Intention to re-exhibit -- when does it translate to actual trade fair attendance?

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ABSTRACT

The purpose of this study is to enhance the knowledge base about rebuying decision processes in B2B-service industries. The professional organization and realization of trade shows and exhibitions is an important service industry globally with over 31,000 exhibitions taking place annually (UFI, 2014). Business with exhibitions is flourishing for a long time not only for exhibitors but also for exhibition organizers. Although research on how to attract exhibitors has been conducted earlier, literature on how to lead exhibitors to re-exhibit and become loyal customers is scarce. It only focuses on the process chain exhibitor satisfaction as an antecedent to the intention to rebuy and not on actual behavior. In order to close this gap and to substantially advance the knowledge we performed a large-scale survey of 313 (out of a total of 642) companies exhibiting at a major public trade fair, conducted annually in Switzerland. This study fills the gaps in four ways: (1) we conceptualize the exhibitor’s trade fair satisfaction in a way that reflects its multifaceted, multidimensional nature, (2) we show that focus on exhibitor’s trade fair satisfaction is the key antecedent and examine its effect on the exhibitor’s decision to re-exhibit at the same trade show again, (3) we prove that the exhibitors’ expressed intention to rebuy neither useful as a proxy for surmised nor as a mediator for observed behavior, and (4) we show that the relationship between exhibitor satisfaction and the re-exhibiting decision might be contingent on several factors involved in the organizational decision process. These factors, such as the company’s strategic orientation, the street distance between a company’s head office and the trade show location, and information orientation vs. sales orientation at the trade show moderate a company’s decision whether to re-exhibit or not. Finally we derive managerial implications for exhibition organizers. They are the hierarchical heads in a network industry. The results presented in this study may apply to other network industries, such as hospitality and tourism, where customer’s behavior to re-buy services is an important managerial issue as well.

Keywords: service industry, trade fair, sales, exhibition, re-exhibition, exhibitor satisfaction, intention, behavior

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1. Introduction

Trade shows are big business. In Europe over 600,000 companies were exhibiting at trade shows in 2013 and over 60.5 million visitors have attended exhibitions (UFI 2013).\(^1\)\(^2\)\(^3\) For the United States statistics reveal that trade shows attracted over 60 million attendees and 1.5 million exhibitors, generating estimated revenue of nearly $11.2 billion (Gopalakrishna & Lilien, 2012). Global Exhibition Industry Statistics (2014) reports approximately 31,000 exhibitions are held worldwide per year with 4.4 million companies exhibiting. Companies exhibiting at trade shows benefit from additional selling opportunities, building up relationships with customers, handle customers’ complaints and gaining information about competition and competitors’ products (Hutt & Speh, 2010). Around 50% of all visitors are planning to buy products or services exhibited at the trade show within the next twelve months and 82% have some buying power (http://www.exhibitsurveys.com/trends). In addition trade shows make up a remarkable part of companies’ communication budget. For example Kirchgeorg, Springer, and Brühe (2009) report that 19.8% of companies’ communication budget was invested for trade shows on average. Reinhold, Reinhold, and Schmitz (2010) even show that every fourth company spends more than the half of their budget for exhibitions. According to the Economic Outlook 2014, 28% of all companies are going to increase their budgeted for trade shows in the next year. (http://www.exhibitoronline.com).

Despite the economic importance of trade shows, extant research has overly neglected to answer key questions. Some prior research has dealt with the attendee perspective seeking to understand better aspects that satisfy, enrich or create a fun experience for attendees in order to increase the likelihood of ensuring a repeat visit and attaining show attendance in the future (Gopalakrishna & Lilien, 2012; Godar & O’Connor, 2001; Bello & Lohtia, 1993). Other research has attempted to clarify exhibitors’ show selection and budgeting decision procedures (CEIR 1993; 1995; Stevens, 2005; Jin, Weber & Bauer, 2012). However, “research from the trade show management perspective is almost non-existent” (Gopalakrishna & Lilien, 2012, p. 239). Little is known about the relevance of an exhibitor company’s experience with a trade fair on the decision to re-exhibit next year with the exception of the paper of Kang & Schrier (Kang & Schrier, 2011). That study focuses on the claimed intention to re-exhibit and not on the actual behavior, as we do. In a business-to-business context, major parts of trade show exhibitors are exhibiting multiple years and the trade fair accounts for major parts of companies’ communication budget (Reinhold, Reinhold, and Schmitz, 2010). Therefore knowing more about factors translating exhibitors’ trade show satisfaction to their decision to re-exhibit in subsequent years is of key interest.

