
The Measurement of Strategic Orientation and its Efficacy in Predicting Financial Performance

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Abstract

For decades, the strategic management literature has recognized strategic orientation as an important cultural attribute in the investigation of the link between organizational culture and firm performance. Using three studies, we develop a survey measure of strategic orientation that is unidimensional, reliable, and predictive of financial performance. Our final study uses a sample of 779 respondents from 20 companies and empirically demonstrates a positive relationship between strategic orientation and firm performance. Our results support the notion that managers should both encourage and support behaviors and execute actions that are consistent with our measure of strategic orientation to create a coherent strategic approach, resulting in improved financial performance.

Introduction

Over the past several decades, organizational researchers have yielded a description of organizational culture that is consistent across both macro- and micro-level domains (cf. Denison & Mishra, 1995; Lee & Yu, 2004; Schein, 1985; Siehl & Martin, 1988; Wallach, 1983). At times, likened to the firm's very identity, culture is a complex set of shared values, beliefs, philosophies, and symbols that define the way in which a firm conducts its business (Barney, 1986; Denison, 1984; Goll & Sambharya, 1995; Jones, Jimmieson, & Griffith, 2005; Michalisin, Kline, & Smith, 2000; Sorensen, 2002). Ultimately this shared set of values and beliefs is transmitted through behaviors and actions of employees within an organization (Wilkins & Ouchi, 1983; Schein, 1985), thus leading to different organizational outcomes (Lee & Yu, 2004). Despite the potential effects and significance of organizational culture, the link between corporate culture and firm-level performance is underdeveloped both theoretically and empirically (Reichers & Schneider, 1990; Sackman, 2010).

In the strategy literature, researchers have used multiple variables to study the culture-performance relationship, including strategic orientation. *Strategic orientation* has been defined as the inclination of a firm to focus on strategic direction and proper strategic fit to ensure superior firm performance (Barney, 1986; Gatignon & Xuereb, 1997; Pleshko & Nickerson 2008). It has also been conceptualized as a continuous and iterative process that must focus on the different effects of rational, economic, political, and subjective aspects of strategic change on competitive performance (Porter, 1980; Whipp, Rosenfeld, & Pettigrew, 1989; Zhou, Gao, & Zhou, 2005).

A firm's strategic orientation is important in the examination of its culture's impact on performance, as this cultural attribute (and cultural phenomena in general) indicates where its employees focus their time, energy, and resources in decision-making (Cahlik, Howard, & Godkin, 1999; Jones, Jimmieson, & Griffiths, 2005; Schein, 1983; Trevino, 1986). Thus, with regard to strategic orientation, employees share values and execute actions toward maintaining a coherent strategic approach given broad environmental factors; this cognitive and behavioral attention influences aspects of organizational performance.

Strategic Orientation Research

A review of the research attempting to operationalize strategic orientation can be seen in Table 1. These studies have identified almost 20 attributes to measure strategic orientation. While the Miles and Snow (1978) typology is the most common approach, it only makes up a small percentage of studies.

As mentioned above, strategic orientation has been defined as the inclination of a firm to focus upon strategic direction and proper strategic fit to ensure superior firm performance (Barney, 1986; Gatignon & Xuereb, 1997; Porter, 1985). Studies have conceptualized strategic orientation utilizing various approaches including classifying firms into typologies such as the Miles and Snow (1978) archetype (Pleshko & Nickerson, 2008) or identifying cultural attributes (Venkatraman, 1989). Much confusion exists regarding the conceptualization and operationalization of strategic orientation, let alone its impact upon organizational performance due to the wide variety of overlapping definitions and measures used. This is problematic given its prevalence in the strategy literature. One conceptual confound in particular, strategic aggressiveness (cf. Venkatraman, 1989), deserves special attention, as the extant literature has evidenced that it is often interchanged with strategic orientation.

