

ASSESSING SUPPLY CHAIN VULNERABILITIES IN EVENT MANAGEMENT IN THE MEDIA INDUSTRY IN GHANA- A CASE OF A MULTIMEDIA STATION

Martey Georgina Kafui¹, Boison David King², Addison Linda³, Asiedu Esther⁴,
Ofori-Nyarko Ernest⁵, Amoah Cornelius Kwarkoh⁶

Coventry University-UK^{1,3}, Ghana Technology University College^{2,4,6} and Methodist University College⁵

Abstract: This study sought to assess supply chain vulnerabilities in event management for the media industry in Ghana. From literature reviewed, a hypothesized model for assessing vulnerability and possible risk in the entire supply chain event management process was adopted for this study. Well-structured questionnaires and interview questions were developed based on this model. The stratified and purposive sampling techniques were adopted in the administering of questionnaires to 100 staff of the case study organization as well as experienced event organizers in the media industry. Data collected was then analyzed using tables, graphs and thematic analysis. The study discovered that, a significant number of events planned (between 61-80%) were successful with a percentage failure of 20% maximum. This proved that, there was some degree of vulnerability in each event organized that amounted to the percentage failure obtained. Moreover, it was evident that, areas along the supply chain event management process accounted for failures, with high rate of failures for planning, logistics and risk management. This paper thus recommended the implementation of Zero Budgeting, to ascertain the true cost of items during event planning. Also, feasible milestones and timelines should be set with event stakeholders in other to have an effective and functional event brief document. The Multimedia industry should further consider other networks for the promotion of events in order to attract other segments of the market. Lastly, brand managers should have an event concept that can attract sponsorship by conducting a comprehensive market survey.

Keywords: Supply Chain, Vulnerability, Event, Media, Management, Multimedia.

I. INTRODUCTION

In the business world today, most events are purposely organized to gain returns on investments, create awareness and develop a brand. These events are mostly managed by professional event planning businesses or planners who take care of corporate events for organizations as well as social events to generate revenue [1]. [2] thus define event management as an occasion that firms organize; considering the overall objective of the organization in areas such as role delegations, tools and work process, success factors and trends. It requires learning the intricacies of brands, knowing the target audience, developing a concept, logistics planning, budgeting and technical issues before commencement and post event analyses. This creates a link between the different departments in the organization needed to run the event and managing the flow of information. These factors according to [2], are very significant for all event management industries. Usually, event management starts from the planning stage through to execution and since it's a service oriented system, both production and consumption happen at the same time. For example, for an awards night show, planning involves venue, artists, sound system, stage and lighting. However, over the last decades, businesses and academia have become increasingly concerned with the failure rate in event management. Statistics show that, five out of every ten events organized, fail due to reasons

such as poor planning, financial and logistics constraints among others. In view of this, it is important to assess supply chain vulnerability in event management. [3] therefore explains supply chain vulnerabilities as the submission to severe interruption. On the other hand, CIPS Knowledge Works sees supply chain vulnerabilities as the point of susceptibility to a crucial risk to the supply chain network [4]. It is also defined as the existence of random disturbance that lead to deviation in the supply of components and materials from normal, expected or planned schedules or activities –all of which cause negative effects or consequences for the involved manufacturers and its sub-contractors [5]. In addition, [6] points out that, the tendency of source of risk and their drivers to draft risk control plans, can be done by triggering unfavorable supply chain results. Subsequently, Miss Patty a guest on Joy FM’s entertainment show (Rhythms A-Z) discussed issues concerning the crises with the organization of the annual Miss Ghana Beauty Pageant competition [7]. In her interview, she attributed the failure of events to the attitude to event organizers. The biggest beauty pageant show in the country has had issues over the years leading to the sudden resignation of the first and second runner-ups of the pageant in the year under review, as a result of the organizers extorting Ten Thousand Ghana Cedis (GH¢ 10,000) to give participants favorable positions. Miss Patty was however, unable to attribute the issue to the 10% percent commission promise to any contestants who successfully brought in a sponsor [7]. Also, the 2010 “Adom Praiz” musical concert organized by Adom FM with the popular American Gospel singer, Cece Winans was rescheduled 24 hours before the show, after massive publicity. This was due to poor arrangement of transportation with the airline, resulting in a reschedule of the event [8]. [9] published an article about the recently organized Ghana @60 Music Week festival by the Musicians Union of Ghana (MUSIGA) and stated that the programme failed to live up to expectation. This was attributed to inadequate financial support from the government and corporate institutions among other factors. The event also failed because publicity was very low and attracted about 50 patrons although it was free [9]. The Business Insider on February 27, 2017 further published a story on Oscars 2017 and Miss Universe 2015 in the United States which faced similar challenges. Renowned TV presenter, Steve Harvey wrongly awarded the winners of the Miss Universe 2015, causing major setback for organisers. In both incidents, the winners were recalled and told it was a mix up, this was the biggest embarrassment in the history of the Oscars and Miss Universe contest [10]. What is worthy of note is that, the failure of the various events organized across different jurisdictions could be linked to defective planning, aside the inability of the event organizers to possess the needed financial muscle to finance those programs. The identified challenges are responsible for the five out of every ten events failure rate in the world. These challenges among other hidden factors have necessitated the need to assess the supply chain vulnerability in event management using events organized by Multimedia Group Limited as a case study. To achieve this, the following objectives were established: a) Assess the entire value chain in event management of the Multimedia organisation and b) Assess the vulnerabilities and risks of the activities of the Multimedia event management systems.

II. LITERATURE

Theoretical Review

As postulated by [2], good research should be grounded in theory. EMBOK was developed by the Silvers and adopted in 2004. It refers to a set of values that spell out the areas to be taken into consideration when planning, organizing and hosting a successful event [11]. It has basically three dimensions; corresponding to core values, processes and phases of project management. According to Silvers, EMBOK plays an important role in assessing the overall scope of the event as well as the responsibilities to be allocated [12]. It encompasses various knowledge areas; situational and experiential, technical and specialized skills as well as ethical standards which helps in drawing up a detailed plan of action to be used in organizing lucrative events [13]. EMBOK also identifies various tasks during the event planning phase. These tasks are classified into five areas; marketing, risk and design, administration and operations, with 35 functional domains of event management. Assessment, Selection, Monitoring, Documentation and Communication are also several phases in event management which serve as a useful structure for event managers to work with. Within each of these phases are found various elements that have specific features which are affected by and subject to different objectives, procedures, constraints and standards during the diverse stages [12]. Furthermore, [11] posits that, this framework is appropriate for assessing event risk management. The study resonates with EMBOK model in principle and practice. A research by [14] explains value chain as the entire range of activities that takes a product or service from start, through different transformational stages of production and finally delivering to consumers. Authors, Lanen, Anderson and Maher also define the value chain as a group of activities that transfer raw sources into goods and services purchased and consumed by end users and in addition, treats or disposes off any waste generated by the consumer [15]. To affirm this stance, value chain is described as a group of interlinked events carried out by an organization, from procuring of raw materials to advertising finished products to the final consumer [16].The Multimedia organization’s value chain event management

structure can however be aligned to this value chain analysis model. This is because it includes the primary and secondary activities within the service delivery process and therefore the multimedia organization has solid brand that seeks to create compelling contents and deliver maximum value to the largest audience (advertisers and all stakeholders).