This paper contributes to fill the gaps of existing research in three important ways: First, we are the first to conceptualize the exhibitor’s trade fair satisfaction in a way that reflects its multifaceted, multidimensional nature. Second, we focus on exhibitor’s trade fair satisfaction as

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1 UFI is the association of the world’s leading tradeshow organizers and fairground owners, as well as the major national and international exhibition associations, and selected partners of the exhibition industry. With over 650 member organizations in 83 countries, UFI’s global reach provides unique value to its members through promotion, information and networking.

2 The data for 2013 contains the certified statistics of 2,181 exhibitions from 22 European countries.

3 According to UFI the report represents around 50% of the European market.
key antecedent and examine its effect on the exhibitor’s decision to re-exhibit at the same trade show again. Third, the relationship between exhibitor satisfaction and the re-exhibiting decision might be contingent on several factors involved in the organizational decision process. We are the first to posit and find that there are several boundary conditions that shape the way, in which exhibitor trade fair satisfaction affects the decision to re-exhibit.

Our results underline that exhibitors’ satisfaction with the trade show is the key determining factor for re-exhibiting at the same trade show. More interestingly, our research shows that this relationship is contingent on boundary conditions of the exhibiting company and the trade show itself. Our findings show how (1) the strategic orientation of the vendor, (2) the geographical distance, and (3) the information orientation at the show influence the way in which trade fair satisfaction drives actual exhibiting behavior.

Our research provides both the theoretical framework and empirical support for these findings. We use a matched data set from three data sources, involving a large-scale survey among 642 exhibiting companies at a large trade fair, objective data from data records of the trade fair management and objective company data from public sources.

We proceed as follows: We first give an overview over the existing literature and relevant theories and we develop our hypotheses. Then we detail our data collection and measures. Finally we present our results and discuss our main findings and managerial and theoretical implications along with our limitations and suggestions for future research.

2. Conceptual Framework and hypotheses development

Much research in the fields of marketing and organizational behavior has been devoted to explaining how satisfaction can influence individual and organizational behavior. We focus on exhibitor trade fair satisfaction as key antecedent to a company’s decision to re-exhibit at the same fair. Figure 1 depicts our model of the link between exhibitor’s trade fair satisfaction and the actual re-exhibiting behavior as observed at the next trade show. We assume that the effect of exhibitor satisfaction is moderated by several boundary conditions, consistent with “theory of the reasoned action action approach” of Fishbein and Ajzen (Fishbein & Ajzen, 2010). Their theory suggests “that intention is the best single predictor of behavior but that it is also important to take skills and abilities as well as environment factors (i.e., behavioral control) into account” (ibid. p. 21). In our study we hypothesize that there are several boundary condition that moderate the path from intention to behavior.

In Figure 1 we show the structure of our framework and hypotheses; we develop the theoretical rationale in the following subsections.

Place Figure 1 near here

Past research has shown strong positive associations between customer satisfaction, the intention to rebuy and store loyalty, i.e. to a straight rebuy at the same POS (Sivadas & Baker-Prewitt, 2000). Since exhibiting at trade fairs requires a high proportion of the exhibitors’ marketing budget, trade show satisfaction is the most important antecedent for customer loyalty. Trade shows are temporary market places where supply represented by the exhibitors meets demand by
the customers (the visitors) in certain industries. Both exhibitors and visitors have to pay a price to the organizers of the trade show for the services rendered. Due to the accrued expenses or the visitors and the exhibitors for participating, both parties will only then be satisfied with the outcome of the trade show, if their expectations, in terms of business transactions, meeting with old and new customers, dissemination of information, brand presence etc., are met with their expectations. Corollary: the multi-faceted construct “satisfaction” enhances or diminishes the chances for a positive decision to re-buy this service again next time when the market place is being set up (cf. Smith et al., 2003). Hence we derive the first hypothesis:

**H1:** An exhibitor’s trade fair satisfaction is positively related to the decision to re-exhibit at the particular trade show.

