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Research Paper

Interdependence and Trust in B2B Relationships: A Validated Model of Performance Drivers in International Commerce

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ABSTRACT

This research examines the relationships between key constructs in B2B marketing in an international context, investigating the role of dependence, problem-solving, investments, trust, commitment, business outcomes, and satisfaction. A quantitative study was conducted using survey research methodology. The data were collected from 312 Portuguese companies engaged in international commerce and analyzed using partial least squares structural equation modeling (PLS-SEM). The model accounts for 53.8% of the variance in commitment, 36.5% in satisfaction, 23.4% in trust, and 16.4% in business outcomes. The seven hypothesized relationships were all supported, confirming the positive influence of dependence, investments, problem-solving, and trust on commitment, as well as the impact of commitment on business outcomes and satisfaction. The study is constrained to a sample of Portuguese companies and is based on data collected at a single point in time. The model's explanatory power for trust and business outcomes indicates the potential influence of additional factors on these constructs. The findings underscore the significance of managing dependence, fostering trust, and maintaining commitment to attain superior business outcomes and elevated levels of satisfaction in B2B relationships. This research develops and validates a comprehensive model of international commerce in B2B marketing, integrating pivotal constructs and their associations. It furnishes empirical evidence for the roles of trust and commitment as pivotal predictors of successful business outcomes and satisfaction in B2B relationships.

Keywords: Relationship marketing, dependence, commitment, business outcomes, satisfaction

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1. INTRODUCTION

The multitude of factors that determine a company's success in international markets is vast and multifaceted. To navigate this complex landscape, companies must consider a wide range of variables, such as macroeconomic trends, industry-specific factors, and company-specific performance indicators. Moreover, several factors also play a key role in fostering positive relationships and ultimately helping to grow the business. These include dependence, problem-solving, investments, commitment, trust, business outcomes, and satisfaction. These constructs have been subjected to extensive analysis within comprehensive frameworks with the objective of elucidating the multifaceted business interactions. The literature demonstrates a significant reliance on comprehensive frameworks such as Commitment-Trust Theory and the Resource-Based View to contextualize the interrelations among these constructs. This is evidenced by numerous studies, including (Chéron, 2009; Hirshberg & Shoham, 2017; Saleh, 2006). The integration of these frameworks allows researchers to elucidate the influence of constructs such as dependence and commitment on primary outcomes such as satisfaction and business performance. Furthermore, structural equation modeling (SEM) and its partial least squares variant (PLS-SEM) are widely utilized to validate these intricate models, facilitating the comprehension of direct and mediating relationships among the constructs (Arthur et al., 2024; Hirshberg & Shoham, 2017; Padgett et al., 2024; Saleh & Quazi, 2011). Trust and commitment are persistently recognized as indispensable for the preservation and enhancement of business relationships, exerting a profound impact on satisfaction and long-term orientation (Ganesan, 1994; Hirshberg & Shoham, 2017; Lam et al., 2004). These constructs are critically examined within the international B2B marketing context, with a pronounced focus on their interaction with cultural dynamics and economic trajectories toward strategic performance (Padgett et al., 2024). Additionally, this research emphasizes the pivotal role of different types of dependence, such as relational and switching cost dependence, in influencing economic and strategic performance, and consequently, relational quality (Arthur et al., 2024; Padgett et al., 2024). The role of investments in B2B relationships in enhancing business outcomes and fostering satisfaction is also addressed (Ganesan, 1994). The importance of satisfaction as a core mediating construct is highlighted in several studies, indicating

its influence on the relationship between trust, commitment, and loyalty (Arthur et al., 2024; Ha & Muthaly, 2008; Lam et al., 2004). This highlights the central position of satisfaction within B2B relational dynamics, as it affects both economic and relational outcomes. This research produces new findings, exploring these constructs using a plethora of analytical and theoretical approaches.

2. LITERATURE REVIEW

2.1. The nature of dependence in B2B

According to Pfeffer and Salancik (2015), Drees and Heugens (2013), dependence occurs when a company relies heavily on a specific customer for a significant portion of its revenue or strategic advantage, a definition supported by the Resource Dependence Theory. Dependence is also upheld in Transaction Cost Economics (Rindfleisch & Heide, 1997; Williamson, 1981), in the Social Exchange Theory (Blau, 2017; Cook et al., 2013), and in the Power Dynamics Theory (Frazier, 1983; Hulbert & Capon, 1972). Dependence is, therefore, multifaceted and complex. Furthermore, dependence may have significant implications on strategy and decision-making (Dastmalchian & Boag, 1990), profit concentration and risk (Hewitt-Dundas & Roper, 1999; Pawar, 2022), and buyer-supplier relationships (Chang et al., 2012; Schiele & Vos, 2015).

The phenomenon of dependence in B2B relationships is frequently characterized by an inherent imbalance, whereby one party places a considerable reliance on another for the provision of critical resources, services, or products (Hitt et al., 2016). Such reliance can engender a state of power asymmetry, wherein the dependent party may be susceptible to the actions and decisions of the more powerful partner and may originate from the distinctive nature of the resources provided, the challenge of identifying alternative suppliers, or the strategic significance of the partnership (Gölgeci & Kuivalainen, 2020). Still, the occurrence of interdependence is also a possibility that describes a situation in which both parties are mutually dependent on each other, frequently resulting in elevated levels of commitment from both parties, as the success of one party is closely correlated with the success of the other (Essig & Amann, 2009). Interdependence cultivates a collaborative setting where both parties are motivated to invest in the relationship, share resources, and engage in joint problem-solving (Hald et al., 2009).

2.2. Commitment as a stabilizing force

Commitment has been identified as a key factor in the maintenance of stable B2B relationships, with particular relevance in contexts where there is a high level of dependency. As postulated by Morgan and Hunt (1994), and also supported by Gansser et al. (2021), an entity's commitment to a relationship is characterized by a desire to sustain a valuable association and reflects a long-term orientation and a willingness to make sacrifices. In relationships characterized by a high level of dependency, the presence of a strong commitment can function as an equilibrium, guaranteeing that both parties are motivated to work towards mutual benefit rather than exploit the dependency (Geyskens et al., 1999). In light of the aforementioned evidence, further supported by the work of Palmatier et al. (2006), Gulati and Sytch (2007), Scheer et al. (2015), and Amoako et al. (2020), a research hypothesis can be formulated as follows:

H1: A customer's dependence on the company has a positive influence on the commitment of the relationship between companies.