Empirical Review

Research by AMR states that supply chain event management (SCEM) are processes and systems that warn companies of any unforeseen changes in the supply line of events so as to provide alternative responses. It is regarded as a concept in management that monitors and gives notification of deviations [17]. Likewise, [18] defines SCEM as an early warning system for inconsistencies or errors in the supply chain process. It is also perceived as a proactive short-term planning and control concept [19]. Similarly, [20] recognizes supply chain event management as a long-term assessment of critical events and disturbances. SCEM strive to identify proactively the possible deviations between plan and execution across the supply chain stages as well as players to initiate corrective measures [21]. Thus, in focusing on the likelihood of uncertainties, there is therefore the need for managers to take proactive measures to prevent and minimize vulnerabilities in the supply chain process and ultimately meet customer demands. In today's uncertain and unstable markets, supply chain vulnerability has become an issue of significance for many event management firms. The challenge for businesses is to manage and mitigate risk through creating a more resilient supply chain. Supply chain managers must therefore measure and manage vulnerabilities to help reduce the amount of disruption and its impact. The ability to recognize the initiatives in supply chain and perceive its value and consequences on the firm, makes it easier to manage vulnerabilities and help reduce risk [22]. Vulnerability is a supply chain feature used to assess the degree of exposure and severity of risks by measuring the impact and ability to control disruptive events [23]. [24] in their studies, also define supply chain vulnerabilities as an exposure to serious disturbance and [25] supports this assertion. Accordingly, [26] claim that, vulnerability is inherent in the characteristics of supply chain and could be defined as the susceptibility to risks. Subsequently, various authors commend that, vulnerability is a supply chain feature that results in risks. [27] supports this claim by stating that, the determination and managing of vulnerabilities is vital as it increases the proficiency in dealing with risks. For that reason, the concept of vulnerability is viewed as a significant factor in the process of risk management within supply chain networks.

Risk in events is basically anticipating the unexpected. [12] defines risk in events as any condition or occurrence that might affect the outcome of an event or event activity; exposing the event organization to a loss. It is the production of hazard and vulnerability [28]. Further research by [29] expounds that risk is anything that could possibly hinder, threaten, interfere or impact on the success of an event. Risk management and assessment must therefore be embedded right from the conception stage of the event to the end (planning, designing, organizing and production). This is to ensure that, the risk associated with the event is effectively and efficiently managed. Event managers must infuse risk awareness attitude in all stages of the event; looking out for likely threats and vulnerabilities. These managers must also identify financial, professional, property and life threats; setting out measures to minimize and mitigate the effect of possible losses. Ultimately, risk management is the process of expectancy, averting or reducing potential costs, problems or harm for an event, its invitees or partners as well as the organization [30]. Although risk management in the event industry may be event dependent and use different approaches, it encompasses every single area of event organizing, that event planners should be concerned about. It consists of five main steps: Assessment, Selection, Monitoring, Documentation and Communication. According to [31], risk assessment approach keenly identifies challenges and manages threats or harm. Risk assessment is therefore key in its competence in event planning; exposing uncertainty and translating it into the knowledge for decision-making. There is however, a common misconception by some event planners that, risk assessment is only significant for large-scale events while others also neglect risk due to inexperience. It can also be inferred that resources for some events are limited or insufficient to adequately prepare and assist event planners in assessment [11]. Inherently, managers of events are liable to ensure the safety and security of event stakeholders including event attendants, volunteers and personnel. It is therefore necessary for event planners to be knowledgeable about probable risks in order to control their impact [32]. In summary, event organizers and venue managers need a certain level of understanding, knowledge and skills in risk assessment and management so as to successfully predict, evaluate and manage all risks involved. [33] therefore presumes that, success will depend on accurately identifying and assessing the impact of risks.

Identifying the critical success factors in event management is vital. Critical success factors (CSFs) can be defined as the management areas that require unique and consistent attention in order to guarantee a reasonable chance for success [34]. Stakeholders' perceptions are taken into consideration when analyzing success factors for an event [35]. Experts in their analysis, extensively identify the following areas as key factors of success in event management: planning and controlling

of projects; problem solving skills, committed and an operative leadership skill; human resources management; handling of relationships and collaboration with media, sponsors, event experts, event promoters among others [36]. A research conducted by [37], identifies ten knowledge areas and attributes essential for the success of an event. Those skills were further characterized into five areas: (1) Legal/finance (2) Management (3) Public relations/marketing (4) Economic/analytical (5) Ethical/contextual. Other researchers highlighted six areas in the success factors of events within the project stages [38]: distinct goals, clear concept, event feasibility, assessing of events, effective communication and task management. The steps in event management will have serious consequences on event planners and organizing agencies, if any mistakes or challenges are identified. They must therefore have knowledge of these challenges that makes an event vulnerable and susceptible to risks. Areas where these challenges can be identified are as follows: a) Clear marketing concept, b) Integrating with other Marketing Communication Vehicles, c) Communication d) Human factor, e) Problem-solving skills by event organizers, f) Risk management & control and g) Cultural factors. Tables 1 and 2 lists a number of events both in Ghana and international.