The choice of moderators that are provided in our model in Figure 1 is carefully reflected. The moderators should in our opinion represent at least four broad categories: strategic orientation (1), exhibition factor (2), and information orientation (3). First, “Strategic orientation” includes a company’s importance for trade fair attendance of leading companies and markets, industry overview and quality of other exhibitors in order to participate at the trade show. Second, for the “exhibition factor” component we have chosen the geographical distance as our major variable. We considered distance between a company’s head office and the location of the exhibition to be a major moderating effect in a company’s decision whether to participate at a trade show or not. Third, we argue for the choice of the “information orientation” component that there are at least two types of exhibitors at such a show. One type can and wants to sell his products and services at the venue directly to the visitors like food and beverage or small household items, the other may only be able to pave the way for after-trade-show business, e.g. in the case of long-lasting consumer goods or individual services, by passing information to the visitors at the booth, improving his image in the market place by participating, and keep himself abreast about the offerings of the competition by information collection. These benefit arguments are often heard from show organizers to motivate companies to participate nonetheless at the exhibition. This last factor incorporates both strategic and operational aspects.

The precise definition and interpretation of the moderating factors resulted from intense discussions with trade show experts. The latter consisted of a group of about ten people with either many years of experience in the management of different trade shows at various places in Germany and Switzerland or as long-term exhibitors at trade shows from various industries and company sizes. From 2005 to 2014 the Institute of Marketing at the University of St.Gallen maintained an intensive co-operation with the Association of Swiss Fairs and with the Swiss Expo-Event Live Communication Association. This facilitated tremendously the access to the trade fair organizers and their customers as experts, as well as the data collection at various show locations.

The decision to re-exhibit is moderated by several factors which are to be discussed in detail. Due to the large number of shows held over the year in highly industrialized countries, there is a large choice of trade shows available to select from. They are held at different times, in different locations, in different countries, with different number of visitors etc. In many branches one finds often globally leading trade shows (e.g. “BaselWorld” for luxury jewelry and watches,
“Salon international de l'auto de Genève” for cars, “Hannover Messe” for industrial goods, “SEMICON” for microelectronics manufacturing, held in the US, Europe and Asia. Participating at these shows is not a free choice but a must for the key players in the industries involved. We define “strategic orientation” as a measure of the strategic importance of the particular trade show for the exhibitor compared to competing offerings of other trade show organizers. The strategic importance of a specific trade fair as reflected in the orientation of the exhibitor should reinforce the effect of trade show satisfaction. Upon the moment of the decision to re-buy, trade show satisfaction is positively influenced if the show is deemed strategically important. Hence, we posit: 

**H2:** The main effect from trade show satisfaction on the decision to re-exhibit is positively moderated for exhibitors with a strong strategic orientation and weaker for those with lower levels of strategic orientation.

Exhibiting at trade shows is a huge investment of which a major share of costs is spent on personnel, travel and accommodation, visitor hosting and advertising at the trade fair location (Neven & Kanitz, 2011). Since exhibiting at far away locations drastically increases travel and logistic cost (e.g. transportation and mounting / dismounting the stand), we assume that due to budgetary constraints the influence of trade show satisfaction on the exhibitors’ preference to participate again in the same trade-show decreases with increasing spatial distance to the venue location. Thus we hypothesize that the main effect is negatively moderated by the geographical distance between the company and the trade fair location: 

**H3:** The main effect from trade show satisfaction on the decision to re-exhibit is negatively moderated by physical distance.

Depending upon the types of products and services offered an exhibitor can place the goals of his participation either on sales and/or information distribution and collection or exclusively only on image and information goals, if the show is an inappropriate direct sales channel. We deem the opportunity for information passing and collecting an important strategic goal. From this we derive our fifth hypothesis. 

**H4:** The main effect from trade show satisfaction on the decision to re-exhibit is positively moderated by the information orientation of the company.

### 3. Methodology

#### 3.1 Data Collection and Sample

To test the proposed relationships, we performed a large-scale survey of companies exhibiting at a major public trade fair, conducted annually in Switzerland. We surveyed key informants of the companies involved in trade fair decisions such as directors and marketing managers. In a first step, we collected names and contact persons of all exhibiting companies at the trade fair. Second, ten days after the exhibition we invited all 642 exhibitors to participate in our online survey. We received 323 responses, for a response rate of over 50%. Because of incompleteness and inconsistent response behavior we dropped 10 responses resulting in 313
usable data records. Participants evaluated how far they were satisfied with several aspects related to the trade fair and their attitude about specific service items at the venue. More than 90 psychographic and physical items were recorded for every participant. Most of the psychographic items were prompted twice: first for its importance and second for its performance at the show. Third, one year after the trade fair (t1), we collected data whether or not the participants were exhibiting again at the annual trade fair. This particular public trade fair attracts close to 400,000 visitors every year.