2.3. The nature of investments in B2B Marketing

The investment in B2B marketing extends beyond the mere financial transaction to encompass a multitude of resources allocated towards the cultivation of alliances with business associates. They are often categorized into tangible and intangible assets. Based on the findings of Chan et al. (2024), investments in B2B relationships entail significant commitments of time and effort to guarantee the advancement and longevity of these partnerships. These investments may take various forms, including the adaptation of products and services, the dissemination of information, and collaborative problem-solving endeavors. The interdependence of the parties due to specialized investments fosters a commitment to maintaining the relationship. As a result, opportunistic behavior is less likely to occur, as the cost of terminating the relationship is higher for both parties (Ganesan, 1994). The extant literature indicates a robust correlation between investments and commitment in B2B marketing. The evidence suggests that supplier investments exert a positive influence on buyer dependence and commitment (Padgett et al., 2020; Stump & Joshi, 1999). In particular, idiosyncratic investments have been demonstrated to exert a significant influence on the level of commitment exhibited by both parties in a business-to-business relationship (Anderson & Weitz, 1992). Such investments serve as pledges, signaling commitment and affecting each party's perception of the other's dedication (Anderson & Weitz, 1992). The Investment Model of Commitment posits that investment size is significantly and positively

associated with commitment across a range of relationships (Tran et al., 2019). Furthermore, buyer-dedicated investments are positively influenced by supplier-dedicated investments, thereby supporting both transaction cost theory and social exchange theory (Stump & Joshi, 1999). In consideration of the above, the following research hypothesis is proposed for consideration:

H2: The investments undertaken exert a positive influence on the level of commitment.

2.4. The role of trust in B2B Marketing

In the context of B2B marketing, trust is conceptualized as a belief in a partner's reliability, honesty, and commitment to act in the best interest of the relationship (Moorman et al., 1992). The trust serves to mitigate the perceived risks associated with business transactions, thereby reducing the uncertainty that typically accompanies inter-organizational relationships (Doney & Cannon, 1997). In their seminal article, Morgan and Hunt (1994) proposed the "Commitment-Trust Theory," which theorizes that trust functions as a pivotal intermediary variable, leading to augmented commitment in business relationships. As partners demonstrate trustworthiness through dependable and benevolent behaviors, it fosters confidence in the relationship, thereby engendering a more robust desire to preserve and strengthen the partnership (Palmatier et al., 2006). In contrast, commitment may also be a precursor to trust. As partners make significant investments and exhibit their commitment to the relationship, they convey their intention to act in a trustworthy manner, which in turn fosters trust (Geyskens et al., 1999). Trust can be seen as both a precursor to and a consequence of commitment, thus making it an integral part of the relationship-building process. As evidenced by this reciprocal relationship, commitment and trust in B2B marketing are mutually reinforcing. Nevertheless, the process of developing commitment and trust is not without its challenges. Factors such as power imbalances, opportunistic behavior, and a lack of communication have the potential to undermine the commitment-trust dynamic (Chicksand, 2015). However, in the absence of trust, the strength of commitment may be diminished, which could result in the formation of weaker business ties.

As postulated by Høgevold et al. (2020), trust and commitment function as intermediaries between economic and non-economic satisfaction. Trust has been demonstrated to reduce uncertainty and complexity, while commitment has been shown to facilitate the maintenance of long-term relationships (Gansser et al., 2021). Furthermore, trust and commitment contribute to buyer dependence, which can be based on relationship value or switching costs (Padgett et al., 2020). Thus, strengthening B2B relationships requires honesty, integrity, and concern for the other party's

interests while ensuring reasonable profits and positive references (Dasanayaka et al., 2020). In consideration of the existing literature on the subject, three research hypotheses are proposed.

H3: A company's dependence on a client exerts a positive influence on the commitment of the relationship between companies.

H4: The capacity to identify and implement solutions to problems has been demonstrated to have a positive effect on trust.

H5: Trust has a positive effect on the level of commitment between companies.

2.5. Business results as an outcome of commitment

The level of commitment in B2B relationships has been demonstrated to exert a direct influence on business results. A substantial body of research indicates that companies with high levels of commitment in their B2B relationships tend to exhibit superior business outcomes, including increased sales, enhanced profitability, and augmented market share (Palmatier et al., 2006), and satisfaction and repurchase intention (Sohn et al., 2013). This is attributable to the fact that committed relationships frequently result in more collaborative and efficient business processes, which in turn lead to a reduction in costs and an increase in revenue streams. Moreover, committed partners are more inclined to invest in joint ventures, co-development projects, and other initiatives that facilitate financial growth (Anderson & Weitz, 1992). The different types of commitment (affective and normative) are associated with relationship value dependence, while calculative commitment is linked to switching cost dependence. Both pathways have the potential to result in positive business outcomes, albeit through different mechanisms (Padgett et al., 2024). In consequence:

H6: A higher level of commitment exerts a beneficial impact on business results.

2.6. The influence of business outcomes on satisfaction

In contrast to business-to-consumer (B2C) markets, where emotional factors are frequently a primary motivator in purchasing decisions, B2B transactions are primarily driven by rational decision-making processes, with a strong emphasis on outcomes that directly impact the buyer's business. Business outcomes refer to the tangible and quantifiable results achieved by one business in its interactions with and transactions with another business. Research conducted by Wang et al. (2016) provides evidence that positive business outcomes can lead to higher levels of satisfaction. Additionally, Guo and Wang (2015) discovered that a robust market orientation exerts a positive influence on customer satisfaction and retention in B2B markets. Moreover, the research by Mittal

et al. (2017) provides further evidence to support the notion that attribute-level satisfaction contributes to overall customer satisfaction, which in turn influences business performance outcomes. Kingshott et al. (2020) argue that trust and commitment have a significant impact on satisfaction and loyalty. Similarly, Briggs et al. (2016) emphasize the importance of consistently delivering high-quality services to achieve favorable outcomes and maintain customer satisfaction. This leads us to the final research hypothesis:

H7: There is a positive relationship between business outcome measures and levels of satisfaction.

