



Environmental scanning the future of event design

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ABSTRACT

This paper used multiple sources of information in order to identify the forces likely to impact event design. Content analysis of key informant interviews and selected trade publication articles identified key forces impacting event design. Technology, the environment and green issues, security and safety, and globalization were forces identified by both the key informants and the trade literature. Neither of the sources gave much attention to political forces. This article contributes to our understanding of the forces impacting event design and suggests some environmental scanning methodologies that can be used with both key informants and the trade publication literature.

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1. Introduction

Successful events do not often occur by chance. Rather, they typically occur due to the diligent effort of sponsor, planner, and venue. Complicating this already challenging landscape is the fact that successful events happen within a constantly changing economic, environmental, political, social, and technological environment. The forces that shape the macro-environment within which events occur must be understood and changes to the macro-environment within which events occur must be anticipated. For example, during the first decade of the 21st century the macro-environment shaping events have experienced global terrorism, a rapid increase in the price of many commodities (such as oil) followed by falling commodity prices, mounting concern about environmental sustainability in general and global climate change in particular, and the fall-out from the collapse of the global financial bubble. The purpose of this paper is to identify key forces affecting the future of a specific phase of the event process, event design, by using the environmental scanning process. Specifically key informant interviews and content analysis of selected event trade publications were used to identify the major forces that will have an affect on event design and to explore some response strategies available to the event design industry.

2. Literature review

2.1. Event design

The event process includes research, design, planning, coordinating, and evaluation of events (Goldblatt and Nelson, 2001). This research focused on those forces affecting the design phase of event planning and execution. A number of event design definitions have been offered. There are two overarching notions embedded within these definitions. The first and more widely used concept identifies event design as the overall look and feel of the event; its aesthetics. The second, and more recently developed concept, deals with the all-encompassing elements of the event, that is, how the event was designed in order to function successfully. The two notions, although different, share many similarities in terms of the overall goal of event design (Berridge, 2007; Monroe, 2006; Yeoman et al., 2004).

Furthermore, it is critical to acknowledge that event design is not static. How to best design and execute an event changes over time due to the many constant changes that describe life in the 21st century's global economy (Berridge, 2007; Shebroff, 2001). A quote from Kevin O'Keefe, Canon's VP for events found in Katz (2007) summarizes the dynamic nature of event design today, "There's been a lot of consolidation in [advanced manufacturing], and everything has become global, so we had to change. And all sorts of efficiencies have been created [among exhibiting firms]. There's more automation and Six Sigma processes, plus with the competition the exhibiting companies face from China, India, and Vietnam, it's all about them showing new concepts and improving speed to market."

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Therefore, identifying forces driving change in event design may be a necessary step in the development of events during this time of constant change. Identifying areas where the industry can focus crucial planning efforts will help enable successful future strategic development in order to stay competitive within the event industry.

2.2. Environmental scanning

Stoffels (1994) defines environmental scanning (ES) as a methodology for coping with external issues that may be difficult to observe or diagnose but that cannot be ignored and will not go away. Lester and Waters (1989) suggest that the ES process encompasses three activities: (1) the gathering of information concerning the organization's external environment, (2) the analysis and interpretation of this information, and (3) the use of this analyzed intelligence in strategic decision making (Formica and Kothari, 2008). Stoffels (1994) also states that the primary purpose of this process is to learn and anticipate any and all changes in order to react and adapt to them. According to Olsen (1999), the scanning process requires a thorough understanding of each of the variables that have significant influence in shaping the force. Accomplishing this requires the individual to open his or her perceptual window and build upon experiential, cognitive and information gathering skills.

There have been a number of published studies using an ES framework to investigate various sectors of hospitality and tourism. But Olsen (2004) noted that much of this ES literature is dominated by prescriptive how-to studies and conceptual papers about the role ES should play in an organization's strategic decision making. Olsen (2004; Olsen and Zhao, 2004) called for more empirical work to be done that facilitates ES by the actual decision makers in hospitality and tourism organizations. Olsen and Zhao (2004) reiterated the need for top management to perceive correctly, monitor systematically, scan consistently, interpret accurately and predict the forces driving change.

During the past few years research on the strategic use of environmental scanning by actual decision makers has been featured at the industry level and at the regional level. At the industry level Jogaratnam (2005) and Jogaratnam and Law (2006) explored the relationship between managerial style and ES, and the use of information sources and ES, respectively, among hospitality executives. Gretzel et al. (2006) investigated the forces of change faced by destination marketing organizations in the USA. Xiang and Formica (2006) mapped the environmental forces perceived by incentive travel executives. Work has also appeared that studies ES from a regional, rather than an industry-specific, point of view. For example, Oreja-Rodríguez and Yanes-Estévez (2007) and Formica and Kothari (2008) used samples of executives drawn from a variety of hospitality and tourism industry sectors to identify the forces shaping the strategic environments in the Canary Islands and the tri-state Delaware, New Jersey, and Pennsylvania region, respectively. What these studies share in common is the idea that industry key informants can reach a consensus about forces that currently affect, and in the future will affect, their organizations' operations.

3. Methodology

This study used multiple methods of research. Key informant interviews were conducted with selected industry leaders and trade publication articles identifying trends impacting event design were located. Content analysis techniques were used to analyze both the key informant interviews and the trade publication articles. The selection of key informants is an important step. Thoughtful selection of key informants increases

a study's validity. There are a number of characteristics that are important in the selection of key informants. Ideally, a key informant should (a) occupy a critical role in their field and have a mastery of the specialized knowledge relevant to the study, (b) be willing to cooperate in the interview process, (c) be able to communicate his or her expertise in the interview, and (d) be able to discuss the topic of interest in an impartial manner (Tremblay, 1957). Unfortunately, most of these characteristics are unknowable until after an interview with the key informant has been conducted. Once key informants have been selected and after the interviews have been conducted there are a number of perspectives useful in evaluating their comments. These include the idea of internal consistency within each interview, the productivity of each interview, and the reliability of each interview within the context of the set of interviews. More specifically, a comparison of content across interviews provides a measure of reliability and is useful in both identifying areas of agreement and in identifying more idiosyncratic perspectives (Tremblay, 1957).

