

The Exhibitor Perspective –

Providing Facility Services for a Successful Trade Show

by

Nicolas Garaycochea

A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Science

Approved April 2017 by the
Graduate Supervisory Committee:

Wendy Hultsman, Chair

Woojin Lee

John Weber

ARIZONA STATE UNIVERSITY

May 2017

ABSTRACT

Currently, show management for convention centers have several resources to help determine where to place their efforts in facility services for exhibitors, one of which is to use research results from an importance-performance analysis study. In order to help show management refine their understanding of the needs of exhibitors before a trade show, this study explores the relationship between the exhibitor's ranking of importance placed on facility services through the Importance-Performance Analysis, and the goals exhibitors have for the trade show. A survey was conducted at three different trade shows taking place in two convention centers. Using a sample of 115 exhibitors, the underlying factors were determined for the importance exhibitors placed on facility attributes and their goals. The findings from the research show that the correlations between importance factors and goals are statistically weak, albeit some notable correlations were made. The importance performance analysis remains a strong and useful tool for show management to use and implementing the iso-rating line provides more detail for a show manager to work with. The finding of this study offer insights into the factor analysis of facility attributes as well as the importance-goals analysis conducted.

DEDICATION

I would like to dedicate this thesis to my wife, whose never ending support through my personal struggles have been an inspiration to me. Without her constant support and love, I would have never made it through the doubts and hardships. I would also like to dedicate this to my father-in-law, who never gave up on me. It was through his example and encouragement that I was able to continue and finish this thesis.

ACKNOWLEDGMENTS

I would like to thank my thesis advisor Wendy Hultsman of the School of Community Resources at Arizona State University. Without her help I would have never figured out what my thesis subject should be on. She helped me to build on my strengths and guided me in the right direction. She was patient with me even though my head wasn't always in the paper, and in the end she never gave up on me. She is an example in the event coordinating community, but she is also a great example to me. Thank you.

Author,

Nicolas Garaycochea

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
LIST OF FIGURES	x
INTRODUCTION	1
Problem Statement	2
Purpose Statement.....	2
Limitations	2
Delimitations.....	2
Definition of Terms.....	3
LITERATURE REVIEW	4
Trade Show defined	5
Trade Show Roles Defined	6
Who Attends Trade Shows?.....	7
Who Are the Exhibitors?	7
Why Do Exhibitors Go to Trade Shows?	8

	Page
Exhibitor Goals for Trade Shows	9
Trade Show Attributes	11
Importance–Performance Analysis	18
METHODS	22
Population of Interest	22
The Instrument	23
Exhibitor Goals	23
Trade Show Attributes	24
Demographics	25
Study Sites	26
Data Collection	27
Methodology	28
ANALYSIS	29
IPA Descriptive Statistics	30
Demographic Information	30
Exhibitor Goals	31

	Page
Show Attribute Importance.....	35
Show Attribute Performance.....	37
Gap Analysis.....	39
Importance–Performance Analysis (IPA).....	41
IPA Inferential Statistics.....	45
Business Size.....	45
Position within Business.....	47
Business Years of Attendance.....	48
Factor Analysis and Correlations.....	50
Exploratory Factor Analysis.....	53
Goals and Show Attribute Importance Correlation.....	62
Factor Analysis of Goals and Show Attributes.....	63
DISCUSSION.....	63
Result Summary.....	63
Demographic Profile.....	65
Use of IP Analysis.....	65
Goal Ranking.....	69
Factor Analysis.....	70
Correlations between importance and goals.....	70

	Page
CONCLUSION.....	73
REFERENCES	76
A. IRB APPROVAL.....	81
B. SURVEY INSTRUMENT	83
C. CORRELATIONS	91
D. GOAL FACTOR LOADINGS	93

LIST OF TABLES

Table	Page
1. Rodriguez-Oromendia et al. (2012) Exhibitor Trade Show Goals	11
2. Hultsman (2001) Characteristics of Trade show.	13
3. Breiter and Milman (2006a).....	15
4. Breiter and Milman (2006b) Facility Features.....	16
5. Breiter and Milman (2006b) Facility Features Around the Convention Center ...	17
6. Breiter and Milman (2006b) Convention Center's Public Areas	17
7. Breiter and Milman (2006b) Convention Center's Exhibit Halls	17
8. Exhibitor Goals	23
9. Trade Show Attributes	25
10. Demographics (N and Percentage) by Business Size	30
11. Average Goal Importance by Business Size.....	31
12. Average Goal Importance by Trade Show.....	33
13. Average Rank of Goals.....	34
14. Average Show Attribute Importance by Trade Show.....	37
15. Average Show Attribute Performance by trade show.....	38

Table	Page
16. Average Gap Between Importance and Performance by Business Size.....	41
17. Importance Factors.....	55
18. Importance Factor Extracted.....	56
19. Goal Factors	59
20. Goal factors extracted	59
21. Pearson Correlations Between Importance Factors and Goals	61
22. P-values of Correlations.....	62
23. Correlations.....	63
24. Pearson's Correlation Full.....	91
25. Goal Factor Loadings.....	93

LIST OF FIGURES

Figure	Page
1. Martilla and James (1977) IPA Grid.....	19
2. Diagonal IPA Grid, Abalo et al. (2007).....	20
3. IPA Zones	21
4. Average Goal Importance	33
5. Average Goal Rank.....	35
6. Average Show Attribute Importance	37
7. Average Show Attribute Performance	39
8. All Exhibitors IPA grid.....	42
9. IPA Grid: Podiatry, Hawaii.....	43
10. IPA Grid: Conservation, Hawaii.....	44
11. IPA Grid: Psychology, Washington DC	45
12. IPA by Business Size With 95% Confidence Intervals.	46
13. IPA by Position in Business.....	48
14. IPA by Years Attendance.....	49
15. Mean Score of Trade Show Attribute Importance by Conference.	51

Figure

Page

16. Mean Score of Trade Show Goals Rankings by Conference..... 52

INTRODUCTION

Current marketing solicitations are more frequently being channeled through social media and online platforms (Han & Verma, 2014). Trade shows, however, are still an important part of the marketing world since they provide businesses a face-to-face experience that online marketing lacks (Han & Verma, 2014). Trade shows can help businesses to increase sales (Smith, Gopalakrishna, & Smith, 2004) as well as allow businesses to observe their competition in practice (Palumbo, 2008; Siskind, 2006). There are thousands of trade shows in the U.S. alone, that many companies participate in as an integral part of their marketing strategies (Trade Show News Network, 2017).

Several studies explore the effectiveness of trade shows for exhibitors (Situma, 2012; Yuksel & Voola, 2010), and indicate what determines the success of a trade show from an exhibitor's perspective (Rodriguez-Oromendia, Reina-Paz, & Sevilla-Sevilla, 2012). However, there is a lack of studies focused on how exhibitor goals (i.e. generating leads, closing sales, introduce new products) correlate with the importance exhibitors place upon facility services provided. Understanding the correlations between an exhibitor's goals and what facility services are important to an exhibitor, allows show management to use this information as an additional management tool and focus their energy on improving those facility services. As the importance performance analysis is a post-show management tool, the study of the correlation between importance and goals is a preshow management tool. Building on the work of Hultsman (2001) and Rodriguez-Oromendia et al. (2012), this study will explore the correlation between exhibitors' business goals and objectives on the importance of trade show features.

Problem Statement

What is the correlation between the goals of trade show exhibitors with the importance placed on facility services and attributes?

Purpose Statement

The purpose of this study is to compare the mean score of facility attributes that are provided in trade shows with the corresponding performance rating using a matrix grid and implements the iso-rating line into the grid.

This study also explores the correlation between exhibitors' ranking of importance placed on facility services through the importance ratings from the Importance Performance analysis, and the goals exhibitors have for the trade show. In order to do that this study attempts to determine the underlying factors that explain the variation in the importance placed on attributes, which will be called importance factors.

H1: Exhibitors' trade show goals correlate with exhibitors' assessment of the importance of trade show attributes

Limitations

Show management at large facilities may differ from those at smaller facilities, as larger facilities will typically subcontract provided services out to different business, whereas smaller facilities may only rely on clients contracting outside services.

Delimitations

The sample size in this study was limited by the size of the shows held at the sampled convention centers. This reduced the ability to detect subtle relationships between exhibitor goals and attribute importance and performance. Another limiting

factor was that only two convention centers were sampled. Additional conference facilities may have provided a broader range of services, such as free Internet, or better parking. Typically, convention centers provide the same or similar services. Sampling from more convention centers and trade shows might have captured a wider variety of responses, as exhibitors may have placed importance on different needs.

Exhibitor's choices could change according to what has occurred at the trade show, so in order to address this issue an importance survey could be distributed before the trade show at sign up and then the performance questionnaire at the end of the trade show. Due to time constraints, the questionnaire was distributed at the end of each event for both importance and performance as well as goals.

The correlation of goals with the importance scores of facility attributes does not explain causation. This was an exploratory study on correlation with the intent of continuing the study by finding the impact goals have on importance scores.

Access to convention centers was limited. Initially the Phoenix Convention Center (PCC) was one of the chosen study sites. Administration at the PCC decided not to allow the questionnaire for this study to be distributed, and therefore only two convention centers were chosen.

Definition of Terms

Trade show. A trade show is an exhibition where businesses gather to provide services and information to other business or clients. This term is interchangeable with

exhibition and trade fair (Black, 1986; Lee-Kelley, Gilbert, & Al-Shehabi, 2004). The term trade show will be used for the purpose of this study.

Attendee: An attendee customer that attends a trade show to either purchase goods or obtain information (Gopalakrishna, Roster, & Sridhar, 2010).

Exhibitor: An exhibitor is someone who purchases a booth at a trade show and represents their company or business (Gopalakrishna et al., 2010).

Trade show manager. A trade show manager or trade show organizer is someone who organizes the trade show, distributes the booths, determines loading and set up times, gives information on convention center services such as utilities and internet (Tafesse, 2014).

Large convention center. A large convention center is a convention center with rentable space over 1 million square feet and caters trade shows (Black, 1986).

Facility services. Facility services are the services provided by a convention center for trade shows. Facility services is also referred to as facility attributes and is used interchangeably.

LITERATURE REVIEW

Trade shows are big business, they attracted 1.5 million exhibitors in 2009 in North America alone and generated \$11 billion dollars. There were 14,000 trade shows held in 2010 totaling 700 million square feet of exhibit space. Expenditure on trade shows is the largest component of the business to business communications budget

(Lillien & Grewal, 2012, p. 227). In 2014, \$25 billion was spent on trade shows in the U.S., of which 39% was spent on exhibit space (CEIR, 2014).

Trade Show defined

Lee-Kelley et al. (2004) described an exhibition as follows: “An exhibition is a fair, a show, an expo or any display of objects or services for public viewing” (p. 635). A trade show is a type of exhibition in which a collection of businesses display their goods and services to an audience of potential customers in one location (Black, 1986). The trade show is a major marketing event whose purpose is to bring information about goods and services to potential customers (Herbig, O’Hara, & Palumbo, 1998). In this paper, as with most studies, the terms exhibition and trade shows and trade fairs were used interchangeably due to their synonymous use in the literature, this study will use the term trade show.

Trade shows create an environment for a significant amount of knowledge sharing between customers and suppliers (Reychav, 2009). Trade shows and fairs also allow businesses to observe competing business practices and compare quality and price points. This opportunity for businesses and customers is unique to exhibitions and trade shows. According to the Center for Exhibition Industry Research (CEIR):

“Trade shows provide the perfect forum for companies to introduce new brands and display products to buyers. Exhibitions are especially effective when combined with a company’s integrated marketing strategy. Exhibitions, as a selling medium, are an excellent way to identify new leads

and improve an exhibitor's return on investment via face-to-face contact with customers" (CEIR, 2009, p. 1).

Trade Show Roles Defined

It takes many individuals to stage a trade show from beginning to end. However, there are three main actors on which a trade show depends in order to run smoothly: the attendee, the exhibitor and the trade show manager (Gopalakrishna et al., 2010). Deborah Breiter and Ady Milman (2006) called these actors "convention planners, convention registrants, and convention exhibitors". For the purpose of this study they will be referred to as attendees, exhibitors and trade show managers.

Attendees are those that attend a trade show for the purpose of obtaining information, comparing prices, and/or purchasing products (Gopalakrishna et al., 2010).

Exhibitors are those that participate in a trade show by occupying a booth or space for purposes such as disseminating information to potential clients, selling, or expanding their network in sales or business (Gopalakrishna et al., 2010).

Trade show managers assist in the organization of trade shows and coordinate with exhibitors from the beginning to the end of the trade show (Tafesse, 2014). Trade show managers provide the information necessary for exhibitors to reserve a space in the exhibition, and serve as a liaison between exhibitors and facility management who provide facility services (i.e. Internet, power) and other convention center management and services (Tafesse, 2014). Trade show managers provide important information such as where to park, when to load into the space provided, how to meet fire and safety regulations, when the trade show will be opened, and for how many days (Tafesse, 2014).

Trade show managers are also there to assist with any issues experienced by exhibitors and attendees (Tafesse, 2014). Trade show managers also make sure that services for the attendees, such as food and restrooms, are provided. Trade show managers represent the convention center (Tafesse, 2014).

Who Attends Trade Shows?

Trade shows attract a range of potential customers; CEIR (2009) reports that of those who attend a trade show, 26% represent companies that have over one thousand employees, 77% are attending a trade show for the first time, and 82% of them have a net buying influence. Net buying influence represents the percentage of customers making the final decision on a given purchasing product or at the least give a final recommendation, and Statista (2014) found that over period of 5 years this percentage only dropped by one percent, meaning that overall 81% of exhibition visitors still have buying influence. CEIR also stated that 76% of attendees rate the face-to-face interaction with potential suppliers as very important for their job (CEIR, 2003).

Who Are the Exhibitors?

According to CEIR, the majority of exhibitors come from relatively small firms (61% from firms with 1-99 employees, 18% from firms with 100-499 employees and 13% from firms with 500 or more employees) (Ducate, Breden, & Drapeau, 2012a). Approximately 38% of exhibitors are sales personnel (Ducate et al., 2012a), which is not surprising since there is a range of non-sales objectives that exhibitors may attempt to achieve, such as, company image building and branding, and membership fees or donations. In fact, Stevens (2005) says that exhibitors should provide a variety of staffing

that is representative of the trade show goals. In 2012 CEIR reported that exhibitor job titles were President/Owner/CEO (21%), Vice President (9%), Exhibit Manager(18%), and other (8%) (Ducate et al., 2012a).

Why Do Exhibitors Go to Trade Shows?

Exhibitors get a lot of exposure to potential buyers at trade shows (Stanton & Sequeira, 2013), for example, 87% of exhibitors rate face-to-face interaction with attendees as very important for marketing their products (CEIR, 2003). The average number of attendees per 100 square foot of paid trade show space per show was 2.2 in 2011 (CEIR, 2011a). Thirty-seven percent of attendees have final say in the purchase decision, 27% specify products and 49% recommend purchase of exhibited products (CEIR, 2011b). Overall, 94% of attendees have net buying influence (Ducate et al., 2012a). Situma (2012) stated that for many companies, trade shows ranked second, behind advertising, in their business marketing budget. Since the economic slowdown in 2008, companies, on average, are allocating more of their marketing budget to trade shows (35.8% to 39.2 % from 2008 to 2011) (Drapeau, 2012).

Marketing strategies have changed over time. In the digital age, marketing has a new platform with the Internet assuming a greater position for company exposure. Due to this change in marketing channels, face-to-face contact with customers has become less frequent. Situma (2012) stated that due to changes in marketing strategy, online usage for business to customer interaction and the recent recession, companies are creating ways to effectively promote sales and products in a more efficient, dollar conscious way. Trade shows and exhibitions provide companies increased face-to-face exposure to customers

while creating a physical presence among other companies working within the constraints of an affordable budget. Additionally, Situma (2012) noted that participating in trade shows creates an equalized forum in which large and small companies can both participate, equalizing exposure between businesses.

O'Hara and Herbig (1993) pointed out that unlike other marketing programs, such as advertisements in which the company reaches out to the customer, trade shows allow the customer to come to the company.

Exhibitor Goals for Trade Shows

There have been several studies on exhibitor goals. In 1996, Poorani found that the vast majority of exhibitors aimed to generate sales leads and increase awareness of their business (Poorani, 1996). Situma (2012) found that at trade shows, the primary exhibitor objectives and motivations for participating are publicity, re-establishing relations with clients, and receiving feedback on new products introduced.

Yuksel and Voola (2010) studied exhibitor motivation at international travel trade shows. Specifically, they examined what an exhibitor interpreted as an effective trade show and the challenges faced by exhibiting businesses. They found that improving relationships with customers was a key motivation for exhibitors participating in travel trade shows. Yuksel and Voola (2010) also listed other exhibitor goals such as, maintaining product image, gaining competitive advantage over other businesses, introduce and promote new products, gather information from their competitors, and direct sales.

Not all exhibitors have specific goals in mind for each trade show. In 2006 a study found that 70% of trade show exhibitors have only vague goals, such as “support the industry” (Pitta, Weisgal, & Lynagh, 2006). Assessing such non-sales value of a trade show is difficult in quantitative terms, for example, what does it mean to “maintain image” (Lillien & Grewal, 2012, p. 227)? Siskind (2008) reported that a major motivation for exhibiting at a trade show, was to do so simply because the competition does, revealing the possibility that some exhibitors have no goals at all. These findings were replicated by Rodriguez-Oromendia et al. (2012), who reported that some companies continue to participate in trade shows out of habit without measurable goals or a quantifiable plan.

As the economy changed, show exhibitors found they had to justify their presence at trade shows, CEIR has reported that 80% of show attendees are looking for new products or vendors (Ducate, Breden, & Drapeau, 2012b). This matches well with findings on exhibitor goals. Drapeau (2012) found that for the majority of exhibitors, building/expanding brand awareness and new product promotions and launches were high priority show objectives. More recently CEIR (2013a) found that 93% of exhibitors agreed that both building brand awareness and reaching new customers were important show objectives. A repeat survey in 2014 confirmed the 2013 results (CEIR, 2015).

Rodriguez-Oromendia et al. (2012) analyzed several studies on the objectives of businesses at trade shows and identified the following as goals and objectives of exhibitors (Table 1). Rodriguez-Oromendia et al. (2012) used a cluster analysis on several existing studies in order to group exhibitors with similar goals (the clusters are

identified as – New Product objectives, Sales, Customer, and Image objectives, and Social Relationship objectives).

Table 1: Rodriguez-Oromendia et al. (2012) Exhibitor Trade Show Goals

Rodriguez-Oromendia Goal Description
Introduce new products and developments
Provide information about products and their uses
Maintain existing business relationships
Make new contacts with potential buyers
Secure orders or generate sales
Have access to customers who would otherwise be difficult to reach
Attend because the competition does so
Exchange experiences
Get an overall sense of the state of the market
Promote the company's image and improve its reputation
Train new sales staff

Some of the goals that Rodriguez-Oromendia et al. (2012) had determined to be prevalent among exhibitors were also found to be among the top objectives for exhibitors in a 2015 study by CEIR: launching new products 73%, maintaining existing customer relationships 90%, networking/exchanging experiences 76%, closing sales at the show 39% (CEIR, 2015).

