**Qualifying Examination**

Research Proposal – Categorization theory

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Research of categories to date is disputed in the question, whether occupying multiple positions in a market space is beneficial or disadvantageous to organizational outcomes. On the one hand, Zuckerman found that stakeholder penalize organizations, which did not fit into single category scheme (Zuckerman, 1999). On the other hand, Hsu et al. suggests that multiple positions in the same category result in positive outcomes, as spanning categories may attract a broader audience from different categories (Hsu, Hannan, & Koçak, 2009). A third perspective derives from the status-identity framework of Jensen et al. (Jensen, Kim, & Kim, 2011). The authors propose that occupying multiple positions may not be penalized, when positions across different horizontal categories are with the same vertical status.

However, prior advances in the field did not perceive whether penalties and benefits of category spanning are contingent to the sequence of spanning multiple market positions that differ in vertical status, nor did they perceive a firm’s prestige or level of specialization. This lack in knowledge impede our understanding under what condition spanning multiple positions enhance or hinders organizational outcomes (Jensen et al., 2011) and whether positive or negative effects are limited to specific services and industries. The following work contributes to this lack of knowledge, by studying the sequence of category affiliation, contingencies on prestige as well as the firms scope of services. The paper examines, to what extent penalties and benefits that arise from category spanning are contingent to the three factors. This work complements to a distinct understanding of the conditions of consequences that derive from category-spanning and amends to Jensen et al. status-identity framework.

The pattern of perceptional discount for being associated with more than one market positions is typically explained by researchers with one of the following two arguments (Leung & Sharkey, 2014). On the one hand it is argued that discount arises from the audience-side (Hsu, Hannan, & Koçak, 2009) which describes the difficulties of market observers in making sense of category spanners (Zuckerman, 1999). Negro and Leung examined to what extent is the audience- side mechanism linked to category-spanning affects evaluation. They found that increasing category spanning of a certain producer will result in worse fit to this recognized industry-scheme. Therefore, its related products should be perceived as less appealing (Negro & Leung, 2013).

Yet, other scholars in the field claim that the penalty for category-spanning derives from the producer-side, namely the situation that the firms who do not focus their efforts narrowly, tend to offer products and services that are of lower quality (Hsu et al., 2009). Adding to this view, Jensen, Kim and Kim established the status-identity framework (Jensen et al., 2011). In their framework the authors distinguished the horizontal dimension, which divides a social system into different categories based on different properties and attributes. The vertical dimension in turn, divides a social system into different categories based on a shared ranking of the member of a particular horizontal category (Jensen et al., 2011). The authors claim that the status discount is evaded, when positions across different horizontal categories are with the same vertical status. They theorize that, within the same vertical status category the risk of status leakage between the different positions is unlikely as the shift of audience´s attention to new categories require minimum efforts (Jensen et al., 2011).

Deriving from that perspective, the present study examines to what extent penalties and benefits that arise from category spanning are contingent to the sequential order of spanning categories, a firm’s prestige, as well as the scope of services that are provided by the focal organizations.

**Sequence**  
First, this study claims that consequences of category spanning are contingent to the sequence of occupying multiple market positions. While Jensen et al. (Jensen et al., 2011) claimed that multiple positions may not be penalized, when positions across different horizontal categories are with the same vertical status, it is assumed that status positions commonly varies among categories. It is further theorized that occupying a lower-status position in a new category, given that the firm represents a high-status position in established categories is more beneficial than the reverse sequence. This rational is based on theoretical advances on legitimacy spill-over from higher-status to lower-status positions.Researchers found that social recognition of observers in one category, leads to receiving greater social recognition for other categories of that organization (Kuilman & Li, 2009).

In turn, moving to market position where lower-status firms can occupy a higher status position is assumed to be penalized by observers due to the reverse legitimacy spill-over. Similarly, Dong and Chintagunta studied cross-category effects on customer satisfaction in banking industry (Dong & Chintagunta, 2016). The authors found that in settings were banks provide their customer with investment- as well as banking services, dissatisfaction with the firm in the corporate banking category spills over to the investment category.

Hypothesis 1: *Spanning categories is more beneficial when occupying a lower status position, following the higher-status position.*

**Organizational prestige**

Next, the present work claims that penalties and benefits that arise from category spanning are contingent to the prestige of the focal firm. It is assumed that prestigious actors receive less penalties by market observers, compared to lower prestige firms. The reason for the beneficial position lies in the positive feedback cycle by which elite actors amplify their prestige based on observers response to earlier demonstrations of quality (Bothner, Podolny, & Smith, 2011). Earlier studies have described this behavior of observers with the Matthew effect – according to which low-ranked actors are unjustifiably victimized while their prestigious counterparts are benefited (Podolny & Phillips, 1996; Podolny, 1993; Waguespack & Sorenson, 2011).

