Davidsson 1989, Hakim 1989) show that most small firms are, in fact, not very entrepreneurial or innovative despite their economic

value. Nikolaou *et al* (2007), state that organizations are increasingly demanding more and more from their employees-such as taking initiative, generating innovative ideas, speaking up and accepting responsibility. This is as a result of intensive competition, higher customer expectations and increased focus on quality among others.

Keegan *et al* (1997), Cooney *et al* (1996), stated that barriers to innovation in European SMEs are both shared across countries. Barriers to innovation that European small firms in general perceived as most significant are, according to Keegan *et al*(1997), high costs associated with innovation, to long pay-off period for innovations, low availability of venture capital, the understanding that innovations are too easy to be copied by competitors, high rates of income tax and social insurance, the small size of the domestic market, lack of government support for business, national tendency towards jobs with security, an education system that influences people to get a job, and a national tendency to recent successful. Regarding exogenous innovation barriers, some of these obstacles that stifle innovation process are; the society's beliefs and traditions, risks and criticism resulting from innovation failures, lack of governmental support, stringent bureaucracies and formal procedures. For instance, Henrekson (1996) asserts that bureaucracies and formal procedures like budgeting and governmental approval processes can be so embedded and cumbersome that they can stifle creativity and flexibility in the workplace. This study sought to establish the components of exogenous innovation barriers in the hotel industry.

Exogenous Barriers to Innovation

The government, its policies and regulations, is a frequent source of barriers to innovation. He views barriers as a component of a national innovation climate in the country. Government taxation is by many small firms perceived to have negative implications for these firms' willingness and capability to invest in innovations. As demonstrated by Henrekson (1996), most governmental regulations favor large-scale firms by their tax policies, credit policies and labour laws. Lack of government support for small business as compared to those with security, besides, education system that influences people to get a job instead of starting a business is other de-motivating factors.

Regulations can take several forms, and most industries are subject to at least one of them which businesses are obliged to follow set regulations if they are to operate successfully. Seth & Ram (1987) categorized regulation into four forms. The first is self –regulation that stipulates codes of business practice and business ethics are limited to the industry, trade or professional association. A good example of self-regulation is the codes and rules that exist in the hotel and restaurant act, 1972 that influence prices, ratings and general operations wherein an establishment is required to comply with the codes, failure to which it may be unable to operate on the same market as the other organizations. The second type is government

regulation of both company's internal operations and its market operations. Government regulators are concerned with product safety, occupational safety, antitrust violations, and trade practices.

An example is the United States' Federal Aviation Administration, which regulates the aviation industry by certifying aircraft, setting maintenance standards, controlling air space, and overseeing the commercial aviation business. Their primary mission is product safety and passenger safety (Seth & Ram, 1987). Katz (2003) notes that governmental requirements and regulations can also be used to enhance the attractiveness of domestic producers over foreign competitors. However, the role of governments is not confined to regulation such as government purchases of a product in the early stages of the market development around an innovative product which could affect the balance in favor of the firm producing it, and make this product more likely to become successful (Suarez, 2004). The third type is limited to certain government controlled services, such as water and energy supply. These markets are monopolies, where the fundamental thrust is rate regulation: prices and products are approved by the government (Seth & Ram, 1987). The fourth type of regulation relates to patents and trademarks. New technologies or processes can be patented and brand names can be protected by trademarks. Patents and trademarks are useful in protecting inventors from imitators seeking to exploit an innovation and thereby deny the rightful innovator the commercial opportunity (Seth & Ram, 1987).

Bureaucracies and formal procedures point to frustration with approval processes, which can be so embedded and cumbersome that they can stifle creativity and flexibility in the workplace. Public sector policies and rules (and how they are interpreted) can be used to block innovative options. For example, concerns about the legal and operational issues with innovative platforms can prevent or delay firms to accessing potential service delivery options. These policies may be related to confidentiality, e.g. intellectual property rights, this can impact on access to information, whereas freeing up information and actively encouraging exchange and collaboration across organizations will promote innovation (Australian Public service commission, 2012).

Just as external public pressure can serve as a source and driver of innovation, it can also constitute a barrier. Inherent resistance to change can mean that the innovation process may barely be underway before opposition is expressed and mobilized. Existing stakeholders who feel they have a stake in the current system may resist change despite its inherent benefits. In some quarters, a suspicion that government-sponsored changes are usually aimed at saving money and cutting services will provoke resistance innovation can be perceived as code for removing something we like'. Some issues may be seen as inappropriate for government involvement, or the exploration of an idea may be misinterpreted as a government endorsement of a controversial position. Also, the process may be at fault. The

innovation might not have been well explained beforehand or the transition might have been poorly managed, becoming an unwelcome and/or misunderstood surprise. In addition, support for an innovation may be rattled by early problems or setbacks during the implementation phase. In each of these circumstances, negative public or stakeholder reaction can cause an innovation to be scrapped. This is not to say that responding to external feedback is bad—there is always the possibility that the new idea or system may be an inferior solution—but overreaction to limited or poorly informed feedback can stop a new idea dead in its tracks. It can also stifle the desire to innovate by giving support to the perception that good ideas will not be defended from unfair criticism. External reaction needs to be considered and carefully balanced against the strength of the case for innovation. Unless the pressure for innovation is very strong, the risk side highlighted by external criticism often seems weightier than an uncertain innovative outcome (Australian Public service commission, 2012).