Over nine consecutive years the one-year re-exhibition rate of all exhibitors was rather stable at 72% (+/- 2 percent). Our sample drawn displayed a re-exhibition rate of 69 percent, which proves that our sample was only slightly biased. The same relative stability in terms of re-exhibition behavior was observed at different trade show of the same type and similar size held annually at a different location in Switzerland.

The final data set consisted of 313 records with exhibitors from 26 different industrial sectors, with booth sizes ranging from 6 to 600 sqm on a total of 40,000 sqm of exhibition floor space. To receive a validation data set, we collected data of companies exhibiting in another public trade fair. We used the identical questionnaire for both trade fairs and received 180 usable records.

The sample sizes collected seem to be at a comfortable level. The model in Fig. 1 has a dichotomous dependent group variable and the ratio of group size vs. number of parameters is critical. Hosmer, Lemeshow & Sturdivant (Hosmer et. al. 2013, p. 401 ff.) postulate that there is a minimum sample size of about 10 required per parameter in reference to the smaller number of events in logistic regression. The smaller group in our sample consists of the 97 companies that were non-re-exhibiting. Therefore not more than (97/10) ~10 parameters should be fitted. The model in Figure 1 exceeds this number and care must be taken to avoid overfitting. The latter manifests itself in unstable results against small parameter changes in the regression analysis. Special care was taken (1) by various forms of bootstrapping and (2) the use different optimization algorithms including bayesian-methods and cross-validation, in order to provide trustworthy confidence intervals for the parameters presented.

3.2 Measures

A list of 31 service items was adapted from Shipley, Egan, and Kway (1993) and from an exhibitor survey questionnaire of the MCH-Group in Basel (Jecker, Andres, Enz, Marbet, and Schober, 2004). The latter includes fifteen key factors for the decision to attend a fair. These factors cover four categories: event values (the fair as such), management values, service values, and location values. Furthermore, an outcome-based sale dimension and four performance-based dimensions to measure trade show performance adapted from Hansen (2004) were included. These dimensions cover sales-related, information-gathering, image-building, relationship-building and motivation activities. This information was the basis of a final questionnaire that was complemented with new scales according to the four-step procedure suggested by Churchill (1979). Overall, the items in our model were rated in terms of service items’ importance and performance on a six-point Likert-scale. We assumed that exhibitor satisfaction directly relates to the performance of several service items and the importance of several service items are the moderators of exhibitor satisfaction leading to re-exhibition. Physical variables combined with satisfaction also act as moderators of the main relationship. As mentioned we first specified the concept and content of the construct through a review of relevant literature. Second, we operationalized the construct and developed an initial pool of items using exploratory research
with 10 trade show managers from 4 different trade show locations in Germany and Switzerland. After feedback from academic researchers and from trade show experts, we refined the wording, adapted the scales and tested the questionnaire in several localized versions at 12 different trade shows.

3.3 Measure Assessment
To assess measurement reliability and validity, we ran a confirmatory factor analysis that included all multi-item scales in Mplus 7.2 (Muthén & Muthén, 2014). With one exception, all scale reliabilities exceeded the .70 threshold (Nunnally, 1978), and the average variance extracted (AVE) was equal or greater than .50. Overall, the results indicated the strong reliability and convergent validity of our measures. Moreover, we assessed discriminant validity using Fornell and Larcker’s (1981) criterion, which requires the AVE to exceed the squared correlations between all pairs of constructs. All measures for which an AVE was available fulfilled this requirement (see Table 1), in support of discriminant validity. The descriptive statistics, Cronbach’s alpha, AVE, and intercorrelations are in Table 1.

We evaluated the retest and external validity of the newly developed second order exhibitor satisfaction scale, using a second data set from a trade show of the same type held at a different time of the year at the same location (Sample 2). The exhibitor trade fair satisfaction scale indicated strong psychometric quality (reliability, convergent and discriminant validity). The confirmatory factor analysis also showed a good fit of the measurement model to the retest data, and each indicator loaded significantly (p < .01) on the appropriate factor.

4. Results
In order to estimate the results, we employed logistic regression models. Because the reported linear coefficients \( \beta \), the so called “log odds” -- in contrast to linear regression analysis -- have no direct useful interpretation, we converted them to probabilities \( p(\beta) = \exp(\beta) / (1 + \exp(\beta)) \).