Key informants for this research paper were suggested by two industry professionals with extensive experience in event design and in event education. A total of nine key informants were recommended, all having extensive experience within the special events industry. Each informant was initially contacted by email in order to establish their willingness to participate in this study. Each email was personalized to reflect the individual, their geographic location, and the person who had referred them to the study. Upon agreeing to participate each key informant was sent a brief description explaining the purpose of the project and the goals for the interview. Discussion questions were supplied prior to the interview in order for informants to have a general understanding of the scope of the project. The information and background supplied to the informants prior to the interview was very brief, which allowed the dialogue to direct the interview. Interviews were conducted using Skype. Skype is a software program allowing users to make telephone calls over the Internet to other Skype users or to landlines and cell phones. Each informant was asked for permission to record their interview. This allowed a more detailed analysis of the interview and helped to ensure the integrity of the interviewee and interviewer during the transcription process. Upon completion, the interviews were transcribed and formatted as plain text files.

There are a variety of publications dedicated to the event industry. For the purpose of this study industry publications were selected based on their relevance to the event industry and their focus on event design. Four titles were selected: *Event Design Magazine*; *Event Solutions: For Successful Events, Meetings and Incentives*; *i.e. Magazine*; and *Special Events Magazine*. Once identified these publications were examined in order to identify articles published between January 2006 and April 2008 pertaining to future trends affecting event design. The following key words (listed in alphabetical order) were used in a computerized article database to identify articles for inclusion in the study: event, event design, forecasting, future, special events, strategic planning, and trend.

Both the key informant interviews and the selected trade publication articles were analyzed using content analysis. There are many different ways to apply content analysis; however, these various approaches fit within two traditions. One tradition is based on the concept of matching words in the text to external categories. This is basically a hypothesis testing approach—the content of the text is analyzed against some external set of definitions and the presence or absence of text fitting each specific definition is noted. The second tradition follows a correlation or pattern-recognition strategy. This tradition approaches text from the point of view that both what is said and how it is said in the context of other thoughts is what matters (Hogenraad et al., 2003). This study approached

the key informant interviews and the selected trade press articles from both perspectives. First, each interview and each trade article was evaluated by both authors and rated for the presence or absence of each of five types of environmental forces: economic, environmental, political, social, and technological. These are the five types of forces used as a framework in previous environmental scanning efforts in hospitality (Olsen et al., 1994; Teare and Bowen, 1997). Evaluation of interviews and trade articles was done independently by each investigator; discrepancies were identified and resolved. Then, the text from each individual interview (or trade press article) was compiled into a single corpus and TextStat (Hüning, 2007) was used to generate word counts and to examine key words in context. This stage of the analysis was shaped by ideas from lexical analysis (Bolden and Mascarola, 2000). In lexical analysis word frequencies provide a starting point. A lexicon of words is generated. Next, tool words (words such as a, the, of, I, my, etc.) are removed from the lexicon. The remaining words are then lemmatized (e.g., the words technical, technology, and technological, share the same stem, tech*, so the lemmatization process would trim them to that common stem) and similar terms are grouped into common categories. At this stage of the process frequencies of these lemmatized words/categories are generated to identify key themes in the text. Finally, the analyst returns to the original body of text and examines these key words/categories in context.

4. Results

4.1. Analysis of key informant interviews

A total of nine industry informants were initially contacted to act as key informants. Due to scheduling conflicts eight interviews were conducted over a two-week period during April 2008. Informants held influential positions in event production, in event-oriented professional associations, and in event education. Three informants are currently located in the USA, two in the UK, and two in Australia. Informants were asked to identify the most influential forces driving change in the event design field. The following paragraphs describe each key informant and his or her qualifications.

1. Currently serves as president of a firm focusing on technical and green elements in special events. He/she is a founding member of the International Special Events Society (ISES), with over forty years of experience in special events
2. A leading designer, conference presenter, lecturer, and executive-in-residence in a university's hospitality and tourism program. He/she has won numerous awards and has been featured in professional design journals and shown at international trade expos throughout the world.
3. One of the first inductees into the Special Events Industry Hall of Fame and one of the founding members of the International Special Events Society, this person has played an integral part in the past and future education of the industry and currently serves as a lecturer at a well-known university

4. With a background of over two decades in the theatre and entertainment industries, this person began their career developing successful promotion and marketing campaigns. This person served as a founding member of the Australian Chapter of the International Special Events Society, in addition to serving as a top officer in it.
5. Beginning as an intern, this professional worked his/her way up the career ladder to organize and transform award-winning displays for one of the largest entertainment corporations in the world. This professional currently designs one of the largest events in his/her specialty, drawing thousands of attendees annually.
6. This professional was born into an entrepreneurial family. With over forty years in the special events industry, he/she is an established industry leader and mentor serving as an educational lecturer and presenter world-wide.
7. This professional has served as President and CEO of the International Festivals & Events Association (IFEA). In this professional's early career, he/she spent years working for a successful 501(c)(3), as their Director of Special Events. Most recently they have served as an executive-in-residence at a well-known university and he/she is currently an executive advisor to another major university hospitality management program.
8. Serving as director of special events for one of the most famous music venues, this professional has served as vice president, events and entertainment and continues to produce events wowing audiences annually. This professional has been inducted into the Event Solutions Event Industry Hall of Fame and has authored industry textbooks.

Each key informant's transcript was edited to include only their comments by removing all text generated by the interviewer, such as greetings, questions, prompts, etc. Each of these edited transcripts was relatively long. The corpus of all edited transcripts was 19,276 words in length, resulting in an average transcript of 2409.5 words. The shortest transcript was 1245 words in length; the longest 5253 words in length.

The first step in the analysis process involved coding each interview for the presence or absence of each of five environmental forces: economic, environmental, political, social, and technological (Olsen et al., 1994; Teare and Bowen, 1997). Each author independently coded the interviews. Panel A in Table 1 documents the initial level of agreement across the 40 decisions in the coding process (eight interviews by the presence or absence of 5 environmental forces). However, whenever human observers categorize the characteristics of text one must ask whether the subsequent coding decisions reflect the measurers or the characteristics of the thing being measured (Hayes and Krippendorff, 2007). In other words, this coding process must demonstrate some minimum level of reliability. Unfortunately, a simple percentage agreement measure likely overstates reliability since it does not account for chance agreement (Krippendorff, 2004). For example, Panel A of Table 1 shows that one coder assigned 30 scores of present across the 40 decisions while the other assigned 32 scores of present across the 40 decisions. But even if they had made these assignments at random there would be some

Table 1
Inter-rater consistency in identifying environmental forces.

