

Exploring Customers' Zone of Tolerance for Professional B2B Services Firms

INTRODUCTION

Service quality and customer expectations are important topics in service marketing discipline because a comprehensive understanding of these constructs may enable services firms to satisfy their customers and improve their business performance. In this context, Zone of Tolerance (ZOT) framework introduced by Zeithaml et al. (1993) has been widely utilized to explore customer expectations across various service industries. However, prior research on ZOT mostly focuses on B2C services with little attention to professional services especially in the B2B context; hence it is not clear if the antecedents for customer expectations may be similar or different in both of these contexts (B2C vs. B2B).

We address this important research gap by introducing a modified ZOT model for B2B professional services with five new antecedents (professional firm size, fee premium, service tenure, client firm size and participation level in service co-creation) and their influence on the desired service level (DSL) and adequate service level (ASL). We also explore the dimensions of service quality for professional B2B services as well as the interaction between dyadic firm sizes, to add to existing research in this area.

CONCEPTUAL FRAMEWORK AND HYPOTHESIS

Impact of Professional Audit Firm Size on DSL

Prior research shows that the size of professional audit firms has a positive effect on their ranking, reputation and customer expectations of service quality (Balvers et al., 1988). We argue that audit firm size would only affect customers' highest level of expectations (i.e., DSL) rather than their minimum acceptable level (i.e., ASL) because client firms are able to judge and evaluate the minimum acceptable ASL irrespective of the size of audit firm. In contrast, they may not know exactly what they "should" look for as the best service quality and hence rely on the service firm size as a surrogate or indicator of highest level of service quality. Hence,

H1: Service firm size positively influences the DSL

Impact of Fee Premium on DSL

Price is an implicit service promise that acts as an indicator of service quality (Zeithaml et al. 1993). For professional audit firms, charging higher fees for providing their services is regarded as a 'fee premium' (Palmrose 1986, Simon, 1988). We argue that fee premiums would only affect the shaping of client firms' expectations of desired service level because the fee premium is a surrogate for excellence in premier, top and advanced high-end services rather than the regular services such as technical services and client service. Moreover, fee premium would not impact client firms' expectations of adequate service level (ASL) as the minimum acceptable service is the basic service standard and is not associated with whether or not the professional audit firm can provide excellent and premier high-end services. Therefore, the following hypothesis:

H2: Service firm fee premium positively influences the DSL

Impact of Service Tenure on DSL and ASL

Customers' past experience with a service firm shapes their expectations (Scott and Yalch 1980; Smith and Swinyard 1983) and it is an antecedent of both desired and adequate service levels (Zeithaml et al. 1993). In other words, the more a client firm interacts with a professional audit firm, the more they will understand their capabilities and form their expectations accordingly. Therefore, we hypothesize:

H3a: Service tenure of the services firm positively influences the DSL.

H3b: Service tenure of the services firm positively influences the ASL.

Impact of Client Firm Size on DSL

Customers of professional B2B services vary in their firm size and this differentiates them from the individual customers examined in most services marketing literature. Professional audit firms are more eager to be appointed by large client firms, and large client firms also create greater economic fee dependence to professional audit firms (Reynolds and Francis, 2000). We argue that larger client firms would have higher expectations of desired service level because their requirements are generally more complex and diverse compared to small client firms. On the other hand, minimum acceptable service levels are determined by the statutory requirements, hence client firm size may have no impact on ASL. This leads to the following hypothesis:

H4: Client firm size positively influences the DSL

Impact of Participation Level in Service Co-creation on ASL

For professional audit firm services, substantial involvement and participation from client firms are required during the course of service provision, referred to as service co-creation (Booms and Nyquist, 1981). As the co-operation and participation of client firms are crucial and essential in the course of providing services by the professional audit firms, client firms would believe that by more proactive participation in the course of providing professional services, the level of service quality should be correspondingly higher. However, the participation of client firms may only affect the efficiency and effectiveness of professional audit firms in carrying out their services; whereas the critical part of the professional audit firm service requires expert knowledge and extensive experience in performing the assessment, examination and professional judgment, for which the involvement from the client firm may not be very relevant. Hence,