Table 1
Comparison of Empirical Definitions of the Strategic Orientation (SO)
Construct in Culture-Performance Literature

Author	Dimensions of SO	Definitional Keywords
Venkatraman (1989)	6	Aggressiveness, analysis, defensiveness, futurity, proactiveness, riskiness
Conant, Mokwa, & Varadarajan (1990)	4	Miles & Snow (1978) Typology (prospectors, defenders, analyzers, reactors)
Veliyath & Shortell (1993)	4	Miles & Snow (1978) Typology (prospectors, defenders, analyzers, reactors)
Goll & Sambharya (1995)	3	Progressive decision making, social responsibility, organicity
Gatignon & Xuereb (1997)	5	Customer orientation, competitor orientation, inter-functional coordination, product orientation, technological orientation
Voss & Voss (2000)	3	Customer orientation, competitor orientation, product orientation
Morgan and Strong (2003)	6	Aggressiveness, analysis, defensiveness, futurity, riskiness
Aragon-Sanchez & Sanchez-Marin (2005)	4	Miles & Snow (1978) Typology (prospectors, defenders, analyzers, reactors)
O'Reagan & Ghobadian (2005)	2	Modified Miles & Snow (1978) Typology (prospectors vs. defenders)
Zhou, Yim, & Tse (2005)	5	Customer orientation, competitor orientation, inter-functional coordination, technological orientation, entrepreneurial orientation
Zhou, Gao, Yang, & Zhou (2005)	3	Intelligence generation, intelligence dissemination, responsiveness to intelligence
Laforet (2008)	2	Modified Miles & Snow (1978) Typology (prospectors vs. defenders)

Where *strategic orientation* is the inclination of a firm to focus upon strategic direction and proper strategic fit, *strategic aggressiveness* examines a firm's strategic posture relative to the deployment of resources to functional areas over time (Fombrun & Ginsberg, 1990; Romanelli, 1989). Conceptually, both strategic orientation and strategic aggressiveness are a means to the same end: superior firm performance. However, they are fundamentally and operationally different constructs, yet researchers use them interchangeably. Strategic orientation refers to shared perceptions that results in parallel behaviors. Strategic aggressiveness focuses on the act of resource allocation. Stated differently, strategic orientation is pri-

marily operationalized as a latent construct as seen in Table 1. In contrast, researchers operationalize strategic aggressiveness by measuring resource allocations such as expenditures in research and development and advertising intensity (cf. Feeser & Willard, 1985; Weinzimmer, 2000). Thus, we argue that they are distinct concepts and should be treated as such in construct and measurement development. Strategic aggressiveness may well be a mediator between strategic orientation and financial performance, but strategic orientation is the cultural variable on which we focus in this study.

Accordingly, Laforet (2008) called for a better understanding of the measurement of strategic orientation. We agree, and we submit that sources of ratings and consistency in measurement are also areas in need of research attention.

The purpose of this paper is to develop a measure of strategic orientation that is comprehensive, yet conceptually distinct from other cultural constructs of interest, such as aggressiveness. We draw on previous studies to develop items, we ensure our measure of strategic orientation is reliable, and we establish the criterion-related validity of our measure by investigating the relationship between strategic orientation and firm performance. We conclude by delineating practical implications for researchers and practitioners interested in examining relationships between strategic orientation and firm performance.

Firm Level Performance

A thorough review of the strategy literature on culture reveals over the last decade more than a dozen articles have attempted to link cultural attributes, such as strategic orientation, to firm-level performance. Each study utilizes different measures of culture and performance as well as sampling different numbers and levels of respondents in organizations. Unsurprisingly, findings have been equivocal.

Strategic orientation focuses on strategic direction and long-range vision. Therefore, we would expect a positive relationship to exist between strategic orientation and long-term financial performance. By continuously seeking out new opportunities and ensuring strategic alignment, firms that exhibit a robust strategic orientation take action in new markets or product areas in order to generate a competitive advantage (Miles & Snow, 1978; Porter, 1980), resulting in improvements in long-term financial performance metrics, such as revenue growth (cf. Barney, 1986; Porter, 1980). In contrast, other research has shown a negative relationship between strategic orientation and short-term outcomes such as profitability and return on sales (Goll & Sambharya, 1995; Veliyath & Shortell, 1993; Venkatraman,

1989). Unfortunately, many of the previous findings are confounded by combining measures with different time horizons (Morgan & Strong, 2003), or findings are non-significant (cf. Voss & Voss, 2000). Due to these inconsistencies, none of the research examined showed an unequivocally positive relationship between strategic orientation and firm performance, though conceptually we would expect one to exist.