A. Agreement matrix for key informant interviews				B. Agreement matrix for selected trade publication articles					
		Rater 1				Rater 1			
		Absent	Present	Total			Absent	Present	Total
Rater 2	Absent	7	1	8	Rater 2	Absent	33	2	35
	Present	3	29	32		Present	4	16	20
	Total	10	30	40		Total	37	18	55
Scott's $\pi = .713$ percentage agreement = .900				Scott's $\pi = .759$ percentage agreement = .891					

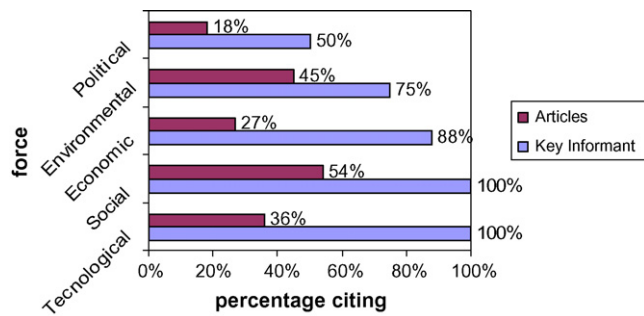


Fig. 1. Environmental forces identified in the key informant interviews and in the selected trade publication articles.

agreement between their coding decisions given these marginal totals. What is needed is a measure of coding agreement that corrects for this base-rate of chance agreement. For two coders and nominal data Krippendorff (2004) suggests that Scott's π (Scott, 1955) is a reasonable choice. In the case of Table 1 Panel A π suggests a moderate level of reliability in the coding process. The coders then met to resolve the four disagreements in coding.

Fig. 1 illustrates the results of coding the key informant interviews for the presence or absence of the five environmental forces. All the informants identified social forces and technological forces. Seven of eight informants identified economic forces while six of eight informants identified environmental forces. One-half of the informants identified political forces. It is interesting to note that even though all eight key informants were prompted for each of the five forces not all informants mentioned each of the five forces.

Some verbatim quotes may help further describe how these forces were perceived by this sample of key informants. Regarding technology one key informant noted, "enriching the information environment with technology is kind of the next step for events." According to another informant "I think you are going to see a huge integration of digital media online. You have already seen the capabilities of systems like Vivien event design, the next step would be to take Vivien and if you could project it on the walls. . creating an event design backdrop in the room by either rear projection or front projection so that it creates a dimensional feel as well of the room but it is all produced by visual media." Comments related to social forces noted that people who attend events have changing, and increasingly higher, expectations about the experience. "These days when you are talking about events it can be a football game a baseball game or a wedding. People don't go to football anymore; they go to a sporting event. Part of that is entertainment, the look and the fireworks and all the stuff that goes into those things." Additionally global issues are seen as driving changes in the world of events, "the actual world system will move so we're watching an evolution and I think events encapsulate that. They (events) are the opportunity

where large groups of people come together to exchange emotions and feelings that is after all what drives the world." Economic forces were the focus of this informant's comment. "I mean ROI came in about 3 or 4 years ago when corporate America started saying what am I getting back for putting on this event? Why am I doing this party? What is the purpose? What is the return on it? And those metrics have been advised by those people, not me because I don't care about them; people are measuring the metrics as to what the return on, not just the sponsorship, but putting on an event. What is the return on the bottom line of my business, what value?" Similarly another informant noted "I think controlling costs and finding more value for less money is going to be the link into a lot of people's success." An example of the role of political forces on event design was suggested by the key informant who said, ". . . what I think we are seeing right now is that there is a change in government as there has been here and a change in government in the UK and I think we are moving into an area where there is going to be more caring in the world at a higher social agenda and we are going to use all of our resources and skills to try to make the world a better place rather than just turn a profit."

Key informants also acknowledged that many of the forces acting on event design do not exist in a vacuum; rather forces interact with each other and this interaction among environmental forces may intensify or diminish their impact on event design. For example, one key informant noted "Now that you have 6.1 stereo sound, you have HD TV, widescreen, access to the internet, streaming of information etc, there are really compelling reasons to enjoy events that can be presented on those platforms with you never leaving your home. Now what that does is it increases the imperative on the part of the event organizer to create enough value for people to get out of their homes and spend the time and the money to get to your event and enjoy it there because of course once they are there not only do you have the critical mass that makes for an entertaining environment but you also have the opportunity of generating revenue when you don't really have that when they are sitting at home enjoying your event on television." Another informant noted that "The event environment today is much more organic in that you have to consider how people experience that event from the day they receive their invitation to go or receive their ticket, up through and including the time they arrive, the time they spend with you in the environment and then the part that a lot of people forget about which is the exit."

While individual quotes from key informants provide useful snapshots of the interviews, given the length of the transcripts much information would be lost if analysis relied on a small number of quotations. In order to better understand these forces and how they may affect event design the key informant transcripts were also analyzed from a lexical analysis perspective. The total corpus was 19,276 words in length. Sorting this text by frequency, however, showed that the ten most common words, for example, were all tool words and accounted for 25.8% of the corpus. Specifically the ten most frequently occurring words were: the, to, that, and, of, a, is, it, you, and I. Once these and other tool

Table 2

Reduced and lemmatized lexicon for key informant interviews and selected trade publication articles.