Table 1: Challenges and Failures of Multimedia Event Programs

Event	Challenge Area	Challenges	Failure/Results
Airtel Adom Praiz (2016)	<ul style="list-style-type: none"> Logistics (Venue) Logistics (Ticketing) Human factor Communication Contract arrangement Safety and security 	<ul style="list-style-type: none"> High charges in securing a venue Weather High ticket prices and availability of tickets Economic situation Ticket security not assured Sound engineers show up late Miscommunication of event date between international artiste and event team Late sharing of program line-up with local artiste Delay in payment by sponsors Difficulty in collecting sponsorship monies Delay in payment by sponsors Difficulty in collecting sponsorship monies. Security negligence at entrance and car park 	<ul style="list-style-type: none"> High venue cost Low ticket purchase Tickets duplication Selling tickets at cheaper prices Delay in starting and closing of show Postponement of event Delays in show start up time Disruptions during show Sponsors not fully funding event Theft Free entry by show attendants
Joy Fm Beauty & Bridal Fair (2010)	<ul style="list-style-type: none"> Marketing communication functions Contract arrangement Human factors Marketing challenges Logistics (Sponsors) 	<ul style="list-style-type: none"> On air promotion was inadequate Interviews as stated in the contracts were not executed Late arrival of patrons to marriage seminar Fashion designers and beauticians were not properly organized Bridal magazine for a cheaper prize had competitive advantage over event magazine Unauthorized photography of exhibitors' challenge event photography Sponsors (Airtel) pulled out at the last minute of the event. 	<ul style="list-style-type: none"> Low publicity Cancellation of interviews with sponsors and exhibitors Poor sales of magazines A lot of magazines were unsold Cancellation of beautician's and fashion seminar. Sales of event magazines affected
JoyFM Keteke Fever (2010)	<ul style="list-style-type: none"> Logistics Technical support 	<ul style="list-style-type: none"> New procurement approval procedures Air conditioners not functioning properly Insufficient food and drinks for the guest technical problems from sound 	<ul style="list-style-type: none"> Late payment to logistics suppliers Delay in mobilization at the event Patrons kept moving outside for fresh air Poor customer satisfaction Poor sound effects
Joy fm Skuuls Re-union 2012	<ul style="list-style-type: none"> Financial resources Logistics (security) 	<ul style="list-style-type: none"> Delay in payment for the venue Security challenges encountered with the 2011 edition The rain disrupted the event 	<ul style="list-style-type: none"> Music play and interaction with crowd activities delayed

Table 2: Summary of challenges of other global events

Event	Source	Organizers	Challenges	Failures/Results
<ul style="list-style-type: none"> Ghana@60 Music Week 2017 	<ul style="list-style-type: none"> http://pinkfmonlinegh.com 	<ul style="list-style-type: none"> Musicians Union of Ghana (MUSIGA) 	<ul style="list-style-type: none"> Financial constraints Failure to integrate with other Marketing Communication Vehicles 	<ul style="list-style-type: none"> Low turnout at the event Event was behind schedule
<ul style="list-style-type: none"> LG's Twenty-Gun Trip to the Hospital (Korea) 	<ul style="list-style-type: none"> Nicholas (2014) 	<ul style="list-style-type: none"> LG 	<ul style="list-style-type: none"> Poor logistics support (security) Ineffective Risk management assessment 	<ul style="list-style-type: none"> Riots occurred
<ul style="list-style-type: none"> Miss Universe 2015 award 	<ul style="list-style-type: none"> http://www.abc.net.au/news 	<ul style="list-style-type: none"> Unknown 	<ul style="list-style-type: none"> Poor communication 	<ul style="list-style-type: none"> Wrong pronouncement of the winner (Miss Universe 2015)
<ul style="list-style-type: none"> Australia's next Top Model (2010) 	<ul style="list-style-type: none"> ABC News (2010) 	<ul style="list-style-type: none"> Unknown 	<ul style="list-style-type: none"> Poor communication 	<ul style="list-style-type: none"> Wrong pronouncement the winner
<ul style="list-style-type: none"> Burnaboy and AKA Concert (2015) 	<ul style="list-style-type: none"> http://www.omghana.com/ 	<ul style="list-style-type: none"> Ghana 	<ul style="list-style-type: none"> Poor Marketing Communication function 	<ul style="list-style-type: none"> Low turnout
<ul style="list-style-type: none"> Unity Concert (2015) 	<ul style="list-style-type: none"> vibesin5.com 	<ul style="list-style-type: none"> Ghana 	<ul style="list-style-type: none"> Poor Marketing Communication function Cultural factors 	<ul style="list-style-type: none"> low turnout due to bad weather condition
<ul style="list-style-type: none"> Black Consciousness Tour (2016) 	<ul style="list-style-type: none"> http://faceofagulu.com/category/entertainment/ 	<ul style="list-style-type: none"> Ghana 	<ul style="list-style-type: none"> Lack of problem solving skills Poor communication Lack of technical support Poor Marketing Communication function 	<ul style="list-style-type: none"> Change of venue Failure to adhere to state protocol Sound equipment
<ul style="list-style-type: none"> Michael Jacksons Shows 	<ul style="list-style-type: none"> YouTube by Alexy Jackson (2012) 	<ul style="list-style-type: none"> Unknown 	<ul style="list-style-type: none"> Poor communication Poor technical support Poor logistics support (security) Ineffective Risk management assessment 	<ul style="list-style-type: none"> microphone consistently going off Curtains fail technical team taken too long to respond Michael burning face and scalp on stage due to explosion missing stage props a crazy fan climbed up to the stage crane static on stage

III. METHODOLOGY

In order to achieve the objectives of the study, the mixed method approach was adopted based on the pragmatist research paradigm. The researchers sought to explore and understand from experts, the subject area and also give participants involved in events organised since 2010, the opportunity to objectively express their views. The descriptive research design was employed as it was found appropriate to explore areas of the supply chain vulnerabilities in the Multimedia organisation and also describe its value chain process. The stratified and purposive sampling strategies were used. A population size of three hundred (300) was targeted in the entire stratum and a sample of one hundred and sixty-nine (169) with a significance level of five percent (5%). Closed-ended questionnaires were administered to the one hundred and sixty-nine (169) participants across the various stratum and sixty-nine percent rate (69%) feedback was received. Furthermore, five (5) experts from event management industries (Charter House, EIB Network, Multimedia Group Ltd, Miss Ghana and Ghana Movie Awards) were interviewed. High ethical standards were maintained. Data collected were analysed using graphs, tables and thematic analysis was also used to analyse the interviews conducted.

IV. FINDINGS

Results

In assessing the number of events that were successfully planned within the organization, 4.7% rated successfully planned events between 1-20%. Also, 8.1% agree that 21-40% of the events were successfully planned with 5.8% of respondents

agreeing to 41-60% of these events being successfully planned. 68.6% of the respondents rated successfully planned events between 61-80% whereas 12.8% were of the view that 80-100% of events within the organization were successfully planned. This is demonstrated in table 3 below.

Table 3: Number of events that were successfully planned

		Frequency	Percent
Valid	1-20%	4	4.7
	21-40%	7	8.1
	41-60%	5	5.8
	61-80%	59	68.6
	81-100%	11	12.8
	Total	86	100.0

Source: Field Work (2017)

In assessing the rate of failure of events in table 4 below, 66.3% of the respondents rated events that failed between 1-20%. Also, 27.9% of the respondents ranked events failure between 21-40%. 4.7% however agree that events that failed were between 61-80% while 1.2% of the respondents rated failed events between 41-60%.