2.7 Conceptual framework and development of hypotheses

The primary objective of this research is to explicitly recognize and subsequently verify the relationship between the underlying constructs that define the dynamics between companies in an international environment. The theoretical constructs that were subjected to analysis in the literature review included dependence, investments, problem-solving, trust, commitment, business outcomes, and satisfaction. Following this analysis, a conceptual framework was developed, which proposed the constructs and located them within a theoretical framework, along with their corresponding relationships. Table 1 provides a comprehensive list of the theoretical constructs and the research hypotheses that have been formulated based on them.

Table 1. Constructs that underly the international environment in B2B marketing.

Research hypotheses
H1: A customer's dependence on the company has a positive influence on the commitment of the relationship between companies.
H2: The investments undertaken exert a positive influence on the level of commitment.
H3: A company's dependence on a client exerts a positive influence on the commitment of the relationship between companies.
H4: The capacity to identify and implement solutions to problems has been demonstrated to have a positive effect on trust.
H5: Trust has a positive effect on the level of commitment between companies.
H6: A higher level of commitment exerts a beneficial impact on business results.
H7: There is a positive relationship between business outcome measures and levels of satisfaction.

The model in Figure 1 is a visual representation of the theoretical framework that was constructed by synthesizing the relevant literature and organizing the constructs and research hypotheses identified in the prior table. It is a conceptual model that includes the constructs of dependence, problem-solving, investments, commitment, trust, business outcomes, and satisfaction. The model helps understand the relationship between these constructs and how they impact business outcomes and satisfaction.

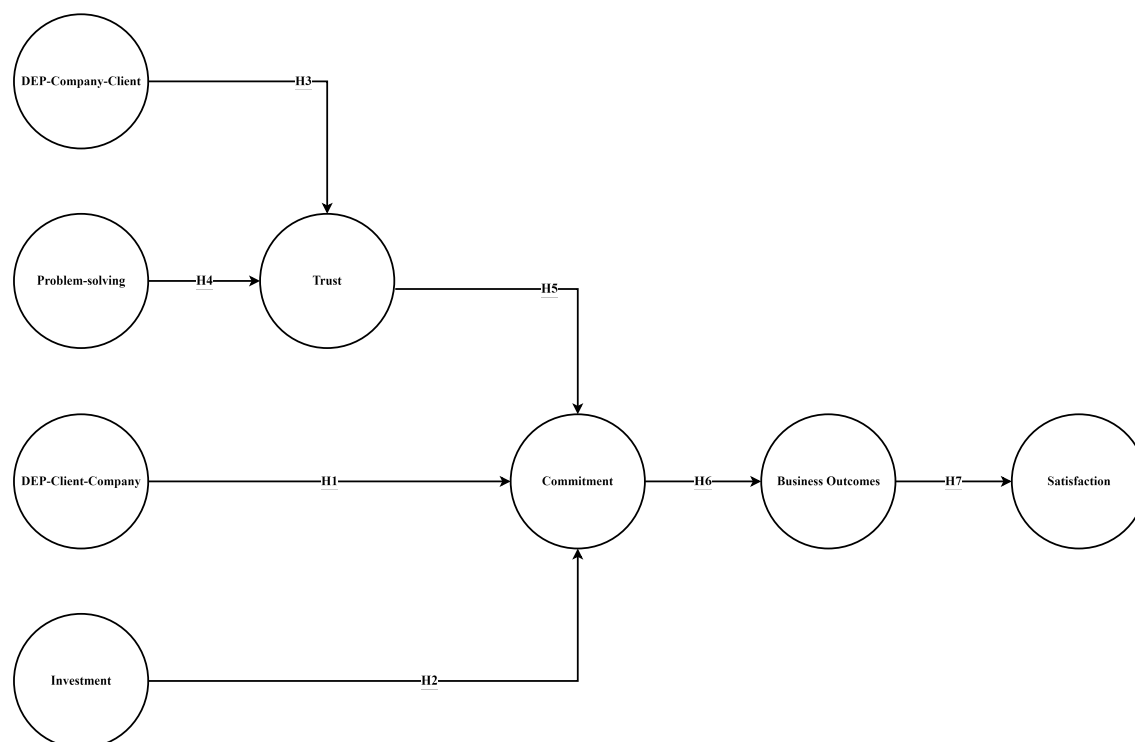


Figure 1. The international environment in B2B marketing Theoretical framework.

3. METHODOLOGY

The methodology section outlines the details of the research intervention procedure and provides a description of the methods to be employed for the collection and analysis of data. This exploratory study is classified as basic research and it is cross-sectional that falls under the umbrella of quantitative research, employing survey research as the primary data collection technique. To assess the research hypotheses presented in the study, a questionnaire was developed and distributed in a self-directed format. A preliminary test was conducted, and feedback was gathered from the participants. All constructs were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

The study focused on Portuguese companies engaged in international commerce and it was limited to companies where at least one of the five largest clients was located outside the country. The companies were obtained from the SABI database. The questionnaire was distributed via email. The empirical research was carried out between January and June of the year 2023. To mitigate the occurrence of bias, non-response bias, common method variance, and common method bias, which can affect the reliability and validity of the empirical results, a number of procedures were put in place. Partial Least Squares Structural Equation Modeling (PLS-SEM) was selected as the appropriate statistical technique for assessing the research hypothesis, given that the study is testing a non-existent conceptual model and is therefore suitable for examining new constructs when the theoretical foundation is not well established.

4. RESULTS

A total of 312 companies were included in our analysis. The characterization of the sample is shown in Table 2.

Table 2. The characterization of the sample.