A. Key informant interviews			B. Selected trade publication articles		
Word	Count	Pct. of total	Word	Count	Pct. of total
Event*	226	1.17	Event*	180	1.51
People	122	0.63	Tech*/internet/web*/computer/GIS/GPS/eSafe	99	0.83
Design*	92	0.48	Environment*/green*	68	0.57
Industry/business/corporate	89	0.46	Industry/business/corporate	58	0.48
Tech*/internet/web*/computer	74	0.38	Recycle*	38	0.32
Environment*/green*	67	0.35	Design*	36	0.30
Cost*/money	57	0.30	Secure*/safe*	27	0.22
Time	39	0.20	World*/global*/international	24	0.20
World*/global*/international	38	0.20	Time	18	0.15
Secure*/safe*	28	0.14	People	18	0.15

words were removed the process of lemmatizing and sorting words into synonym categories continued. Results are shown in Panel A of Table 2. Taking frequency as a measure of importance or emphasis, the key forces facing event design include those related to people, to the economy (industry/business/corporate and cost*/money), to technology, to environmental issues, to time pressure, to globalization (world*/global*/international), and to issues related to security and safety.

Knowing that the key informants were frequently using words such as tech*, internet, and web provides one way to examine their transcripts. More information about their perceptions of the forces facing event design may come from knowing not only how often they used these words, but by also understanding what they were saying about these words. Figs. 2–5 provide context for their use of four sets of words/conceptual categories. Fig. 2 displays the key informants use of words based on the tech* stem in context. Reading through this suggests that technology was used in these interviews a number of ways—in reference to a specific product or application, but also in reference to a process of change. Additionally, in these comments technological change is linked to social change. A suggestion is present that there is a generation gap between younger and older people when it comes to

- an example and the ability of **technology** to provide the bandwidth information environment with **technology** is kind of the next step for 14 seasons. I think that **technology** is going to change. It will take a year with everybody. The **technology** change in the event industry is online world. The deal with **technology** is that it is an underlying, sustainable. The proper use of **technology** reduces the use of resources in my lifetime I have seen major **technological** changes in the industry. I mean we're seeing **technology** is constantly improving and we were just blending more **technology** in to make us more professional. I mean we have only grown up with **technology** and don't know how thin the line is between the two that are significant in **technology**. One is energy costs which is technical, social, ecological and **technological** is the one thing that we can apply about that and the dirty **technology** which is going on there. There is a social aspect and **technological** aspect there and that's why I worked in three areas the **technical** design, the creative design, and from there back down into the **technical** nuts and bolts of how all the budgets started increasing the **technological** started increasing and that's why the technical, economical, ecological, **technological** environment at the time that I think is going on. From a **technological** side with the advent of new events. I think that from a **technological** perspective we now have a different perspective we now have the **technology** where we can now create content that is rather straightforward **technology** and automatic at the moment. The social influence in the **technology** of events. So that is a much more interactive as the **technology** picks up and at the moment because they already have the **technology** in there, put in their hands these opportunities where this **technology** is there it's only bound towards internet and all the **technology** that goes with that so it's important to do that. I think **technology** is definitely something that organic show that incorporating **technology** sort of goes against what we're still trying to think of how **technology** plays a role in the garment industry yet that really brings **technology** into the piece. And I see the organic world in sort of a high tech, sort of **technological** way. I see a sort of a high tech, sort of **technological** way. It's still giving us a lot of things for us. Correct Right and **technology** like I said to you earlier. I said to you earlier, the use of **technology** and how we get that in the industry of those folks aren't as **technological** savvy as a younger generation. Different focuses we have on the **technology** piece. The different mediums are being affected by **technology**. And if you're working on trying to provide a lot of the **technology** and access that's available. I mean now, I went to a session on **technology** that if anything frightens me there at their events with **technology** and video. They had the screen. I wasn't quite sure the **technology** they were using to make the screen. It was remarkable **technology** and obviously for this time. So there is going to be new **technology** and things, now in Dubai and they have these huge **technical** sets and you they are far from the opportunity to be involved so **technology** will effect that but all the forms. It doesn't have to be **technology** we just have to think a

Fig. 2. Key informants' use of "tech*" in context.

- unsupportive. They call them **green** efforts, I'm not sure that what we're doing, in one way or another. The **green** sustainable movement has gone from starting somewhat in Florida, **green** environmental concerns are becoming a phase where there are lots of **green** oriented tradeshows happening and that that ties into in going **green** and organic with food is the new thing. We are at the start of **greening** events right now. There is no true definition of a **green** event. That is a nebulous concept. Overall different, there is the **green** meeting industry council who we now have the EPA has their **green** meeting standards; they create standards that will become more sustainable, **green**, organic whether we like it or not. The world because of the constant **green** house gases from flying airplanes and the flower show. I think the **green** industry is going to have a huge impact; this movement of thinking **greener** and thinking more environmentally friendly is going to be expecting it. More **green** roofs more environmentally friendly. Designing exhibits around the **green** industry is definitely something that we're doing, but even not because of the **green** industry, but even just using the organic feel or that **green** feel but putting more of an emphasis on the lower show we have been doing **green** roofs for 20 years in our show. We're all over the place and we've been showing **green** roofs and all that for years. So as saying that everything is **green** in our show, we certainly have a lot of **green** in our show, we certainly have **green** concepts, but we've been talking about the **green** on the floor that are **green** and concepts that can help people use them. Your environmental, **green** is certainly going to play a role and there are now new, I mean **green** used to mean you had to recycle. So on or scheduled for the whole **green** issue because people have to be involved. So he will be willing to sponsor **green** and environmental programs at the time that are now going totally **green** in how they provide that. So

Fig. 3. Key informants' use of "green*" in context.

technology, and that generation gap has implications for the future of technology in event design.

Fig. 3 displays the use of the stem green* in the context of the key informant interviews. Reviewing these examples of green* in context suggest that the key informants talked about green* as a process, strategies to become green, and the idea that the greening of events is one of the key trends affecting event design.

Fig. 4 puts key informants' use of cost* and money in context. There are several ideas embedded in these quotations. Some specific sources of costs in event design, such as energy costs, are highlighted. There is a general sense that costs are increasing and increasing costs are a long-term trend. Related to this is the idea of cost control and achieving cost efficiencies in event design. Finally, another theme from examining these quotations is the idea that spending money during event design should be approached as a strategic decision.

Fig. 5 puts the key informants' use of words related to security and safety in to context. Informants' spoke about security measures and processes. They predict the need for more security. They also addressed the role that security requirements may have on the event guests' experience. A goal for event designers will be creating safe but friendly environments for guests.