This study will use factor analysis to determine the underlying factors from the answers given on the survey to reduce the dimensions of the data set, then goal factors and importance factors will be correlated with Pearson's correlation.

Trade Show Attributes

A show manager who understands the needs of exhibitors can better provide services required by exhibitors helping to ensure a successful trade show experience.

Although there have been many studies that focused on exhibitor success, there have been few studies that have focused on exhibitor facility service to attain trade show success.

Hultsman (2001) made the argument that some show managers might have the belief that providing tables, chairs, pipe and drape is good enough for the exhibitors. This would be an inadequate interpretation of what an exhibitor sees as important assets for a successful trade show. Hultsman (2001) focused on determining exhibitor needs and the perceived benefits of participation in a study at an International Arts Convention. Characteristics of a typical trade show are identified by Hultsman are listed in Table 2. Hultsman (2001) distributed a survey with open ended questions to determine what they expected to gain from the trade show and the value they placed on the conference. These questions are similar to the exhibitor goals that were presented by Rodriguez-Oromendia et al. (2012). Hultsman (2001) also included the list of 27 facility attributes in Table 2 with a Likert scale in order to determine the level of importance each attribute held for exhibitors and the level of satisfaction with facility services. Those results showed that what was most important to exhibitors, at the time, was the fee for space rental. The results were placed on an Importance-Performance Analysis matrix. The results gave insight for the show managers that the attribute in most need of improvement was “the fee for exhibiting”, “the method off assigning space to exhibitors”, “the relation off your exhibit area to the door”, “the layout off the exhibit hall”, “exhibit hall space specifications”, “the exhibit hall hours”, “the size of your booth space”. According to this study, the improvements that show managers would need to make mostly focus on exhibitors’ booth size and their exposure in the exhibition hall. It was also indicated that

show managers would need to improve their communication about the exhibit space upon sign up and the fairness of where each exhibitor would be located (Hultsman, 2001).

Table 2: Hultsman (2001) Characteristics of Trade show.

Hultsman Attribute Description
The relation of your exhibit area to the door
The type of exhibitors near your booth
The size of your booth space
The layout of your booth
The layout of the exhibit hall
Availability of audio-visual equipment
The exhibit hall hours
The number of representatives you can bring
Having the exhibit hall open for so many days
Having food nearby
The method of assigning space to exhibitors
The fee for exhibiting
Ease of getting your materials to the conference
Having a listing in the conference directory
Receiving tickets for the buffet lunch
Having an exhibitors reception
The amount of time for set-up
Having overnight security
Having opportunities to meet with other exhibitors
Having a variety to lodging options
Having storage space
Receiving directions to the hotel
Receiving information about sightseeing
Proximity of restrooms
Exhibit hall space specifications
Availability of microphone to make announcements
Availability of business services (e.g., FAX, Copy machine, Internet)

Breiter and Milman (2006) did a similar study to Hultsman (2001), however their study focused on the needs and service priorities in large convention centers for attendees rather than exhibitors. The attributes shown in Breiter and Milman's (2006) study are

similar to Hultsman's (2001) list of attributes because some of the basic features of a trade show overlap for both the exhibitors and attendees. Even though some of the attributes from Breiter and Milman's (2006) list overlap with Hultsman's (2001) list, attendee needs are very different from the needs of an exhibitor. Most of the scores presented in Breiter and Milman's (2006) show more concern for food availability and quality than booth placement.

Table 3 Breiter and Milman (2006a)

Facility Features	Facility Services
Directional signage within the convention center	Overall cleanliness of the convention center
Availability of high quality lodging facilities near the convention center	A well-maintained facility
Sufficient restrooms throughout the convention center	Helpfulness of guest services personnel
Ability to get cell phone signal in the convention center	Friendliness of guest services personnel
Directional road signage to the convention center	Assistance of other convention center staff
Availability of seating throughout the convention center	Design and content of the Orange County Convention Center Web site
Easy accessibility to local foodservice facilities	Other
Affordability of parking	
Availability of taxi service to and from the convention center	
Affordability of taxi service to and from the convention center	
Food service outlets open during all show hours	
Availability of food kiosks throughout the convention center	
Proximity of food services to exhibit hall	
Availability of business services	
Sufficient public telephones	
Availability of upscale food service in the convention center	
Sufficient public Internet access	
Availability of branded food service in the convention center	
Other	

An exploratory study was also conducted by Breiter and Milman (2006) wherein the researchers determined through focus groups what facility attributes were important to the exhibitor. D. Breiter and A. Milman (2006) split the facility features in several tables (Table 4, Table 5, Table 6, Table 7) Some of these features include maintenance, cleanliness of the convention center, the presence of exhibitor services representatives, rigging services internet and catering. In Breiter and Milman’s (2006) exploratory study, the Important-Performance Analysis showed that improvement is needed in “assistance of exhibitor representative”, “affordability of convention center services” (utilities and rigging), and “price of exhibitor parking”. Some of these attributes are similar to the ones identified by Hultsman (2001), however Breiter and Milman (2006b) included features that are mostly present in large convention centers such as rigging services.

Table 4 Breiter and Milman (2006b) Facility Features

Convention Center's Facility Services
A well-maintained facility
Overall cleanliness of the convention center
Affordability of center services
Assistance of Exhibitor Services Representatives
Availability of business services
Exhibitor order forms online
Reliable rigging services
Design and content of the center’s website
Availability of booth catering

Table 5 Breiter and Milman (2006b) Facility Features Around the Convention Center

Convention Center's Features: Around the Convention Center
Directional road signage to the convention center
Availability of high-quality lodging facilities near the convention center
Easy access to local foodservice facilities
Price of exhibitor parking
Availability of taxi services to and from the convention center

Table 6 Breiter and Milman (2006b) Convention Center's Public Areas

Convention Center's Public Areas
Ability to get cell phone signal in the building
Proximity of food services to exhibit halls
Availability of food kiosks throughout the building
Availability of food services during show move-in
Availability of upscale food services
Sufficient public internet access
Sufficient public telephones
Soundproof meeting rooms

Table 7 Breiter and Milman (2006b) Convention Center's Exhibit Halls

Convention Center's Exhibit Halls
Sufficient lighting
Power and communication outlets in the floor
Temperature control during move in
Uninterrupted internet access

Hultsman's (2001) study portrayed a broad overview of service provided by event managers to exhibitors, however the sample size was relatively small (N =41). With a large sample size (N = 566) Breiter and Milman's (2006) study focused on service provided to attendees, however neither study focused on the correlation between

importance placed on service features and exhibitor goals. To date, there are no major studies that focus on the correlation of the importance exhibitors place on facility services and their goals for the trade show.

Importance–Performance Analysis

Importance–performance analysis was first used by Martilla and James (1977) to help determine consumer acceptance to business’ marketing strategies, although over time its use branched out to a variety of fields, such as tourism, recreation, and education (Azzopardi & Nash, 2013; Oh, 2001). The measurement asks two questions per feature: “How important is this feature?” and “How well was it performed?” (Martilla & James, 1977). The benefit of this question design is that the information can be easily interpreted by plotting it on an “Importance–Performance Grid” which, in turn, highlights management strategies that allow businesses to determine and focus on what is important to the consumer (Martilla & James, 1977). The importance of the attribute is plotted on the vertical axis and the performance of the attribute is on the horizontal axis of the Importance–Performance Grid (Figure 1).

On the placement of the lines on the grid that divide it into the quadrants, Martilla and James (1977) stated “it is a matter of judgment”. Both Oh (2001) and Deng (2007) clarify that the horizontal line is drawn at the average importance (that is, the sum of importance for all attributes divided by the number of responses) and that the vertical line is drawn at the average performance. The average importance and average performance for each attribute are then plotted as points on this diagram.

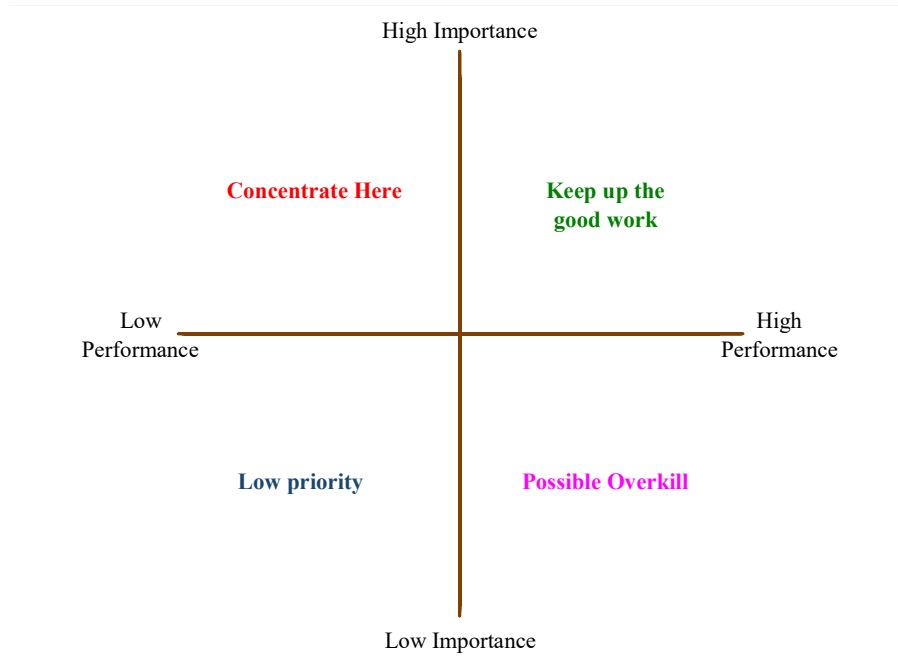


Figure 1: Martilla and James (1977) IPA Grid

In the Martilla and James (1977) framework, points in the lower left quadrant are those where performance is somewhat more than exhibitors’ importance, indicating that the show manager allotted more time and resources into that attribute than was necessary according to exhibitors’ importance ratings. On the other hand, points in the upper right quadrant are those where performance is somewhat less than exhibitors’ importance, indicating that the show manager needs to put more time and resources into that attribute to meet exhibitors’ needs.

A simpler format for the importance performance analysis was used by Magal and Levenburg (2005) using the iso-rating line model. The line running at 45° to the horizontal axis in Figure 2 is the line where the performance equals importance. This line that is referred to as the “iso-rating line”, a line that represents that a managers performance on facility attributes meet, but does not exceed, the importance the

exhibitors ascribe to them (Magal & Levenburg, 2005). Any point below the iso-rating line has performance exceeding importance and any point above the line has importance exceeding performance. When looking at the original IPA matrix, points in the upper right and lower left are likely closer to the iso-rating line than those in the other two quarters, they can potentially still be some distance was from the iso-rating line.

Abalo, Varela, and Manzano (2007) suggested a different break down of the areas on the IPA grid, utilizing the iso-rating line (Figure 2), which is a 45-degree angle line used to highlight the regions of differing priorities. Abalo et al. (2007) suggest that all attributes to the left of the iso-rating line are worthy of further attention. All attributes to the right of the line do not need attention.

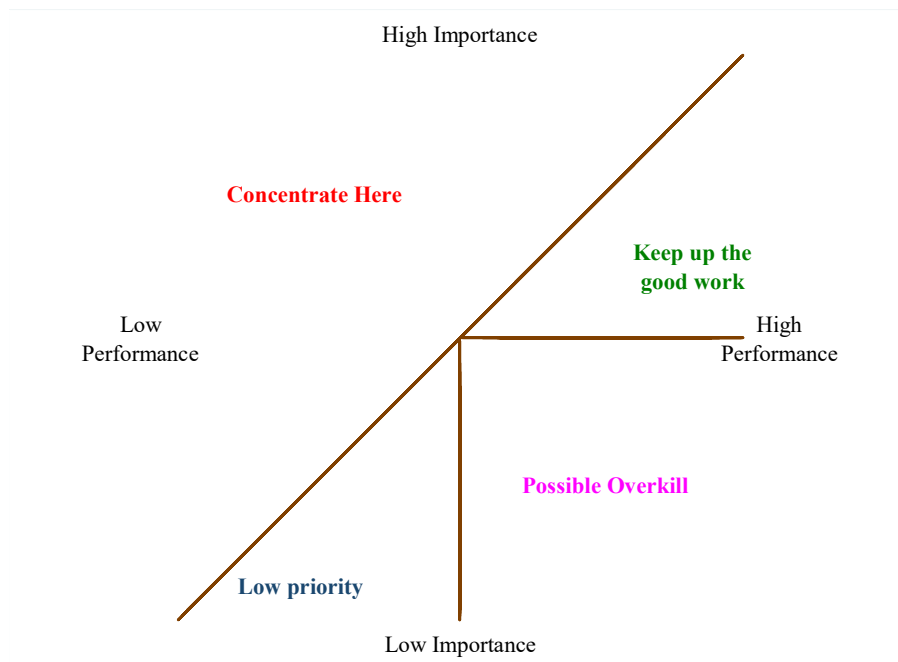


Figure 2: Diagonal IPA Grid, Abalo et al. (2007)

Aspects of these interpretation methodologies have merit and can be combined when describing the information presented in the IPA grid (see Figure 3). Using the iso-

rating line with the IPA matrix can help define show management's focus to the scores deviating from the line (Skok, Kophamel, & Richardson, 2001) This deviation can be expressed in a gap analysis (Skok et al., 2001). The gap analysis compares importance and performance is to look at the difference between the two. These differences are visually placed on the IPA matrix and represents the distance from the iso-rating line. So a positive gap indicates that performance was better than importance (overkill) and a negative gap indicates that performance was poorer than importance (needs work). Any variance from the iso-line needs attention, however Skok et al. (2001) identified those attributes with larger gaps (or the distance from the line) as areas that need more concentration.

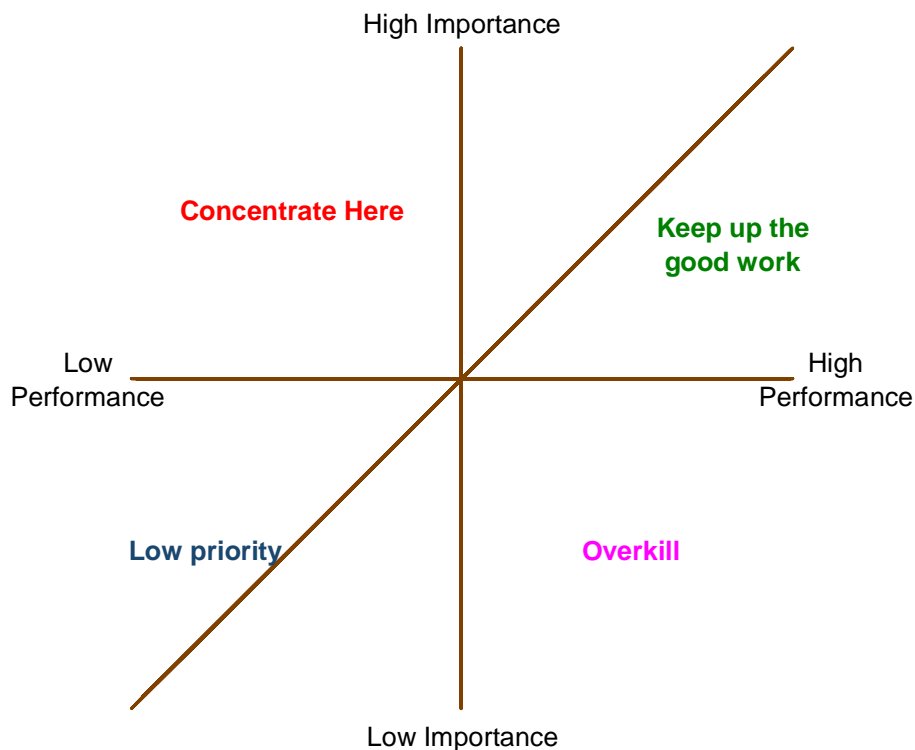


Figure 3: IPA Zones

METHODS

Between July and August of 2014 data were collected from three different trade shows; Podiatrist Exhibition, Conservation Conference, and APA Convention at two different convention centers (Hawaii Convention Center and the Walter E. Washington Convention center in DC). The survey was distributed on the last day of each trade show and once collected, the data was compiled. To manage the amount of data collected a factor analysis was used for both importance and goals results.

Population of Interest

The populations of interest are exhibitors attending trade shows at larger venues, who came from small, medium and large business (determined by the number of employees), including a range of business lines within the United States. Not all exhibitions and trade shows use all the square footage available, however large conference centers typically have more features available for exhibitors to use. While each conference center has its unique characteristics there are attributes that all large conference centers have in common. Larger conference centers provide a wider range of services in comparison to smaller venues. These services include a large number of loading docks, service elevators, in-house catering, in-house rigging and utilities, an eatery inside the exhibit hall and more square footage for exhibitor halls, which allows for more booths or the option for larger booth size.¹ This study specifically was

¹ Examples of larger venues are the San Diego Convention Center (2.6 million square feet), the Baltimore Convention Center (1.2 million square feet) and the San Antonio Convention Center (1.3 million square feet).

interested in the features offered at larger conference centers, so it was decided to focus on conference centers that had over 1 million square ft. of space available.

The Instrument

The exhibitors' questionnaire (Appendix B) was adapted from the importance-performance questionnaire used by Hultsman (2001). A section of the questionnaire on exhibitor goals was added, which was based on the work of Rodriguez-Oromendia et al. (2012).

Exhibitor Goals. Adaptation of Rodriguez-Oromendia et al. (2012) goals focused on exhibitor trade show success (Table 1). The goal concerning the training of new staff (goal 11) was not utilized in this study since it would only apply to those who have new staff to train. The remaining ten goals used (Table 8) were rated on a Likert scale using, strongly disagree, disagree, neither disagree nor agree, agree and strongly agree, and were coded 5, 4, 3, 2 and 1, respectively.

Table 8: Exhibitor Goals

Goal Description
Introduce new products and developments
Provide information about products and their uses
Maintain existing business relationships
Make new contacts with potential buyers
Secure orders or generate sales
Have access to customers who would otherwise be difficult to reach
Attend because the competition does so
Exchange experiences
Get an overall sense of the state of the market
Promote the company's image and improve its reputation

All goals, other than “attend because the competition does so”, were included in Siskin’s top 100 reasons for exhibiting (Siskind, 2006).

In addition to rating each individual goal, the instrument contained a section for exhibitors to rank their goals for attending trade shows in order of importance. This was intended to obtain more detailed information. For example, in the goal rating section, several goals may be rated as extremely important, in contrast ranked goals can only be chosen once for each rank (1-10). The ranking would differentiate the importance of each goal by rank. Most important was ranked 1 and least important was ranked 10.