% of results international commerce	Number of employees		
	< 250	250 - 999	>=1000
[0% - 25%]	24%	2%	0%
]25% - 50%]	20%	1%	1%
>50%	37%	15%	1%

The population was quite diverse, which made it an excellent choice for studying the aforementioned constructs. The table provides a detailed breakdown of companies based on the percentage of their business that comes from international commerce and their number of employees. The table highlights that smaller companies (< 250 employees) are more actively engaged in international commerce, with 37% of them deriving over 50% of their business from international markets. Medium-sized companies (250-999 employees) show moderate international involvement, with 15% exceeding 50% international business. In contrast, large companies (\geq 1000 employees) have minimal engagement, with only 1% having more than 50% of their business internationally. This suggests that smaller firms are generally more involved in international markets compared to their larger counterparts.

The use of Mahalanobis distance (Hair, 2019) did not identify any multivariate outliers, and there were no missing values. While PLS-SEM does not impose distribution requirements, it is crucial to ascertain that the data does not deviate significantly from a normal distribution. Given that extreme non-normal data may impact the assessment of statistical significance, this is a pivotal aspect to address (Hair et al., 2022). Thus, an assessment was conducted to evaluate the skewness and kurtosis of the variables. No variables exhibiting asymmetric or markedly skewed distributions were identified. The procedure for the comprehensive evaluation of the results of PLS-SEM is divided into two distinct phases. These phases align with the recommendations set forth by Hair et al. (2022), which include: (I) the assessment of the measurement model; and (II) the assessment of the structural model. The initial phase encompasses the assessment of both reflective and formative measurement models. The sequence of analytical steps involved in the evaluation of the reflective measurement model comprises an assessment of the reliability of the individual indicators, an assessment of the reliability of the internal consistency, an assessment of the convergent validity, and an assessment of the discriminant validity. The model does not include formative constructs; therefore, the formative measurement model is not required. The structural model assesses collinearity through the variance inflation factor (VIF), the significance and relevance of the relationships within the model through path coefficients, and the explanatory power through coefficients of determination (R^2) and other measures.

4.1. Measurement Model - Reflective

As detailed in Table 3, the values used to assess the suitability of including outer loadings, internal consistency, and convergent validity are provided.

Table 3. Outer loadings, internal consistency, and convergent validity.

Constructs	Indicators	Outer Loadings	Cronbach's Alpha	rho_A	Composite Reliability	AVE
DEP-Company-Client	1	0.862	0.794	0.856	0.873	0.698
	2	0.874				
	3	0.766				
Problem-solving	1	0.919	0.833	0.843	0.9	0.75
	2	0.847				
	3	0.83				
	1	0.862	0.873	0.884	0.913	0.724

DEP-Client-Company	2	0.878				
	3	0.877				
	4	0.782				
Investment	1	0.774				
	2	0.922	0.802	0.853	0.883	0.716
	3	0.836				
Trust	1	0.713				
	2	0.816				
	3	0.749	0.868	0.871	0.901	0.604
	4	0.801				
	5	0.75				
	6	0.827				
Commitment	1	0.864				
	2	0.748	0.875	0.899	0.914	0.727
	3	0.917				
	4	0.873				
Business Outcomes	1	0.938				
	2	0.925	0.886	0.89	0.929	0.815
	3	0.842				
Satisfaction	1	0.883	0.715	0.715	0.875	0.778
	2	0.881				

The initial step in the examination of the reflective measurement model is the examination of the outer loadings of the indicators (see the preceding table). Outer loadings less than 0.40 are excluded, while those greater than or equal to 0.7 are retained. Within the aforementioned values, the reliability of internal consistency and the convergent validity of the construct are analyzed. All the constructs are accompanied by indicators within the specified conditions.

The second criterion for evaluation is internal consistency and reliability. In formal settings, the standard measure of internal consistency and reliability is Cronbach's alpha (see Table 3). Hair et al. (2022) propose that values between 0.60 and 0.70 are appropriate for initial exploratory research, while values between 0.70 and 0.90 are deemed sufficient for more advanced research. The results indicate that all constructs are dependable.

Convergent validity refers to the extent to which an indicator is positively correlated with other indicators that assess the same construct. In this case, the average variance extracted (AVE) values are all greater than 0.5, thus exceeding the threshold value required for acceptability.

The assessment of discriminant validity determines whether a construct can be differentiated from other constructs through empirically derived evidential support. The utilization of the Heterotrait-Monotrait ratio (HTMT) is a requisite component of this assessment (see Table 4).

Table 4. The Heterotrait-Monotrait ratio (HTMT).

	Business Outcomes	Commitment	DEP-Client-Company	DEP-Company-Client	Investment	Problem-solving	Satisfaction
Business Outcomes							
Commitment	0.44						
DEP-Client-Company	0.373	0.399					
DEP-Company-Client	0.147	0.334	0.446				
Investment	0.355	0.422	0.392	0.094			
Problem-solving	0.182	0.231	0.233	0.066	0.416		
Satisfaction	0.75	0.501	0.421	0.177	0.386	0.268	
Trust	0.357	0.789	0.265	0.249	0.394	0.499	0.405

A recommended threshold of 0.85 is established for path models comprising conceptually distinct constructs, as an HTMT value exceeding 0.90 indicates an insufficient level of discriminant validity. As all values are less than or equal to 0.789, discriminant validity is assured.

4.2. Structural Model

The structural model commences with an examination of collinearity via the Variance Inflation Factor (VIF), see Table 5.

Table 5. The Inner VIF Values.

	Business Outcomes	Commitment	Satisfaction	Trust
Business Outcomes			1	
Commitment	1			
DEP-Client-Company		1.151		
DEP-Company-Client				1
Investment		1.225		
Problem-solving				1
Trust		1.15		

The results provide compelling evidence that collinearity is not a critical concern in the structural model. The VIF values for all constructs are substantially below threshold 5, indicating that the constructs are accurately capturing distinct concepts and do not overlap. This is a promising outcome, as it allows for the analysis of the structural model to proceed with confidence.

Subsequently, the value and significance of the connections within the theoretical framework are evaluated through the application of path coefficients (see Table 6).