Table 4: Rate of event failure

		Frequency	Percent
Valid	1-20%	57	66.3
	21-40%	24	27.9
	41-60%	1	1.2
	61-80%	4	4.7
	Total	86	100.0

Source: Field Work (2017)

Majority of the respondents representing 30% said logistics accounted for the failure rate of events. 27% of these respondents were of the view that risk planning and management accounted for the failure rate. 19%, 16% and 8% of respondents however said that planning, budgeting and on-air promotion accounted for the failure rate of events respectively. This is shown in figure 1 below.

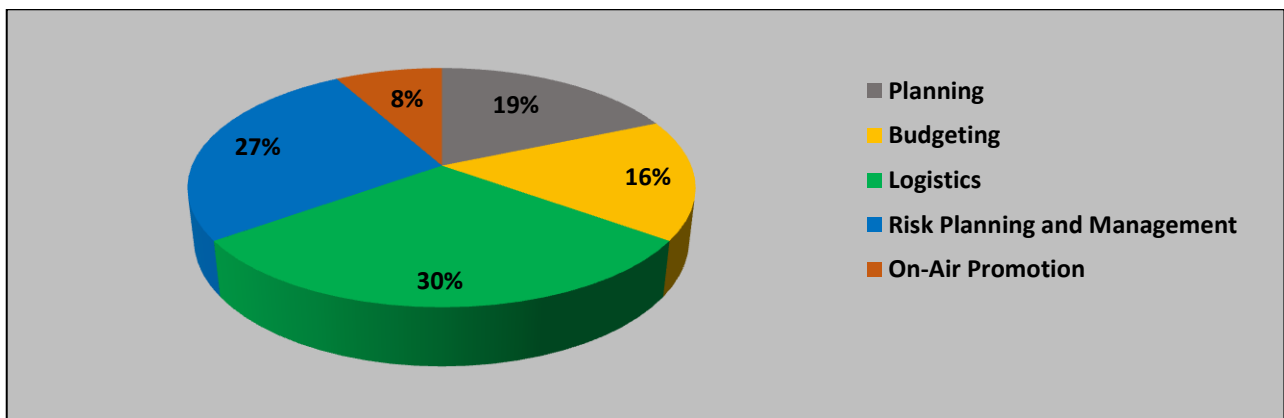


Figure 1: Event management areas accounting for failure rate of events

Source: Field Work (2017)

Figure 2 below shows that, 44% of respondents were of the view that event brief accounted for event failures in planning for an event. 29% and 15% said the absence of stakeholders and a concept in planning accounted for event failure respectively while a least percentage (12%) said proposal accounted for failure.

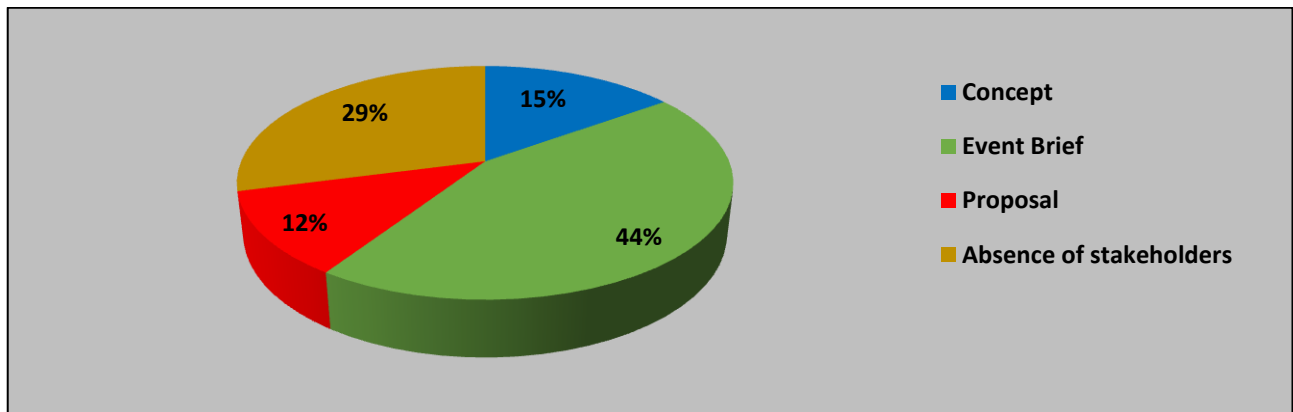


Figure 2: Segment in planning accounting for event failure

Source: Field Work (2017)

In Figure 3 below, the graph depicts majority (55%) of the workers supporting the lack of sponsorship as accounting for event failure in budgeting. High financial expenditure however represents 28% of participants and 17% supporting sales and marketing team’s inability to sell event as segment in budgeting accounting for event failure.

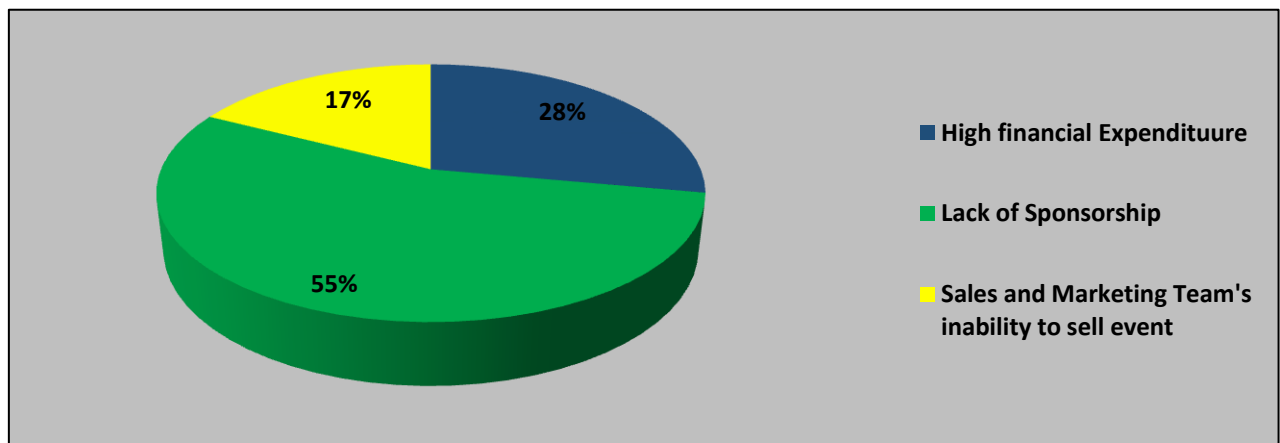


Figure 3: Budgeting segment accounting for event failure

Source: Field Work (2017)

Figure 4 below, is response from employees on the segment in logistics that accounts for event failure. From the graph, the same number of respondents representing a percentage of (26%) chose venue and event promotion as the segment in logistics that accounts for event failures. Event failure attributed to artiste was selected by 18.6% of the workers, 16% selected ticketing, 9% also selected technical and engineering and 2% selected security.