H5: Participation level of the client firm positively influences the ASL

Moderating role of Professional Firm Size and Client Firm Size

From a dyadic firm size perspective, the influence of client and service firm sizes may interact with each other, such that the size of client firm may act as a catalyst accelerating the positive influence of professional firm size on DSL, leading to an even higher DSL for larger professional firms compared to that for smaller professional firms. We expect this positive influence to be stronger for larger client firm because customer expectation on service quality may be escalated by the combined impact of dyadic firm sizes (client and professional firm sizes), thus accelerating their impact on DSL. Similarly, the positive influence of client firm size on DSL will be stronger when the professional firm size is large. Larger client

firm will have higher DSL, and this positive influence will be greater for customers having larger professional firms as their service providers. Hence, we hypothesize as follows:

H6a: The positive influence of service firm size on DSL is stronger for larger client firm size compared to smaller client firm size.

H6b: The positive influence of client firm size on DSL is stronger for larger service firm size compared to smaller service firm size.

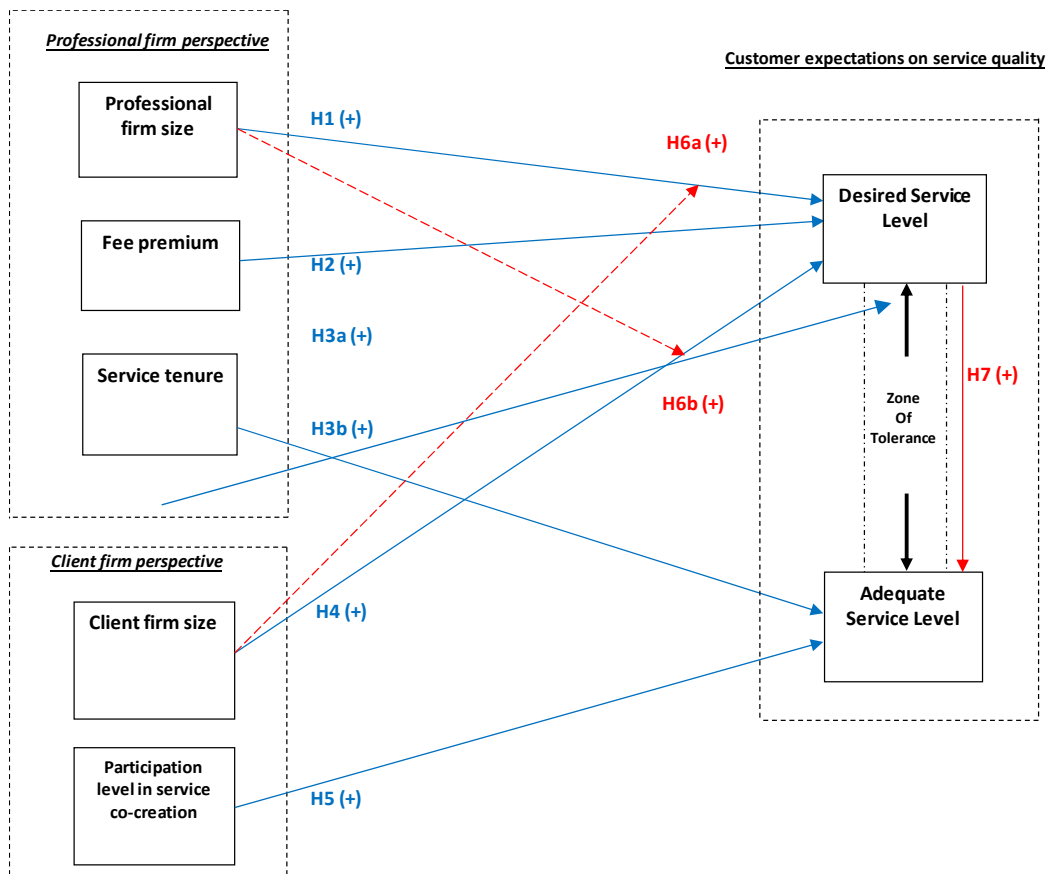
Impact of DSL on ASL

Zeithaml et al. (1993) suggest that DSL is relatively stable and idiosyncratic as compared with ASL. We argue that B2B professional services require special knowledge, expertise and professional judgment; hence an increase in the client firms' highest level of expectations (DSL) may also raise their lowest level of expectations (ASL). Specifically, when increasing the DSL on specific services provided by a professional firm, customers believe that the professional firm has the ability to provide better service and hence they will not be willing to settle for a lower level of adequate service level as well. Therefore, we hypothesize as below:

H7: DSL positively influences the ASL

Figure 1 shows the modified ZOT framework with all the above hypotheses.