Trade Show Attributes. The questions pertaining to trade show attributes were adapted from Hultsman (2001) and suitably modified according to current technology. For example, availability of facsimile machines (attribute 26) was replaced with wireless Internet access and utilities. The microphone and audio-visual equipment (attributes 6 and 25), although available in each venue, were not included in the questionnaire, since the audio-visual equipment provided by the conference center cannot be used universally by all attending exhibitors. Based on trade show trends, microphones are used for certain booth setups or show management for program announcements and announcing closing time and special opportunities (Gonzalez, 2017). The number of representatives you can bring is rarely restricted (attribute 8) so this attribute was not used (Gonzalez, 2017). This resulted in the use of 22 questions for this study (Table 9). The importance for each attribute was rated with four choices: extremely important, important, slightly important and not important. The performance of each attribute was similarly rated on a four-point

scale: excellent, good, fair and poor. Both were coded numerically by 4, 3, 2 and 1, respectively.

Table 9: Trade Show Attributes

Attribute Description
The method of assigning space to exhibitors
The fee for exhibiting
Having a variety of lodging options
Parking provided
Ease of getting your materials in the booth space (i.e. dock usage)
The amount of time given for set-up
The size of your booth space
The relation of your exhibit area to the door
The layout of the exhibit hall
The exhibit hall hours
Having the exhibit hall open for multiple days
Having a listing in the conference directory
Fire safety information (i.e. Fire Marshal Presence)
Availability of shipping/mailing service
Telecommunication Services (i.e. wireless Internet)
Utility service availability (i.e. electricity, water)
Proximity of restrooms to exhibition space
Appearance of restrooms
Appearance of exhibit hall
Having food available in the exhibit hall
Receiving information about sightseeing
Having overnight security

Demographics. The demographics section of the questionnaire consisted of three variables: size of the exhibitors' firm, the number of years attending the trade show and the position of the individual who staffed the booth and completed the questionnaire, these categories were determined by a combination of several studies ranging from booth

staffing to exhibitor attendance (Han & Verma, 2014; Jin & Weber, 2016; Tanner & Chonko, 1995).

The size of the exhibitors' firm was broken into five categories by number of employees: 50 or fewer employees, 51-250 employees, 251-500 employees, 501-1000 employees and more than 1000 employees. The number of years of attendance at this trade show was requested, which was broken into four categories, "first time attendees", "two to five years", "six to nine years" and "ten or more years". Lastly, information regarding the individual completing the questionnaire was collected, broken into the following categories of position in the business: Director/VP/Management Team (management), Manager/Supervisor/Consultant (middle management), Representative/Special/ General/Analyst (representative), Administrative/Assistant/Students/Other (assistant). Demographic information was used to determine whether there are differences between exhibitors in the importance-performance relationship of study characteristics. For example, larger companies might place more importance on Internet access than smaller companies.

Study Sites

The study sites were chosen based on size, convenience of location, and access to the convention center with permission from administration. This study took place in two large convention centers in the United States: The Hawai'i Convention Center in Honolulu, Hawaii, and the Walter E. Washington Convention Center in Washington D.C.

The Hawaii Convention Center in Honolulu, like many other large conference centers, outsources many of their facility services. This is important for a trade show

manager to know because they are in charge of facilitating these services for the exhibitors. The Hawaii Conference Center outsourced audio visual (Projection Presentation), food and beverage (AEG management and Levy Restaurants), Internet services (Pacific Direct Connect), and Security (Securitas).

The Walter E. Washington Convention Center in Washington D outsources Audio Visual (Projection Presentation Technology), Internet (Smart City), food and beverage (Centerplate/NBSE), and Utilities (Hi-Tech Electric).

In house services for the event centers include janitorial services, docking supervisors, and event management.

Data Collection

The questionnaire was distributed to exhibitors between July and August 2014 at the selected conference centers. At that time three expositions were being held. The Annual Hawai'i Conservation Conference (HCC) is an annual conference that was held July 14 – 17, 2014. This conference had 75 exhibition booths. The American Podiatric Medical Association (AMPA), an annual convention, was held July 24 – 27, 2014 and had 109 exhibition booths. The American Psychological Association (APA) is held in different locations in the USA and sometimes internationally, in 2014 it was held in Washington D.C. The APA convention was held August 7 – 10, 2014 and had 181 exhibition booths. CEIR reports that 21% of all exhibitors attend shows in the medical and health care field (Ducate et al., 2012a).

One representative from each exhibit was asked to complete a survey on the effectiveness of facility services provided by the show manager. The exhibit personnel

decided amongst themselves who would fill out the questionnaire. Paper copies of the surveys were distributed on the last day of the trade show, which were then collected later that day. The last day of the show was selected to distribute the questionnaire as by that time the exhibitors would be able to gauge the performance of the show manager.

Methodology

Data were entered from the paper survey into an Excel spreadsheet through the use of Survey Monkey. Once the spreadsheet of data was retrieved from Survey Monkey it was spot checked for accuracy. A total of 115 surveys were filled out by exhibitors. (40 surveys from the APA Convention, 20 surveys from the Podiatric convention, and 55 from the Conservation Convention). Eight had incomplete answers in the demographic section. These surveys were determined to be unusable, leaving 107 usable surveys

In each section of the 107 usable surveys, some of the participants gave the same answer to all questions in that section, specifically, 4 exhibitors for importance and 14 exhibitors for performance. For goals, 10 had the same answers for the goal importance section of the survey, and 31 did not provide viable answers in the goal ranking section. The incomplete sections were not used in the final results.

The importance section and the goals section were factored and correlated. One hundred and three (103) surveys were used for analyzing Importance and 93 surveys were used for analyzing Performance.

Importance N = 103		
Podiatric Convention	N = 9	9%
Conservation Convention	N = 54	52%
APA Convention	N = 40	39%

Performance N = 93		
Podiatric Convention	N = 12	13%
Conservation Convention	N = 50	54%
APA Convention	N = 31	33%
Goal Importance N = 97		
Podiatric Convention	N = 10	10%
Conservation Convention	N = 49	50%
APA Convention	N = 38	40%

ANALYSIS

Based on the answers and the number of attributes and goals in the survey, a factor analysis was used to reduce the dimensions of the data set to a more manageable size and to correlate the importance scores with the rated goals of the exhibitors. The data for importance rating of the facility service features was checked for correlation to see which attributes correlated with each other. The data for exhibitor goals were also checked for correlation. Many of the service features tested were correlated greater than 0.3, as indicated in Appendix C.

Two indicators of sampling adequacy were evaluated to check the validity of performing a factor analysis. These were the overall Kaiser Mayer Olkin index (KMO) and Bartlett's test for sphericity, which was used to measure the degree of common variance in the dataset, KMO is a good indicator of whether underlying factors can be extracted from the given sample. In general, data sets with scores larger than .7 indicate that factor extraction is appropriate. The overall KMO for the importance survey was .74, and .8 for the goals survey. For both the goals and importance attributes, the test for sphericity was highly significant, rejecting the null hypothesis that the variables are uncorrelated.

IPA Descriptive Statistics

Demographic Information. Error! Reference source not found. shows a summary of the demographic information for the exhibitors who completed the survey broken down by business size. It is shown that the majority of businesses that exhibited were small (less than 50 employees). Of the small businesses that attended, 43% had attended the trade shows for 2-5 years and 29% of participants were sales representatives for their businesses. The majority of participants overall (35%) attended the trade show for 2-5 years and 35% were sales representatives. Two thirds of the responses were collected from the Hawaii conference center. A Fisher's exact test is used because the total sample size is less than 100 and the expected frequencies were lower than 5. According to Fishers exact test, there were no significant differences between years attending, the role of the participant, or the conference center attended, by size of business.

Table 10 Demographics (N and Percentage) by Business Size

	Number of Employees at Business					P-value
	Total N=107	≤50 N=58	51-250 N=15	251-1000 N=15	≥1000 N=19	
Years Attending						
First	28 (26%)	14 (24%)	5 (33%)	4 (27%)	5 (26%)	0.622
2-5	37 (35%)	25 (43%)	4 (27%)	3 (20%)	5 (26%)	
6-9	17 (16%)	6 (10%)	2 (13%)	4 (27%)	5 (26%)	
More than 10	25 (23%)	13 (22%)	4 (27%)	4 (27%)	4 (21%)	
Participant						
Management	19 (18%)	10 (17%)	4 (27%)	4 (27%)	1 (5%)	0.564
Middle Management	30 (28%)	16 (28%)	3 (20%)	4 (27%)	7 (37%)	
Representative	37 (35%)	17 (29%)	6 (40%)	6 (40%)	8 (42%)	
Assistant	21 (20%)	15 (26%)	2 (13%)	1 (7%)	3 (16%)	
Conference						
Hawaii	67 (63%)	39 (67%)	10 (67%)	8 (53%)	10 (53%)	0.579
Washington DC	40 (37%)	19 (33%)	5 (33%)	7 (47%)	9 (47%)	

Exhibitor Goals. The goals that business representatives want to achieve at trade shows may have bearing on their overall experience. There were 97 responses for goal importance. **Error! Reference source not found.** shows the average importance for each of ten goals, broken down by business size. “Promoting the business image” had the highest average importance, although this was somewhat less important for the smallest businesses. “Attending because the competition does so” has the lowest average importance.

Table 11: Average Goal Importance by Business Size

	Number of Employees at Business					P-value
	Total	≤50	51-250	251-1000	≥1000	
Number	N=97	N=52	N=14	N=14	N=17	
Promote company's image/reputation	4.3 (1.0)	4.1 (1.0)	4.4 (1.2)	4.6 (0.7)	4.6 (0.6)	0.093
Maintain existing business relationships	4.0 (1.0)	3.8 (1.1)	4.1 (1.0)	4.3 (0.7)	4.1 (0.9)	0.437
Make new contacts with potential buyers	3.9 (1.2)	3.9 (1.2)	3.9 (1.2)	4.2 (0.9)	3.7 (1.4)	0.683
Provide information about products/uses	3.9 (1.2)	3.8 (1.3)	4.4 (0.9)	3.8 (1.3)	3.9 (1.1)	0.328
Access difficult to reach customers	3.8 (1.1)	3.7 (1.1)	3.6 (1.2)	3.9 (0.8)	3.9 (1.0)	0.761
Introduce new products/developments	3.6 (1.3)	3.5 (1.3)	3.4 (1.5)	3.8 (1.2)	3.8 (1.2)	0.723
Exchange experiences	3.6 (1.0)	3.6 (1.1)	3.5 (1.0)	3.4 (1.3)	3.7 (0.8)	0.817
Get overall sense of state of the market	3.4 (1.1)	3.3 (1.1)	3.5 (1.0)	3.4 (1.1)	3.7 (0.9)	0.628
Secure orders or generate sales	3.0 (1.3)	3.1 (1.4)	2.6 (1.2)	3.1 (1.1)	2.9 (1.4)	0.736
Attend because the competition does so	2.7 (1.2)	2.7 (1.2)	2.4 (0.9)	2.6 (1.2)	3.3 (1.1)	0.158

Error! Reference source not found. shows the average importance for each of ten goals, in order of most important to least important, broken down by trade show. N=97 viable responses for goal importance.

Promoting the business image had the highest total average importance and attending because the competition does so had the lowest total average importance as emphasized in Figure 4. The only significant differences in average goal importance between shows was “making new contacts with potential buyers” which was higher for podiatry exhibitors, and “exchange experience” which was higher for conservationists.

Table 12: Average Goal Importance by Trade Show

	Trade Show				P
	Total N=97	Podiatry N=10	Conserv. N=49	Psychology N=38	
Promote company's image/reputation	4.3 (1.0)	4.6 (0.8)	4.1 (1.1)	4.5 (0.9)	0.126
Maintain existing business relationships	4.0 (1.0)	4.7 (0.5)	3.9 (0.9)	3.9 (1.1)	0.051
Provide information about products/uses	3.9 (1.2)	4.4 (1.1)	3.8 (1.1)	3.9 (1.4)	0.347
Make new contacts with potential buyers	3.9 (1.2)	4.4 (1.1)	3.6 (1.2)	4.2 (1.1)	0.021
Access hard to reach customers	3.8 (1.1)	3.9 (1.4)	3.5 (1.0)	4.0 (1.0)	0.094
Introduce new products/developments	3.6 (1.3)	4.0 (1.2)	3.5 (1.2)	3.6 (1.3)	0.487
Exchange experiences	3.6 (1.0)	3.4 (0.8)	3.9 (0.9)	3.2 (1.1)	0.010
Get overall sense of market	3.4 (1.1)	3.6 (0.7)	3.2 (1.1)	3.6 (1.1)	0.250
Secure orders/generate sales	3.0 (1.3)	3.6 (1.4)	2.8 (1.3)	3.0 (1.2)	0.238
Attend because competition does so	2.7 (1.2)	3.2 (1.1)	2.7 (1.1)	2.7 (1.3)	0.406

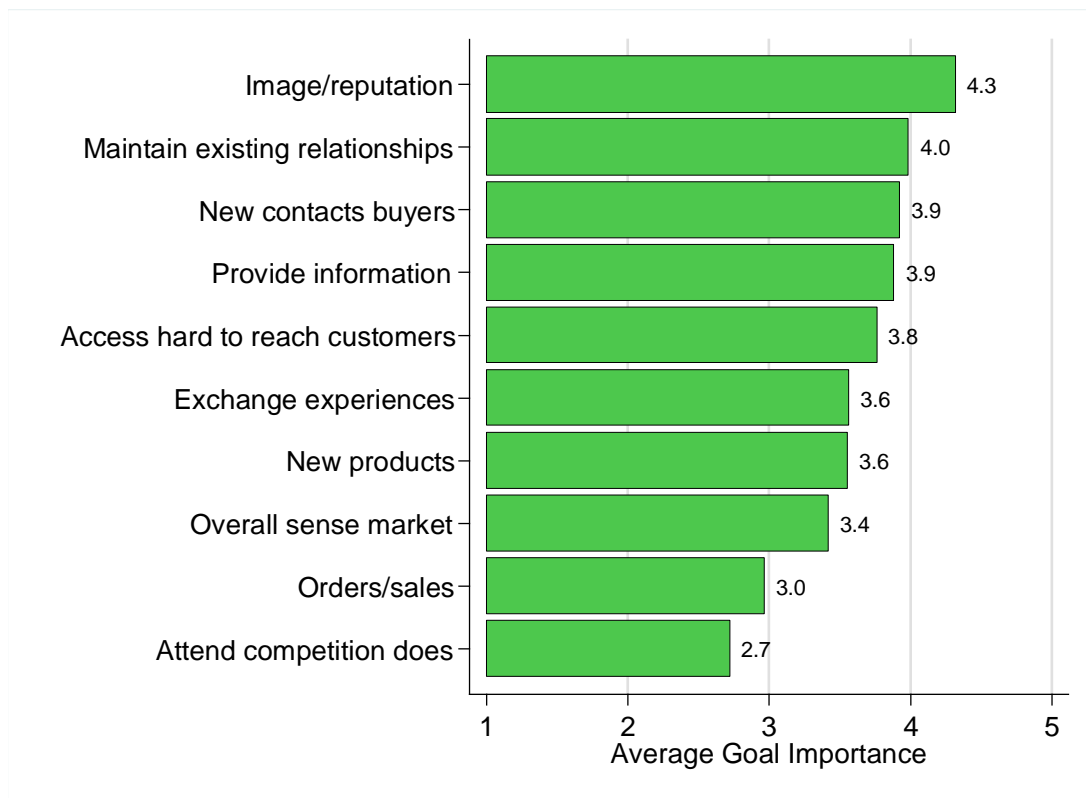


Figure 4: Average Goal Importance

Error! Reference source not found. shows the average ranking of goals (10 most important, 1 least important), broken down by trade show, listed in the same order

as **Error! Reference source not found.** N=76 viable responses for goal rankings. Figure 5 shows the total average goal rank in order of highest ranking to lowest ranking.

“Providing information about products and their uses” was the most highly ranked, followed closely by “promoting the business image” and “making new contacts with potential buyers”. “Attending because the competition does so” had the lowest average rank. There were five significant differences in goal ranks among shows. While “exchanging experiences” was more highly ranked by conservationists, “introducing new products”, “securing orders and generating sales” were ranked more highly by podiatry exhibitors. “Accessing difficult to reach customers” and “getting an overall sense of the market” were ranked more highly by exhibitors at the psychology show.

Table 13: Average Rank of Goals

	Trade Show				
	Total N=76	Podiatry N=9	Conserv. N=33	Psychology N=34	P
Provide information about products/uses	7.1 (2.6)	8.4 (1.2)	7.2 (2.2)	6.6 (3.0)	0.138
Promote company's image/reputation	7 (2.7)	5.6 (2.8)	7 (3.1)	7.4 (2.2)	0.207
Make new contacts with potential buyers	7 (2.5)	7.7 (2.5)	6.6 (2.5)	7.3 (2.6)	0.37
Maintain existing business relationships	6.6 (2.2)	7.6 (1.9)	6.9 (1.8)	6 (2.4)	0.088
Introduce new products/developments	6 (2.8)	7.8 (1.4)	6.2 (2.8)	5.2 (2.9)	0.038
Access hard to reach customers	5.7 (2.0)	4.6 (2.1)	5.1 (1.8)	6.6 (1.7)	0.001
Exchange experiences	4.5 (2.7)	3.2 (1.7)	5.5 (2.9)	3.9 (2.5)	0.014
Get overall sense of market	4.5 (2.5)	2.4 (2.2)	4.5 (2.3)	5 (2.6)	0.025
Secure orders/generate sales	3.7 (2.6)	5.8 (1.2)	3.2 (2.6)	3.7 (2.5)	0.023
Attend because competition does so	3 (2.5)	2 (1.0)	2.8 (2.5)	3.4 (2.8)	0.297



Figure 5: Average Goal Rank

Goal importance (**Error! Reference source not found.** and Figure 4) used a five point Likert scale to help identify what the exhibitors deemed important. Goal ranking (**Error! Reference source not found.** and Figure 5) was added in to help narrow down the most important and crucial exhibitor goals during the trade shows. Only 76 viable responses came from goal ranking where 97 viable responses came from goal importance. Many responses for goal ranking were not complete or the exhibitor didn't understand the instructions well enough to rank the goals properly.

Show Attribute Importance. **Error! Reference source not found.** shows the average attribute importance (4 is extremely important and 1 is not important), broken down by trade show, in order of average importance. There were 103 complete responses

for importance. The most important attributes to exhibitors were “fee for exhibiting”, “ease of getting your materials in the booth space” (easy booth access), “the exhibit hall hours”, and “listing in directory”. The least important attributes were “information about sightseeing”, “fire safety information”, “availability of shipping/ mailing service” (shipping/ mailing), “having a variety of lodging options” (variety of lodging options). Figure 6 shows the total average of all the trade shows, the same numbers reflected in **Error! Reference source not found.** under “total”.