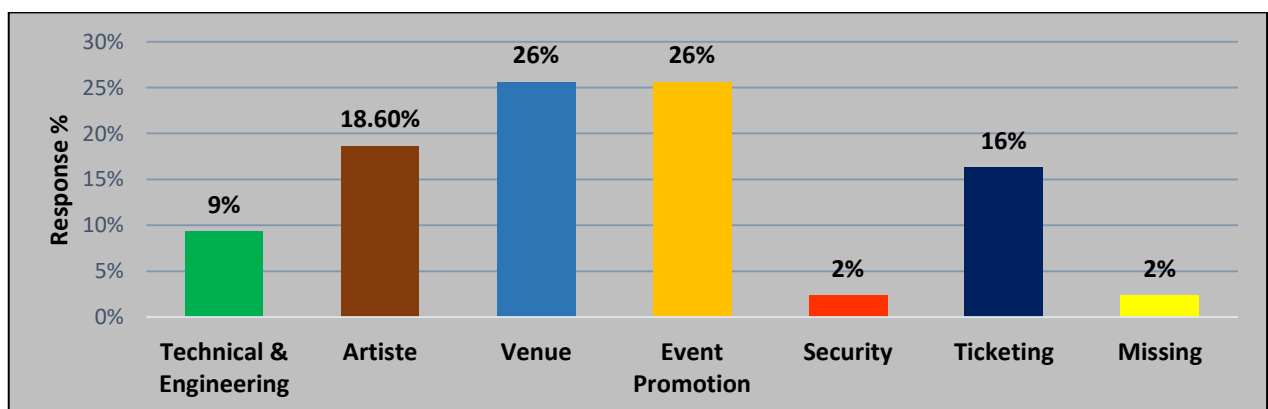


Figure 4: Segment in Logistics accounting for event failure

Source: Field Work (2017)

In Figure 5, 38% of respondents as constituting the greatest percentage are in support of the fact that the non-availability of a risk management plan accounts for event failure in risk management. Logistics challenges were also identified by 22% of respondents as the segment in risk management that accounts for failure. 7%, 10% and 4% were of the view that lack of funds, climate change and tight budget accounts for the rate of event failure in the risk management section respectively. In addition, unnecessary delay of the event due to stakeholder engagement and withdrawal of sponsor was identified by 19% of the staff causing event failure in risk management.

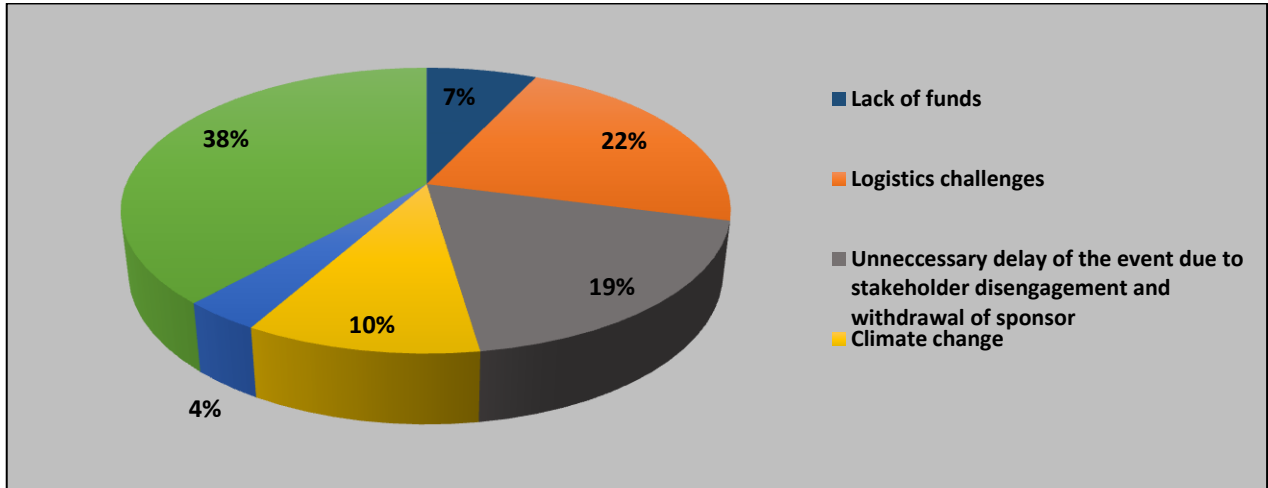


Figure 5: Segment in Risk management accounting for event failure

Source: Field Work (2017)

In Figure 6 below, response from 32.6% of the staff show that, cost of failure under logistics ranges between GH¢ 50,000-88,000 (\$10,000-20,000). 12.8% agree to cost ranging between GH¢ 92,000-178,000 (\$21,000-40,000), 17.4% also agree the cost was between GH¢180,000-246,000 (\$41,000-60,000) whereas 37.2% agree to a cost range between GH¢ 268,400-352,000 (\$61,000-80,000).

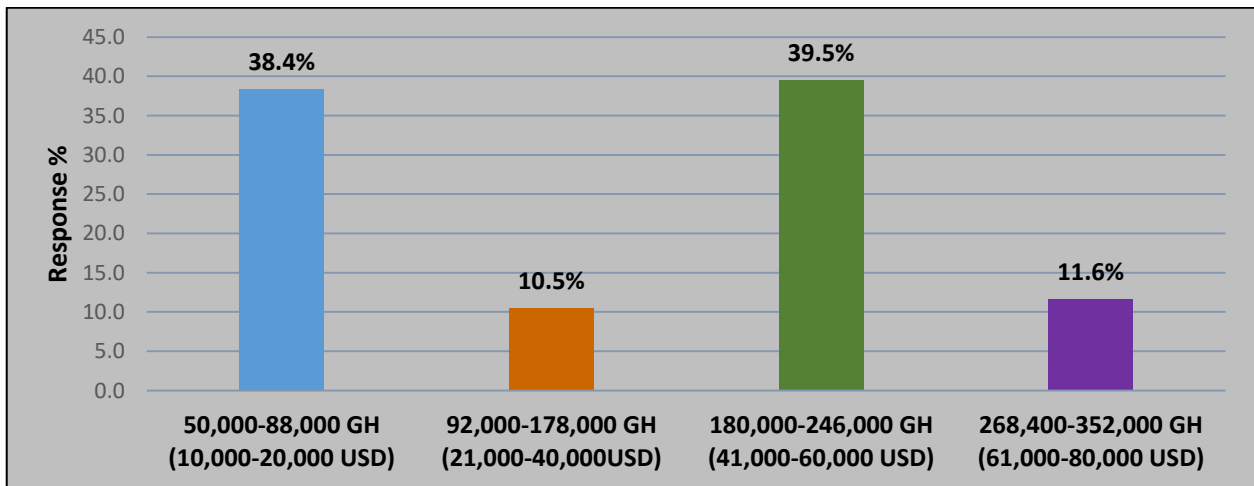


Figure 6: Cost of failure under planning

Source: Field Work (2017)