Public servants are regarded as risk-averse. This is not surprising, given the potential for political and media criticism of the government if programs or policies are seen to fail. It is easier to avoid criticism by not taking risks, particularly as the consequences of risk-taking in the public sector can be severe and can include political damage to the government, public criticism, possible legal consequences, diminished career prospects, and damage to personal reputation. As well as the obvious risk of failure, a range of other risks may be involved in introducing innovation, these may include the risk that the innovation may render the skills of the staff or service manager of the organization obsolete, secondly the risk that the innovation will cost more than was intended, the risk that the innovation will have unintended consequences, fourthly that the innovation might be successful but that the PSO could not cope with the subsequent increased level of demand for the service (Australian Public service commission, 2012).

According to Australian Public service commission (2012), parliamentary formal processes for scrutiny, such as the budgeting process or the reports of the Auditor-General, tend to focus on risks, shortcomings and failures. It is not the vast majority of agency activities being performed successfully that claim attention, but the small minority experiencing problems. A disproportionate focus on those activities can lead to broad claims and perceptions of public sector incompetence and ineptitude. Such exposure to parliamentary and public criticism can act as a powerful disincentive for experiment or risk taking and again emphasizes the need to carefully manage public sector innovation. Legal frameworks also emphasize risk. Legal advice will detail risks, many of which will not have equal weight but must still be considered. Poor legal advice will often set out all possible risks without advising on likelihood, consequences or ways of minimizing the risks. Above all, however, the problem is that most elected chief executives perceive bureaucratic innovation as very risky. Challengers, legislators, and the media concentrate almost exclusively on failure. Failure is news, it generates controversy, particularly about

who was responsible, and can be portrayed as scandalous (Australian Public service commission, 2012).

The public sector supports the government of the day by implementing its policies. While this does not prevent organizations from putting forward innovative ideas that may be different from existing government policy, it makes it harder to sell the merits of those ideas. Senior executives and ministers may recognize the value of a proposal, but if it would force the government to withdraw an established policy position- this is much less likely to be accepted. Innovations can also occur at the wrong time in a political cycle and be caught up in a change of priorities. Innovations that feed into the government's priorities, particularly those that hold the promise of addressing problems facing the government, will have a good prospect of support. In some instances, an innovative idea will need to wait for the right time and climate to attract the support it may deserve (Australian Public service commission, 2012).

According to Australian Public service commission (2012); social factors like religion and local traditions discourage consumers from accepting modern foods, clothing, and lifestyles in general. Tradition barriers can cause successful products to fail in one culture because of inability to break the traditions. An example is that many people in Catholic countries do not want to use condoms, because this is against the will of the church. Another example in the hospitality sector is the consumption of certain foods which are deemed as a taboo in some communities, additionally the resistance of modern medicines in some Asian countries where they have always relied on herbal remedies and other alternative means to treat diseases. In addition, patents and mindsets of customers are barriers that are difficult to break.

There is resistance to innovation especially when changes are required in established traditions affect societal culture and when the change is great there is bound to be resistance. An example of a tradition barrier is the eating and drinking habits of (groups of) persons. Drinking beer was viewed as blue collar while gin and tonic was a drink that no real man would prefer over a shot of whiskey. This barrier of tradition is probably the biggest obstacle to product innovation in many developing countries. Perhaps the most common reason for customer resistance to an innovation is that it is not compatible with existing workflows, practices, and/or habits of the user (Seth & Ram, 1987).

MATERIALS AND METHODS

The research was carried out in three selected International chain hotel establishments located in Nairobi city. This study employed descriptive research design. The target population comprised 190 frontline employees in all three five-star rated international hotel chains. The sample size computed was 127 employees.

The study employed purposive, stratified and systematic sampling methods. Purposive sampling technique was used to identify the establishments, stratified samplings was used to stratify the hotels according to primary and support departments while systematic sampling was used to pick employees at a ratio of the sample size. Both primary and secondary data sources were employed in the study. The study utilized questionnaires as the tools of data collection. Both content and face validity was performed to check the instruments' adequate coverage of the topic. Reliability was measured using Cronbach's Alpha at a level of 0.7%. Descriptive statistics (means, frequencies and percentages) were used to summarize data. Factor analysis was performed in order to establish the elements that can be used to measure exogenous barriers. As displayed in table 1, exogenous was measured using a 5-point Likert scale.