Table 6. Path coefficients.

	Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Business Outcomes -> Satisfaction	0.604	0.604	0.04	15.019	0
Commitment -> Business Outcomes	0.405	0.405	0.051	7.878	0
DEP-Client-Company -> Commitment	0.202	0.203	0.051	3.979	0
DEP-Company-Client -> Trust	0.226	0.229	0.057	3.973	0
Investment -> Commitment	0.102	0.103	0.041	2.514	0.012
Problem-solving -> Trust	0.430	0.435	0.059	7.266	0
Trust -> Commitment	0.610	0.608	0.058	10.502	0

The table corroborates the veracity of the relationships established among the constructs, as the path coefficients are all statistically significant, as substantiated by the bootstrapping technique. It is imperative to underscore that the path coefficients encapsulate the tenets of the research hypotheses. Consequently, all the research hypotheses are indubitably validated. Furthermore, the strength of the path coefficients allows for the identification of the most significant relationships within the model. This is a crucial aspect, as it enables the determination of the key constructs and

relationships that warrant the most attention. The most important relationships are: 1) Trust -> Commitment, trust significantly impacts commitment; 2) Business Outcomes -> Satisfaction, business outcomes strongly influence satisfaction. They are followed by: 3) Problem-solving -> Trust, problem-solving enhances trust; 4) Commitment -> Business Outcomes, commitment directly affects business outcomes. Trust and commitment constructs play crucial roles, with trust strongly influencing commitment and the latter, in turn, affecting business outcomes. Business outcomes have a significant impact on satisfaction, showing that good business outcomes are associated with greater satisfaction. Problem-solving is also important for building trust. The least significant relationships are as follows: The relationship between investment and commitment is the weakest; the relationship between DEP-Client-Company and Commitment is characterized by a moderate impact, and the relationship between DEP-Company-Client and Trust is also moderate. The subsequent phase of the analysis entails an evaluation of the explanatory power through the coefficients of determination (R^2), which are shown in Table 7.

Table 7. Coefficient of determination.

	R Square	R Square Adjusted
Business Outcomes	0.164	0.161
Commitment	0.538	0.534
Satisfaction	0.365	0.363
Trust	0.234	0.23

The R-squared (R^2) statistic quantifies the proportion of variance in the dependent variable that can be explained by the independent variable(s). The adjusted R^2 statistic considers the number of predictors in the model and only increases if the addition of the new variable contributes to a greater improvement in the model fit than would be expected by chance. The results indicate that commitment has the highest R^2 value, indicating that the model explains approximately 53.8% of the variance in commitment. Satisfaction has the second-highest R^2 value, with the model explaining approximately 36.5% of the variance. Trust has a lower R^2 value, with the model explaining approximately 23.4% of the variance. Business Outcomes has the lowest R^2 value, with only 16.4% of the variance explained by the model. The minor discrepancies between R^2 and Adjusted R^2 indicate that the model is not overfitted.

Additionally, effect sizes f^2 were employed as a means of gauging the strength of the relationships within the structural model. The preceding findings were corroborated by the outcomes of this assessment. Furthermore, the model's predictive capacity was evaluated through the use of the Q^2 statistic, which demonstrated that the model exhibited a superior predictive capability compared to the naïve LM benchmark model.

Once all the requisite tests have been carried out in accordance with the established guidelines for PLS-SEM, the subsequent phase will entail an examination of the research hypotheses outlined in Table 8.

Table 8. Assessment of research hypotheses.

Research hypotheses	Result
H1: A customer's dependence on the company has a positive influence on the commitment of the relationship between companies.	Supported
H2: The investments undertaken exert a positive influence on the level of commitment.	Supported
H3: A company's dependence on a client exerts a positive influence on the commitment of the relationship between companies.	Supported
H4: The capacity to identify and implement solutions to problems has been demonstrated to have a positive effect on trust.	Supported
H5: Trust has a positive effect on the level of commitment between companies.	Supported
H6: A higher level of commitment exerts a beneficial impact on business results.	Supported
H7: There is a positive relationship between business outcome measures and levels of satisfaction.	Supported

In light of the outcomes yielded and the comprehensive validations conducted, the subsequent findings can be articulated as follows: the formulated research hypotheses have been substantiated, and the relationships delineated in the model have been corroborated. Consequently, it can be posited that the identified constructs and the relationships between them constitute a comprehensive model of international commerce that incorporates, dependence, problem-solving, investments, trust, commitment, business outcomes, and satisfaction.

5. DISCUSSION

The results of this research make a valuable contribution to the understanding of international B2B relations. The model illustrates differential levels of explanatory strength among various constructs and provides significant patterns that are worthy of in-depth discussion.

5.1. Commitment as the cornerstone of B2B relationships

The model accounts for approximately 53.8% of the variance in commitment, making it the most well-explained construct. This substantial explanatory power underscores the critical role of commitment as the cornerstone of successful B2B relationships. The strong predictive capacity of trust, dependence, and investments in commitment aligns with Morgan and Hunt (1994)'s seminal work on relationship marketing, which positioned commitment as a central mediating variable.

The particularly strong path coefficient between trust and commitment (0.610) reveals that trust serves as the primary driver of commitment in international B2B relationships. This finding extends beyond previous research by Gansser et al. (2021) and Amoako et al. (2020) by quantifying the relative importance of trust compared to other antecedents. In the context of international commerce, where geographic and cultural distances can create uncertainty, trust emerges as the critical foundation upon which commitment is built.

The dual influence of dependence, both from the customer to the company (0.202) and from the company to the client, on commitment, provides empirical validation for the theoretical frameworks proposed by Schiele and Vos (2015) and Pawar (2022). However, our findings reveal a more nuanced picture: the asymmetric path coefficients suggest that different forms of dependence exert varying levels of influence on commitment. This asymmetry has important implications for power dynamics in B2B relationships, suggesting that companies should strategically manage dependence to nurture commitment without creating detrimental power imbalances.