In Figure 7 below, response from 32.6% of the staff show that, cost of failure under logistics ranges between GH¢ 50,000-88,000 (\$10,000-20,000). 12.8% agree to cost ranging between GH¢ 92,000-178,000 (\$21,000-40,000), 17.4% also agree the cost was between GH¢180,000-246,000 (\$41,000-60,000) whereas 37.2% agree to a cost range between GH¢ 268,400-352,000 (\$61,000-80,000).

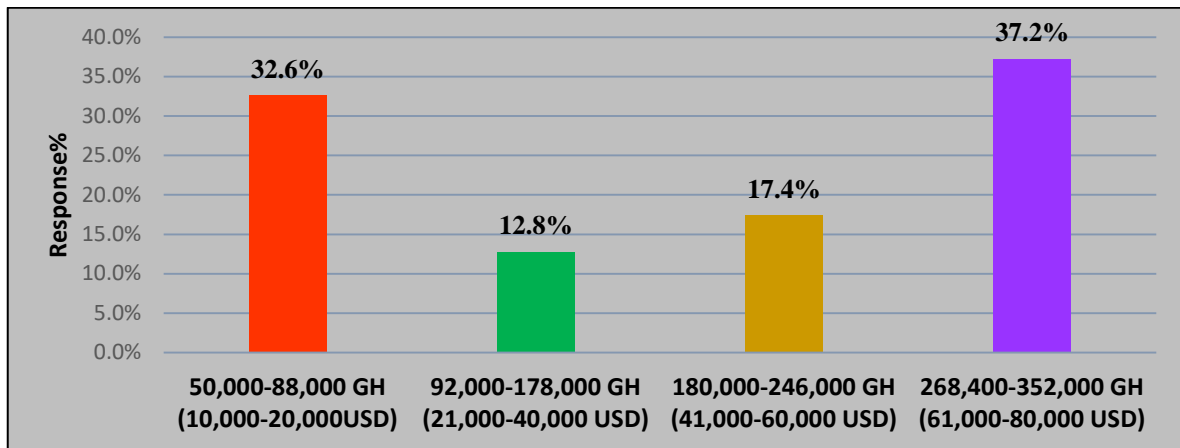


Figure 7: Cost of failure under Logistics

Source: Field Work (2017)

Interviews

Table 5: Summary interviews with experts in the industry

Firm /Organisation	Number of events managed and No. successful	Challenges encountered	Vulnerability and Risk Management Plan
EIB Network - Star Fm, Agoo Fm, Kasapa FM, Live Fm, Empire Fm, Ultimate Fm, Abusua Fm, Radio 360, GhOne TV and Agoo TV. Sales Manager	Over 80 events organised locally and international 90% successful events	<ul style="list-style-type: none"> lack of funds (sponsorship) venue high artist performance fee, substandard execution 	<ul style="list-style-type: none"> Vulnerability test is done for some major events Non-availability of a risk management plan for sub events.
Ghallyhood Production organisers of Ghana Movie Awards- interview with Chief Executive Officer	7 events organised 5 were very successful Events are organised within 3month	<ul style="list-style-type: none"> Financial challenge venue late start of events 	<ul style="list-style-type: none"> Provide alternative measures for the major logistics It's expensive to run a risk management plan for the whole event.
Roverman Production interview with Business Development Executive Head	34 plays staged multi times 90% successful A play can be executed in 3weeks	<ul style="list-style-type: none"> light out during a live show Technical issues dysfunctional microphones Climate changes Human error - 	<ul style="list-style-type: none"> We look out for all the causes of challenges in our previous plays and set remedies to prevent them. Risk management plan available
Joy fm – events coordinator	40 events yearly 80% successful Time frame depends on the particular events	<ul style="list-style-type: none"> -Wrong profiling and not enough awareness to targeted groups. - competing events from competitors, -event content and drive 	<ul style="list-style-type: none"> -checklist of essentials to make the event a success and constantly update and review. - check for vulnerabilities like weather pattern -clear vulnerability that can't be summoned, we postpone to another time or date

Source: Field Work (2017)

V. DISCUSSIONS

[14] in their study, explained value chain as the entire range of activities that takes a product or service from start, through different transformational stages of production and finally delivering to consumers. Therefore, the value chain system that is implemented in managing events at Multimedia were seen to be planning, logistics, budgeting, risk planning and management, final and post events. These processes are key to supply chain and need to be monitored so as to report any deviations as explained by [17] in their study. When all these areas are managed properly, a successful event is assured. The rate of success and failure of events organised as well as areas in the event management process that are likely to cause failure in events will be analysed based on the presented data. It is thus evident from Table 3 that, the rate of successfully planned events by the Multimedia organizations ranges between 61-80% while the rate of failure of these events ranges between 1-20% as depicted in table 4. The event's coordinator of Joy Fm and the Chief Executive Officer of Ghana Movie Awards respectively validates results by staff of multimedia; asserting an 80% and 70% success rate for events. Additionally, media industries such as EIB Network and Roverman Production confirmed a success rate of 90% in events organised. This still suggests that there is some level of failures in the event industry. It can be inferred from these results that, the success rate of events by the multimedia industry is high while that of event failure is very low. This analysis shows that multimedia events although has a very low percentage of failure, is still exposed to some level of vulnerability which needs to be identified, so as to ensure that the degree of exposure and severity of risk is minimal. In probing further into areas that are most vulnerable in the event management process, areas that results in the failure of events are logistics and risk planning and management since high responses of 30% and 27% respectively were obtained. In general, the most vulnerable areas in the supply chain event management are logistics and risk planning and management.