	Trade Show				
	Total N=103	Podiatry N=9	Conserv. N=54	Psychology N=40	P
Fee for exhibiting	3.4 (0.6)	3.4 (0.7)	3.4 (0.6)	3.6 (0.5)	0.485
Easy booth access	3.1 (0.8)	3.1 (0.9)	3.3 (0.9)	3.1 (0.5)	0.894
Exhibit hall hours	3.1 (0.8)	3.2 (0.7)	3.0 (0.9)	3.1 (0.9)	0.611
Listing in directory	3.1 (0.8)	3.2 (0.8)	2.9 (1.1)	3.1 (0.8)	0.605
Method of assigning space	3.0 (0.9)	2.9 (0.9)	3.3 (0.8)	2.7 (0.8)	0.195
Multiple days open	3.0 (0.7)	3.1 (0.7)	2.9 (0.6)	3.0 (0.7)	0.399
Appearance of exhibit hall	3.0 (0.7)	3.0 (0.7)	3.3 (0.6)	2.9 (0.8)	0.367
Food available in exhibit hall	3.0 (0.8)	3.0 (0.8)	3.4 (0.6)	3.0 (0.9)	0.346
Size of booth space	2.9 (0.7)	3.0 (0.7)	2.8 (0.8)	2.8 (0.6)	0.308
Layout of the exhibit hall	2.9 (0.9)	2.9 (0.8)	3.0 (0.9)	3.1 (1.0)	0.169
Wireless Internet	2.9 (1.0)	3.0 (1.0)	2.6 (1.1)	2.6 (1.1)	0.173
Utility availability	2.9 (1.0)	3.0 (0.9)	2.8 (1.3)	2.4 (1.1)	0.157
Time given for set-up	2.8 (0.7)	2.8 (0.8)	3.1 (0.6)	2.5 (0.7)	0.177
Overnight security	2.8 (0.9)	2.9 (1.0)	2.9 (1.0)	2.5 (0.8)	0.515
Appearance of restrooms	2.7 (0.9)	2.7 (0.9)	2.6 (1.0)	2.5 (0.8)	0.849
Parking provided	2.6 (1.2)	2.7 (1.2)	2.4 (1.0)	2.1 (1.2)	0.312
Relation of booth to door	2.6 (1.0)	2.7 (0.9)	2.7 (1.1)	2.5 (0.9)	0.268
Proximity of restrooms	2.5 (0.9)	2.6 (0.9)	2.6 (1.1)	2.2 (0.9)	0.538
Variety of lodging options	2.4 (1.0)	2.4 (1.1)	2.5 (1.1)	2.2 (0.8)	0.841
Shipping/ mailing	2.4 (1.1)	2.2 (1.1)	2.6 (1.2)	2.5 (1.1)	0.118

Fire safety information	2.3 (1.0)	2.3 (1.0)	2.3 (1.0)	2.1 (1.0)	0.919
Sightseeing information	1.8 (0.9)	1.7 (0.8)	1.9 (0.9)	2.1 (0.8)	0.239

Table 14: Average Show Attribute Importance by Trade Show²

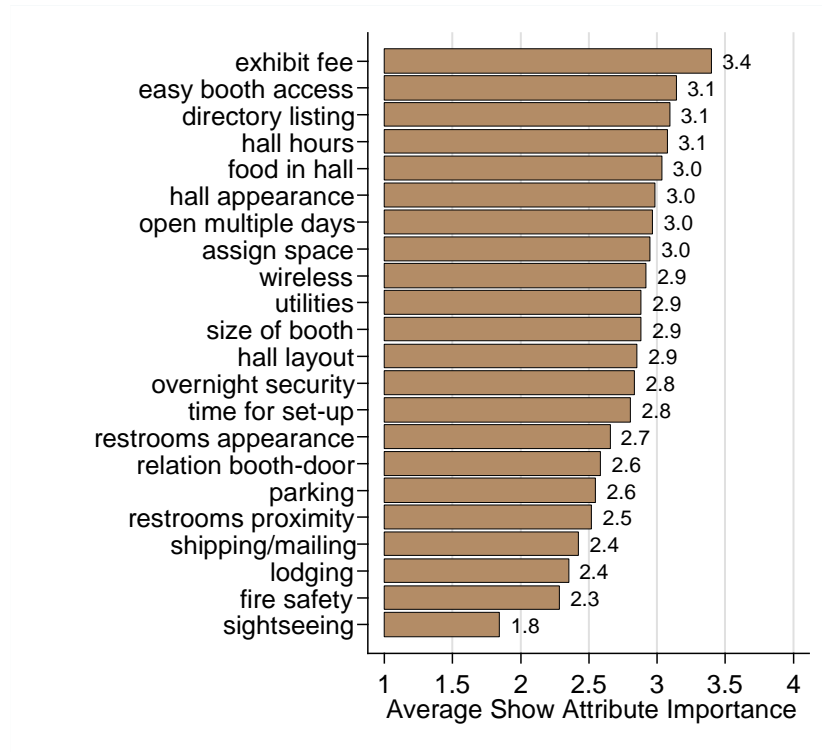


Figure 6: Average Show Attribute Importance

Show Attribute Performance. Table 15 shows the average attribute performance (4 is excellent and 1 is poor), broken down by trade show, listed in the same order as **Error! Reference source not found.** There were 93 complete responses for performance. The attribute that was performed the best was the time given for booth set-up. The attribute that was performed the worst was the provision of parking. The exhibitors at the psychology show rated the performance of the shipping and mailing

² The names of some of the attributes are shortened for convenience of space.

service significantly higher than the exhibitors at the other shows. There were 93 complete responses for performance.

Table 15: Average Show Attribute Performance by trade show³

	Trade Show				P
	Total N=93	Podiatry N=12	Conservation N=50	Psychology N=31	
Time given for set-up	3.4 (0.6)	3.3 (0.6)	3.5 (0.7)	3.6 (0.5)	0.29
Multiple days open	3.3 (0.6)	3.4 (0.6)	3.5 (0.5)	3.1 (0.7)	0.088
Appearance of exhibit hall	3.3 (0.6)	3.3 (0.5)	3.7 (0.5)	3.3 (0.7)	0.112
Food available in exhibit hall	3.3 (0.8)	3.4 (0.6)	3.6 (0.5)	3.3 (1.0)	0.009
Size of booth space	3.3 (0.6)	3.3 (0.5)	3.5 (0.7)	3.5 (0.6)	0.605
Layout of the exhibit hall	3.2 (0.6)	3.2 (0.5)	3.5 (0.5)	3.3 (0.5)	0.042
Appearance of restrooms	3.2 (0.6)	3.3 (0.6)	3.3 (0.6)	3.3 (0.6)	0.686
Proximity of restrooms	3.2 (0.6)	3.2 (0.7)	3.1 (0.6)	3.1 (0.5)	0.955
Easy booth access	3.1 (0.8)	3.1 (0.8)	3.2 (0.8)	3.3 (0.7)	0.869
Exhibit hall hours	3.1 (0.7)	3.2 (0.6)	3.1 (0.5)	3.1 (0.9)	0.597
Relation of booth to door	3.1 (0.7)	3.1 (0.7)	3.5 (0.7)	2.9 (0.6)	0.023
Listing in directory	3 (0.9)	3.1 (0.8)	3.3 (0.9)	2.7 (1.0)	0.294
Method of assigning space	3 (0.7)	2.9 (0.7)	3.4 (0.9)	3.1 (0.6)	0.275
Overnight security	3 (0.8)	3.1 (0.8)	2.8 (1.0)	2.9 (0.8)	0.839
Sightseeing information	2.9 (0.9)	2.8 (1.0)	2.8 (1.0)	3.3 (0.8)	0.292
Utility availability	2.8 (0.9)	2.8 (0.9)	3.2 (0.9)	2.7 (1.0)	0.463
Fee for exhibiting	2.7 (0.7)	2.7 (0.7)	3 (0.8)	2.6 (0.6)	0.38
Wireless Internet	2.4 (1.0)	2.3 (0.9)	2.5 (1.0)	2.4 (0.8)	0.754
Variety of lodging options	2.4 (1.0)	2.5 (1.0)	2.2 (1.1)	2.7 (0.7)	0.477
Shipping/mailing	2.3 (1.1)	2 (1.0)	2.4 (1.1)	2.9 (1.0)	0.017
Fire safety information	2.3 (0.9)	2.3 (1.0)	2.2 (1.0)	2.2 (0.9)	0.944
Parking provided	2.1 (0.9)	2.2 (1.0)	2.4 (0.8)	1.9 (1.2)	0.361

³ Some of the names of the attributes are shortened for convenience of space.

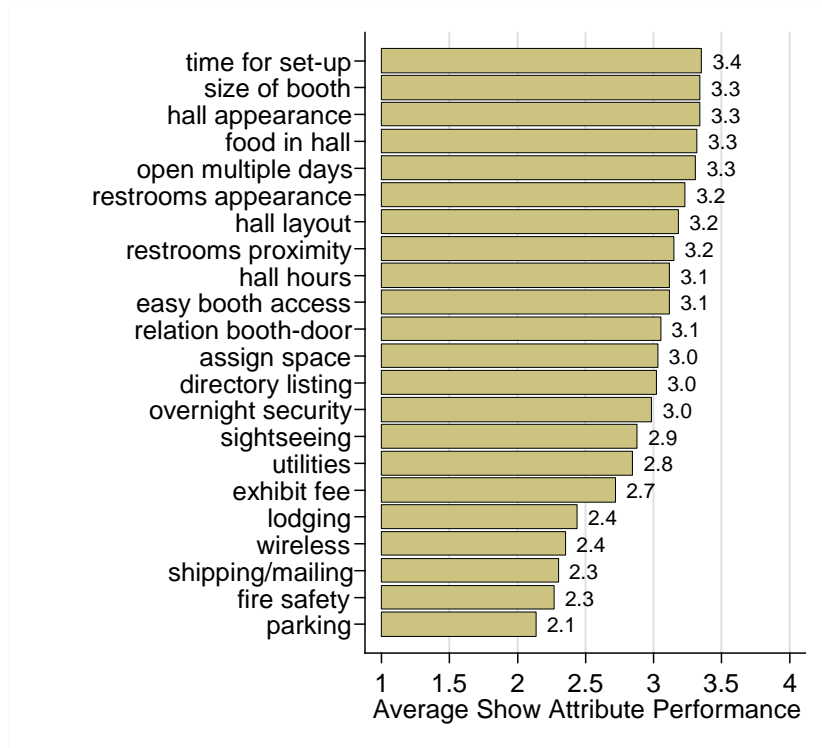


Figure 7: Average Show Attribute Performance

Gap Analysis Table 16 shows the average gap between importance and performance, in which importance was subtracted from performance (P minus I). A positive number means performance was better than importance (overkill) and a negative number means performance was poorer than importance. The attributes with an average gap of zero were “exhibit hall hours”, “ease of getting materials to the booth”, “utility availability”, “variety of lodging” and “fire safety information”, meaning that the show manager would not need to focus on those attributes because the importance level of these attributes meet the performance level. The attribute with the largest negative gap was the “fee for exhibiting”. A negative gap indicates that the importance level was higher than performance level and the show manager need to reevaluate their performance on “fee for exhibiting”. The attribute with the largest positive gap was

information about sightseeing. A positive gap mean that performance level was higher than the importance that exhibitors placed on that attribute, this would indicate that the show manager would need to evaluate the energy, resources, and time they are putting into these attributes and adjust them according to the level of importance that exhibitors are placing on them. There were no significant differences in the average gap between performance and importance of attributes by business size.

Table 16: Average Gap Between Importance and Performance by Business Size

	Number of Employees					P-value
	Total	≤50	51-250	251-1000	≥1000	
	91	49	12	15	15	
Sightseeing information 21	1 (1.1)**	1 (1.0)	0.8 (1.1)	1.1 (1.2)	1.1 (1.3)	0.8
Time given for set-up 6	0.6 (0.9)**	0.5 (0.9)	0.3 (0.8)	1.1 (0.8)	0.5 (1.1)	0.066
Appearance of restrooms 18	0.6 (1.0)**	0.5 (1.0)	0.6 (1.3)	0.8 (0.6)	0.5 (1.1)	0.8
Proximity of restrooms 17	0.6 (1.0)**	0.6 (1.0)	0.5 (1.4)	0.9 (1.0)	0.6 (0.9)	0.689
Size of booth space 7	0.5 (0.8)**	0.3 (0.7)	0.8 (0.9)	0.7 (0.7)	0.6 (0.9)	0.179
Relation of booth to door 8	0.4 (1.2)**	0.4 (1.2)	0.7 (1.4)	0.4 (1.1)	0.5 (1.4)	0.913
Appearance of exhibit hall 19	0.4 (0.8)**	0.3 (0.8)	0.5 (0.5)	0.4 (0.8)	0.4 (0.7)	0.94
Food available in hall 20	0.3 (1.2)*	0.4 (1.1)	0.3 (0.6)	0.3 (1.4)	-0.1 (1.4)	0.513
Multiple days open 11	0.3 (0.8)**	0.3 (0.8)	0.5 (0.7)	0.1 (0.7)	0.5 (1.1)	0.484
Layout of the exhibit hall 9	0.3 (0.9)**	0.2 (0.9)	0.4 (1.0)	0.2 (0.9)	0.3 (0.9)	0.925
Overnight security 22	0.2 (1.0)	0.2 (1.1)	0.2 (1.3)	0.4 (0.7)	0 (0.8)	0.757
Method of assigning space 1	0.1 (1.0)	0.1 (1.0)	0 (1.2)	0.3 (0.9)	-0.3 (1.0)	0.409
Exhibit hall hours 10	0 (1.1)	0 (0.9)	0 (0.9)	0 (1.5)	-0.1 (1.4)	0.998
Easy booth access 5	0 (1.1)	-0.1 (1.0)	-0.1 (1.4)	0.2 (0.9)	-0.1 (1.2)	0.829
Utility availability 16	0 (1.1)	-0.2 (0.9)	0.4 (1.7)	0.3 (1.3)	-0.1 (0.9)	0.165
Variety of lodging options 3	0 (1.3)	0 (1.4)	-0.3 (1.6)	0.5 (0.7)	-0.1 (1.1)	0.344
Fire safety information 13	0 (1.2)	-0.1 (1.2)	0 (1.3)	0.1 (1.3)	0.3 (1.3)	0.847
Listing in directory 12	-0.1 (1.1)	-0.1 (1.1)	0.6 (1.4)	-0.3 (0.9)	-0.2 (1.0)	0.163
Shipping/mailing 14	-0.2 (1.1)	-0.2 (1.3)	-0.4 (0.5)	0.3 (0.8)	-0.3 (0.8)	0.272
Parking provided 4	-0.4 (1.3)**	-0.5 (1.3)	0.1 (1.4)	-0.3 (1.5)	-0.5 (1.5)	0.571
Telecommunication Services (wireless Internet) 15	-0.6 (1.2)**	-0.8 (1.0)	-0.3 (1.7)	-0.2 (1.3)	-0.8 (1.1)	0.202
Fee for exhibiting 2	-0.7 (0.9)**	-0.7 (1.0)	-0.3 (0.8)	-1 (0.8)	-0.6 (1.0)	0.298

* Average was significantly different from 0 at 5% level

** Average was significantly different from 0 at 1% level

Importance–Performance Analysis (IPA). The IPA grid provides a visual component to the examination of importance and performance. Figure 8 shows the IPA grid for all exhibitors and included in this grid is the ios-rating line. Ninety-one

exhibitors had complete responses for all of the attribute importance and performance questions. “Exhibit fee” and “Telecommunication Services (i.e. access to wireless Internet)” were the attributes that have the largest room from improvement in show manager performance among attributes considered important to exhibitors. “Parking”, and “shipping and mailing” were also left of the iso-rating line, which shows a lower performance level than indicated by its importance, but were lower priority attributes for exhibitors.

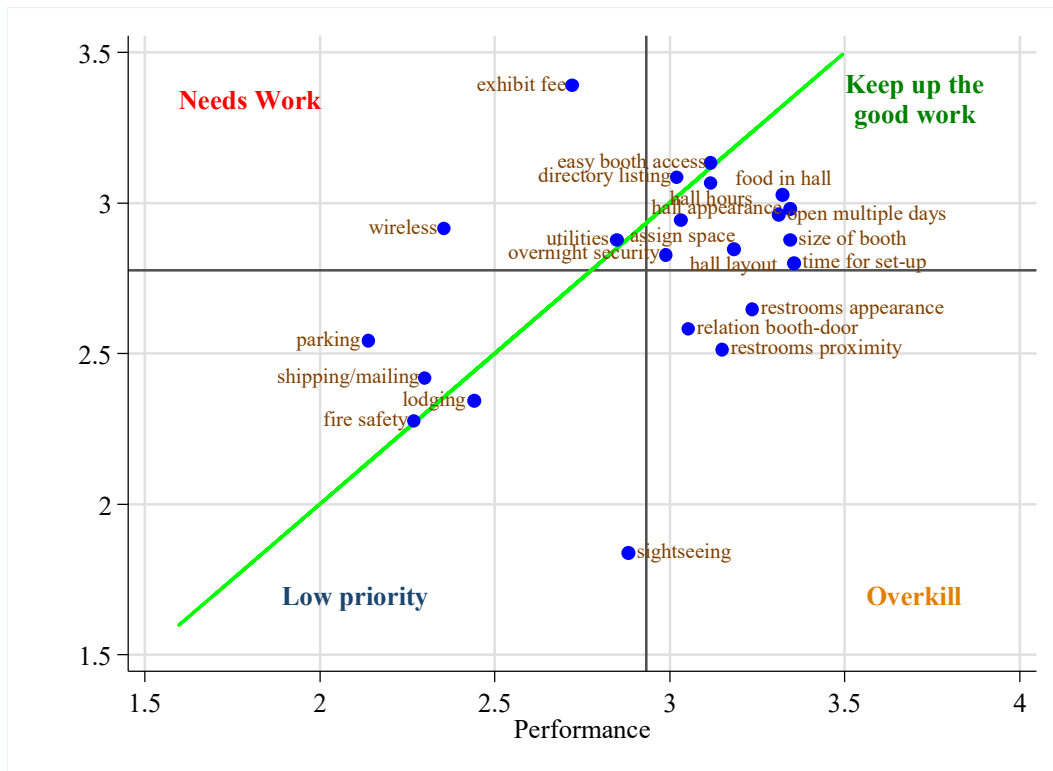


Figure 8: All Exhibitors IPA grid

Attributes for which performance exceeds the level indicated by importance were those to the right of the iso-rating line. Many attributes were positioned to the right of the iso-rating line, with “restroom appearance” and “restroom proximity”, and “relation of

booth to door”, in the overkill zone. “Sightseeing information” is the attribute furthest from the iso-rating line. It was in the low priority quadrant but bordering on overkill.