Item Development

Based on a review of the extant research, we developed a list of potential survey items to measure strategic orientation as a unique construct. We drew on existing studies from the strategy literature to identify construct items that had been empirically tested in previous research. We then performed an inter-rater reliability assessment to address the consistency of the potential items (cf. Carmines & Zeller, 1991). Specifically, we asked a panel of seven experts (defined as academics researchers actively involved in studying antecedents of financial performance) to match potential individual survey items with our construct of strategic orientation. Values greater than 0.70 are typically acceptable for consistency estimates of inter-rater reliability (Crocker & Algina, 1986). Therefore, when an individual item received an inter-rater reliability score of less than 0.70, it was dropped from the item pool.

Once we established the content of the scale and an agreement as to its construct validity, we arrived at the 6-item strategic orientation scale appearing in Appendix 1. Respondents were asked to rate the degree to which each statement accurately described the cultural orientation of their organization (using a five-point Likert scale where 1 = strongly disagree, and 5 = strongly agree).

Method

Three studies were then conducted to further develop our measure of strategic orientation. Studies 1 and 2 were designed solely to ensure that we had created reliable measures of strategic orientation. The third study attempted to show the link between strategic orientation and three different measures of financial performance.

In these studies, we also attended to an often overlooked aspect of culture research that can also affect the observed culture-performance link: the sources of ratings and the nature of the sample. Many researchers have attempted to collect data from large cross-sectional samples, but as a tradeoff, they only collect data

from one person per company (Denison & Mishra, 1995). As culture is, by definition, a shared value and belief system, this approach does not align properly with our treatment of strategic orientation as a cultural variable. Even when studies have attempted to measure strategic orientation by surveying many individuals in very few companies (Calori & Sarnin, 1991), basic perceptual agreement is necessary to conclude that a variable is, in fact, a cultural phenomenon (Denison, 1996; James, 1982; James, Joyce, & Slocum, 1988). In many cases, perceptual agreement is not ensured before aggregating data and treating the mean as a measure of a shared strategic orientation.

Therefore, to overcome conceptual inconsistencies in previous research, we surveyed all employees (as opposed to one employee) in multiple organizations (as opposed to a single organization) in order to assess how strategic orientation impacted firm-level performance in Study 3. Agreement was also assessed before collapsing individual responses into a mean score that can reasonably be considered cultural in nature. Specifically, in Study 3, we surveyed 779 respondents from 20 companies.

Study One: Reliability and Unidimensionality

In Study 1, employees in a medium-sized service organization completed our survey instrument to measure unique constructs for strategic orientation. Specifically, respondents were asked to agree or disagree with a statement concerning the workplace using the five-point Likert scale. We achieved a 67% response rate yielding 447 usable responses.

We found encouraging internal reliability and dimensionality results from this initial survey. We measured internal reliability using Cronbach's Alpha. Specifically we found that our measure of strategic orientation yielded an alpha score of 0.90, which exceeded Nunnally's (1967) stringent threshold of 0.70. Moreover, items loaded onto a single factor in a principal components analysis. When items showed high "alpha if deleted" statistics and low factor loadings, they were revised to be clearer and more aligned with strategic orientation.

Study Two: Criterion-Related Validity

In order to replicate the content validity of our measures from Study 1 and to assess the criterion-related validity of our strategic orientation measure, we conducted a second study. In Study 2, we collected data from employees from various profit centers in a technology-based organization using the revised strategic orien-

tation measure from Study 1. We also collected performance data across 43 profit centers. Note that financial performance was measured in this organization as a composite of revenue growth and sales growth for the profit center.

We collected survey data for strategic orientation using mail surveys. Our response rate was 45%, yielding 117 responses. Consistent with Study 1, we assessed the internal reliability of our strategy-orientation measure using Cronbach's Alpha with a reliability measure of 0.90, again exceeding the threshold of 0.70.

Before aggregating the results by profit center, we ensured within-group perceptual agreement. Our variables of interest are group-level variables, therefore, for us to have confidence that individual employees' perceptions are a characteristic of the group that is predictive of organizational performance, we first need to assess whether employees share these perceptions within each organization. A well-accepted measure of agreement — $r_{WG(J)}$ (James, Demaree, & Wolf, 1984; James, 1993; LeBreton & Senter, 2008) — was used to justify the aggregation of individual level data in this study. Using a uniform null distribution (which was deemed appropriate for this sample), the average $r_{WG(J)}$ across all profit centers that had more than one respondent was 0.88, and only 4 profit centers returned results lower than the 0.70 threshold established by LeBreton and Senter (2008) for strong agreement.