The relatively weaker influence of investments on commitment (0.102) contrasts with Anderson and Weitz (1992)'s findings, which positioned investments as strong predictors of commitment. This discrepancy may reflect the changing nature of B2B relationships in the digital age, where relationship-specific investments may be less tangible or more easily redeployed. Alternatively, it may indicate that in international contexts, the trust-building aspects of the relationship take precedence over purely transactional investments.

5.2 Satisfaction as a consequence of business performance

The model explains 36.5% of the variance in satisfaction, with business outcomes serving as a strong predictor (path coefficient of 0.604). This robust relationship provides empirical support for the rational decision-making paradigm that characterizes B2B transactions, as noted by Wang et al. (2016) and Guo and Wang (2015). Unlike B2C contexts, where emotional factors often drive satisfaction, our findings confirm that in B2B relationships, satisfaction is predominantly determined by tangible business results.

The strength of this relationship surpasses what was reported in previous studies by Mittal et al. (2017) and Kingshott et al. (2020), suggesting that in international B2B contexts, the link between performance and satisfaction may be even more pronounced. This heightened connection could be attributed to the increased stakes and scrutiny that often accompany international business ventures, where objective performance metrics serve as clear indicators of relationship success.

The model's explanatory power for satisfaction, while substantial, also indicates that approximately 63.5% of the variance remains unexplained. This suggests the potential influence of additional factors not captured in our model, such as cultural alignment, communication quality, or service recovery experiences. Future research should explore these potential additional determinants of satisfaction in international B2B relationships.

5.3 Trust formation in international B2B contexts

The model accounts for 23.4% of the variance in trust, with problem-solving capabilities (0.430) and company dependence on clients (0.226) serving as significant predictors. The stronger influence of problem-solving capabilities on trust formation aligns with the findings of Dasanayaka et al. (2020) and highlights the importance of operational competence in building trust across international boundaries.

The relatively modest explanatory power for trust suggests that trust formation in international B2B relationships is a complex phenomenon influenced by factors beyond those captured in our model. This complexity is consistent with the multidimensional nature of trust described by Moorman et al. (1992) and Doney and Cannon (1997), which encompasses both cognitive and affective dimensions.

The significant but moderate influence of company dependence on trust (0.226) provides empirical support for the theoretical proposition that vulnerability—a key aspect of dependence—is a necessary condition for trust to develop Blau (2017). However, the moderate strength of this

relationship suggests that dependence alone is insufficient for building robust trust. This finding extends the work of Høgevold et al. (2020) by quantifying the relative contribution of dependence to trust formation in international contexts.

5.4 Business outcomes as a function of commitment

The model explains 16.4% of the variance in business outcomes, with commitment serving as a significant predictor (path coefficient of 0.405). While this explanatory power is more limited than for other constructs, it nonetheless provides empirical validation for the theoretical link between relationship quality and performance outcomes proposed by Palmatier et al. (2006) and Sohn et al. (2013).

The moderate explanatory power suggests that business outcomes in international B2B relationships are influenced by a broader array of factors beyond relationship commitment. These likely include market conditions, competitive dynamics, operational efficiencies, and strategic alignment, factors that future research should incorporate to develop more comprehensive models of B2B performance.

The significant path coefficient between commitment and business outcomes (0.405) quantifies the “relationship dividend” that companies can expect from investing in commitment-building activities. This finding provides empirical justification for allocating resources to relationship management in international B2B contexts, as it demonstrates a clear link between relationship quality and tangible business results.

67. CONCLUSIONS

This research contributes a comprehensive empirical model that integrates core relationship marketing constructs – dependence, investments, trust, commitment, and satisfaction – within the context of international B2B commerce.

6.1 Theoretical implications

This research makes several significant contributions to the theoretical understanding of B2B relationships in international contexts. First, it integrates and empirically validates a comprehensive model that connects key relationship constructs (dependence, problem-solving, investments, trust, and commitment) with performance outcomes (business results and satisfaction). This integration advances beyond the more fragmented approaches seen in previous

studies (Chéron, 2009; Hirshberg & Shoham, 2017) by providing a holistic framework for understanding the interconnected nature of these constructs.

It also extends the Commitment-Trust Theory proposed by Morgan and Hunt (1994) by quantifying the relative importance of different antecedents to trust and commitment in international B2B contexts. The findings reveal that problem-solving capabilities are more influential than dependence in building trust, while trust exerts a stronger influence on commitment than either dependence or investments. These nuanced relationships provide a more detailed understanding of the mechanisms through which trust and commitment develop in international B2B relationships.

Additionally, the study contributes to Resource Dependence Theory by demonstrating the dual pathways through which dependence influences relationship outcomes. The findings show that dependence affects commitment both directly and indirectly (through trust), suggesting a more complex role for dependence than previously theorized. This dual pathway extends the work of Padgett et al. (2024) by providing empirical evidence for the multifaceted influence of dependence in international B2B relationships.

The advances in the theoretical understanding of satisfaction formation in B2B contexts by empirically validating the strong link between business outcomes and satisfaction are also included. This finding supports the rational decision-making paradigm that characterizes B2B relationships and distinguishes them from more emotionally-driven B2C interactions. The strength of this relationship in our international sample suggests that objective performance metrics may be even more important for satisfaction in cross-border B2B relationships than in domestic contexts. Finally, the varying explanatory power across constructs (from 53.8% for commitment to 16.4% for business outcomes) highlights the differential predictability of relationship constructs and suggests areas where theoretical models need further development. In particular, the limited explanatory power for business outcomes indicates the need for more comprehensive theoretical frameworks that incorporate both relationship quality and other strategic and operational factors.

6.2 Practical implications

The findings of this research offer several actionable insights for managers engaged in international B2B relationships. First, the strong influence of trust on commitment (path coefficient of 0.610) underscores the critical importance of trust-building activities in developing stable and productive B2B relationships. Companies should prioritize transparency, consistency,

and integrity in their international business interactions, as these behaviors foster the trust that serves as the foundation for commitment.