Hypothesis 2: *Spanning categories is more beneficial for prestigious organizations than for lower prestige actors.*

**Scope of services**

Complementary to the above, earlier work theorizes that benefits and discounts related to spanning categories originates not exclusively from market observers, but also the organization itself (Hsu et al., 2009; Negro & Leung, 2013; Paolella & Durand, 2016; Roberts, Khaire, & Rider, 2011). Drawing on that view, the present study claims that the benefits and discounts deriving from category spanning is contingent to the type of organization and the related scope of services. While producers and specialized firms may experience constraints by operating in multiple categories, generalist firms commonly span their services across multiple categories as a crucial aspect of their business scheme. Offering a broad range of services at the same time, generalist firms can provide their customers with a comprehensive service scope and utilize their resources at best. On the contrary, specialist firms that are dedicated to a single area of profession are expected to face capacity and knowledge constraints by spanning multiple categories (Paolella & Durand, 2016). While earlier studies claim that spanning categories generally reduces competitiveness (Hsu et al., 2009) and increases determination (Negro & Leung, 2013) those studies relate their findings merely to small size firms and -producers, such as eBay sellers (Hsu et al., 2009) and wine-makers (Roberts et al., 2011).

Hypothesis 3: *Spanning categories is more beneficial for generalist firms than for specialist firms.*

**Empirical setting**The context for testing the Hypotheses are professional service firms, namely organizations in the United States of America, offering accounting- and consulting services. Professional service firms can be divided into firms that specialize on one specific discipline and generalist firms that provide a broad range of service. The present study determines to what extent the three earlier described mechanism affect benefits or penalties that derive from category spanning.   
Spanning categories, the extent to which firms operate in multiple market categories is set as the independent variable of the present study. Category spanning is measured based on the Standard Industrial Classification- (SIC) information for the years 2009 and 2018, computed with LexisNexis Corporate Affiliations database (Vieregger, Larson, & Anderson, 2017). Corporate Affiliations includes over 2 million company profiles in north America (LexisNexis, 2018), providing information on each firm´s revenue, management team as well as affiliated Standard Industrial Classification (SIC) categories. SIC codes consists of four numeric digits, and are structured in a hierarchical, top-down structure beginning with general characteristics and narrows down to the specifics. The first two digits of the code represent the major industry category. The third and fourth digits describe the sub-classification of the business category. Category spanning is operationalized with firms occupying new SIC categories, to the extent that the SIC codes differ in the first two digits.

The following table provides an excerpt of LexisNexis database for the professional service firm Pricewaterhousecoopers LLP, USA (LexisNexis, 2018). The table indicate that Pricewaterhouse-coopers LLP, USA (PwC) provides with a broad scope of services. The table further indicates that the firm extended their scope between the years 2009 and 2010, spanning categories which is indicated by the newly added SIC codes 7291 and 8999. Remaining categories do not fulfill earlier described conditions of category spanning.

|  |  |  |  |
| --- | --- | --- | --- |
| **2008 – 2009** | | **2010 - 2018** | |
| **SIC Code** | **Standard Industrial Classification Division** | **SIC Code** | **Standard Industrial Classification Division** |
| 7389 | Business Services | 7291 | Tax Return Preparation Services |
| 8742 | Management Consulting Services | 7361 | Employment Agencies |
| 8748 | Business Consulting Services | 7389 | Business Services |
| 8299 | Schools and educational services | 8721 | Accounting, Auditing & Bookkeeping Services |
|  |  | 8742 | Management Consulting Services |
|  |  | 8748 | Business Consulting Services |
|  |  | 8999 | General Services |