4.2. Analysis of selected trade publications

Turning to the content analysis of trade publications, the key word search via electronic databases identified 11 articles from the study period (January 2006 through April 2008). The corpus of 11 articles was 11,951 words in length. Individual articles ranged in length from 417 words to 2000 words. The average article was 1084.5 words in length.

Analysis paralleled the approach used with the key informant interviews. The first step involved coding the articles for the presence or absence of each of the five environmental forces: economic, environmental, political, social, and technological (Olsen et al., 1994; Teare and Bowen, 1997). Each author independently coded the articles. Panel B in Table 1 documents the initial level of agreement across the 55 decisions in the coding process (11 articles by the presence or absence of 5 environmental

stant future and although the **costs** are going up as an event org
 ssing along of a lot of those **costs** to the consumer is going to
 se those. I think controlling **costs** and finding more value for I
 ans to come to and it doesn't **cost** anything. We had 25,000 peopl
 way to sample an event at no **cost** for others there is the oppor
 nternet which of course has a **cost** to the organizer but to the p
 that is going to continue to **cost money** it's going to continue
 to continue to drive up your **costs**, but it holds case because t
 ad been talking about all the **costs** involved, and the next thing
 sort of **money** it was going to **cost** them, it came down to a simpl
 p that there are all kinds of **cost** efficiencies that are happeni
 being standard and not really **costing** a whole lot more if done c
 if done correctly, sometimes **costing** less. For the first time
 ertain materials come down in **costs** that are recyclable and reus
 d product which tends to be a **cost** reduction. Especially right
 Especially right now with the **cost** of fuel the way it is. If it'
 he goal of that event and the **cost** to do that, they felt was wor
 nd they want to know what the **cost** is to accomplish that, and no
 in technology. One is energy **costs** which are going through the
 o doing that. As a result the **cost** to buying energy this way fro
 1000 or \$1500, because energy **costs** have gone up. Well certain
 ess that I really put under a **costing** checklist. So by having, y
 e you have to look at all the **costs** pertaining to the event, lik
 , like also as well as hidden **costs**. Most important to know the
 re fabulous effects, but they **cost** more. That's gonna **cost** more
 they **cost** more. That's gonna **cost** more if you want to hire the
 will start thinking about the **cost** of admission, what the price
 ng to be considerate of. Fuel **costs** as you had mentioned that af
 understand you have these new **costs** which you didn't have, but I
 but all of that has added new **costs** and things as well to people
 sudden that changes what the **cost** is for them to operate and if
 ers to do more and it will be **costly**, but the good news is is th
 d finding more value for less **money** is going to be the link into
 ent without spending a lot of **money**. So what I think you are seei
 es and spend the time and the **money** to get to your event and enjo
 is going to continue to **cost money** it's going to continue to dri
 term in my opinion that saves **money** because it ends up that if th
 ave anything like the sort of **money** it was going to **cost** them, it
 people they won't have enough **money** to do what we have designed t
 estment. You're spending less **money** getting the same product for
 thing specific. The amount of **money** put towards achieving that go
 ch is really where all of the **money** came into events before. Befo
 ves how they used to generate **money**, a lot of **money** was not just
 d to generate **money**, a lot of **money** was not just generated from t
 ually ahead of corporate bank **money** raising utilities. That is do
 o get that return back on the **money** they outlyed. Another thing I
 and your happy to spend your **money** once more. So that culture re
 mputer, I don't like spending **money** every three years but I have
 now in Dubai they've got more **money** than god and so they can have
 to and where they spend their **money**. They are going to go to even
 the price, they'll make less **money** and then they will have to ma
 n clothes. Do you spend extra **money** to set up metal detectors if
 if events appear to be making **money** then certainly we should be c
 consider taking part of that **money** and several years ago they tr
 good and so there will be new **money** available for those kinds of
 . Now obviously they have the **money** and things to do it but very
 . But everyone doesn't have the **money** they have obviously to do tha

Fig. 4. Key informants' use of "cost*" and "money" in context.

tion will be paid towards the **security** of both the attendees as w
 now we are installing a 300ft **secured** perimeter around the Super
 there are pat-downs and extra **security** measures put in place. In
 ty in waves to go through the **security** process. And what that doe
 ay it is actually inside that **secured** perimeter. We throw that se
 ured perimeter. We throw that **security** fence overnight on the Sat
 game, and now once you clear **security** you have free run of the a
 are facing as an industry is **security** as a general rule and then
 the negative impacts of added **security** requirements and still mai
 t 70,000 people through added **security** measures that it takes tim
 nerally respect the fact that **security** is required and I think th
 inly though to be financially **secure** for livelihood but while thi
 ffects. There are effects of **security** since September 11th all th t
 e September 11th all types of **security** measures have been put in
 y have to have and a lot more **security** and clearances on things a
 ll events have to think about **security** in new ways they need to t
 ink people are used to seeing **security** at airports and places lik
 actually make them feel more **secure** to see something where they
 park you're not able to put a **security** detector. I think generall
 but knowing you have the same **security** and support around you whe
 not just keeping participants **safe** but also not impacting the en
 country it is the health and **safety** because now if you use, I n
 ltaneously I think health and **safety** regulations are going to be
 I think the whole health and **safety** issue are going to be huge
 ys with one eye on health and **safety** because they may not be abl
 generally people want to feel **safe** but friendly so I think most
 hing because it seems to be a **safe** and friendly setting. And we
 how biodegradable is it, how **safe** is it? What's it going to har

Fig. 5. Key informants' use of "secure*" and "safe*" in context.

percent of the corpus. These and other tool words were removed from the corpus; words remaining in the corpus were lemmatized and sorted into synonym categories where necessary. The resulting reduced and lemmatized lexicon is displayed in Panel B of Table 2. Again taking a word or concept's frequency of appearance in the lexicon as a measure of its importance Panel B of Table 2 suggests that the key forces facing event design include those related to technology, to environmental issues, to the economy (industry/business/corporate), to recycling (recycle*), to issues related to security and safety, to globalization (world*/global*), to time pressure, and to people.