4.1 Test of the Proposed Main Effects Model
Test of the Proposed Main Effects Model: We employed structural equation modeling (SEM) to test the hypothesized main effect of exhibitor trade fair satisfaction in Mplus 7.2 (Muthén and Muthén, 2014). In a first step, we specified a model to estimate the main effect but not the interaction effects including the newly developed psychographic second order variable exhibitor satisfaction, the objective binary dependent variable “re-exhibit decision” and we controlled for direct effects of all moderator variables. This model fit the data satisfactorily (\( \chi^2/df = 1.60 \); confirmatory fit index [CFI] = .905, root mean square error of approximation [RMSEA] = .044, 90% confidence interval (.035; .052), and weighted root mean residual [SRMR] = .913). The SEM analysis supports our main effect as proposed in hypothesis H1. Exhibitor trade show satisfaction has a positive effect on the exhibitor’s decision to re-exhibit, in line with H1 (\( \beta = .567, p < 0.001 \); see table 2).

4.2 Tests of the Moderating Effects
To test the moderating effects of boundary conditions, we employed a binary logistical regression analysis using the software package STATA®13. We are dealing with a complex model with many parameters, involving first and second order-constructs, binary, ordinal and ratio scaled manifest variables. Combining the SEM with a regression analysis for the analysis of
moderating effects is a well-established approach (e.g., Schmitz and Ganesan 2014; Homburg, Müller, and Klarmann 2011; Morhart, Herzog, and Tomczak 2009; Yim, Chan, and Lam 2012). All predictor variables were mean-centered before creating the interaction terms, consistent with Aiken and West (1991). First, we entered the main effect of the predictor variable (Model 1). Second, we added all direct effects of the moderator variables involved, but not the interaction terms (Model 2), before inserting the two-way interactions (Model 3). The details appear in Table 3. In the final model 3 we dropped 10 outliers based upon Cook’s distance.

Consistent with H2, an exhibitor’s strategic orientation positively moderates the relationship between exhibitor trade show satisfaction and the decision to re-exhibit (unstandardized coeff. β = .54 p<.05). Figure 2 displays the average marginal effect of the strategic orientation on the probability to re-exhibit (delta change) together with the corresponding 95% CIs as a function of exhibitor satisfaction. The latter variable is mean-centred, the standard deviation is .62. This and the following diagram cover about +/- 2 std. deviations on the exhibitor satisfaction axis. The diagram proves that combining a high exhibitor satisfaction with a strong strategic orientation vs. this type of show increases the propensity to re-exhibit.

**Place Figure 2 near here**

Regarding our hypothesis H3, there is no moderating effect of geographical distance on the exhibitor satisfaction to re-exhibit relationship (unstandardized coeff. β = -.003 ns.). Summary: H3 is not supported by the data.

Finally, we find support for our hypothesis H4 positing that the information orientation of the exhibiting company positively moderates the relationship between exhibitor satisfaction and the decision to re-exhibit (unstandardized coeff. β =0.23). Figure 4 displays the average marginal effect of the information orientation on the probability to re-exhibit (delta change) together with the corresponding 95% CIs as a function of exhibitor satisfaction. If exhibitor satisfaction is low, then information orientation decreases the probability to re-exhibit in a stronger manner, than if satisfaction were high.

**Place Figure 3 near here**

### 4.2 Additional results

Our study has further shown that predicted group membership can be improved by about 9% (74.3%/69%) over the prediction by chance alone (75.1%/69%). A measure for the goodness of model fit is the area under the ROC curve (Hosmer et al. 2013, p. 173 ff.). We observe an ROC area of 0.75 (see figure 5 below). This is considered as an “acceptable discrimination” (ibid., p 177).

**Place Figure 4 near here**
Comments about the ROC-curve are found in the last section.

5. Conclusion, limitations and outlook

Organizing trade shows and exhibitions as a professional service is a challenging task. It embraces the coordination effort as a hierarchical head in a network industry in order to be commercially successful. Key players are first the exhibitors and second the visitors of the show. Long-term success can only be achieved if exhibitors’ and visitors’ objectives to attend are met and both parties are satisfied with the services provided by the organizer.

This study has identified a number of psychographic variables that drive exhibitors’ satisfaction and lead in the majority of cases to actual re-exhibition. Exhibitor satisfaction manifests itself as a second order latent variable. The general applicability of exactly the same number of items to other types of shows, e.g. a purely industrial trade show like the “Pitcon” or the “RSNA show” in the USA or the Hannover industrial fair in Germany, is unlikely and an open question for further research. Hansen (2004) gives a good example about what can be expected when moving such a questionnaire from one industrial trade show to another.