***Table 1:*** *SIC Codes related to Pricewaterhousecoopers LLP, USA*

*Source: LexisNexis Corporate Affiliations Database*

The dependent variable of this study, the status change among different categories is determined by each firm’s score from Vault’s annual firm rankings (Bidwell et al., 2015; Rider & Tan, 2015). The status increase or -discount is operationalized by related changes in Vault´s status score in year t+1, following category spanning in year t. Related to the above example of PwC, the changes of status scores are perceived in both Vault ranking for consulting- as well the ranking for accounting services. Since, 1998 Vault ranks accounting- and consulting firms in the United States. The separate rankings are established based on interviews with experts, industry news, prior rankings of firms, as well as surveys of thousands of associates working at related firms. The respondents of the survey rate how prestigious they believe working for each firm would be (Vault, 2018). However, respondents do not rate their own firms and are asked not to rate firms with which they are not familiar. Rankings are based on each firm’s average rating in the surveys (Rider & Tan, 2015; Tan & Rider, 2017).   
The first moderating variable measures the sequence, a focal firm is occupying more than one market position. The sequence is measured based on sub-sets of the above described independent- and dependent variables. The present study operationalizes the sequence of category spanning by referring to Vault Top 50 Consulting- as well as Top 50 Accounting- firm ranking and determines each rank of the organization in earlier categories, before spanning as well as the status in new categories after spanning. The sequence can either consists of a lower-status position, following a high-status position or a higher-status position, following a low-status rank. The sequence can also consist of two similar status-scores. However, this approach can only code for category spanning events across accounting and consulting categories. Events where generalist firms such as PwC spans from consulting- to server-hosting services cannot be perceived by this measure.

The second moderating variable denotes for the prestige of the focal firm prior to the category spanning event. Professional service firms use organizational prestige as an important differentiator towards their contenders (Cowen & Marcel, 2011; Von Nordenflycht, 2010). While survey results from Vault are commonly used to proxy status (Bidwell et al., 2015; Rider & Tan, 2015), this variable draws on its original measure of prestige. To operationalize the prestige of the focal organization, the present study divides the sampled firms into two groups. The first group includes firms with prestige scores above the 75th percentile of the distribution of prestige scores for a given year. The low-prestige group contains all firms with status scores below that cut point. Further, both groups are operationalized as a categoric variable, where “0” accounts for a firm with low or medium prestige scores and “1” for high-prestige firms ownership. For firms listed in multiple Vault rankings, the average score is calculated.   
The last moderating variable is the firms scope of services prior to category spanning. The scope is operationalized as a categoric variable, where “0” accounts for a specialized firm and “1” for a generalist firm. The related Information also derive from Lexis Nexis Corporate Affiliations database and are determined based on the SIC codes. Firms that are affiliated to SIC codes within same first two-digit code prior to category spanning are coded as specialized firms. In turn, firms that hold multiple diverse SIC codes are coded as generalist firms.

**Sample and Analysis**

The sample for the present study derives from Vault.com rankings for the years 2009 to 2017. The ranking for accounting- and consulting firms list annually the fifty most prestigious firms. For U.S. accounting- and consulting firms, Vault publishes a TOP50 ranking every year. As the merger and acquisition take place, firms are newly listed and other firms drop from the ranking, the overall sample contains 162 organizations, consisting of 74 accounting- and 88 consulting firms. All sample related SIC affiliations are drawn from Lexis Nexis Corporate Affiliations database. In the present example, PwC is affiliated with five-, in later years with seven categories. Those categories represent PwC´s main business units advisory, tax and audit (PwC, 2018). Based on this service scope, PwC is listed in both Vault rankings among the most prestigious accounting- and consulting firms.   
Preceding with the analysis, the present study tests the first hypothesis by determining the sequence of category-affiliation according to the earlier described procedure. In the earlier example of PwC, the study compares the firm´s 2009 rank in Vault-TOP50 consulting firms with the latter in the year 2010, as well as the position of PwC in 2010´s Vault TOP50 accounting survey, following the occupation of the new category. For the second hypothesis, this study perceives PwC´s prestige score in the 2009 Vault-TOP50 consulting survey, prior to the category-spanning event. Last, the scope-of-service is determined based on the information from Lexis Nexis Corporate Affiliations specialized firms. In the earlier example of PwC, the firm holds multiple diverse SIC codes and is therefore coded with “1”, a firm providing a broad scope of service. The analysis is completed for all firms of the sample. Finally, the moderating effect of the three constructs on the status change in the aftermath of category-spanning is measured.

**Discussion**

The present paper contributes to the ongoing discourse on category spanning by studying the contingencies of organizational outcomes for the sequence of spanning categories, organizational prestige as well as the firms scope of services. This approach adds to a distinct understanding of the conditions of consequences that derive from category-spanning and amends to Jensen et al. status-identity framework. While Jensen et al. theorized that occupying multiple positions with same vertical status may not be penalized, the present study sheds light to extended conditions where penalties that arise from category spanning are evaded. As large U.S. internet firms keep expending their scope to traditional offline markets, future research can contribute with additional fruitful insights on the question how organizations can bypass discounts from spanning categories.