Second, the significant impact of problem-solving capabilities on trust (path coefficient of 0.430) highlights the importance of operational excellence in building successful international B2B relationships. Companies should invest in developing robust problem-solving processes and capabilities, as these not only address immediate operational challenges but also build the trust that drives long-term commitment. This finding suggests that relationship management in B2B contexts should extend beyond the sales and marketing functions to include operational and technical teams. Third, the dual influence of dependence on relationship outcomes suggests that companies should strategically manage dependence in their international B2B relationships. While some level of interdependence can foster commitment, excessive asymmetric dependence may create vulnerability. Managers should strive for balanced interdependence that creates mutual value without exposing either party to undue risk. This might involve diversifying customer or supplier bases while still maintaining deep relationships with key partners.

Fourth, the strong link between business outcomes and satisfaction (path coefficient of 0.604) emphasizes the importance of delivering tangible results in international B2B relationships. Companies should establish clear performance metrics and regularly communicate progress against these metrics to their international partners. This focus on objective outcomes is particularly important in cross-cultural contexts, where subjective assessments of relationship quality may be influenced by cultural differences. Fifth, the significant but modest influence of investments on commitment (path coefficient of 0.102) suggests that companies should be strategic in their relationship-specific investments. Rather than making investments indiscriminately, companies should focus on investments that build trust and demonstrate commitment, such as customized solutions, knowledge sharing, and joint innovation initiatives. These targeted investments are likely to yield greater returns in terms of relationship commitment than generic resource allocations.

To conclude, the model's varying explanatory power across constructs provides guidance for prioritizing management attention. The strong predictability of commitment (53.8% variance explained) suggests that companies have substantial influence over this aspect of B2B relationships through their trust-building, dependence management, and investment activities. In contrast, the more limited predictability of business outcomes (16.4% variance explained)

indicates that while relationship quality is important, managers must also attend to other strategic and operational factors to achieve optimal business results.

6.3 Limitations and future research directions

While this research provides valuable insights into international B2B relationships, it has several limitations that should be acknowledged. The initial constraint pertains to the geographical restriction of the study, which is confined to Portuguese companies engaged in international commerce. Future research should extend this analysis to other countries and regions to assess the generalizability of the findings across different cultural and economic contexts. Furthermore, the cross-sectional nature of the data limits our ability to definitively establish causality or observe how relationships evolve over time. Longitudinal studies would provide more robust evidence of causal relationships and would allow researchers to examine how B2B relationships develop and change in response to various influences.

Indeed, the explanatory power of the model for trust (23.4%) and business outcomes (16.4%) indicates the potential influence of additional factors not captured in our analysis. Future research should explore these additional determinants, potentially incorporating constructs such as communication quality, cultural alignment, market conditions, and competitive dynamics. It is also evident that the present study is not explicit in its address of the potential impact of cultural differences on international business-to-business relationships. Given the cross-border nature of the relationships studied, future research should examine how cultural factors moderate the relationships between key constructs in the model.

Finally, the study places principal emphasis on direct relationships between constructs. It is possible that this approach may result in an oversight of significant moderating or mediating effects. Future research should explore more complex relationship patterns, such as the potential moderating effect of relationship duration on the link between trust and commitment, or the mediating role of specific types of commitment in the relationship between trust and business outcomes.

REFERENCES

- Amoako, G. K., Adams, G. B., & Doe, J. K. (2020). Intention to continue relationship in B to B setting—case of Guinness Ghana breweries—some preliminary findings. *Journal of Business-to-Business Marketing*, 27(1), 81-94.

- Anderson, E., & Weitz, B. (1992). The use of pledges to build and sustain commitment in distribution channels. *Journal of Marketing Research*, 29(1), 18-34.
- Arthur, E., Agbemabiese, G. C., Amoako, G. K., & Anim, P. A. (2024). Commitment, trust, relative dependence, and customer loyalty in the B2B setting: the role of customer satisfaction. *Journal of Business & Industrial Marketing*, 39(5), 933-948.
- Blau, P. (2017). *Exchange and power in social life*. Routledge.
- Briggs, E., Landry, T. D., & Daugherty, P. J. (2016). A framework of satisfaction for continually delivered business services. *Journal of Business & Industrial Marketing*, 31(1), 112-122.
- Chan, R. Y., Shen, J., Cheng, L. T., & Lai, J. W. (2024). Impacts of investment relations service quality on corporate information transparency and intangible value: the moderating role of competitive intensity. *Marketing Intelligence & Planning*, 42(4), 704-724.
- Chang, S.-H., Wang, K.-Y., Chih, W.-H., & Tsai, W.-H. (2012). Building customer commitment in business-to-business markets. *Industrial marketing management*, 41(6), 940-950.
- Chéron, E. (2009). Antecedents, Consequences, and Mediating Roles of Trust in Relationships between Buyers and Suppliers: A Comparison among North America, Japan, and South Korea. *Sophia International Review*(31), 1-28.
- Chicksand, D. (2015). Partnerships: The role that power plays in shaping collaborative buyer–supplier exchanges. *Industrial marketing management*, 48, 121-139.
- Cook, K. S., Cheshire, C., Rice, E. R., & Nakagawa, S. (2013). Social exchange theory. *Handbook of social psychology*, 61-88.
- Dasanayaka, S., Al Serhan, O., Glamboosky, M., & Gleason, K. (2020). The business-to-business relationship: examining Sri Lankan telecommunication operators and vendors. *Journal of Business & Industrial Marketing*, 35(6), 1069-1087.
- Dastmalchian, A., & Boag, D. A. (1990). Environmental dependence and departmental structure: Case of the marketing function. *Human Relations*, 43(12), 1257-1276.
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer–seller relationships. *Journal of Marketing*, 61(2), 35-51.
- Drees, J. M., & Heugens, P. P. M. A. R. (2013). Synthesizing and Extending Resource Dependence Theory: A Meta-Analysis. *Journal of Management*, 39(6), 1666-1698.
- Essig, M., & Amann, M. (2009). Supplier satisfaction: Conceptual basics and explorative findings. *Journal of purchasing and supply management*, 15(2), 103-113.
- Frazier, G. L. (1983). Interorganizational exchange behavior in marketing channels: A broadened perspective. *Journal of marketing*, 47(4), 68-78.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of marketing*, 58(2), 1-19.
- Gansser, O. A., Boßow-Thies, S., & Krol, B. (2021). Creating trust and commitment in B2B services. *Industrial marketing management*, 97, 274-285.