From Figure 5, venue and event promotion accounts for event failures for logistics. This is supported with secondary data of documents on events organized by multimedia in Table 1, where venue was recognized as one of the challenges encountered during the 2016 Airtel Adom Praiz. This is further confirmed by EIB Network sales manager and the Chief Executive Officer of Ghana Movie Awards during the interview conducted. It can be anticipated that, most programs organized by Multimedia are in open spaces instead of enclosed spaces. Reason being that, enclosed spaces are usually assumed to be costly as compared to open spaces. However, open spaces usually require the movement of fixtures such as chairs, canopies, transporting power, setting of platforms and security apparatus among others which results in huge costs incurred which may inflate the projected budget; contributing to failure. On the other hand, empirical evidence in Tables 1 and 2 affirm that the Joy Fm Beauty & Bridal Fair, Burnaboy and AKA Concert, the Unity Concert, the Black Consciousness Tour as well as Ghana@60 Music Week faced challenges with not carrying out the right and effective event promotion technique as such, resulted in low publicity of event. This supposes that, the Multimedia group does not carry out extensive publicity as events organized are promoted using their own networks in order to cut cost. Conversely, for wider coverage and publicity, Multimedia needs to pay for promotion of events on other networks instead of relying on their own networks. Also, failure in event promotion can be attributed to inadequate social media publicity of events that can attract estimated attendees from the social media platforms. Rating the likelihood of failure in logistics was within a range of 1-20% and 21-40% as results show a high response of 49% and 32% respectively. Accordingly, a maximum rating of 40% shows that logistics should be an area of great concern. This is also evident that most events battle with logistics issues in the area of venue and event promotion as poor logistics coordination can result in commercially related risk that can disrupt a flawlessly planned event as highlighted by [39] and [40].

The perception of workers in the area of risk management shows that, the non-availability of a risk assessment management plan, accounts for event failure. However, empirical evidence during LG's Twenty-Gun Trip to the Hospital (Korea) in 2014 and one of Michael Jackson's shows validates ineffective risk management assessment but does not provide the particular segment that accounts for challenges. EIB Network sales manager and the Chief Executive Officer of Ghana Movie Awards during the interview, emphasized that, the non-availability of a risk management plan poses as a challenge for event organizers as these event organizers explain that it is usually expensive to run a risk management plan for the whole event. As conferred by [11], resources for some events are limited or insufficient to adequately prepare and assist event planners in assessment. From the analysis Multimedia does not have a risk management plan or framework for managing risk. Again, in rating the likelihood of failure in risk planning and management, the range was between 21-40%. This maximum rating of 40% suggests that the risk management area should be of great concern to MGL since [33] presumes that, success will depend on accurately identifying and assessing the impact of risks.

Ultimately, the objective of supply chain management is to improve performance of the chain by adding value and concurrently minimizing cost [41]. Hence, analyzing the cost of failure for each event management process will help in deducing and minimizing cost during events to provide benefits to all parties involved. The overall cost of failure for planning events by multimedia was estimated between GH 180,000 - 246,000 as shown in Figure 8 while that of logistics was between GH 268,400-352,000 in figure 9. The estimated cost of failure for logistics was therefore very high as compared to the other event management processes and that of risk management was very low. This will result in Multimedia losing revenue after the event, as confirmed in a study by [42]; associating the loss of revenue to financial risk.

VI. CONCLUSIONS AND RECOMMENDATIONS

First of all, supply chain within the context of media industry is a framework of activities such as planning, logistics, budgeting, risk management planning with a success rating between 61-80% and a maximum failure rate of 20%. The failure rate is an indication of vulnerabilities which occurs within each supply chain event management process. Secondly, failure in event brief is encountered in planning during which is attributed to unpredictable weather patterns and the fact that, some milestones and timelines for event deliverables is not feasible. Thirdly, failure in budgeting is due to the lack of sponsorship where it is assumed that event managers in the media industry use incremental budgeting instead of zero budgeting in budget planning. An unattractive event concept is also a contributing factor to failure. Again, venue and event promotion during the logistics planning stage, experience most failures and can be attributed to the failure by multimedia to carry out extensive publicity and also the use of open spaces instead of enclosed areas. The non-availability of a risk assessment management plan in risk planning and management process accounts for failure due to the lack of a risk assessment framework. Lastly, discussions made evident the likelihood of failure; pinpointing planning, logistics and risk management as having a high rating while budgeting shows a low rate. In cost failures of event management, logistics is acknowledged as having the highest cost of failure followed by planning then budgeting. Risk management accounted for the least cost of failure. To mitigate or reduce the impact of risk in MGL event management activities, the following vulnerability assessment strategies and models are recommended: Zero budgeting should be used to ascertain the true cost of items during event budgeting instead of incremental budget. Again, setting feasible milestones and timelines with event stakeholders in order to have an effective and functional event brief document. Further to this, future project by Multimedia should look at organizing programs in enclosed areas instead of open spaces. Also, although there may be challenges with limited capacity, this can be resolved by repeating programs. Critical areas such as the weather conditions are sometimes disregarded. Although the meteorological service is sometimes not reliable, for multimedia events that need to be organized in open spaces, the services of the meteorologist should be sought before scheduling the events on a particular date. Again, Multimedia in terms of event promotions should consider other networks for the promotion of events in order to attract other segments of the market. More to this, brand managers should have an event concept that can attract sponsorship by conducting a comprehensive market survey to ascertain the taste and preference of the people. KPI indicators for measuring social media engagement must be assessed by creating a hash tag for events; a way to track comments and remarks on social media and promotes brand personality. Moreover, the media industry should adopt a robust risk assessment model to ascertain the level of risk during events. Finally, a vulnerability assessment model should be adopted by multimedia to carry out regular vulnerability test on ongoing events to assess supply chain vulnerability. This is to verify if each stage of the event is vulnerable and open to threats and unpredictable occurrences in order to mitigate it.

Limitation and Future Study

The study was limited in terms of the population –restricted to event organizers since the year 2010. The 69% response rate could be increased to reflect a better picture illustrated in the study. Also the Multimedia organization studied, did not release actual cost figures and as a result cost ranges were used to estimate the cost of the events as well as the failure cost. An extensive study in areas of cost analysis is proposed for future studies.

REFERENCES

- [1] J. Allen, “Event Planning”, 2 ed. Canada: John Wiley & Sons, 2009.
- [2] T. Bhe, P. Glasmacker, J. Meckwood, G. Pereira and M Wallace, “Event Management and Best Practices, International Business Machines Corporation”, 4 ed., New York, IBM Redbooks Publication, 2004.
- [3] M. Christopher & H. Peck, “Building a Resilient Supply Chain. International Journal of Logistics Management”, 15(2), pp. 1-13, 2004.