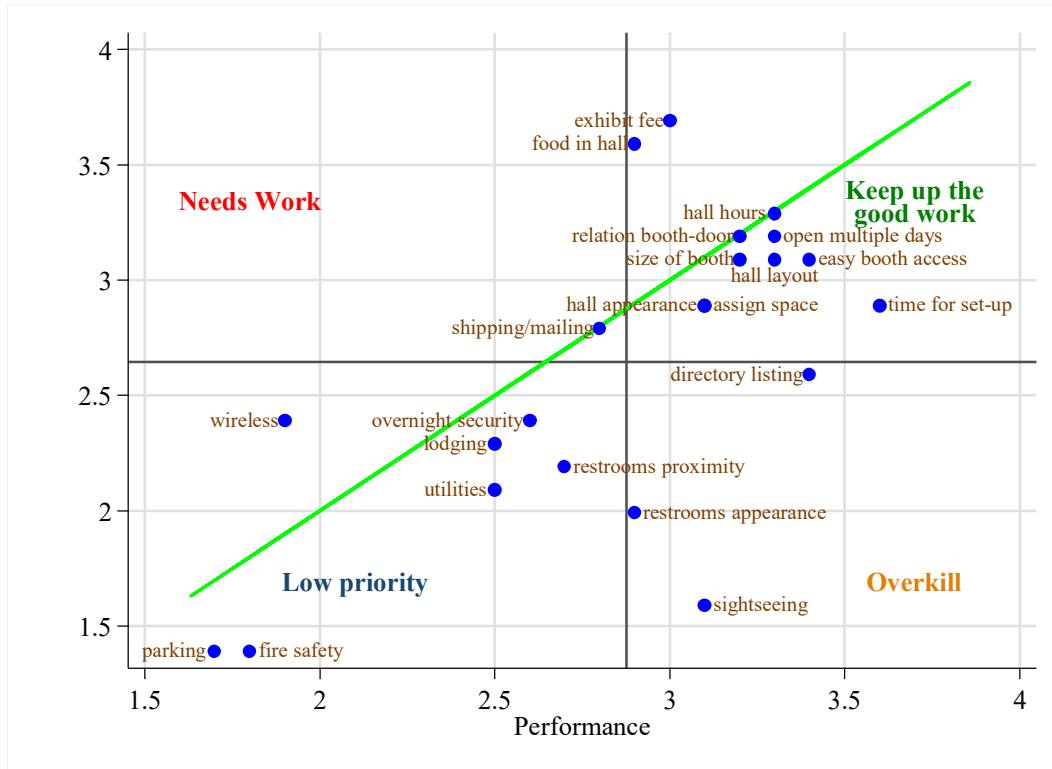


Figure 9: IPA Grid: Podiatry, Hawaii

For the podiatrist convention (see Figure 9), “the fee for exhibiting” and “food in hall” fell short on performance relative to their importance. “Telecommunication Services (i.e. access to wireless Internet)” also had much room for improvement but was lower priority. “Sightseeing information”, “restroom appearance” and “directory listing” were all overdone.

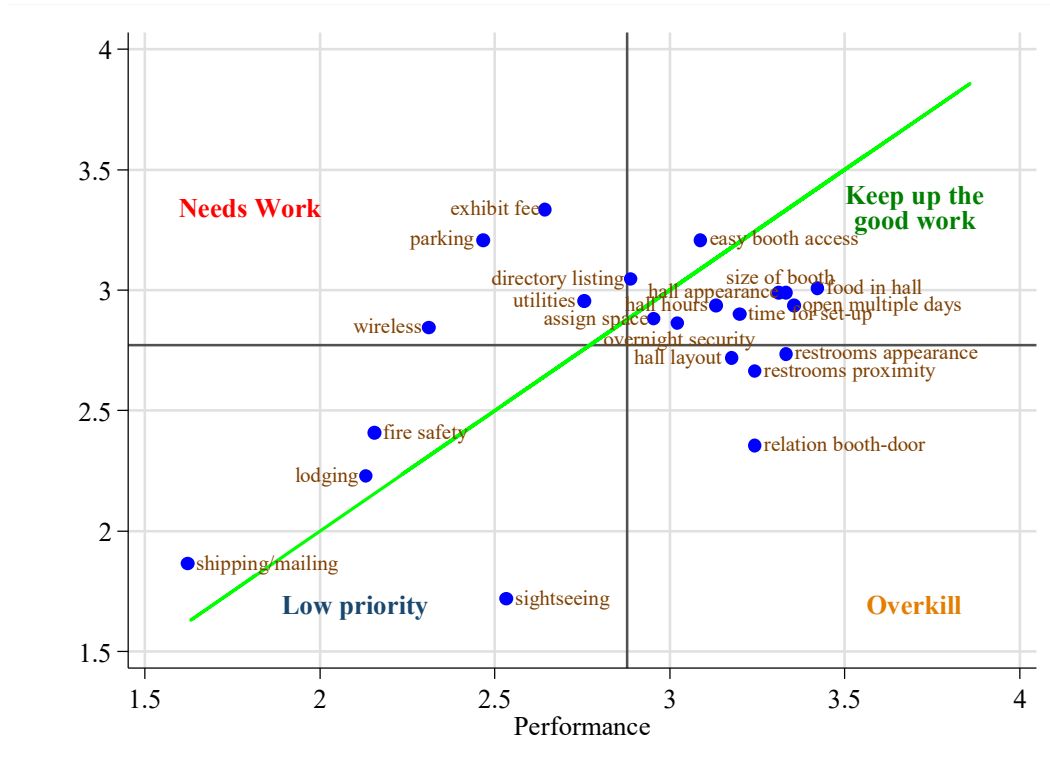


Figure 10: IPA Grid: Conservation, Hawaii

Compared to the Podiatrists, exhibitors at the conservation show (see Figure 10) gave a high performance rating to “food in hall”, falling in the top right quadrant, even though they are at the same convention center (the conservation show supplied food in exhibition hall). “The fee for exhibiting” and “Telecommunication Services (i.e. access to wireless Internet)” were of concern, as they had been for the podiatry show. “Parking” was a concern for conservation show exhibitors, since perhaps that show garnered more local participants whereas podiatry may have had a more national or international audience. “Sightseeing” was low priority, but not overdone, possibly because the exhibitors were providing outdoor information themselves.

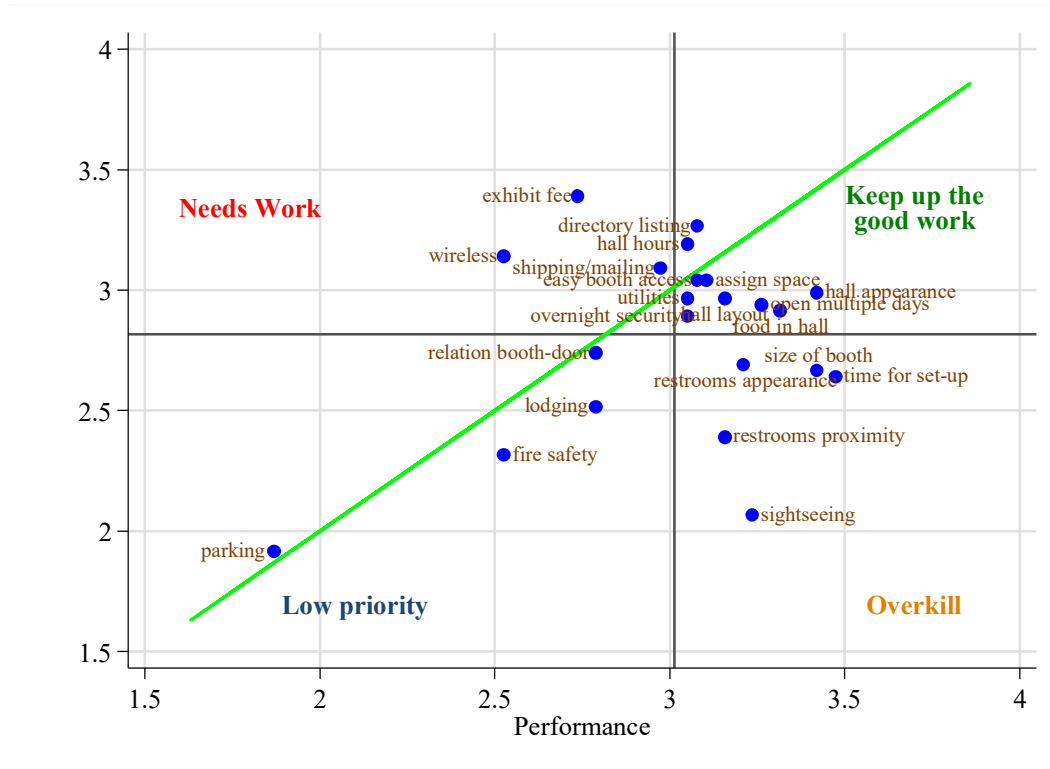


Figure 11: IPA Grid: Psychology, Washington DC

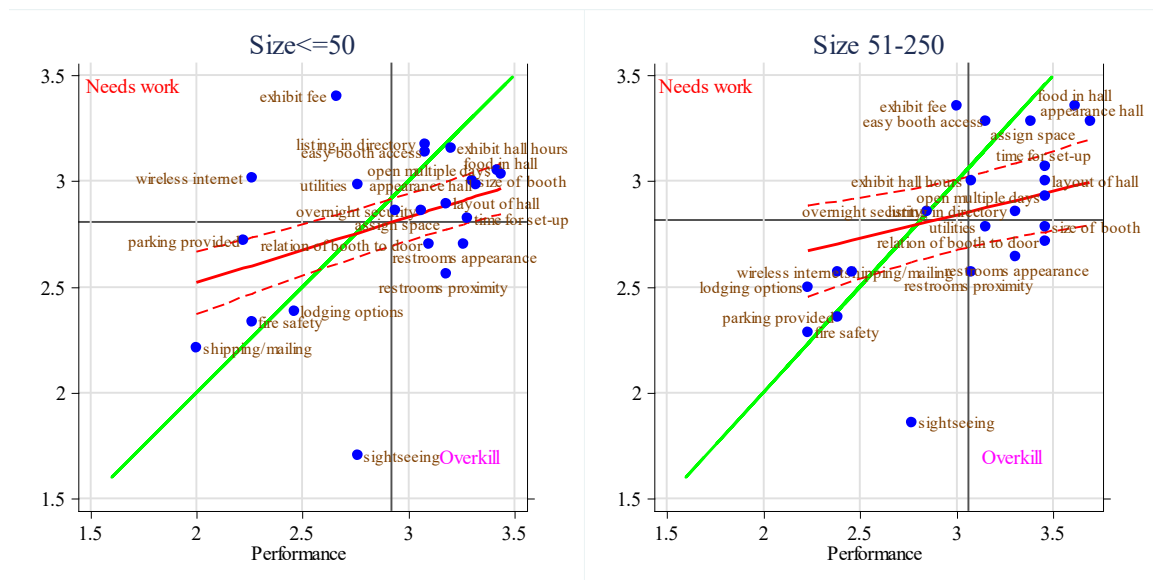
Similar to the two other shows, the APA convention (Figure 11) exhibitors rated “The fee for exhibiting” and “Telecommunication Services (i.e. access to wireless Internet)” as “Needs Work”, and “receiving information about sightseeing” was in the “Overkill” quadrant. “Parking provided” was low priority, again, possibly due to most exhibitors flying in from out of town.

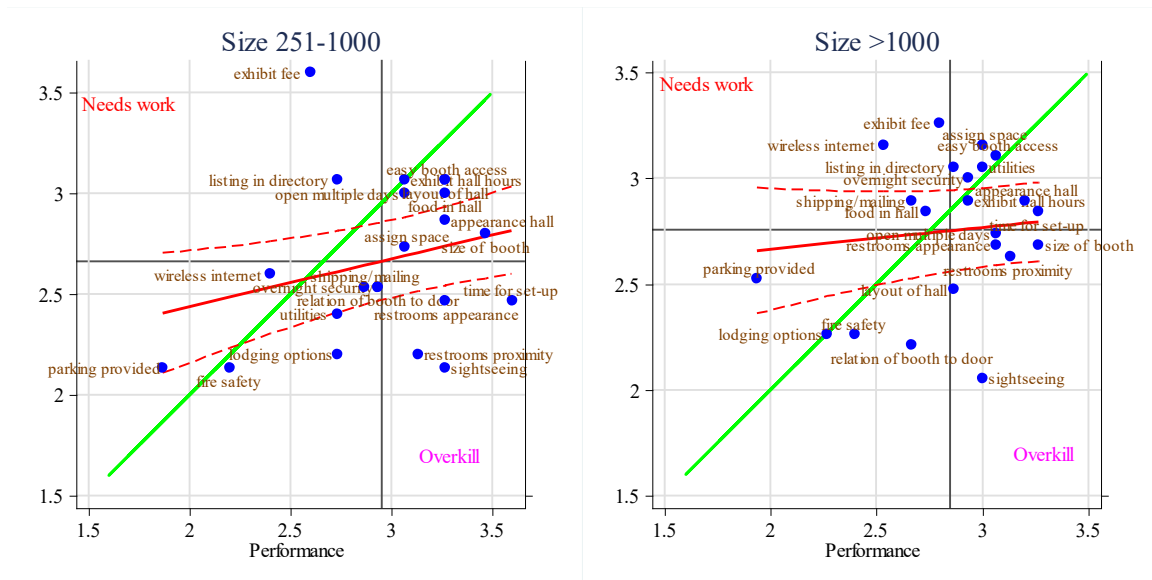
IPA Inferential Statistics

Business Size. Figure 12 shows the IPA for each business size, together with the trend line (red) and its 95% confidence interval (CI), which was calculated via simple linear regression. The trend line was included to show how close it is with the iso-rating line (or the “ideal line”) and it is used to simplify the importance and performance of show management. The slope of the trend line for smallest size of business (≤ 50

employees, N=58) was 0.31 (95% CI 0.21-0.41). For the other business sizes, the lines were much closer to horizontal, with 95% CI almost containing zero, (between 500 and 250 employees (N=15) it was 0.22 (95% CI 0.03-0.42); for between 250 and 1000 employees (N=15) 0.24 (95% CI 0.03-0.43) and for largest size, more than 1000 employees (N=19) 0.10 (95% CI -0.11-0.32)), suggesting that show managers are doing a better job of matching their performance to the importance of attributes for smaller businesses, or in other words the most significant relationship between importance and performance is for the smallest companies. For midsize companies there is a modest relationship. However, for the larger companies, there is no significant evidence of a relationship between importance and performance.

Figure 12: IPA by Business Size With 95% Confidence Intervals.

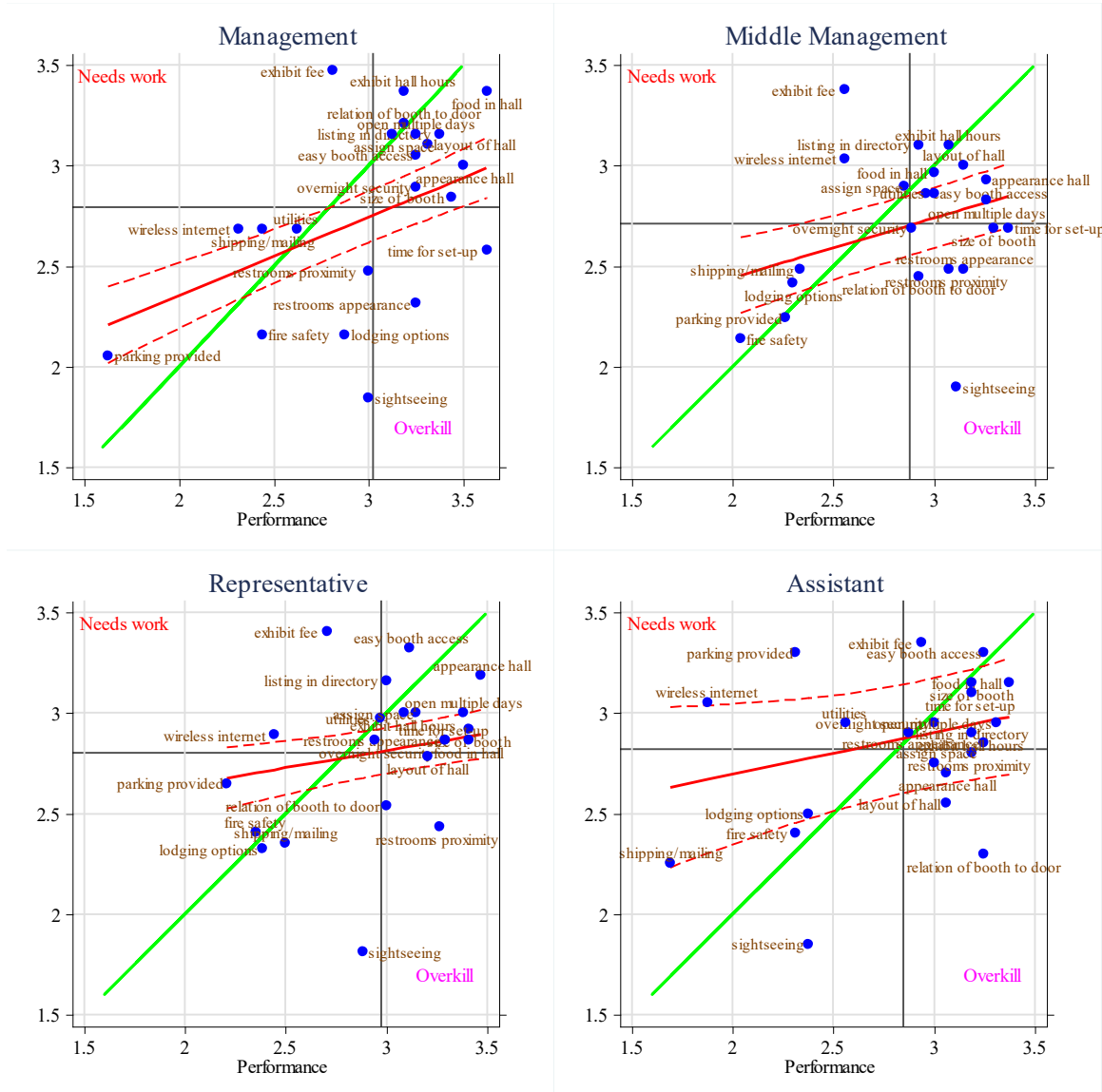




Position within Business. Figure 13 shows the IPA for the exhibitor representatives' position within business. The most significant relationship between importance and performance is for managers and middle managers. For representatives there is a modest relationship between important and performance. However, for assistants, there is no significant evidence of a relationship between importance and performance (slope for management (N=19), 0.39 (95% CI 0.26-0.51), for middle

management (N=30), 0.30 (95% CI 0.16-0.43), for representatives (N=37), 0.17 (95% CI 0.05-0.29) and for assistants (N=21) 0.21 (95% CI -0.05-0.46)).