Figure 1 – Modified ZOT Framework for B2B Professional Services



METHODOLOGY

We used professional audit firms (CPA firms) as the context for this study because it allows us to test all our hypotheses. We first conducted focus group interviews to validate the applicability of the measures for each construct identified from literature and to improve them where appropriate. We used a self-report questionnaire, including the 53 items AUDITQUAL scale (Duff, 2004) to measure DSL and ASL as the dependent variables with a 7-point Likert scales (1=strongly disagree to 7=strongly agree). For independent variables, we used existing scales for service tenure (Cameran et al. 2010), professional firms size (Balvers et al. 1988) and participation level in service co-creation (Licata et al. 2008), and adopted the measures for client firm size and fee premium from the focus group interviews. Next, we used an online survey for our main study, inviting business contacts and their referrals as participants to collect 395 completed set of questionnaires for further analysis.

DATA ANALYSIS AND FINDINGS

We used the well-established two-step process with Structural Equation Modeling (SEM). First, the measurement model showed a good fit (Chi-square/df = 2.55, CFI = .97, GFI = .96 and RMSEA = .036). All the scales also showed high reliability and construct validity with large parameter estimates and t-values (> 1.0). Average variance extracted by each factor is higher than .40 and exceeds the squared correlations with other factors, showing convergent and discriminant validity (Fornell and Larcker, 1981).

Next, we used a structural model to test all the hypotheses. H1 is not supported as audit firm size has no significant influences on DSL ($\beta = -.08$, $p > .80$). Similarly for H2, fee premium has no significant effect on DSL ($\beta = -.05$, $p > .50$). However, both H3a and H3b are supported, as service tenure positively influences both DSL ($\beta = .32$, $p < .001$) and ASL ($\beta = .22$, $p < .001$). For H4, we did not find the predicted relationship that client firm size positively influences DSL ($\beta = .01$, $p > .60$). Similarly, for H5, participation level has no influence on ASL ($\beta = .08$, $p > .10$). H6a is supported as the predicted positive influence of audit firm size on DSL is stronger for large client firms ($\beta = .08$, $p < .05$) than small client firms ($\beta = .00$, $p > .50$). However, H6b is not supported as there is no significant difference in the effect of client firm size on DSL for large ($\beta = .01$, $p > .50$) and small audit firms ($\beta = -.02$, $p > .10$). Finally, H7 is supported as DSL has a strong positive influence on ASL ($\beta = .26$, $p < .001$).

DISCUSSION

This research extends Zeithaml et al.'s (1993) ZOT framework by studying the antecedent of customer expectations in the context of B2B professional services. First, we examine the influence of many new antecedents of DSL and ASL for B2B professional services - client firm size, professional firm size, fee premium, service tenure and participation level. Second, we evaluate the dimensionality of service quality in professional services sector by validating the AUDITQUAL scale. Finally, we highlight the distinctive characteristics of ZOT framework in the context of B2B professional services by showing the interaction between dyadic firm sizes. All these contributions help us develop and test a modified ZOT framework in the context of professional B2B services, which may be useful for future research in this area.

Our study also provides managerial implications to professional B2B services managers. First, by offering a modified ZOT model for B2B professional services, we help them understand the mechanism of customer expectations formation and dynamic changes on the professional firm service quality. Managers can use our model to predict customer expectations and plan effective strategies to manage these expectations in different dyadic firm size combinations (client and professional services firms) in order to improve their service quality, customer satisfaction and loyalty.

LIMITATIONS AND FUTURE RESEARCH

Our study has some limitations that future research may address. First, we focus on a single industry (professional audit firms), hence future research may include other B2B professional service industries such as business consulting, utilities, research and design etc. Second, we examine the role of dyadic firm sizes, fee premium, service tenure and participation level as the antecedents of customer expectations, however future research may include other factors that are more relevant in other contexts. Third, we study customer expectations in a cross-sectional manner but these may evolve over a period of time, hence future research may use a longitudinal design to study these changes. Finally, further study of customer expectations in B2B professional services should include the examination of the role of professionals, as people involve an important role in the provision of professional services.

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