The main path of our model is in addition moderated by several single or multi-item variables that were recorded as psychographic or physical variables. The moderator exhibitors’ perception of the “strategic importance of the show” is a first order latent variable, the moderators “distance” to the venue location is a physical variable, and finally the moderator “exhibitors’ information orientation at the show” is again represented as a first-order latent variable. For the moderators “strategic importance” and “information orientation” a moderating effect was shown, whereas for “distance” it failed.

When investigating other variables that are valid candidates for moderation, e.g. company size or booth size, we realized that the sample size, more precisely the size of the smaller group in logistic regression, was the limiting factor for the total number of moderators that could be analyzed. We conclude that with logistic regression and under similar conditions the trade show sample size should be bigger by a factor of at least ten in order to accommodate more moderating variables. This limits the scope of further research to the world’s largest shows.

The ROC-curve shows that the discriminatory power of our model in Fig. 1 is good enough to use it as the base of a forecasting tool by explaining already about 75% of the effect. Due to the multifaceted, multidimensional nature of trade shows it is very likely that the ‘remaining’ 25% of the effect cannot explained by exhibitor satisfaction alone but by other factors such as the economic health of the company, the business cycle of the industry and sales strategy. The show organizers would certainly like to have a good forecasting tool in order to allocate their scarce sales resources on the valuable customers. This is an area where additional research is required to search for additional decisive variables outside of the scope of this study. It may also be conceivable that the model in Figure 1 already exhausts the potential of information about re-exhibiting decisions, which can be obtained with reasonable expenditures.

We furthermore showed that an intermediate, manifest variable “intention to re-exhibit” is not required in our decision chain model in order to explain the actual behavior. Our data show that the variable “intention” does not serve as a mediator either. In comparison, Kang & Schrier’s
model does not use the actual behavior as an output variable, only the intention to re-exhibit (Kang & Schrier, 2011). Their finding of “unexpected relationships that present negative relationships between variables” (ibid. p. 81) is confirmed with our data, if the variable “intention to re-exhibit” is used as dependent variable. We suppose that exhibitors may strongly overrate their propensity to re-exhibit shortly after the show, since they fear negative consequences, such as unsolicited phone calls from show organizer’s agents.

Neither the direct cause-effect relationship has, at least to our knowledge, been shown before in the literature about the management of trade shows and exhibitions. Nor have the effects of moderating variables in the psychographic and physical context upon the decision to re-exhibit been demonstrated.

These insights can be used as a managerial guideline for fair organizers first in the design of questionnaires about exhibitors' satisfaction. However, the questions in this study apply only for our type of B2C-show with private customers as visitors and a large variety of sectors presenting. For other typologies, e.g. a B2B-industrial-show with visitors from private and public companies, it must be adapted. Second, after data analysis, the individual propensity to re-exhibit is known and can be used to steer the scarce resources for next year’s customer acquisition. Third, the whole set of variables used in our model supply the readers with (1) excellent starting points to increase the attractiveness of their trade shows and (2) with plenty of issues to be discussed in trade show marketing communication.

With reference to the ROC-curve displayed in Fig. 4 the question arises whether the model presented in this study can be used in practice to correctly forecast re-exhibiting behavior or how is the area under the ROC-curve brought up from 75% to say 90%? From a pure statistical viewpoint the answer is clear: (1) go to a more complex model by including more variables, which are relevant for the decision to re-exhibit, and (2) massively increase sample size and fit more model parameters. From a practical standpoint the answer is obvious: For any given show the number of exhibitors, part of it being the sample size, cannot be increased at will. The answer to the question has become therefore a moot point.