Exploring how these words/concepts were used in the context of the trade publication articles resulted in a series of four figures (Figs. 6–9). Review of Fig. 6, for example, suggests that technological change is on-going and that new technologies represent an improvement on today's standard of practice. Technology will help solve (event design) problems. Specific products—such as GIS or GPS—will have many event-related applications. Fig. 7 identifies the greening of events as a trend—but also suggests some skepticism in the distinction between trend and band-wagon effect. Increasingly, green event products will be available. This has implications both in the short-term, based on the present cost of going green, and in the long-term, with the role of green procurement in the purchasing life-cycle. Authors in these 11 articles also spoke to security and safety as an environmental force (Fig. 8). These authors suggest that safety and security has both objective and subjective components. Security and safety will affect not only events, but many other aspects of society such as air travel, law enforcement, etc. The role of risk management expertise (either as a human resource or as a technologically facilitated product such as eSAFE) is stressed. Finally, event design will be shaped by globalization (Fig. 9). Globalization represents a two-way street; for example events in North America will be influenced by global trends and products, but will also influence what happens elsewhere. Globalization has implications for both good and ill. Global summits and global best practice are positive forces, while global terrorism and global warming are negative forces.

forces). Coders were in agreement 49 out of 55 times, resulting in a value of Scott's π of .759. Coders met and resolved the six discrepancies in coding. The consensus was that social forces were alluded to in six of the 11 articles, followed in frequency by environmental forces (present in five of the 11 articles), and technological forces (present in four of the 11 articles) (Fig. 1).

In order to better understand these forces the 11 trade publication articles were approached from a lexical analysis perspective. The total corpus was 11,951 words in length. Sorting this text by word frequency showed that the most frequently appearing words were, as one would expect, tool words. Specifically, the ten most frequently occurring words were: the, and, of, to, a, in, that, for, will, and I. These words accounted for 20.2

- t history as rapidly evolving **technology** spawned choice and we h
- escience anticipated a day of **technological** sophistication and i
- ry, behind the greater use of **technology** and healthy food option
- will all be based on wireless **technologies** with an edge that we
- eality Audio Clips--a display **technology** that integrates real an
- ring water." Carl George What **technologies** will we rely on? "Vi
- ence" that we provide through **technology**--for example, a 1,000 D
- ic glimpse into the future of **technology**'s impact on the world,
- ess, the once-a-year weekend "tech fest" has not only provided a
- ded a look into the future of **technology**, but has also opened a
- s Fair showcasing the premier **technologies** that will impact the
- ff homemade and hand-sculpted **technology**. Yes, the corporate spo
- breeding ground for emerging **technologies** that event designers
- and space. Not only is the **technology** on display bleeding-edge
- appearance. And now, with new **technologies** in hand, some of the
- s-work is being replaced with **technological** answers. For years
- the early introduction of GPS **technology** in day-to-day civilian
- s still to come. But how can **technology** that guides planes, tra
- ou. This is how GPS and other **technology** will help us. GPS recei
- ty. So, how does GPS and GIS **technology** relate to the special e
- re a few examples of how this **technology** can help you better und
- become accustomed to this new **technology** you will quickly apprec
- tely, in its current state of **technology**, most basic GPS receive
- do you get started using this **technology**? First, research your s
- PS data into your event. This **technology** may not be appropriate
- learn more about GIS and GPS **technology** by visiting GIS.com and
- ghtest days of this important **technology** are still ahead of us,

Fig. 6. Selected trade publications' use of "tech" in context.

- nscientious community. Going "green," getting involved with chari
- s to create a complete set of **green** furniture. He came one step c
- e. He also has plans to add a **green** event resource directory to h
- que event rental company with **green** products on the market. In mi
- be starting to climb onto the **green** bandwagon, but are these chan
- cross the industry identified **green** meetings as the No. 3 trend a
- ngs, and says inquiries about **green** event products are on the ris
- ith an edge that we now term 'green,' but by 2032 will be the sta
- owards wellness, health and a **greener** future. Our generation will
- events can take advantage of "green" innovations — techniques dev
- he time." After incorporating **green** elements into her own wedding
- educe trash are a step in the **green** direction. The Los Angeles Ti
- ach consumer uses will reduce **greenhouse** emissions more than driv
- ue operators. They can have a **green** report to show that they not
- ng water. "It doesn't get any **greener** or more sustainable than th
- nd her company for help with "greening" their meetings. As a resu
- Meetings for attempting to go **green**. Greening meetings makes a bi
- as recently named the world's **greenest** trade show exhibit produce
- create team to focus more on **green** materials and building practi
- lk about making the switch to **green**, what designers and clients n
- t got you started focusing on **green** materials and building practi
- s was to create a 100 percent **green**, absolutely no vinyl, brand i
- ducts they are selling in the **green** building industry. Nexus was
- erior sides together with our **green** material printing and **green** s
- r **green** material printing and **green** signage fabricating capability
- the one major complaint about **green** materials is higher costs. Wh
- the acceptance of cost around **green** materials. If it were a zero
- d user exhibitors would buy a **green** product. If it's a five perce
- ation would bounce you from a **green** materials option. It tells y
- cycle cost. If you look at how **green** materials and **green** thinking
- ok at how **green** materials and **green** thinking changes life cycle c
- dramatic head start on us in **greening** their trade shows. Heighte
- e done now. Where do you the **green** movement five years from now?
- tend Tell us about your new **green** building. We're moving into
- e to when you aren't thinking **green**? I'm a fairly accomplished I

Fig. 7. Selected trade publications' use of "green" in context.

4.3. Comparing key informant interviews to the selected trade publications

Fig. 1 may reflect both differences in how the data was generated and differences in perspective between the key

- t there is no great secret on **securing** this most prestigious, fab
- heir perception of **safety and security**" as the primary considerat
- literature involving **safety, security** and risk management as per
- event and festival **safety and security**. This knowledge is combine
- y and a U.S. based **safety and security** expert may share his or he
- he common cause of **safety and security** for our current and future
- nd event-goers use **safety and security** as a major consideration w
- FE, the industry's **safety and security** program." Through eSAFE, p
- estrooms, stages, generators, **security** personnel posts, buoys, et
- anopies? Wouldn't you be more **secure** knowing exactly where the le
- ts list "their perception of **safety and security**" as the primar
- here is little awareness of **unsafe** conditions because the attend
- could be used to improve the **safety** of all events." The eSAFE s
- nd other literature involving **safety, security** and risk managem
- of event risk management and **safety** that users of eSAFE may con
- e field of event and festival **safety and security**. This knowledge
- nts industry and a U.S. based **safety and security** expert may sha
- eloping country to insure the **safety** of their event guests. Thro
- te around the common cause of **safety and security** for our curren
- festival and event-goers use **safety and security** as a major con
- ed with eSAFE, the industry's **safety and security** program." Thro
- to potential revenue, public **safety** and overall appearance. And
- and it is responsible for our **safety** on every commercial flight,
- to law enforcement and public **safety** officials during an event e
- you) in their existing public **safety**, law enforcement and impact

Fig. 8. Selected trade publications' use of "secure" and "safe" in context.