To assess criterion-related validity, we examined the relationships between strategic orientation and performance. Specifically, we used hierarchical OLS regression modeling to test this relationship. Before any regression results were interpreted, a complete set of diagnostic procedures was completed to ensure that this modeling technique was appropriate for these data. Specifically, data were checked for normality, patterns in residuals such as heteroscedasticity, and outliers (cf. Weinzimmer, Mone, & Alwan, 1994).

Our results from Study 2 further confirmed the viability of our measure of strategic orientation. Additionally, we found initial evidence for establishing criterion-related validity. Specifically, using OLS regression modeling, we found that strategic orientation was significant and positively related to firm performance ($p < .01$) with an adjusted R^2 of .13, indicating that 13% of the variance in the performance measure was explained by our strategic orientation measure.

Study Three: Strategic Orientation and Firm Level Performance

In Study 3, we used our measure to investigate the extent to which strategic orientation impacts financial performance. We surveyed all employees from multi-

ple companies to overcome methods problems from previous research (e.g., surveying all employees from one company or one employee from multiple companies). Specifically, we surveyed all employees in 20 companies from a range of industries. Companies were all: (1) independent businesses that were not owned by a parent company; (2) single-product firms; (3) operating in one geographic location. The size of the organizations in our study consisted of 122 employees on average. Ultimately, we gathered data from 779 respondents across the 20 companies.

Data Aggregation

Before conducting analyses, it was again necessary to aggregate data from individual employee ratings into firm-level variables, namely, the strategic orientation of the firm. We did so using r_{WG} . In this case, we examined both a uniform null distribution, and a slightly skewed null distribution — the latter being the closest to the distribution of the responses in this data set. Using the slightly skewed null, responses from 19 of the 20 companies exceed or approach the 0.70 threshold for strong agreement (LeBreton, James, & Lindell, 2005) and statistics ranged from 0.30-0.86. While the overall pattern of results justifies aggregating data to perform the analyses required (LeBreton & Senter, 2008), subsequent analyses were run with and without the low-agreement organization. However, results were not impacted by inclusion or removal of the low-agreement organization, so results reported here reflect the total sample.

Firm-Level Performance. Strategic management researchers suffer from a lack of consistency defining firm-level performance (Venkatraman & Ramanujam, 1986). However, in terms of the culture-performance literature, much of the research focuses on financial performance (e.g., profit growth), while the remainder examines market performance (cf. Christensen & Gordon, 1999) or process outcomes, such as successful value innovation (Gatignon & Xuereb, 1997; Ogbonna & Harris, 2002; Wiklund & Shephard, 2003). Chandler and Hanks (1993) conducted a validation study that empirically demonstrated the use of revenue and profit data as reliable measures when testing the impact of various organizational attributes on firm-level performance.

Given that the financial performance measures are accepted in the culture-performance literature, we measure firm performance in terms of profit growth over a five-year period, revenue growth over a five-year period, and return on equity, to recognize financial performance as a multidimensional phenomenon (Weinzimmer, 2000).

There is a substantial amount of research in the strategic management literature that considers the relationship between specific strategies and dynamic measures of financial performance (Short, Ketchen, Bennett, & du Toit, 2006). We felt it was necessary to measure performance longitudinally, as cultural dimensions such as strategic orientation evolve over time and therefore would have a dynamic effect on firm performance. Five-year periods were chosen, as they are common time-frames found in the strategic management literature. Specifically, revenue growth rates, profit growth rates, and ROE growth were calculated from 2003 to 2007. Furthermore, we used objective measures of performance as multiple scholars (Dess & Robinson, 1984; Harris, 2001; Meyer, 1991) have indicated that objective performance measures are more preferable than subjective ones.