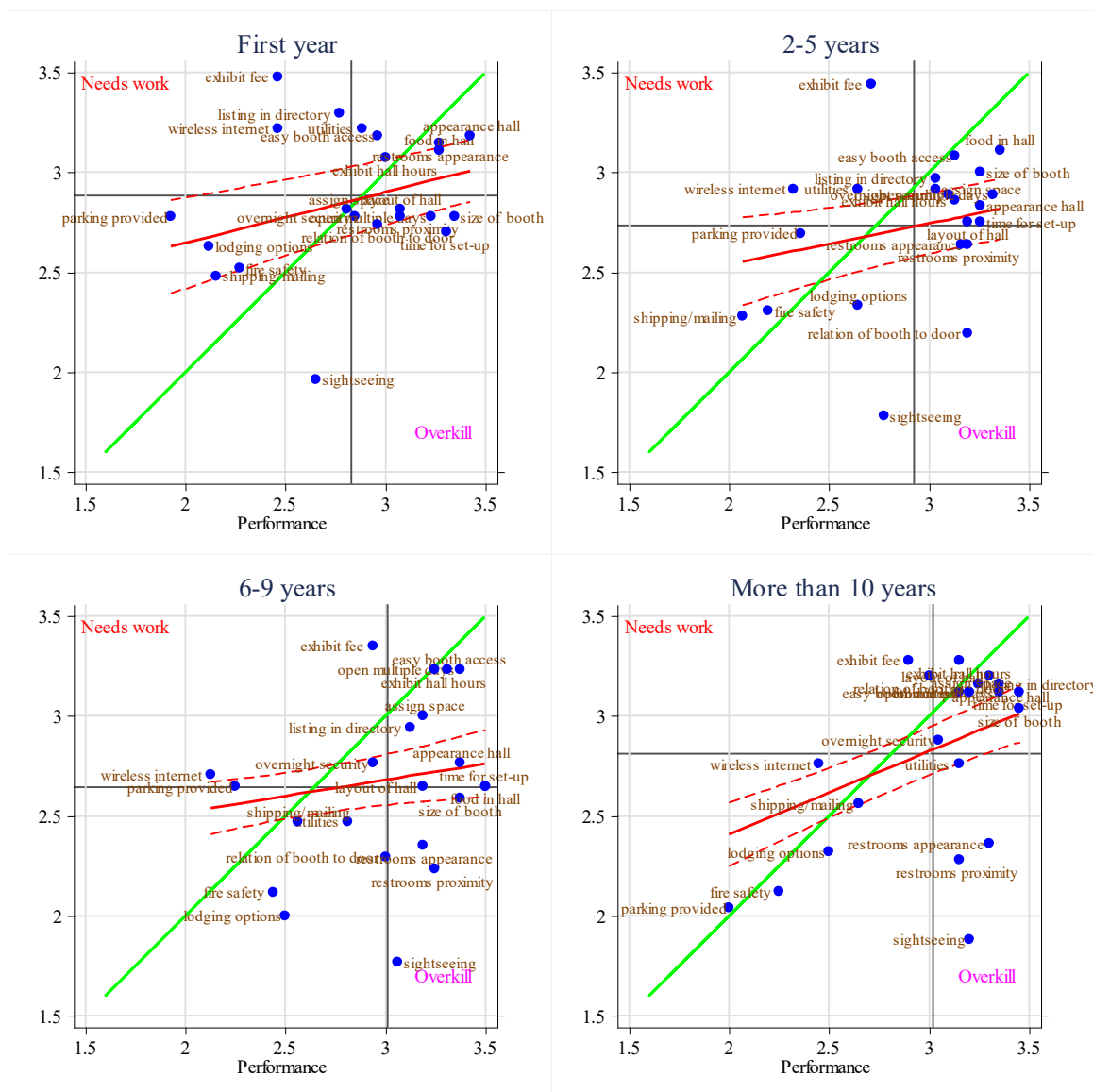
Figure 13: IPA by Position in Business



Business Years of Attendance. Figure 14 shows the IPA for the business years of attendance. The most significant relationship between importance and performance is for the companies that have been attending the longest. For businesses attending less time

there is a modest relationship between important and performance (slope for business attending for the first time (N=28), 0.25 (95% CI 0.13-0.37), 2-5 years (N=37), 0.20 (95% CI 0.05-0.35), 6-10 years (N=17), 0.16 (95% CI 0.01-0.31) and more than 10 years (N=25), 0.41 (95% CI 0.28-0.55)). (slope for business attending for the first time, 0.25 (95% CI 0.13-0.37), 2-5 years, 0.20 (95% CI 0.05-0.35), 6-10 years, 0.16 (95% CI 0.01-0.31) and more than 10 years, 0.41 (95% CI 0.28-0.55)).

Figure 14: IPA by Years Attendance



Factor Analysis and Correlations.

Included in this section are the results of the important performance analysis as well as the factor analysis and correlation between importance and exhibitor goals.

The following plots display the mean scores for each attribute and goal respectively by show.

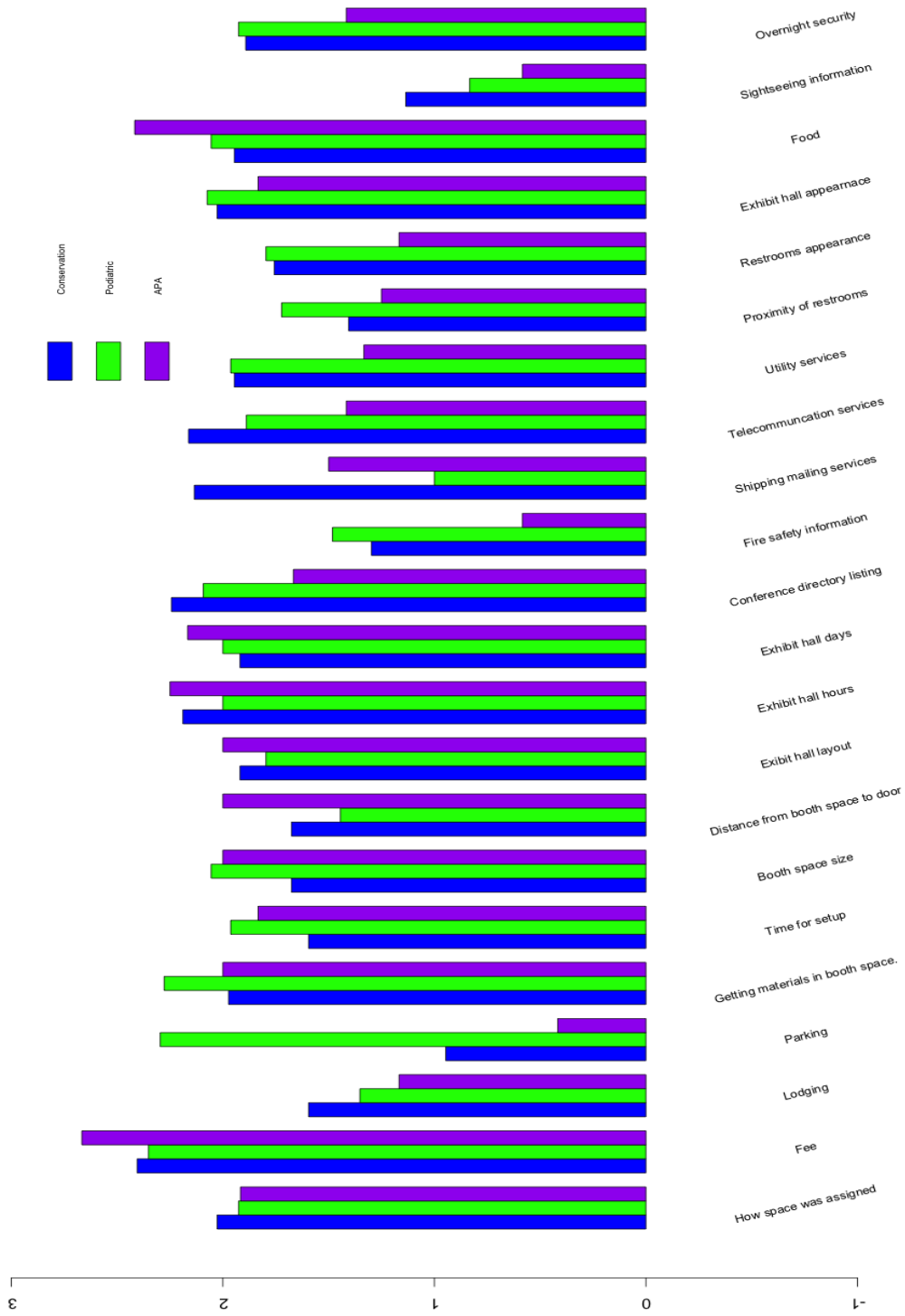


Figure 15 Mean Score of Trade Show Attribute Importance by Conference.

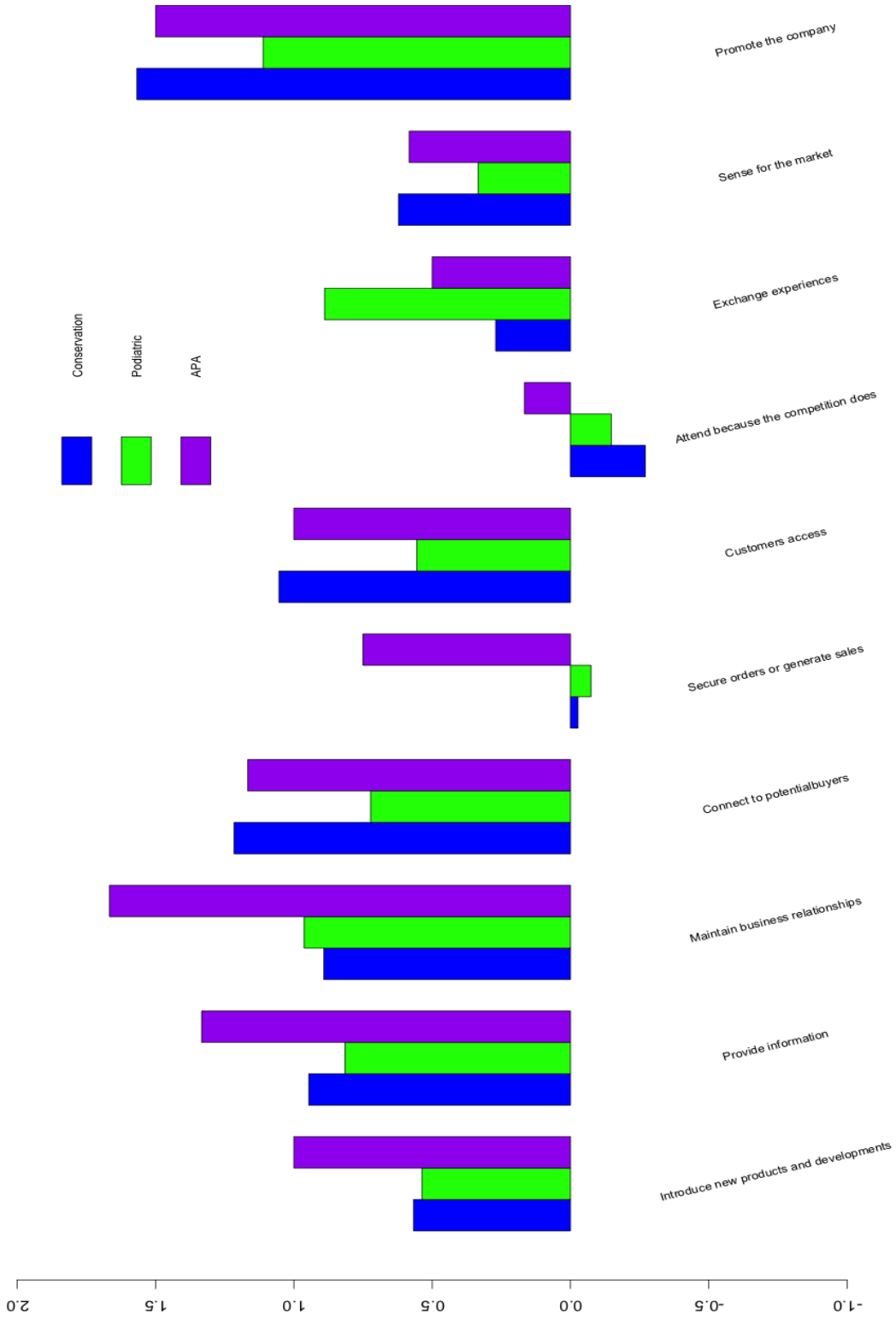


Figure 16 Mean Score of Trade Show Goals Rankings by Conference.

Due to the survey distribution among three different shows, it was necessary to determine whether the characteristics (e.g. parking) of a particular show had a specific effect on how exhibitors responded. The descriptive plots in Figure 15 and Figure 16 suggest that responses depend on the show. Statistical tests confirmed the evidence that responses to the importance surveys were dependent on the show, specifically responses to the importance of “parking provided”, “size of the booth space”, “availability of shipping and mailing services”, and “utility services availability”. For these four attributes the Fisher’s exact test for independence failed to reject a null hypothesis of independence at the .1 level, implying that there is not enough evidence to suggest that the null is rejected at the 95% confidence interval. This would imply a limitation that at any given trade show, an exhibitor might place a different level importance on these attributes.

Exploratory Factor Analysis. The number of factors to extract was decided based on three primary criteria: parallel analysis, chi-squared tests for factor adequacy, and interpretability. Based on said criteria seven (7) factors were chosen for the importance attributes and three (3) factors for the goals. In order to account for the possibility that the underlying factors may be correlated I used an oblique rotation.⁴ Factor extraction was done via maximum likelihood estimation. The importance of “the fee for exhibiting” and the importance of “the method of assigning space to exhibitors” each had a communality less than .25, suggesting they did not move in common with the other attributes. Thus

⁴ Underlying factors may be correlated because of the show effect. In such a situation, oblique rotations are more appropriate (Costello, Anna B. & Jason Osborne, 2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*, 10(7).

these two attributes were left out of the final factor extraction and analysis for the Importance attributes.

The final extracted factors and the variable loadings are displayed in Table 17. Each Attribute is a row and the columns are the factors extracted. These factor loadings were used to interpret and name the seven factors for importance attributes and the three factors for goals.

Table 17 Importance Factors

	Atmosphere	Booth Real Estate	Tourism	Exposure Time	Convenience	Amenities	Accessibility
Lodging	0.196	0.152	0.369	-0.137	0.203	0.043	0.19
Parking	0.104	-0.02	0.257	0.094	0.074	0.059	0.707
Getting materials in booth space.	-0.137	0.064	0.101	-0.053	0.456	0.175	0.497
Time for setup	0.201	-0.032	0.088	0.053	0.593	0.058	0.096
Booth space size	0.041	0.121	0.046	0.067	0.714	0.007	0.011
Distance from booth space to door	0.003	0.521	0.01	0.123	0.296	0.068	-0.212
Exhibit hall layout	-0.011	0.998	-0.01	0.017	-0.014	0.019	0.016
Exhibit hall hours	0.012	0.285	0.01	0.495	0.086	0.083	-0.032
Exhibit hall days	-0.05	0.005	0.018	0.883	0.005	-0.02	0.035
Conference directory listing	0.155	0.117	0.001	0.364	-0.182	0.149	0.212
Fire safety information	0.435	0.065	0.144	0.035	0.058	0.158	0.409
Shipping mailing	-0.032	-0.021	0.991	0.03	0.012	0.04	-0.069
Telecommunication	0.002	-0.005	0.037	0.009	-0.013	0.99	0.004
Utility services	0.457	-0.05	0.038	-0.088	0.016	0.435	0.034
Proximity of restrooms	0.781	0.007	0.037	-0.006	0.042	0.116	-0.066
Restrooms appearance	0.722	-0.029	0.033	-0.07	0.014	0.002	0.128
Exhibit hall appearance	0.496	0.153	0.007	0.029	0.087	0.087	0.064
Food	0.435	-0.077	0.129	0.3	0.205	0.026	-0.146
Sightseeing information	0.299	0.236	0.411	-0.075	-0.207	0.064	0.133
Overnight security	0.209	-0.065	0.271	0.152	-0.044	0.048	0.325

Table 18 Importance Factor Extracted

Importance Factors			
Factor 1	Items	Load	Reliability
Atmosphere	Fire safety information	0.435	0.79
	Food available in the exhibit hall	0.435	
	Utility services	0.457	
	Exhibit hall appearance	0.496	
	Restroom appearance	0.722	
	Proximity to restrooms	0.781	
Factor 2	Items	Load	Reliability
Booth Real Estate	Exhibit hall layout	0.998	0.79
	Distance from booth space to the door	0.521	
Factor 3	Items	Load	Reliability
Tourism	Shipping mailing service	0.991	0.69
	Sightseeing information	0.411	
	Lodging	0.369	
Factor 4	Items	Load	Reliability
Exposure Time	Exhibit hall days	0.883	0.65
	Exhibit hall hours	0.495	
	Conference directory listing	0.364	
	Food available in the exhibit hall	0.300	
Factor 5	Items	Load	Reliability
Convenience of Set Up	Booth size space	0.714	0.74
	Time for set up	0.593	
	Ease of getting materials to booth space	0.456	
Factor 6	Items	Load	Reliability
Amenities	Telecommunication service (Internet)	0.990	0.71
	Utility services	0.435	
Factor 7	Items	Load	Reliability
Accessibility	Parking	0.707	0.69
	Ease of getting materials in booth space	0.497	
	Fire safety information	0.409	

Shown in Table 18 the first factor is Atmosphere which includes the attributes “food availability in the exhibit hall”, “exhibit hall appearance”, “restroom appearance” and “proximity to restrooms”. The atmosphere factor simplifies these attributes to the overall look and cleanliness of the venue as a whole. There were a couple of cross-loadings that included “fire safety information” and “utility services”, these attributes were placed under factor 7 and factor 6 respectively.

The second factor is Booth Real Estate (“exhibit hall layout”, “distance from booth space to the door”). Booth real estate emphasizes the availability attendees will have to the exhibitor’s booth due to its location.

The third factor is Tourism. The attributes that loaded into this factor reflect the need for tourism. These attributes are “sightseeing information” and “having a variety of lodging options” (or lodging). “Shipping/ mailing service” also loaded into this factor. Tourism approached the borderline of reliability (0.69).

The fourth factor is Exposure Time. Trade shows will have certain times that give attendees access to the exhibitors’ booth. This gives exhibitors time to showcase their booth. The attributes that loaded into this factor are “exhibit hall days”, “exhibit hall hours”, and “conference directory listing”. Exposure Time is at the margin of statistical reliability (0.65)

The fifth factor is Convenience of Set Up. Exhibitors will need to set up their booths, the attributes that loaded into this factor describes this step. This includes “ease of getting materials to booth space”, “time for set up”, “booth size space”.