- other in L.A., nationwide and **worldwide**. What do you think are go
- the event and the theatrical **world** have really merged. Who would
- ow reaches the event industry **worldwide** with a print magazine, tr
- se in global summits with the **world** coming together peacefully to
- ility of events to change our **world**." Evan and Jordan Carbotti W
- eople from the TV and theater **world** since they know how to tell a
- of technology's impact on the **world**, they probably didn't have ev
- nologies that will impact the **world** in the next three to 10 years
- tudents from all parts of the **world** showing off homemade and hand
- te sponsors bring some of the **world's** most well-known brands to t
- stivals and events around the **world** to improve their communication
- cticed in another part of the **world** may indeed positively influen
- in from the other side of the **world**, yet the blooms die two days
- s firm was recently named the **world's** greenest trade show exhibit
- Fla. "I see an increase in **global** summits with the world comi
- membering the events of 9/11, **global** warming and the nation's he
- , fire and the new threats of **global** terrorism. Now, for the fir

Fig. 9. Selected trade publications' use of "world" and "global" in context.

informants and the selected trade publications. Key informants were encouraged to address all five environmental forces: economic, environmental, political, social, and technological. In contrast, authors of trade publication articles likely approached their subject from a more focused point of view. Despite these differences, however, there is some agreement between the two sources. Environmental and political forces were the types of forces least likely to be mentioned by either source. For example, one-half of the key informants mentioned political forces—despite political forces being listed as one of the topics in the interview. Similarly, only two of the 11 selected trade publication articles addressed political forces.

Comparing the forces identified by key informants and selected trade publications in Table 2 suggests broad areas of agreement between these two sources of expertise. They share the same word/concept categories except for the presence of recycle* on the top ten from the selected trade publications and the presence of the cost*/money concept on the key informants' list. The frequency with which word/concept categories appear in both reduced and lemmatized lexicons is also broadly similar with perhaps the most interesting differences found between the word/concept people

and tech*. The key informants were more likely to talk about people when discussing trends in event design than were the authors of the 11 selected trade publication articles (0.63% versus 0.15%, respectively). Authors of the trade publications, on the other hand, were more likely to use words related to technology than were the key informants (0.83% versus 0.38%, respectively). This may reflect the fact that two of the 11 selected trade publications were focused on specific technological products (GIS/GPS in one, and eSAFE in the other).

5. Conclusion and discussion

This study identified the environmental forces that will impact event design as perceived by industry experts. The content analysis of the key informant interviews and the selected trade press articles suggested that a variety of forces will lead change within the industry. The most frequently identified forces by the key informants were social, technological, and economic. In contrast, the articles from the trade press most frequently addressed social, environmental, and technological issues. Both sources of expertise described forces affecting event design using similar language. Based on this shared language it seems safe to conclude that some of the specific forces affecting event design will include technology in its many applications, environmental and green issues, pressure to run events on a more business-like basis, security and safety issues, and globalization.

These sources paint a complex picture for the future of event design. Forces shaping event design interact and this interaction adds to the complexity of the picture. As one informant noted the event environment is “*organic*,” meaning that from the point of view of the consumer all parts of the event experience must fit together seamlessly. Additionally, as potential event guests become more sophisticated through their lived experiences their expectations for events are likely to increase. Awareness of technological advances is also likely to raise expectation levels.

Furthermore, in some ways events are in competition with technology. The benefits offered by a live event will need to exceed those available through virtual attendance at an on-line event. This competition increases as the ratio of the cost of live events to the cost of virtual events shifts in favor of the virtual event. Awareness by consumers of what is available as an on-line experience and continued exposure to coverage of world class events via technology will further increase expectations about live events.

These ever rising expectations will have to be met in a setting that contains significant constraints. Sponsors will continue to demand proof of positive return on investment. This may be challenging in an environment with higher energy and commodity costs. The need for secure events in the face of global terrorism is another source of constraint on event design. Some informants suggested that event goers will have to become accustomed to seeing signs of security at events, just like they have become accustomed to seeing airport security. Others suggested that the challenge will be in providing safe events where the security measures do not compromise the event experience.

Another important influence shaping event design will be environmental or green issues. Events will need to go green because of changing resource costs, because of higher expectations about environmentally friendly practices from sponsors and event goers, and perhaps due to increased levels of government regulation. These green expectations are likely to present a moving target to event planners. An example of this was provided by an informant who noted that while recycling used to put an event in the forefront of environmental practices today it is seen as almost a minimal level of environmental sensitivity.

It may also be worthwhile to take note of some forces that these expert sources did not identify. Specifically, relatively little attention was paid to political forces. But since this data was collected one of the highest visibility issues affecting events in the USA has been public and government unhappiness with corporations’ use of Troubled Asset Relief Program (TARP) assistance to fund incentive travel, meetings, and other events. In fact, backlash against using these public funds in a “business-as-usual” manner has been so strong that industry trade groups have had to respond. For example, the American Hotel & Lodging Association has developed guidelines for the use of meetings and events by organizations receiving TARP funds (www.ahla.com/pressrelease.aspx?id=25492). Similarly, the US Travel Association has developed an entire web site devoted to educating the public and elected officials about the role of meetings and events in the US economy (www.meetingsmeanbusiness.com). Actions such as these emphasize the important role political forces can play on events. Yet most of the sources of expertise in this study did not address political forces. Conjecturally, this may be the result of availability bias when making predictions (Kahneman and Tversky, 1973; Tversky and Kahneman, 1974). Research into how people make predictions given incomplete information suggests that there are biases based on how easy it is to remember examples of an event or to imagine examples of that type of event. People are more likely to predict that something will occur if they are aware of similar examples or if the event is easy to imagine. Conversely, they are less likely to predict events that are not easily retrievable from memory or are difficult to imagine (Kahneman and Tversky, 1973; Tversky and Kahneman, 1974). Future work on environmental scanning in hospitality and tourism may need to address the role that known choice heuristics and perceptual biases may play in shaping decision makers’ ability to identify forces.