Control Variables. Because we were testing the impact of strategic orientation across multiple industries, it was necessary to control for industry impacts on firm-level performance (cf. Dess, Ireland, & Hitt, 1990). In the strategy literature, measures for industry-level performance are commonly used as control variables in research investigating firm-level performance across multiple industries (Christenson & Gordon, 1999). Subsequently, we used industry-level control variables based on previous research examining culture and firm-level performance — namely munificence, dynamism, and concentration. Munificence, defined by Dess and Beard (1984) as the ability of an industry to support growth and dynamism, defined by Dess and Beard (1984) as the degree of change in an industry, were both measured using data from six-digit NAICS codes. Specifically, munificence was measured by using the standardized regression coefficient (B') of industry sales data over time and dynamism was measured as the standard error of the regression coefficient ($\sigma^{\beta_{ik}}$) for the munificence measure (cf. Dess & Beard, 1984; Weinzimmer, Nystrom, & Freeman, 1998). Competitive concentration was measured using a four-firm concentration ratio.

Results

Descriptive Statistics: Correlations and Reliabilities. Initial analyses revealed significant positive correlations between our strategic orientation measure and firm performance. Strategic orientation was positively related to profit growth, revenue growth, and ROE growth ($p < .01$). Note that industry munificence also had significant positive correlations with all three performance measures. Competitive concentration was also significantly correlated to ROE growth ($p < .01$). While there was only one significant correlation among the control variables, between

dynamism and munificence ($p < .01$), only one control variable concentration was significantly correlated with strategic orientation ($p < .05$).

All means, standard deviations, and correlations of variables are presented in Table 2. Note that similar to Study 2, strategic orientation had an internal reliability estimate of 0.90.

Table 2
Means, Standard Deviations, Correlations for Study 3

Variable	Mean	SD	1	2	3	4	5	6	7
1. Profit Growth	-1.52	17.03	-						
2. Revenue Growth	3.42	7.84	.61**	-					
3. ROE	.02	.07	.53**		-				
4. Strategic Orientation	4.12	4.23	.20**	.13**	.13**				
5. Munificence	13.21	11.88	.14*	.16*	.22**	.07	-		
6. Dynamism	5.48	7.07	.09	.01	.04	.03	.27**	-	
7. Competitive Concentration	4.71	.59	.01	.07	.14**	.11*	.05	.04	

Notes: N = 20

* $p < .05$, ** $p < .01$

OLS Regression Modeling. We used regression analyses to show how strategic orientation behaves when modeled as an antecedent to firm-level performance. Table 3 presents regression results. Data were checked for normality, patterns in residuals such as heteroscedasticity, and outliers (cf. Weinzimmer, et al., 1994).

Results from Model 1, in Table 3, show a significant positive relationship between strategic orientation and profit growth ($p < .01$). This suggests that a strong strategic orientation is positively linked to profit growth. Note that among the control variables, industry munificence was also positively related to profit growth ($p < .01$), however the other two control variables were not significant. The overall model was significant ($p < .01$) and the adjusted R^2 was .51, suggesting that 51% of the variance in profit growth may be explained by the model.

Table 3
OLS regression results for firm performance for Study 3

	Model 1 Profit Growth	Model 2 Revenue Growth	Model 3 ROE Growth
Control Variable			
Munificence	.61***	.47*	.53***
Dynamism	.15	.19	.23
Concentration	.16	.22	.37*
Strategic Orientation	.48***	.50**	.27
F	6.22***	4.41***	5.80***
Adj. R ²	.51	.34	.24

Notes: N = 20

* $p < .10$, ** $p < .05$, *** $p < .01$

Results from Model 2, in Table 3, shows a significant positive relationship between strategic orientation and revenue growth ($p < .05$). This suggests that a strong strategic orientation is positively linked to revenue growth. Again, among the control variables, industry munificence was also positively related to profit growth ($p < .10$), however, the other two control variables were not significant. The overall model was significant ($p < .01$) and the adjusted R² was .34, suggesting that 34% of the variance in profit growth may be explained by the model.

Finally, results from Model 3, in Table 3, show that a significant positive relationship between strategic orientation and ROE does not exist. This suggests that strategic orientation is not linked to ROE growth. However, note that two of the control variables, industry munificence ($p < .01$), and competitive concentration ($p < .10$) have significant positive relationships with ROE growth. The overall model was significant ($p < .01$) and the adjusted R² was .24, suggesting that 24 percent of the variance in profit growth may be explained by the model.