The sixth factor is Amenities. Exhibitors utilize Internet or power for certain features in their booth. This includes the attributes “utility service” and “telecommunication service”.

The seventh factor is Accessibility. The attribute that loaded strongest into this factor is “availability of parking”, and “ease of getting materials in booth space” as well as “fire safety”. “Overnight security” was also included in this factor although it had a weak loading. There were a few items in this factor that had cross-loadings into other factors. “Ease of getting materials in booth space” was placed in factor 5, “exposure time”. Accessibility is provisionally reliable (0.69)

Reliability for three of the seven factors are under 0.7, one possible reason is that there is a lot of variation in the responses to importance that are not explained in the underlying factors, some of the variation would be because the show rooms.

Table 19: Goal Factors

	Attraction & Retention	Networking	Sales
Introduce new products and developments	0.71	0.098	-0.002
Provide information	0.753	-0.043	-0.118
Maintain business relationships	0.565	0.257	-0.2
Connect to potential buyers	0.859	-0.057	-0.02
Secure orders or generate sales	0.658	0.062	0.483
Customers access	0.646	0.049	0.117
Attend because the competition does	-0.119	0.463	0.462
Exchange experiences	0.117	0.53	-0.121
Sense for the market	0.026	0.719	0.024
Promote the company	0.471	0.267	-0.409

Table 20 Goal factors extracted

Goal Factor			
Factor 1	Items	Load	Reliability
Attraction & Retention	Connect to potential buyers	0.859	0.7
	Provide information	0.753	
	Introduce new products	0.710	
	Secure orders or generate sales	0.658	
	Customer access	0.646	
	Maintain business relationship	0.565	
Factor 2	Items	Load	Reliability
Networking	Get a sense of the market	0.719	0.5
	Exchange experiences	0.530	
	Promote the company image	0.267	
Factor 3	Items	Load	Reliability
Sales	Secure orders and generate sales	0.483	0.5
	Attend because the competition does so	0.462	

The first factor for exhibitor goals is Attraction & Retention. The attributes that loaded into this factor are “have access to customers who would otherwise be difficult to reach” (customers access), “secure orders or generate sales”, “make new contacts with potential buyers” (connect to potential buyers), “maintain existing business relationships”, “provide information about products and their uses” (provide information), and “introduce new products and developments”.

The second factor for exhibitor goals is Networking. The goals that loaded into this factor are “promote the company’s image and improve its reputation” (promote the company), “get an overall sense of the state of the market” (get a sense for the market), “exchange experiences”.

The third and final factor for exhibitor goals is Sales and the goals that loaded into this factor were “attend because the competition does so”, and “secure orders and generate sales”.

In order to determine the adequacy of the selected factors a chi-square test was calculated in order to affirm that an adequate number of factors were selected. For the importance attributes with seven factors the chi-square test also failed to reject the null hypothesis (P-value 0.12), indicating that the factor model for importance was adequate. On the other hand, even with five factors, the chi-square test for factor adequacy was rejected (P-value 0.037), indicating that a factor model for goals would be inadequate, and was not used in this study.

When determining the correlation between exhibitors' goals and the importance they place on show room attributes, I considered how the seven extracted factors for attributes were related to each individual goal.

To determine whether there is a relationship between exhibitor goals and the importance placed on showroom attributes, Pearson correlations, were calculated along with their P-values. Table 21 displays the Pearson correlations significant at the .05 level. While these correlations were statistically significant, they are all too close to zero to indicate meaningful relationships between importance factors and goals in a practical application, meaning that the correlations are statistically weak. Regardless of their weakness, there exists correlations.

Table 21: Pearson Correlations Between Importance Factors and Goals

	Atmosphere	Booth Real Estate	Tourism	Exposure Time	Convenience	Amenities	Accessibility
Introduce new products and developments
Provide information	-0.203	0.286	.	.	.	.	.
Maintain business relationships	-0.212
Connect to potential buyers	0.198	-0.221
Secure orders or generate sales
Customers access
Attend because the competition does
Exchange experiences	0.202	0.274
Sense for the market
Promote the company	0.219	.

Table 22: P-values of Correlations

	Atmosphere	Booth Real Estate	Tourism	Exposure Time	Convenience	Amenities	Accessibility
Introduce new products and developments
Provide information	0.04	0.003	.	.	.	.	.
Maintain business relationships	0.032
Connect to potential buyers	0.045	0.025
Secure orders or generate sales
Customers access
Attend because the competition does
Exchange experiences	0.041	0.005
Sense for the market
Promote the company	0.026	.

Goals and Show Attribute Importance Correlation

I was able to identify seven underlying factors that help explain how an exhibiter responds to the importance placed on the 21 showroom attributes in the survey. This may help show room mangers simplify their approach to providing an appealing venue, however, according to Pearson’s correlations, only statistically weak relationships were found between how exhibitors rate the importance of a certain showroom attribute factor and the way they rate their goals, as shown in Appendix APPENDIX C

C. CORRELATIONS, there were 8 correlations between the importance ratings and goals (Table 23).

Table 23 Correlations

	Correlations	P
Booth real estate and provide information	0.286	0.003
Accessibility and exchange experience	0.274	0.005
Amenities and promote the company	0.219	0.026
Amenities and exchange experiences	0.202	0.041
Amenities and connect to potential buyers	0.198	0.045
Atmosphere and provide information	-0.203	0.040
Accessibility and maintain business relationships	-0.212	0.032
Accessibility and connect to potential buyers	-0.221	0.025

Factor Analysis of Goals and Show Attributes

The results of the factor analysis highlighted that several factors were directed at the same attribute. The questionnaire used in this study had 21 different attributes for exhibitors to rate. In order to avoid long questionnaires on facility attributes, these attributes could be reevaluated to create a more manageable list that accurately represents the trade show attributes provided by large convention centers. A shorter, more efficient questionnaire can encourage an increase in completed tests.

DISCUSSION

Result Summary

The purpose of this study is to compare the mean score of facility attributes that are provided in trade shows with the corresponding performance rating using a matrix

grid and implements the iso-rating line into the grid with the gap analysis to help interpret the distance of the iso-rating line to the scores of the IPA results.

This study also explores the correlation between exhibitors' ranking of importance placed on facility services through the importance ratings from the Importance Performance analysis, and the goals exhibitors have for the trade show. The result of this information is meant to be a tool that helps show managers better provide specific services that are important to exhibitors relative to their specific goals for attending conventions. In order to do that this study attempts to determine the underlying factors that explain the variation in the importance placed on attributes, which will be called importance factors.

This study aimed to explore the importance performance analysis matrix incorporating an iso-rating line and gap analyses. Implementation the gap analysis and iso-rating line to the IP analysis will help show managers define what excess (or lack of) energy/resources they spend on a facility attribute. Show managers' focus will be defined not only by the IPA matrix, but by the distance the score is from the iso rating line, or the gap. The IPA matrix then will become a visual graph that will help them prioritize their efforts based on actual need and resources spent. This will change the way show managers view IPA scores in the future and help refine the needs of exhibitors.

Results were further analyzed through comparison with the demographics of the sample, which helped to understand who was taking the test. The demographic results were in line with previous studies on exhibitor attendance.

Demographic Profile. The majority of exhibitors that attended the trade shows worked for small businesses, that is, those with fewer than 50 employees. This is in line with findings reported by CEIR (Ducate et al., 2012a) as well as Jin and Weber (2016). Thirty-five percent (35%) of the exhibitors were sales representatives, similar to that reported by CEIR (Ducate et al., 2012a) and 35% had attended trade shows for 2-5 years.

Use of IP Analysis. Because exhibitor space rental provides 75% of the revenue to venues, there should be significant motivation on the part of venue management to ensure the show manager's priorities match that of the exhibitors, in terms of facility attributes (Baumann, 2006).

The results of the IP Analysis of the three trade shows found that the facility attributes furthest away from the iso-rating line and the highest gap number (therefore in most in need of improvement) were “sightseeing information”, “the fee for exhibiting”, “time given for setup” and “telecommunication Services (i.e. wireless Internet)”. According to the gap analysis as well as the iso-rating line on the IPA matrix, the greatest need for improvement lies with “sightseeing information” provided in the conference centers. This gap is consistent in both conference centers. This indicates that when exhibitors participate in a trade show at the conference center, they rank the importance of sightseeing information low, yet exhibitors consistently rank the performance of receiving the sightseeing information as high. Traditionally, because this is high performance, but low importance there would be no need to pay attention to this, but with the indication of the gap analysis and the iso-rating line, unnecessary energy is being spent by event management on providing sightseeing information to the exhibitors. Although this could suggest that access to sightseeing information is overdone in the

conference centers for the exhibitors, the access to sightseeing information is available to every guest that enters the conference center. There is also the possibility that in the packets that exhibitors receive when they purchase, or sign up for a booth, tourism and sightseeing information is provided. If this is so then it should be clear to show management that they might consider to either not include it in their instruction packets or direct them to a conference center concierge to find out more information.

This study found that “Fee for exhibiting” has an overall gap of -0.7, indicating that the performance was less than importance placed on this attribute. This would put “fee for exhibiting” in the “Needs Work” section of the IPA matrix. Hultsman’s (2001) findings also suggested that “the fee for exhibiting” was one of the attributes in most need of improvement. The fee for exhibiting can vary depending on the trade show and the price point show management places on booth space. Exhibitor rental space prices per square foot ranged between \$6 to \$75 in 2013 (Stanley, 2013), depending on the size of the space rented for the booth, as well as the location and popularity of trade show. Fifty percent of exhibitors use less than 200 square feet of booth space, and 6% use more than 600 square feet in booth space (Ducate et al., 2012b). Another study suggested similarly, that the average cost of a booth site was reported to be \$22.32 per square foot and the average booth size was a 10x10ft space (Red-Cedar, 2014). While booth space can be expensive, the booth size regulates the number of sales stations that can fit in a booth and in turn the number of sales interactions that can take place in a booth at one time (Konopacki, 2003). There is also a cost for promotional items given away in a booth called the booth giveaway industry, around 19 billion was spent on trade show promotional items in 2007 (Friedmann, 2007). It has been estimated that exhibitors spent,

on average, \$270 per attendee with whom a face-to-face conversation took place (Stanton & Sequeira, 2011). The price of the event hall as well as marketing and sponsors are other variables that determine the booth space cost. Due to “the fee for exhibiting” being one of the attributes in most need of improvement, further study on overall booth space cost (including fee for exhibiting, promotional items, employee time spent on exhibiting and training and variances in trade show costs) is warranted.

This study also found that “Telecommunication Services (i.e. wireless Internet)” is an attribute that is in general need of improvement having scored high on importance but low performance (Figure 8). The use of telecommunication services, such as Internet access during a trade show for exhibitors, was ranked over all as important, this is in line with Ling-yee (2010). Ling-yee (2010) suggested that exhibitors who used the Internet for trade show marketing perceived it as a powerful influence on their marketing performance at the trade show. The exhibitors ranked telecommunication services low on performance indicating that this area needs improvement. Table 16 show that this attribute has a gap of -0.6 meaning that performance did not meet the importance score reported by exhibitors. Breiter and Milman (2006b) also found that the exhibitors rated “uninterrupted internet access” slightly lacking in performance.

Another attribute worth noting is “Parking provided”. This attribute only had a gap of -0.4 and fell into the low priority section of the IPA matrix. The low importance of parking could be due to availability of public transportation in the area. Both convention centers had access to mass transit (such as city buses and light rail) and they were both close to several hotels. Breiter and Milman (2006b) asked about the “price of exhibitor parking”, which received low performance.

Perceived important and well performed show attributes were “ease of getting your materials in the booth space (i.e. dock usage)”, “exhibit hall hours”, “the layout of the exhibit hall” and “appearance of exhibit hall”. The gap from the iso-rating line shows that there might be a slight need of improvement in these attributes, albeit not as urgent as other attributes. This is confirmed with Hultsman’s (2001) study where she found similar or the same facility attributes that needed attention such as “the method off assigning space to exhibitors”, “the relation off your exhibit area to the door”, “the layout off the exhibit hall”, “exhibit hall space specifications”, “the exhibit hall hours”, “the size of your booth space”.

Examining the IPA scores based on the size of the business (Figure 12), it appears as though show managers are doing a better job of matching their performance to the importance of attributes for smaller businesses, suggesting that the most significant relationship between importance and performance is for the smallest companies. There was a larger response from smaller companies over all, so the results may be biased towards smaller businesses. The larger attendance from smaller businesses suggest that need for exposure at expositions, the data indicate that show management is doing a better job at meeting their needs. For midsize companies there is a modest relationship. For the larger companies, the data suggests no significant evidence of a relationship between importance and performance based on statistical significance. There were fewer larger companies in the population study indicating the lack of data necessary to determine their needs being met by management. Based on this test, management have not met the needs of larger companies.

IPA scores for exhibitor management in Figure 13 show that the most significant relationship (meaning the data is closer to the trend line) between importance and performance is for “management” and “middle management”. For representatives there is a modest relationship between importance and performance. For assistants, there is no significant evidence of a relationship between importance and performance.

For business years of attendance (Figure 14) the most significant relationship between importance and performance is for the companies that have been attending the longest. For businesses attending their first year or two – five years there is a modest relationship between important and performance. This makes practical sense because the longer a business would consistently attend a show, the easier it is for a show manager to know how to cater to that business. This could also suggest that businesses attending conform to the services provided by show management.

Goal Ranking. In this study the three most highly ranked exhibitor goals were “promote the company's image and improve its reputation”, “make new contacts with potential buyers”, and “provide information about products and their uses”. Due to the nature of trade shows and face-to-face interaction it is reasonable that there was a high importance placed in promoting business image in order to market a company’s brand to local and international communities. Making new contacts with potential buyers also plays into the nature of face-to-face interaction. Providing information about products can be easily achieved through a website or the Internet, however face-to-face allows one to personalize the dissemination of the information given to each contact. The least important trade show exhibitor goal was attending because the competition does so. This is consistent with previous studies by Rodriguez-Oromendia et al. (2012), and Siskind

(2008). It is also worthy to note that recent studies on exhibitor goals from Han and Verma (2014) doesn't include the goal "attend because the competition does so". I would suggest that this goal is obsolete, it not only ranked the lowest in goal importance, there is no correlation between importance placed on facility services and this goal, and it wouldn't factor into the other goals as was shown by the results.

Factor Analysis. The results of the chi-square test for the underlying factors of importance attributes show that it is a good fit and the factors were used in Pearson's Correlation. The results for the chi-square test for goal factors showed that the goal factors did not reject the null hypothesis and therefor were not adequate to use. Therefore, the ten goals, not the goal factors, were used in Pearson's Correlation with the importance factors.

Correlations between importance and goals. The purpose of assessing this correlation is to give show managers another tool on understanding exhibitors' needs before a trade show so that the show manager can provide better services to the exhibitor based on their goals. This will help a show manager focus on services and how these services correlate with exhibitors' goals. This is essential to help improve a show manager's performance of services.

After determining the underlying factors for importance attributes and goals, the data suggests that the correlation between importance factors and goals are statistically weak. There were eight significant correlations as shown in Table 23.

The strongest correlation was found with "booth real estate" and "provide information about products and their uses", which had a positive correlation of 0.286

(significantly weak). “Booth real estate” represents the importance of where the booth is located in the exhibit hall and the exhibit hall layout. This correlation suggests that as the score for the goal “provide information about products and their uses” increases, so does the importance of the exhibitor’s booth placement and the trade show layout. In practice, all exhibitors place importance on where their booth is located and the layout of the trade show. As the show manager places special attention to the exhibitor’s needs on booth placement if an exhibitor was looking to provide information about products and their uses, this correlation suggests that an exhibitor would more likely score the performance of booth placement high.

The factor “Accessibility” and the goal “exchange experiences” positively correlates at 0.274 (significantly weak). “Accessibility” includes the attributes “parking provided”, “ease of getting materials in booth space”, fire safety information”, and “overnight security”. This correlation indicates that as the score for the goal “exchange experiences” increases so will the importance for “accessibility”, suggesting that an exhibitor will place more importance on how close parking is to the exhibit floor, how easy it is to access their booth if their objective in going to the exhibit is to exchange experience.

The factor “amenities” positively correlates with “promote the company” (0.219), “exchange experience” (0.202) and “connect to potential buyers”. This suggests that exhibitors with the goal to promote their company, the importance level of “amenities” (access to the Internet, and access to electricity) increases. In order for exhibitors to promote their company, they will use promotional strategies such as Internet events, social media, or use the Internet to collect polling data (Han & Verma, 2014; Mani,

Nguyen, & Crespi, 2009). Access to electricity is also useful for exhibitors that want to increase booth attraction by using projector screens or television screens as well as other units that require electricity. This suggests a practical correlation between “amenities” and company promotion. The goal to exchange experience for a company could include the need for amenities as the company might use social media as a means of exchange. The last positive correlation for “amenities” is with the goal to “connect to potential buyers”. This has practical value as well, as connecting with these buyers face-to-face is as important as connecting with them online, often screens were used to attract potential buyers.

The last correlations “accessibility” and “connect to potential buyers” correlate negatively at -0.221 (significantly weak). If an exhibitor’s objective is to connect with potential buyers, the level of importance to accessibility decreases. “Accessibility” and “maintain business relationships” correlate negatively at -0.212. “Atmosphere” and “provide information” correlate negatively at -0.203. Factors that correlate negatively to goals do not make practical sense in a trade show setting. This suggests that if an exhibitor has the goal to connect with potential buyers or maintain relationships they will place low importance on accessibility, or how easy it would be to access their booth as well as the booth layout. If an exhibitor has the goal to maintain business relationships, these scores also suggest that they would place less importance on how the exhibit hall looks. These weak correlations do not make very much sense in a practical setting. It is safe to assume that an exhibitor would always want to be as accessible as possible in order to connect with potential buyer.

All these correlations are significantly weak according to Pearson's correlation. The closer the correlation scores are to 1 the stronger the correlation and the closer they are to 0 the weaker the correlation. Any correlation below 0.3 is significantly weak. Statistically the correlations exist, however practically, some of these correlations do not make sense. Correlations does not imply causation, a follow up study on the causation might be worth looking into to understand why the correlation exists and if there is any practical use for the trade show manager.

In retrospect, an expanded list of goals could have been asked without noticeably compromising the quality of the responses obtained. For example, to capture information about management-customer relations, it would have been helpful to ask – “give your customers a chance to meet the experts”, “give your CEO an opportunity to meet the customers”, “bring senior management closer to customers” (goals from Siskind 2006).

CONCLUSION

The purpose of this study was to help show managers better understand the needs of the exhibitors and understand which facility attributes correlate with the importance and preferences of show exhibitors. An Important-Performance Analysis helps obtain this information, and facilitates a visual aid by using the IPA matrix and iso-rating line. This study also examined correlations between exhibitor goals and importance placed on facility attributes to help provide show managers a better idea on how to provide better service to the exhibitors. The show manager would be able to use that information to better serve the exhibitor and the exhibitor would give a higher rate of performance on service features after the event. After determining the underlining factors of both

importance and goal attributes, most of the factors did not correlate, and the factors and attributes that did correlate were statistically weak, suggesting that the correlations would make little practical difference. Further studies would provide a practical use for an analysis between importance that exhibitors place on facility features and their goals.