Trade shows and exhibitions exist in large variety all over the world. Since they all belong to the network B2B-service industries, like hospitality and tourism, they are a good prototypical example to be studied. The avenue for further research therefore leads to the generalization of our findings by identifying and analyzing further important parameters of such industrial services.
REFERENCES


Appendix

Table 1
Means, Standard Deviations, and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Re-exhibition decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>--(^b)</td>
</tr>
<tr>
<td>2. Exhibitor trade show satisfaction</td>
<td>.24***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sales importance</td>
<td>.08</td>
<td>.35***</td>
<td></td>
<td></td>
<td>(,81(^a))</td>
</tr>
<tr>
<td>4. Show importance</td>
<td>-.02</td>
<td>.26***</td>
<td>.43***</td>
<td>.73(^a)</td>
<td></td>
</tr>
<tr>
<td>5. Distance to trade show</td>
<td>.09</td>
<td>-.06</td>
<td>-.13</td>
<td>-.02</td>
<td>--(^b)</td>
</tr>
</tbody>
</table>

Mean        | .71      | 4.51     | 3.84     | 4.76     | 90.9     |
SD           | .46      | .62      | 1.11     | .89      | 83.5     |
Average variance extracted | --\(^b\) | .49      | .46      | .49      | --\(^b\) |

\(^**\text{p} < .05\). \(^***\text{p} < .01\).

\(^a\)Multidimensional composite.
\(^b\)Manifest construct.

Notes: Correlations are shown below the diagonal. Cronbach’s internal consistency reliability coefficients appear on the diagonal.
Table 2
Results of the Structural Equations Model: Main Effect Model

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Coeff.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
</tr>
<tr>
<td>Exhibition trade show satisfaction</td>
<td>0.567***</td>
</tr>
<tr>
<td><strong>Direct effect (moderator variables)</strong></td>
<td></td>
</tr>
<tr>
<td>Strategic orientation</td>
<td>0.151 ns.</td>
</tr>
<tr>
<td>Distance to trade show</td>
<td>0.001 ns.</td>
</tr>
<tr>
<td>Information orientation</td>
<td>-0.373**</td>
</tr>
</tbody>
</table>

Notes: *** p<0.01, ** p<0.05, * p<0.1.

Notes: Model fit: Chi(sq.)/df = 1.60, CFI = .905, TLI = .892, RMSEA = .044, 90% CI = (.035; .052), and WRMSR = 0.913.

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4 The addition of several single item covariates did neither change the strength and significance of the main effect coefficient, nor did it lead to a noteworthy change in model fit.
### Table 3
Linear Logistic Regression Analysis

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Model 1 main effect only</th>
<th>Model 2 with direct effects</th>
<th>Model 3 with two-way interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibitor Satisfaction</td>
<td>0.93***</td>
<td>1.003***</td>
<td>1.230**</td>
</tr>
<tr>
<td>Strategic Importance</td>
<td>0.084</td>
<td>0.123</td>
<td></td>
</tr>
<tr>
<td>Information Importance</td>
<td>-0.258</td>
<td>-0.264</td>
<td></td>
</tr>
<tr>
<td>Street distance (km)</td>
<td>0.003*</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Exhibitor Satisfaction*Strategic Importance</td>
<td></td>
<td></td>
<td>0.537**</td>
</tr>
<tr>
<td>Exhibitor Satisfaction*Information Importance</td>
<td></td>
<td></td>
<td>0.233</td>
</tr>
<tr>
<td>Exhibitor Satisfaction* Street distance (km)</td>
<td></td>
<td></td>
<td>-0.003</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.21***</td>
<td>-3.55**</td>
<td>-4.66***</td>
</tr>
</tbody>
</table>

| Statistics                                      |                          |                             |                                   |
| Observations                                    | 303                      | 303                         | 303                               |
| Log-Likelihood                                  | -173.634                 | -170.795                    | -165.533                          |
| Likelihood ratio                                | 17.869(1)                | 23.546(4)                   | 32.820(7)                         |
| Prob > LR                                       | 0.000                    | 0.000                       | 0.000                             |
| BIC’                                            | -1372.566                | -1361.101                   | -1353.235                         |