Table 1: Measurement of Components of Exogenous Barriers

1. The government does not offer enough innovative support to the hotel
 2. We face governmental stringent regulations on innovation.
 3. We face governmental bureaucracies on innovative products
 4. We encounter formal governmental procedures for example in registration of new products or services.
 5. The government focuses on the risks of failure of the new products and services
 6. There are social factors like consumer taboos which discourage the consumption of new products and services
 7. Our existing external stakeholders resist change despite its inherent benefits
 8. Innovation occurs at the wrong time in a political cycle which changes priorities.
 9. There are potential external criticisms if innovation is deemed to fail.
 10. It is difficult to compete with other companies that have a high level of innovation
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RESULTS AND DISCUSSION

Reliability tests were captured through statements on a 5-point Likert scale. The reliability test results showed that Cronbach's alpha coefficient of the exogenous barriers was 0.703 respectively, hence a good internal consistency of the factors used to measure. This value is above the minimum value of 0.7 considered acceptable by Hair *et al.*, (2006). On the other hand, descriptive results found that majority (50.7%) agreed that the government does not give enough innovative support to the hotel. Concerning government regulations on innovation 48% agreed that the regulations do not offer support to hotel innovativeness. Table 2 depicts that lack of government support and regulations are exogenous innovation barriers that exist in hotels based on the mean results of all the measures that fell within 2 (Agree) based on the Likert scale.

Table 2: Descriptive Results on Exogenous Innovation Barriers

Item	Scale	Count	Percent	Mean	Std. Dev
The government does not offer enough innovative support to the hotel	strongly agree	17	22.1	2.83	1.418
	agree	22	28.6		
	neutral	6	7.8		
	disagree	21	27.3		
	strongly disagree	11	14.3		
The hotel faces governmental stringent regulations on innovation	strongly agree	15	19.5	2.88	1.414
	agree	22	28.6		
	neutral	11	14.3		
	disagree	15	19.5		
	strongly disagree	14	18.2		

Factor Analysis

Factor analysis was carried out for each of the variables to reduce the number of items on each of the variables for ease of presentation, analysis, interpretation and discussion of the most significant factors. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.721, which is above the recommended acceptable value of 0.5. Therefore the sample size was adequate. Bartlett's test of sphericity indicated that the factor model was inappropriate because it was significant ($p < 0.001$), implying that factor analysis was appropriate.

Table 3: KMO and Bartlett's Test of Exogenous Innovation Barriers

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.721
Bartlett's Test of Sphericity	Approx. Chi-Square	92.748
	Df	28
	Sig.	.000

Although 10 factors were computed for exogenous innovation barriers, not all the factors were useful in representing the list of variables. Using the criterion of retaining only components with reasonable percentages of variance eigen values, the first 3 factors were retained for rotation which accounted for 33.05%, 14.13% and 13.71% of the total variance respectively. These barriers were designated change hurdles, administrative obstructions and entrepreneurial blockade respectively. This gave a cumulative percentage of 60.904% of the total variance attributed to the three components. Thus, a model with three components was adequate to represent the data.

Table 4: Total Variance Explained of Exogenous Innovation Barriers

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1.Change hurdles	2.64	33.06	33.05	2.64	33.05	33.05	2.07	25.99	25.99
2.Administrative obstructions	1.13	14.14	47.19	1.13	14.13	47.19	1.65	20.73	46.73
3.Entrepreneurial blockade	1.09	13.71	60.90	1.09	13.71	60.90	1.13	14.17	60.90

Extraction Method: Principal Component Analysis.

Table 5 shows the rotated component matrix that presents 3 components after Varimax rotation. These three components explain a total of variables grouped into each of the three principal components namely: change hurdles, administrative obstructions and entrepreneurial blockades respectively. The interactions converged in 5 iterations. Varimax Criterion was used to rotate the components in order to reduce multi-collinearity and hence account for 100% of the variance.

Table 5: Rotated Component Matrix (a) of Exogenous Innovation Barriers

Rotated Component Matrix ^a			
	Component		
	Change hurdles	Administrative obstructions	Entrepreneurial blockade
Innovation occurs at wrong time which changes priorities	.773		
External stakeholders resist change	.745		
Social factors discourage the use of new products	.652		
Government does not offer enough innovative support		.767	
Governmental stringent regulations on innovation		.836	
Focuses on the risks of failure of the new products			.823
Governmental bureaucracies on innovative products			.602
Governmental procedures e.g. In registration of new products			
There are potential external criticisms if innovation is deemed to fail.			
It is difficult to compete with other companies that have a high level of innovation			

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

a. Rotation converged in 5 iterations

CONCLUSION

Exogenous innovation barriers can be measured using three factors that are stumbling blocks to innovation namely; change hurdles, administrative obstruction and entrepreneurial blockade. Specifically, change hurdles include wrong timing for innovation process, resistance to change by external stakeholders and social factors such as culture and beliefs that discourage use of new products. Administrative obstructions include stringent governmental regulations and policies of licensing, product registration and taxation that stifle the innovation process. Lastly, entrepreneurial blockade include placing too much emphasis on the risks of failure of new products and unhealthy bureaucracies that impede innovation. Consequently for innovation to take place in the hotel industry, these exogenous barriers must be addressed as this study has clearly brought out the three components as obstacles to innovation.

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