The importance performance analysis alone provides practical information on exhibitors' needs and is easy for exhibitors to understand when plotted on the importance performance analysis matrix. Implementing the iso-rating line also allows the show manager to visually see the gap distance of a score and the iso-rating line as well as understand what amount of effort would need to be placed in each attributes. Using the demographics that were collected, show management can focus their energies on what facility attributes different size companies deem important and cater to them as needed. This study suggests that a show manager would need to focus more on smaller businesses as they are the majority of exhibitor participants in the types of trade shows that were surveyed. Other trade shows that only have large companies or governmental organizations would need further study to determine a show manager's focus on facility features.

In retrospect, the number of facility attributes tested was excessive and some attributes were unnecessary because they were redundant. For example, attributes such as "appearance of restrooms" and "appearance of exhibit hall" could have been replaced with "the overall appearance and cleanliness of the facility" in the questionnaire reducing the number of attributes. The attribute "fire safety" scored so low in importance overall that in future studies this attribute could be removed. I also suggest that the wording when distributing the questionnaire be changed to specify the use of the attribute to the

exhibitor, for example Breiter and Milman (2006b) asked about “the price of exhibitor parking” whereas this study asked “parking provided”. In future studies the feature might be phrased “Notification about location and price of parking”. The questions phrased in the goals section should change as well, for example, the goal “exchange experiences” should refer to “exchange experiences with other exhibitors”.

In future studies, the amount of facility features being tested for importance and performance can be reduced. Focusing on factors that are more essential and that better express facility features would help expedite the completion of the questionnaire and reduce incomplete tests. Features such as “fire safety information” which had an overall low importance level could be removed entirely. Other features that are expressed in the factor analysis can be combined in one questions such as the factor “atmosphere” represents several aspects of the cleanliness and appearance of the event hall. Instead of asking about “exhibit hall appearance” “restroom appearance” one could ask only about the “overall cleanliness of the event hall” (Breiter and Milman, 2006b). Another example of shortening the questionnaire would be to replace “exhibit hall days” and “exhibit hall hours” with “exhibit hall availability”.

This was an exploratory study on the limited correlation between goals and importance of service features, therefore it is recommended that further a study be done on the impact that exhibitor goals have on the importance exhibitors place on service features. The future study should expand the number of convention centers and trade shows being tested and increase the sample size. The wording in the facility features should be more specific toward exhibitors needs and how they would change according to the goals they have for the exhibition.

REFERENCES

- Abalo, J., Varela, J., & Manzano, V. (2007). Importance values for Importance–Performance Analysis: A formula for spreading out values derived from preference rankings. *Journal of Business Research*, 60(2), 115-121.
- Azzopardi, E., & Nash, R. (2013). A critical evaluation of importance–performance analysis. *Tourism Management*, 35(0), 222-233.
- Baumann, J. K. (2006). *Trade show booth assignment process re-engineering*. Paper presented at the Academy of Marketing Studies.
- Black, R. (1986). The trade show industry: Management and marketing career opportunities. *Trade Show Bureau, East Orleans*.
- Breiter, D., & Milman, A. (2006). Attendees' needs and service priorities in a large convention center: Application of the importance–performance theory. *Tourism Management*, 27(6), 1364-1370. doi: <http://dx.doi.org/10.1016/j.tourman.2005.09.008>
- Breiter, D., & Milman, A. (2006). Predicting exhibitor levels of satisfaction in a large convention center. *Event Management*, 10(2/3), 133-143. doi: 10.3727/152599507780676661
- CEIR. (2003). Use and Value of face-to-face (Vol. F01.03). Chicago, IL: Center for Exhibition Industry Research.
- CEIR. (2009). Exhibitions work to bring buyers and sellers together generating commerce (Vol. F01.03). Chicago IL: Center for Exhibition Industry Research.
- CEIR. (2011a). The Average Traffic Density for Exhibitions (Vol. ACRR1152.11). Chicago, IL: Center for Exhibition Industry Research.
- CEIR. (2011b). Exhibitions Attract Market of Visitors with Buying Authority. Chicago IL: Center for Exhibition Industry Research.
- CEIR. (2013a). Exhibitor Information Sharing Practices (Vol. MC48.13). Chicago, IL: Center for Exhibition Industry Research.
- CEIR. (2014). How the Exhibit Dollar is Spent (Vol. SM22.14). Chicago, IL: Center for Exhibition Industry Research.
- CEIR. (2015). The Marketing Spend Decision (Vol. MC 51.15). Chicago, IL: Center for Exhibition Industry Research.
- Deng, W. (2007). Using a revised importance–performance analysis approach: The case of Taiwanese hot springs tourism. *Tourism Management*, 28(5), 1274-1284.

- Drapeau, N. (2012). Factors behind the Resiliency of Business-to-Business Exhibitions. Chicago, IL: Center for Exhibition Industry Research.
- Ducate, D., Breden, C., & Drapeau, N. (2012a). The Role and Value of Face-to-Face Interaction: Profiles of Attendees and Exhibitors. Chicago IL: Center for Exhibition Industry Research.
- Ducate, D., Breden, C., & Drapeau, N. (2012b). The Role and Value of Face-to-Face Interaction: Trends in Use of Exhibitions. Chicago, IL: Center for Exhibition Industry Research.
- Friedmann, S. (2007). Giveaways and Incentives: What Every Exhibitor Needs to Know (Vol. G08.07). Chicago, IL: Center for Exhibition Industry Research.
- Gonzalez, V. (2017, March 21, 2014). [Recreational Coordinator].
- Gopalakrishna, S., Roster, C. A., & Sridhar, S. (2010). An exploratory study of attendee activities at a business trade show. *Journal of Business & Industrial Marketing*, 25(4), 241-248. doi: 10.1108/08858621011038199
- Han, H. S., & Verma, R. (2014). Why Attend Tradeshows? A Comparison of Exhibitor and Attendee's Preferences. *Cornell Hospitality Quarterly*, 55(3), 239-251.
- Herbig, P. A., O'Hara, B. S., & Palumbo, F. A. (1998). Trade show: who, what, why. *Marketing Intelligence & Planning*, 16(7), 425-435.
- Hultsman, W. (2001). From the eye of an exhibitor: Characteristics that make exhibitions a success for all stakeholders. *Journal of Convention & Exhibition Management*, 3, 27.
- Jin, X., & Weber, K. (2016). Exhibition destination attractiveness – organizers' and visitors' perspectives. *International Journal of Contemporary Hospitality Management*, 28(12), 2795-2819. doi: 10.1108/IJCHM-01-2015-0023
- Konopacki, A. (2003). Does your exhibition have the Correct Sales Floor Plan? (Vol. G9.03). Chicago, IL: Center for Exhibition Industry Research.
- Lee-Kelley, L., Gilbert, D., & Al-Shehabi, N. F. (2004). Virtual exhibitions: an exploratory study of Middle East exhibitors' dispositions. *International Marketing Review*, 21(6), 634.
- Lillien, G., & Grewal, R. (Eds.). (2012). *Trade Shows in the Business Marketing Communications Mix*. Northampton MA: Edward Elgar
- Ling-ye, L. (2010). Antecedents and effect of internet implementation for trade shows. *Journal of Business & Industrial Marketing*, 25(4), 272-283. doi: 10.1108/08858621011038234

- Magal, S. R., & Levenburg, N. M. (2005). *Using importance-performance analysis to evaluate e-business strategies among small businesses*. Paper presented at the System Sciences, 2005. HICSS'05. Proceedings of the 38th Annual Hawaii International Conference on.
- Mani, M., Ngyuen, A.-M., & Crespi, N. (2009). *What's up: P2P spontaneous social networking*. Paper presented at the Pervasive Computing and Communications, 2009. PerCom 2009. IEEE International Conference on.
- Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing*, 41(1), 77.
- Network, T. S. N. (2017). TSN Trade Show Data. Retrieved 5 March, 2017, from <http://www.tsn.com/tsn-trade-show-data>
- O'Hara, B. S., & Herbig, P. A. (1993). Trade shows: What do the exhibitors think? *The Journal of Business & Industrial Marketing*, 8(4), 18.
- Oh, H. (2001). Revisiting importance–performance analysis. *Tourism Management*, 22(6), 617-627.
- Palumbo, F. A. (2008). *Trade show/fair piracy and industrial espionage*. Paper presented at the Journal of Convention & Event Tourism.
- Pitta, D. A., Weisgal, M., & Lynagh, P. (2006). Integrating exhibit marketing into integrated marketing communications. *Journal of Consumer Marketing*, 23(3), 156-166.
- Poorani, A. A. (1996). Trade-show management: Budgeting and planning for a successful event. *The Cornell Hotel and Restaurant Administration Quarterly*, 37(4), 77-84.
- Red-Cedar. (2014). *Trade Show Budgeting*. Cheltenham PA: Red-Cedar PR and Marketing.
- Reychav, I. (2009). Knowledge sharing in a trade show: A learning spiral model. *VINE: The Journal of Information and Knowledge Management Systems*, 39(2), 143.
- Rodriguez-Oromendia, A., Reina-Paz, M. D., & Sevilla-Sevilla, C. (2012). Business Objectives For Trade Shows Aimed At Final Consumers. *The International Business & Economics Research Journal (Online)*, 11(13), 1455.
- Siskind, B. (2006). *Management by Objectives: Benchmarks for Exhibit Growth (Vol. G11.06)*. Chicago, IL: Center for Exhibition Industry Research.
- Siskind, B. (2008). *Powerful Exhibit Marketing: The Complete Guide to Successful Trade Shows, Conferences, and Consumer Shows*: John Wiley & Sons.

- Situma, P. S. (2012). The Effectiveness of Trade Shows and Exhibitions as Organizational Marketing Tool (Analysis of Selected Companies in Mombasa). *International Journal of Business and Social Science*, 3(22).
- Skok, W., Kophamel, A., & Richardson, I. (2001). Diagnosing information systems success: importance–performance maps in the health club industry. *Information & Management*, 38(7), 409-419. doi: [http://dx.doi.org/10.1016/S0378-7206\(00\)00076-8](http://dx.doi.org/10.1016/S0378-7206(00)00076-8)
- Smith, T. M., Gopalakrishna, S., & Smith, P. M. (2004). The complementary effect of trade shows on personal selling. *International Journal of Research in Marketing*, 21(1), 61-76.
- Stanley, J. (2013). Exhibit Space and Sponsorship Sales Metrics and Practices Study: Exhibit Surveys, Lippman Connects.
- Stanton, T., & Sequeira, I. (2011). 2010 Trade show trends. *Exhibitor Magazine*.
- Stanton, T., & Sequeira, I. (2013). 2012 Trade show trends. *Exhibitor Magazine*.
- Statista. (2014). Share of trade show visitors with buying influence in the United States in 2011, by industry (Vol. 2014).
- Stevens, R. (2005). *Trade Show & Event Marketing: Plan, Promote & Profit* Belmont CA: Cengage Learning.
- Tafesse, W. (2014). Understanding how resource deployment strategies influence trade show organizers' performance effectiveness. *European Journal of Marketing*, 48(5/6), 1009-1025. doi: [doi:10.1108/EJM-06-2012-0342](https://doi.org/10.1108/EJM-06-2012-0342)
- Tanner, J. F., & Chonko, L. B. (1995). Trade show objectives, management, and staffing practices. *Industrial Marketing Management*, 24(4), 257-264. doi: [http://dx.doi.org/10.1016/0019-8501\(94\)00082-8](http://dx.doi.org/10.1016/0019-8501(94)00082-8)
- Yuksel, U., & Voola, R. (2010). Travel trade shows: exploratory study of exhibitors' perceptions. *Journal of Business & Industrial Marketing*, 25(4), 293.

APPENDIX A

A. IRB APPROVAL



EXEMPTION GRANTED

Wendy Hultsman
Community Resources and Development, School of
602/496-0179
whultsma@asu.edu

Dear Wendy Hultsman:

On 7/16/2014 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	The Exhibitor Perspective – Providing Facility Services for a Successful Trade Show
Investigator:	Wendy Hultsman
IRB ID:	STUDY00001176
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none">• Consent Form - Verbal, Category: Consent Form;• Consent Form - Online, Category: Consent Form;• HRP-503a - PROTOCOLSOCIAL BEHAVIORAL, Category: IRB Protocol;• Questionnaire The Exhibitor Perspective, Category: IRB Protocol;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 7/16/2014.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Nicolas Garaycochea

APPENDIX B

B. SURVEY INSTRUMENT

The Exhibitor Perspective

The Exhibitor's Perspective - Providing Facility Services to Exhibitors for...

Exhibitors' Perspective

I am a graduate student under the direction of Professor Hultsman... in the School of Community Resource and Development at Arizona State University. I am conducting a research study to evaluate the exhibitors' perspective on services provided by show managers during trade shows.

I am inviting your participation, which will involve taking this 5 minute survey. You have the right not to answer any question, and to stop participation at any time.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty, nor will my grades be affected.

There are no foreseeable risks or discomforts to your participation.

Your responses will be confidential. The results of this study may be used in reports, presentations, or publications but your name will not be used. Individual responses will not be shared and will be kept confidential.

If you have any questions concerning the research study, please contact the research team at: whultsma@asu.edu or ngarayoo@asu.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "Next" button below indicates that:

- You have read the above information
- You voluntarily agree to participate
- You are at least 18 years of age

If you do not wish to participate in the research study, you may exit the survey at any time.

Page 1

The Exhibitor Perspective

Section A: Exhibitor Demographics

This section will help us understand the demographics of the trade show. All information will be anonymous.

1. Number of years your company has exhibited at the trade show:

- First Time Attendees
- Two to Five Years
- Six to Nine Years
- Ten or More Years

2. Company size (employees):

- <50
- 51 - 250
- 251 - 500
- 501 - 1,000
- 1,001 - 2,500
- 2,501 - 5,000
- >5,001

3. Who is completing this survey? (Representative, title of employment)

- Director / VP / Management Team
- Manager / Supervisor / Consultant
- Representative / Special / General / Analyst
- Administrative / Assistant / Students / Other

The Exhibitor Perspective

Section B: Rating Services Given

This section will tell us how important the services listed are to you and how we performed with each of the services

4. How important are these features?

(Eventhough some features might not have been present in your trade show, we would still like to know how important they were to you.)

	Extremely Important	Important	Slightly Important	Not Important
The method of assigning space to exhibitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The fee for exhibiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a variety of lodging options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking provided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of getting your materials in the booth space (I.e. dock usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of time given for set-up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The size of your booth space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The relation of your exhibit area to the door	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The layout of the exhibit hall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The exhibit hall hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having the exhibit hall open for multiple days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a listing in the conference directory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire safety information (I.e. Fire Marshal Presence)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of shipping/mailing service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telecommunication Services (I.e. wireless Internet)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
utility service availability (I.e. electricity, water)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proximity of restrooms to exhibition space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appearance of restrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appearance of exhibit hall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having food available in the exhibit hall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Exhibitor Perspective

Receiving information about sightseeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having overnight security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How did we perform with each of these features?

(Features not present in the trade show you participated in can be marked as a "poor")

	Excellent	Good	Fair	Poor
The method of assigning space to exhibitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The fee for exhibiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a variety of lodging options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking provided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of getting your materials in the booth space (i.e. dock usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of time given for set-up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The size of your booth space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The relation of your exhibit area to the door	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The layout of the exhibit hall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The exhibit hall hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having the exhibit hall open for multiple days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a listing in the conference directory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire safety information (i.e. Fire Marshal Presence)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of shipping/mailing service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telecommunication Services (i.e. wireless Internet)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
utility service availability (i.e. electricity, water)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proximity of restrooms to exhibition space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appearance of restrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appearance of exhibit hall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having food available in the exhibit hall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Receiving information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Exhibitor Perspective

about sightseeing

Having overnight security

○

○

○

○

The Exhibitor Perspective

Section C: Goals and Objectives

This section will help us understand what your goals and objectives were for this event.

6. Your goals and objectives for this event are:

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
Introduce new products and developments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide information about products and their uses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintain existing business relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make new contacts with potential buyers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Secure orders or generate sales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have access to customers who would otherwise be difficult to reach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend because the competition does so	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exchange experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Get an overall sense of the state of the market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promote the company's image and improve its reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Exhibitor Perspective

7. Please rank the goals and objectives from 1 to 10, 1 being the most important and 10 being the least.

<input type="text"/>	Introduce new products and developments
<input type="text"/>	Provide information about products and their uses
<input type="text"/>	Maintain existing business relationships
<input type="text"/>	Make new contacts with potential buyers
<input type="text"/>	Secure orders or generate sales
<input type="text"/>	Have access to customers who would otherwise be difficult to reach
<input type="text"/>	Attend because the competition does so
<input type="text"/>	Exchange experiences
<input type="text"/>	Get an overall sense of the state of the market
<input type="text"/>	Promote the company's image and improve its reputation

APPENDIX C

C. CORRELATIONS

Table 24: Pearson's Correlation Full

	Atmosphere	Booth,Real,Est	Tourism	Exposure,Time	Convenience	Amenities	Accessibility
Introduce new products and developments	-0.075	0.18	0.079	0.024	-0.051	0.08	-0.054
Provide information	-0.203	0.286	0.107	-0.013	0.097	0.166	-0.162
Maintain business relationships	-0.092	0.074	0.007	-0.118	0.161	0.126	-0.212
Connect to potential buyers	-0.103	0.178	0.146	-0.064	0.025	0.198	-0.221
Secure orders or generate sales	0.047	0.142	0.062	0.046	0.055	0.051	-0.114
Customers access Attend because the competition does	-0.043	0.035	0.066	0.057	-0.088	0.106	-0.131
Exchange experiences	0.146	0.1	0.112	-0.042	0.178	0.02	0.091
Sense for the market	0.069	-0.056	0.042	-0.121	0.034	0.202	0.274
Promote the company	0.144	0.09	0.183	-0.191	-0.105	0.131	0.019
	-0.125	0.097	0.11	0.023	-0.064	0.219	-0.175

APPENDIX D

D. GOAL FACTOR LOADINGS

Table 25: Goal Factor Loadings

	Attraction & Retention	Networking	Sales
Introduce new products and developments	0.71	0.098	-0.002
Provide information	0.753	-0.043	-0.118
Maintain business relationships	0.565	0.257	-0.2
Connect to potential buyers	0.859	-0.057	-0.02
Secure orders or generate sales	0.658	0.062	0.483
Customers access	0.646	0.049	0.117
Attend because the competition does	-0.119	0.463	0.462
Exchange experiences	0.117	0.53	-0.121
Sense for the market	0.026	0.719	0.024
Promote the company	0.471	0.267	-0.409