A second concern about this approach to environmental scanning comes from the selection of key informants. Tremblay (1957) listed a number of characteristics describing the ideal key informant. It seems reasonable to assume that these informants met the first three of his criteria: they occupied critical roles in their field and had a mastery of the specialized knowledge relevant to the study, they were willing to cooperate in the interview process, and they were able to communicate their expertise in the interview. However, one may question the degree to which they could discuss the forces influencing event design in an impartial manner. It appears that one of the challenges in using the key informant technique comes from the basic contradiction between strategically selecting informants who play critical roles in their field versus having key informants who hold impartial perceptions about their field. Expertise likely goes hand-in-hand with strong opinions. Research designs may need to further investigate ways to minimize, or at least balance, these conflicting imperatives.

A related study limitation arises from the small number of key informants used in this study. While these key informants were suggested by two separate industry professionals the two professionals had overlapping social networks so these key informants likely represent a single network of industry professionals. Additionally, all key informants work primarily in the English-speaking parts of the Old and New Worlds. Therefore their perception of the forces shaping the future of event design may not generalize beyond their geographic areas of expertise.

Despite these limitations these results provide some understanding of the forces influencing the direction of event design. The event industry has evolved due to historical forces shaping event demand and supply. Similarly event design will continue to evolve as environmental forces wax and wane. Success may lie in anticipating these changes.

References

- Berridge, G., 2007. *Events Design and Experience*. Elsevier, New York, NY.
- Bolden, M., Mascarola, J., 2000. Bridging the quantitative–qualitative divide: the lexical approach to textual data analysis. *Social Science Computer Review* 19 (4), 450–460.
- Formica, S., Kothari, T.H., 2008. Strategic destination planning: analyzing the future of tourism. *The Journal of Travel Research* 46, 355–367.
- Goldblatt, J., Nelson, K.S. (Eds.), 2001. *International Dictionary of Event Management*. John Wiley & Sons, New York, NY.
- Gretzel, U., Fesenmaier, D.R., Formica, S., O’Leary, J.T., 2006. Searching for the future: challenges faced by destination marketing organizations. *Journal of Travel Research* 45, 116–126.
- Hayes, A.F., Krippendorff, K., 2007. Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures* 1 (1), 77–89.
- Hogenraad, R., McKenzie, D.P., Péladeau, N., 2003. Force and influence in content analysis: the production of new social knowledge. *Quality & Quantity* 37, 221–238.
- Hüning, M., 2007. TextSTAT 2.7. Retrieved April 3, 2008 from www.niederlandistik.fu-berlin.de/teststat.
- Jogarathnam, G., 2005. Management style and environmental scanning in the search for business opportunities and challenges. *International Journal of Hospitality and Tourism Administration* 6 (1), 53–71.
- Jogarathnam, G., Law, R., 2006. Environmental scanning and information source utilization: exploring the behavior of Hong Kong hotel and tourism executives. *Journal of Hospitality & Tourism Research* 30, 170–190.
- Kahneman, D., Tversky, A., 1973. On the psychology of prediction. *Psychological Review* 80 (4), 237–251.
- Katz, R., 2007. July 16. Bucking trend, a trade show grows wider, not narrower. (Cover story). *Meeting News* 31 (9) 1, 64.
- Krippendorff, K., 2004. Reliability in content analysis: some common misconceptions and recommendations. *Human Communication Research* 30, 411–433.
- Lester, R., Waters, J., 1989. *Environmental Scanning and Business Strategy*. British Library, Research and Development Department, London, UK.
- Monroe, J.C., 2006. *Art of the Event: Complete Guide to Designing and Decorating Special Events*. Wiley, Hoboken, NJ.
- Olsen, M.D., 1999. Macroforces driving change into the new millennium: major challenges for the hospitality professional. *International Journal of Hospitality Management* 18 (4), 371–385.
- Olsen, M.D., 2004. Literature in strategic management in the hospitality industry. *International Journal of Hospitality Management* 23, 411–424.
- Olsen, M.D., Zhao, J., 2004. Industry change, environmental scanning and firm strategy: how is the hospitality industry doing? *Tourism & Hospitality Planning and Development* 1 (1), 13–18.
- Olsen, M.D., Murthy, B., Teare, R., 1994. CEO perspectives on scanning the global hotel business environment. *International Journal of Contemporary Hospitality Management* 6 (4), 3–9.
- Oreja-Rodríguez, J.R., Yanes-Estévez, V., 2007. Perceived environmental uncertainty in tourism: a new approach using the Rasch model. *Tourism Management* 28, 1450–1463.
- Scott, W.A., 1955. Reliability of content analysis: the case of nominal scale coding. *Public Opinion Quarterly* 19, 321–325.
- Sheffroff, N., 2001. *Experience Design 1*. New Riders, Indianapolis, IN.
- Stoffels, J.D., 1994. *Strategic Issues Management: A Comprehensive Guide to Environmental Scanning*. Pergamon, Milwaukee, WI.
- Teare, R., Bowen, J.T., 1997. Assessing information needs and external change. *International Journal of Contemporary Hospitality Management* 6, 274–284.
- Tremblay, M.-A., 1957. The key informant technique: a nonethnographic application. *American Anthropologist* 59 (4), 688–701.
- Tversky, A., Kahneman, D., 1974. Judgment under uncertainty: heuristics and biases. *Science* 185 (4157), 1124–1131.
- Xiang, Z., Formica, S., 2006. Mapping environmental change in tourism: a study of the incentive travel industry. *Tourism Management* 28, 1193–1202.
- Yeoman, I., Robertson, M., Ali-Knight, J., Drummond, S., McMahon-Beattie, U., 2004. *Festival and Events Management*. Elsevier, Burlington, MA.