Notes: *** p<0.01, ** p<0.05, * p<0.1
# Measures

<table>
<thead>
<tr>
<th>Dimensions of satisfaction</th>
<th>First order (sample 1)</th>
<th>Second order (sample 1)</th>
<th>First order (sample 2)</th>
<th>Second order (sample 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales related satisfaction (SAL_PER1)</strong></td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
</tr>
<tr>
<td>To what extent did you achieve the following objectives by participating at the trade show?</td>
<td>.49 .59 .72 .89 .49 .58 .63</td>
<td>.60 .73 .80 .80 .47 .56 .68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sales at the show</td>
<td>.72</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sales initiations at the show</td>
<td>.83</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>convincing customers of value propositions</td>
<td>.51</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Market related satisfaction (SAL_PER2)</strong></td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
</tr>
<tr>
<td>To what extent did you achieve the following objectives by participating at the trade show?</td>
<td>.65 .78 .85 .65</td>
<td>.71 .84 .87 .73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>market tests of new products at the show</td>
<td>.71</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>information about prices, products and sales strategies of competitors</td>
<td>.84</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>search for information about competitors, suppliers and customers</td>
<td>.87</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service related satisfaction (SEI_PER)</strong></td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
<td>FL AVE CR CA</td>
</tr>
<tr>
<td>How well were you served at the trade show regarding the following aspects?</td>
<td>.55 .83 .89 .50</td>
<td>.57 .84 .90 .49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>friendliness of the personnel</td>
<td>.69</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>personnel’s understanding of the exhibitors’ industry</td>
<td>.70</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional advice about sourcing services for the show</td>
<td>.74</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>scope of information about the trade show and its services</td>
<td>.84</td>
<td>.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>scope of services available for the participation at the show</td>
<td>.86</td>
<td>.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>quality and handling of the services ordered</td>
<td>.75</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>scope and quality of the infrastructure available at the show</td>
<td>.57</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: All loadings are significant at $p < .01$.

Fit indices (sample 1): $\chi^2$/d.f. = 1.97, CFI = .96, RMSEA = .056, SRMR = .045.

Fit indices (sample 2): $\chi^2$/d.f. = 2.96, CFI = .911, RMSEA = .104, SRMR = .066.

FL = factor loading; AVE = average variance extracted; CR = composite reliability; CA = Cronbach’s alpha; df = degrees of freedom, RMSEA = root mean square error of approximation; CFI = comparative fit index; SRMR = standardized root mean residual

Notes:

1. Scale from "unfulfilled" (1) to "completely fulfilled" (6).
Re-exhibition decision
This was measured by the actual trade show attendance:
  0 = company did not re-exhibit one year after trade show
  1 = company re-exhibited one year after trade show

Exhibitor trade show satisfaction
Measured by:
  Sales related satisfaction (SAL_PER1)
  Market related satisfaction (SAL_PER2)
  Service related satisfaction (SEI_PER)

Strategic Importance
Measured by:
  How important is for you the goal of testing new products at the trade show?
  How important is for you the goal of gathering information about competitor’s products, prices and strategies at the trade show?
  How important is for you the goal of searching for information about competitors, suppliers and customers at the trade show?
  How important is for you the goal of teaching and developing the skills of the sales team at the trade show?
  How important is for you the goal of increasing the motivation of the sales team at the trade show?

Information Importance
Measured by:
  How important is for you the attendance of leading companies and brands at the trade show?
  How important is for you the industry overview at the trade show?
  How important is for you the quality of other exhibitors exhibiting at the trade show?

Distance to trade show
This was measured by the street to street distance of the exhibiting company and the trade show in kilometers.
Notes:
(1): Scale from "totally dis-satisfied" (1) to "very satisfied" (6)
(2): Scale from "totally unimportant" (1) to "very important" (6)
(3): For the first order latent moderating variables “Strategic Importance” and “Information Importance” the same SEM-calculations were done as for the second order latent variable “Exhibitor Satisfaction” reported above. This information is not displayed here. Details are available upon contacting the authors.
Figure 1: Conceptual Framework

- Sales related satisfaction
- Market related satisfaction
- Service related satisfaction
- Exhibitor trade show satisfaction $t_0$
- Strategic orientation
- Geographic distance
- Information orientation
- Re-exhibition decision $t_1$

Hypotheses:
- $H_2$ (+)
- $H_3$ (-)
- $H_4$ (+)
- $H_1$ (+)
Figure 2: Moderating effect of strategic orientation on the probability to re-exhibit as a function of main effect exhibitor satisfaction (un-centered mean = 0.45, sd. = 0.62; exhibitor satisfaction is displayed between about 3.5 and 5.5 on the 6-point likert scale). The error bars indicate the 95% CI limits of the moderating effect of strategic orientation.
Figure 3: Average Marginal Effects of Information Orientation

Figure 3: Moderating effect of the information orientation on the probability to re-exhibit as a function of the main effect exhibitor satisfaction (un-centered mean = 0.45, sd. = 0.62; exhibitor satisfaction is displayed between about 3.5 and 5.5 on the 6-point likert scale). The error bars indicate the 95% CI limits of the moderating effect of the information orientation.
Figure 4: ROC-Curve for Model in Figure 1

The area under ROC curve gives the percentage of correct predicted re-exhibition decisions (74.8%) by the model.