- Geyskens, I., Steenkamp, J.-B. E., & Kumar, N. (1999). A meta-analysis of satisfaction in marketing channel relationships. *Journal of Marketing Research*, 36(2), 223-238.
- Gölgeci, I., & Kuivalainen, O. (2020). Does social capital matter for supply chain resilience? The role of absorptive capacity and marketing-supply chain management alignment. *Industrial marketing management*, 84, 63-74.
- Gulati, R., & Sytch, M. (2007). Dependence asymmetry and joint dependence in interorganizational relationships: Effects of embeddedness on a manufacturer's performance in procurement relationships. *Administrative science quarterly*, 52(1), 32-69.
- Guo, C., & Wang, Y. (2015). How manufacturer market orientation influences B2B customer satisfaction and retention: empirical investigation of the three market orientation components. *Journal of Business & Industrial Marketing*, 30(2), 182-193.
- Ha, H.-Y., & Muthaly, S. (2008). Alternative retailer-partner relationships: the role of satisfaction. *International Journal of Business Excellence*, 1(1-2), 32-54.
- Hair, J. F. (2019). *Multivariate data analysis* (Eighth edition. ed.). Cengage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (Third edition. ed.). SAGE.
- Hald, K. S., Cordon, C., & Vollmann, T. E. (2009). Towards an understanding of attraction in buyer-supplier relationships. *Industrial marketing management*, 38(8), 960-970.
- Hewitt-Dundas, N., & Roper, S. (1999). Overcoming customer dependency: a case study of the strategies of small consumer food producers in Northern Ireland. *International Small Business Journal*, 17(4), 49-65.
- Hirshberg, R. S., & Shoham, A. (2017). A behavioral model of international channel relationships. *Journal of Business-to-Business Marketing*, 24(4), 257-282.
- Hitt, M. A., Xu, K., & Carnes, C. M. (2016). Resource based theory in operations management research. *Journal of operations management*, 41, 77-94.
- Høgevoid, N., Svensson, G., & Otero-Neira, C. (2020). Trust and commitment as mediators between economic and non-economic satisfaction in business relationships: a sales perspective. *Journal of Business & Industrial Marketing*, 35(11), 1685-1700.
- Hulbert, J., & Capon, N. (1972). Interpersonal communication in marketing: An overview. *Journal of Marketing Research*, 9(1), 27-34.
- Kingshott, R. P., Sharma, P., & Nair, S. R. (2020). Social and technical chains-of-effects in business-to-business (B2B) service relationships. *European Journal of Marketing*, 54(6), 1225-1246.
- Lam, S. Y., Shankar, V., Erramilli, M. K., & Murthy, B. (2004). Customer value, satisfaction, loyalty, and switching costs: an illustration from a business-to-business service context. *Journal of the Academy of Marketing Science*, 32(3), 293-311.
- Mittal, V., Han, K., Lee, J.-Y., Im, B., & Sridhar, S. (2017). Attribute-level satisfaction, overall customer satisfaction, and performance outcomes in business-to-business firms. *Mays Business School Research Paper*(2964334).

- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(3), 314-328.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of marketing*, 58(3), 20-38.
- Padgett, D., Hopkins, C. D., & Gabler, C. B. (2024). Turning commitment into performance through buyer dependence: a dual pathway approach. *European Journal of Marketing*, 58(4), 869-899.
- Padgett, D., Hopkins, C. D., & Williams, Z. (2020). Buyer dependence in B2B relationships: The role of supplier investments, commitment form, and trust. *Journal of Business Research*, 119, 13-24.
- Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of marketing*, 70(4), 136-153.
- Pawar, S. K. (2022). An assessment of market dependency risk in the international student industry. *International Journal of Educational Reform*, 10567879221106727.
- Pfeffer, J., & Salancik, G. (2015). External control of organizations: A resource dependence perspective. In *Organizational behavior 2* (pp. 355-370). Routledge.
- Rindfleisch, A., & Heide, J. B. (1997). Transaction cost analysis: Past, present, and future applications. *Journal of marketing*, 61(4), 30-54.
- Saleh, A., & Quazi, A. (2011). Determinants of Trust and Commitment in an international exchange setting. Asian Business Research Conference 2011,
- Saleh, M. A. (2006). *Antecedents of Commitment to an Import Supplier* [Doctoral dissertation, Queensland University of Technology]. Brisbane.
- Scheer, L. K., Miao, C. F., & Palmatier, R. W. (2015). Dependence and interdependence in marketing relationships: Meta-analytic insights. *Journal of the Academy of Marketing Science*, 43, 694-712.
- Schiele, H., & Vos, F. G. (2015). Dependency on suppliers as a peril in the acquisition of innovations? The role of buyer attractiveness in mitigating potential negative dependency effects in buyer-supplier relations. *Australasian Marketing Journal*, 23(2), 139-147.
- Sohn, Y. S., Seung, K. Y., Seo, S. Y., & Kim, S. E. (2013). The mediating role of commitment in healthcare B2B marketing. *The Service Industries Journal*, 33(13-14), 1381-1401.
- Stump, R. L., & Joshi, A. W. (1999). To be or not to be [locked in]: An investigation of buyers' commitments of dedicated investments to support new transactions. *Journal of Business-to-Business Marketing*, 5(3), 33-63.
- Tran, P., Judge, M., & Kashima, Y. (2019). Commitment in relationships: An updated meta-analysis of the investment model. *Personal Relationships*, 26(1), 158-180.

Wang, W. Y., Pauleen, D. J., & Zhang, T. (2016). How social media applications affect B2B communication and improve business performance in SMEs. *Industrial marketing management*, 54, 4-14.

Williamson, O. E. (1981). The economics of organization: The transaction cost approach. *American journal of sociology*, 87(3), 548-577.

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