- [4] CIPS Knowledge Works, Supply Chain Vulnerability. Stamford: CIPS Group, 2013.
- [5] G. Svensson, "A conceptual framework for the analysis of vulnerability in supply chains", *International Journal of Physical Distribution & Logistics Management*, 30(9), pp. 731-750, 2000.
- [6] U. Juttner, "Supply chain risk management", *International Journal of Logistics: Research and Application*, 4(6), pp. 197-210, 2003.
- [7] K. Ahenakwa, "Miss Ghana in Crisis: Organiser, Inna Patty, falls on her own dagger" [Online] Available at: <http://www.graphic.com.gh>, 2014, [Accessed 20 June 2017].
- [8] D. Aglanu, "Rescheduling of Adom Praiz 2010", [Online] Available at: <http://www.myjoyonline.com>, 2010, [Accessed 11 March 2017].
- [9] GhanaWeb, "Ghana Music Week Festival flop miserably", [Online] Available at: <http://www.mobile.ghanaweb.com>, 2017, [Accessed 17 March 2017].
- [10] P. Schrod, "Steve Harvey-Who accidentally crowned the wrong Miss Universe Winner", [Online] Available at: <http://www.businessinsider.com>, 2017, [Accessed 31 March 2017].
- [11] J. R. Silvers, "Professional Event Coordination", New Jersey, John Wiley & Sons Inc, 2004.
- [12] J. R. Silvers, "Risk Management for Meetings and Events", 1 ed., London, Butterworth -Heinemann Publication, 2008.
- [13] J. R. Silvers, "Event Management: Profession or occupation", Publication from: ISES, 2003.
- [14] R. Kaplinsky & M. Morris, "A Handbook for Value Chain Research: Institute of development studies", Brighton, University of Sussex, 2002.
- [15] W. N. Lanen, S. W. Anderson & M.W. Maher, "Fundamentals of cost accounting", New York, McGraw-Hill/Irwin, 2008.
- [16] A. Kazmi, "Strategic Management and Business Policy", New Delhi, Tata McGraw-Hill, 2008.
- [17] O. Wieser & B. Lauterbach, "Supply Chain Event Management mit my SAP SCM (Supply Chain Management)", In S. Meinhardt (Ed.). *Fertigungs management in der Supply Chain*, 2001.
- [18] M. Mors, "Supply Chain Event Management System", *Supply Chain Management*, Volume II, pp. 25-28, 2002.
- [19] M. Steven & R. Krüger, "Supply Chain Event Management für globale Logistikprozesse In Charakteristika, konzeptionelle Bestandteile und deren Umsetzung in Informationssysteme", In T. Spengler, S.Voss & H. Kopfer (Ed.), *Logistik Management, Prozesse, Systeme, Ausbildung*, 179-195, Physica Verlag, 2004.
- [20] K. F. Heusler, W. Stölzle & H. Bachmann, "Supply Chain Event Management. Grundlagen: Funktionen und potenzielle Akteure", *WiSt*, 2006.
- [21] A. Otto, "Supply Chain Event Management: Three Perspectives", *The International Journal of Logistics Management*, 14(2), pp. 1-13, 2003.
- [22] S. Fazli & A. Masoumi, "Assessing the Vulnerability of Supply Chain Using Analytic Network Process Approach", *International Research Journal of Applied and Basic Sciences*, Volume 3, pp. 2763-2771, 2012.
- [23] B. E. Asbjournslett, "Assess the vulnerability of your production system. In: *Production Planning & Control*", 10(3), pp. 219—229, 1999.
- [24] C. Martin & P. Helen, "Building the Resilient Supply Chain. *International Journal of Logistics Management*", 15(2), pp. 1-13, 2004.
- [25] U. Juttner, "Supply Chain Risk Management: Understanding the business requirements from a practitioner perspective", *International Journal on Logistics*, Volume 16, pp. 120-141, 2005.
- [26] S. Wagner & C. Bode, "An empirical investigation into supply chain vulnerability", *Journal of Purchasing & Supply Management*, Volume 12, pp. 301-312, 2006.

- [27] M. Prowse, "Towards a clearer understanding of 'vulnerability' in relation to chronic poverty", CPRC Working Paper 24, Manchester, UK: Chronic Poverty Research Center, University of Manchester, 2003.
- [28] J. Agarwal & D. I. Blockley, "Structural integrity: hazard, vulnerability and risk", *Int. J. Materials and Structural Integrity*, 1/2/3(1), pp. 117-127, 2007.
- [29] L. M. Robson, "Perceptions of risk at meetings and conferences: An event planner's perspective", University of Waterloo: PhD Thesis, 2009.
- [30] D. Getz, "Event Studies", Oxford: Elsevier Ltd, 2007.
- [31] U. Beck, "Risk society: Towards a new modernity", London: Sage, 1992.
- [32] S. L. Smith & S. F. Kline, "Crisis Preparedness and Meeting Planners' Perceptions", *Journal of Convention & Event Tourism*, Volume 11, pp. 62-78, 2010.
- [33] P. Wood, "Security management - will you see it through to the end?" *Journal of Crowd Safety and Security Management*, 1(2), pp. 81-85, 2009.
- [34] A. C. Boynton & R. W. Zmud, "An assessment of Critical Success Factors", *Sloan Management Review*, 26(4), p. 17-27, 1984.
- [35] P. Dunphy, "Common Success Factors when Bidding for Sporting Events In New Zealand", School of Business Auckland university of Technology: A thesis submitted in partial fulfilment of requirements for the degree of Master of Business in Tourism, 2006.
- [36] P. Waeffler & E. Pfister, "Successful project management in today's sport", In: Proceedings of the 22nd IPMA World Congress "Project Management to Run, Milano: ANIMP Servizi Srl., 513-518, 2008.
- [37] M. Perry, P. Foley & P. Rumpf, "Events Management: An Emerging Challenge in Australian Higher Education", *Festival Management and Event Tourism*, 4(3/4), pp. 85-94, 1996.
- [38] A. Rofner, "Critical factors of International Sport Events from the perspective of Project Management", Umea University School of Business Master in Management: Master's thesis, 2009.
- [39] S. Frosdick, "Managing risk in public assembly facilities", In: Frosdick, S. and Walley, L. (eds) *Sports and Safety Management*, Butterworth-Heinemann, London, pp. 273-291, 1997b.
- [40] H. Appenzeller, "Risk management", 2nd ed., Durham, Carolina Academic Press, (2005).
- [41] B. J. Finch, "Operations Now: Profitability, Processes, Performance", 2nd ed., McGraw-Hill, Irwin, United States, 2006.
- [42] D. Getz, "Event management & event tourism", 2nd ed., USA, Cognizant Communication Corporation, 2005.