Discussion

The findings of our study and their implications are two-fold. First, we developed and tested a reliable and valid strategic orientation measure that resolves the historical problems with construct contamination. Specifically, the measure created in this study is reliable and unidimensional, and it shows criterion-related validity when predicting firm level performance. Our study confirms and extends the work

of Gatignon and Xuereb (1997) by identifying a direct relationship between the cultural construct of strategic orientation and the quantifiable performance measure of profit growth. Gatignon and Xuereb established an indirect relationship between strategic orientation and firm performance, using new product development as a moderator.

Note, that while we expected strategic orientation to be related to all three firm-level financial measures, there was no significant relationship between strategic orientation and ROE growth in Model 3. This may be explained by industry effects. Note that industry munificence and competitive concentration accounted for 24% of the explained variance. While strategic orientation was significantly correlated with ROE growth, when controlling for effects of the industry, it was no longer significantly related to ROE growth.

Second, our research underlines prescriptive calls to operations managers to encourage and support a culture that both values and executes upon strategic fit and environmental alignment over the long term. Culture is critical when developing organizational strategy and that strategy should be altered to meet strategic changes facing the organization (Calori & Sarnin, 1991; Sayles & Wright, 1985). Thus, given that strategic orientation predicts organizational performance, it should be considered an important tool in producing the results needed for organizational success and longevity. Additionally, operations managers may benefit from a careful examination of the items included in Appendix 1. Focusing on improving organizational focus within each of these areas will increase the level of strategic orientation. As suggested in this research, strategic orientation may improve financial performance in terms of profit growth and revenue growth.

Limitations

We note some limitations in the present research. First in all three studies, we conducted cross-sectional research using surveys. Although our firm performance measures were “hard” measures of performance gleaned from company financial information, all other independent variable data were collected via self-report surveys. Thus, we cannot exclude the possibility that some of our results occurred in part from response bias.

Second, though our results in Study Three were significant, our sample size was small. While we gathered data from 779 people, they were nested within 20 companies, which decreased the power of our analyses. We found statistically significant results, but we would have been more confident with a larger sample, not to

mention the ability to look more closely at moderating variables (such as strength of culture) or additional controls (such as company age.) While easier said than done, culture research conducted on larger samples would advance the knowledge in this area. Finally, there was a modest correlation between strategic orientation and competitive concentration. Even though there was a positive correlation between strategic orientation and all three performance variables, the possibility of multicollinearity may exist.

Future Research Directions

In this study, we created a measure that was unidimensional, both conceptually and statistically. Future research should take care to isolate constructs of interest to further understand how they predict financial performance, and the interrelationships between concepts.

We also ensured inter-group and inter-organization agreement among respondents before aggregating the data and treating the mean as a group- or organization-level variable. Including this practice more routinely in strategy research is imperative, as the very definition of culture suggests that basic perceptual agreement is necessary. Future research should align hypothesis testing using all culture variables, including strategic orientation with current prescriptions in organizational culture research. Chan (1998) discussed the various ways we may look at compositional data such as that used in this and any study using surveys to assess culture. Direct consensus is often the most appropriate compositional model.

Lastly, as mentioned in our limitations section, we urge researchers to aspire to use larger samples of organizations with larger samples of employees surveyed within each organization. Though the efforts required in gathering such data is extensive, doing so allows us to ensure that the cultural variable of interest is widely shared throughout the organizations while also allowing complex analyses that hone our understanding of culture's impact upon financial performance.

Conclusion

In the current study, we develop a survey measure of strategic orientation that is unidimensional, reliable, and predictive of financial performance. We urge researchers to use surveys to assess shared values, philosophies, and behaviors, but to assess agreement before elevating the mean perception to an organizational-level variable. Our results also support the notion that culture (broadly), and strategic orientation (specifically) impact financial performance. Additional research should

build upon these findings and those of others using larger sample sizes and more complex analyses. Managerial implications of these results include a recommendation to encourage and support a culture that both values and executes upon strategic fit and environmental alignment over the long term.

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Appendix 1

Strategic Orientation Scale

1. There is a shared vision of what the company will be in the future
 2. Our strategic direction is clear
 3. The company's goals and objectives can be linked to our mission, vision, and strategy
 4. Short-term thinking does not compromise our long-range vision
 5. We have an effective strategic plan
 6. The company has regular and effective planning processes at all levels
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