**References**

Bidwell, M., Won, S., Barbulescu, R., & Mollick, E. (2015). I used to work at Goldman Sachs! How firms benefit from organizational status in the market for human capital: Status in the Market for Human Capital. *Strategic Management Journal*, *36*(8), 1164–1173.

Bothner, M. S., Podolny, J. M., & Smith, E. B. (2011). Organizing Contests for Status: The Matthew Effect vs. the Mark Effect. *Management Science*, *57*(3), 439–457.

Cowen, A. P., & Marcel, J. J. (2011). Damaged Goods: Board Decisions to Dismiss Reputationally Compromised Directors. *Academy of Management Journal*, *54*(3), 509–527.

Dong, X., & Chintagunta, P. K. (2016). Satisfaction Spillovers Across Categories. *Marketing Science*, *35*(2), 275–283.

Hsu, G., Hannan, M. T., & Koçak, Ö. (2009). Multiple Category Memberships in Markets: An Integrative Theory and Two Empirical Tests. *American Sociological Review*, *74*(1), 150–169.

Jensen, M., Kim, B. K., & Kim, H. (2011). The Importance of Status in Markets: A Market Identity Perspective. In *Status in Management and Organizations* (pp. 87–117). Cambridge University Press.

Kuilman, J. G., & Li, J. (2009). Grades of Membership and Legitimacy Spillovers: Foreign Banks in Shanghai, 1847–1935. *Academy of Management Journal*, *52*(2), 229–245.

Leung, M. D., & Sharkey, A. J. (2014). Out of Sight, Out of Mind? Evidence of Perceptual Factors in the Multiple-Category Discount. *Organization Science*, *25*(1), 171–184.

LexisNexis. (2018). *Corporate Affiliations - Online Business Database on the Companies that Drive Global Business*. Retrieved from http://www.corporateaffiliations.com/default/index

Negro, G., & Leung, M. D. (2013). “Actual” and Perceptual Effects of Category Spanning. *Organization Science*, *24*(3), 684–696.

Paolella, L., & Durand, R. (2016). Category Spanning, Evaluation, and Performance: Revised Theory and Test on the Corporate Law Market. *Academy of Management Journal*, *59*(1), 330–351.

Podolny, J. M., & Phillips, D. J. (1996). The Dynamics of Organizational Status. *Industrial and Corporate Change*, *5*(2), 453–471.

Podolny, J. M. (1993). A Status-Based Model of Market Competition. *American Journal of Sociology*, *98*(4), 829–872.

Pontikes, E. G. (2012). Two Sides of the Same Coin: How Ambiguous Classification Affects Multiple Audiences’ Evaluations. *Administrative Science Quarterly*, *57*(1), 81–118.

PwC. (2018). Our Services. Retrieved from https://www.pwc.com/services

Rider, C. I., & Tan, D. (2015). Labor Market Advantages of Organizational Status: A Study of Lateral Partner Hiring by Large U.S. Law Firms. *Organization Science*, *26*(2), 356–372.

Roberts, P. W., Khaire, M., & Rider, C. I. (2011). Isolating the Symbolic Implications of Employee Mobility: Price Increases after Hiring Winemakers from Prominent Wineries. *American Economic Review*, *101*(3), 147–151.

Tan, D., & Rider, C. I. (2017). Let them go? How losing employees to competitors can enhance firm status: How Losing Employees to Competitors Can Enhance Firm Status. *Strategic Management Journal*, *38*(9), 1848–1874.

Vault. (2018). *Annual Vault Accounting TOP 50*. Retrieved from http://www.vault.com/company-rankings/

Vieregger, C., Larson, E. C., & Anderson, P. C. (2017). Top Management Team Structure and Resource Reallocation Within the Multibusiness Firm. *Journal of Management*, *43*(8), 2497–2525.

Von Nordenflycht, A. (2010). What is a professtional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, *35*(1), 155–174.

Waguespack, D. M., & Sorenson, O. (2011). The Ratings Game: Asymmetry in Classification. *Organization Science*, *22*(3), 541–553.

Zuckerman, E. W. (1999). The Categorical Imperative: Securities Analysts and the Illegitimacy Discount. *American Journal of Sociology*, *104*(5), 1398–1438.