

Prediction of Socio Emotional Wealth in Ecuadorian Family Businesses Using Artificial Intelligence Techniques

Ingrid Verónica Peñaherrera Veloz

Universidad Estatal de Milagro, Milagro, Ecuador

Javier Oswaldo Moreno Sánchez

Universidad Agraria del Ecuador, Guayaquil, Ecuador

Ariel Argenis Cedillo Alvarado

Universidad Estatal de Milagro, Milagro, Ecuador

Carlos Leonidas Yance Carvajal

Universidad Estatal de Milagro, Milagro, Ecuador

Washington Javier Guevara Piedra

Milagro State University, Milagro, Ecuador

Abstract

The purpose of the research was to provide a prediction of the level of socio-emotional wealth of Ecuadorian family businesses, using artificial intelligence instruments and certain family, organizational and technological variables. It was carried out within the framework of a quantitative research, with a non-experimental, cross-sectional, explanatory and predictive research design. The sample was made up of 220 family businesses from the commerce, services, manufacturing, agro-industrial and construction sectors. A structured questionnaire with a Likert scale was used, which was validated by expert judgment and showed adequate internal consistency, using Cronbach's alpha. The data were processed with descriptive statistics, correlations and logistic regression machine learning models, decision tree, Support Vector Machine, artificial neural network, Gradient Boosting and Random Forest. In general, the results indicate that there is a high level of socio-emotional richness, especially in emotional attachment, family identification and family control. The model that had the best predictive performance was the Random Forest model with an accuracy of 0.89 and an AUC of 0.92. The variables that had the most weight were family participation in management, succession planning, family identification and administrative professionalization. It can be deduced that artificial intelligence allows accurate prediction of socio-emotional wealth and provides a useful tool to guide strategic decisions in Ecuadorian family businesses.

Key Words: Socio-Emotional Wealth, Family Businesses, Artificial Intelligence, Machine Learning, Generational Succession.

1. Introduction

Family businesses are an important organizational modality for the economy, since they are present outside the productive sectors, generate employment and can maintain business projects related to identity, continuity and

family legacy. These companies, unlike others, not only orient their activity along the path of economic objectives but also along the path of affective, reputational and generational values that are also present in decision-making, in fact, the analysis of the family business must take into consideration the interaction between ownership, family and management (all these aspects converge in the dynamics in a unique way in strategic management, succession and the preservation of business control, Abeysekera, 2023; Sánchez Pantaleón et al. 2023).

In this framework, socio-emotional wealth has already established itself as an important theoretical category to explain the functioning of family businesses. According to Berrone et al. (2012), this construct manages to address the preference of business families for maintaining control, protecting family identity, paying attention to social ties and preserving that emotional attachment, but also that legacy to the next generations. From this point of view, decisions are not always aimed at immediate financial maximization but are intended to ensure the protection of non-economic benefits that are of considerable value to the owning family.

Recent literature has reinforced the importance of socio-emotional richness as an explanatory axis of family business behavior. Hernández-Perlines et al. (2023) argue that this approach has allowed us to broaden the understanding of the non-financial objectives of family businesses, while Reina et al. (2023) highlight that their study has evolved towards the analysis of dimensions, roles, and effects on business continuity. Consequently, socio-emotional wealth should not be understood as a secondary element, but as a factor that affects the strategy, governance, innovation, succession and sustainability of the family business.

In the Latin American context, family businesses present particular challenges associated with professionalization, capital structure, decision-making, and generational renewal. Aguilar Feijo and Briozzo (2020) show that socio-emotional wealth is related to financial and business structure decisions, which confirms that family ties can influence the way in which risk is assumed, the operation is financed, and control is maintained. In turn, Avellán Herrera and Hernández Junco (2021) point out that the process of generational renewal in South American countries continues to be a critical problem, especially when there are no formal succession mechanisms or when continuity depends on poorly institutionalized family agreements.

Succession is one of the most sensitive processes within the family business, as it involves transferring not only ownership or direction, but also identity, authority, knowledge and values. Li et al. (2023) explain that the identities of the founder, successor, and family influence the way business continuity is constructed. Similarly, Baltazar et al. (2025) highlight that succession strategies require greater research attention, because the success of generational transfer depends on emotional, organizational, and strategic factors. Therefore, the study of socio-emotional wealth is key to understanding why some families prioritize the continuity of the legacy over short-term decisions.

In Ecuador, the analysis of family businesses acquires special relevance due to the presence of family businesses in sectors such as commerce, services, manufacturing, agribusiness and construction. Although many of these companies maintain management practices based on trust, family experience and reputation, they also face limitations related to digitalization, succession planning, administrative professionalization and the incorporation of analytical tools. This situation opens the possibility of studying socio-emotional wealth from a predictive perspective, capable of identifying which family, organizational and technological factors allow us to anticipate its level within Ecuadorian family businesses.

Digital transformation has changed the way organizations produce information, make decisions, and manage their internal processes. In family businesses, this phenomenon generates opportunities and tensions, because technological adoption can strengthen competitiveness, but also alter traditional practices of control, leadership, and continuity. Nieto et al. (2023) point out that digitalisation can facilitate open innovation in family businesses, although its effects depend on the particularities of this type of organisation. In a complementary way, Maseda et al. (2025) state that digital transformation in small and medium-sized family businesses is associated with entrepreneurial orientation, leadership structure, and generational participation.

In this scenario, artificial intelligence is presented as a useful tool to analyze complex patterns and support business decision-making. Lee et al. (2023) argue that the implementation of artificial intelligence in organizations requires considering technological, human, and strategic factors, since its value does not depend only on the availability of tools, but also on their integration into management processes. Along the same lines, Pallathadka et al. (2023) highlight that artificial intelligence has relevant applications in administration, e-commerce, and finance, demonstrating its potential to improve the analysis of business information.

The use of predictive techniques has gained ground in business research because it allows identifying non-linear relationships, classifying behaviors, and anticipating results from organizational data. Broby (2022) explains that predictive analytics makes it possible to strengthen decision-making processes through advanced information processing, especially when working with large volumes of data or multidimensional variables. Likewise, Ma and Sun (2020) point out that machine learning connects computational capacity with the interpretation of human patterns, which is relevant for studying business phenomena where behavioral, emotional, and strategic factors intervene.

Artificial intelligence has also begun to be integrated into studies on entrepreneurship, innovation and business management. Mumi et al. (2025) show that the relationship between artificial intelligence and entrepreneurship constitutes an emerging line of research, especially for its ability to explain organizational decisions in dynamic environments. For their part, Mejía Vera et al. (2025) state that artificial intelligence is increasingly involved in managerial decision-making, by facilitating scenario analysis, data interpretation, and uncertainty reduction. These contributions are relevant to the study of family businesses, where decision-making usually combines rational, emotional and family criteria.

Despite the theoretical advance on socio-emotional wealth, there is still an important gap in the use of predictive models to estimate this construct in Latin American family businesses. Most studies have focused on describing its dimensions, analyzing its relationship with succession or explaining its influence on performance; however, less frequent research that uses artificial intelligence techniques to classify or predict the level of socio-emotional wealth based on family, organizational, and technological variables. This limitation reduces the possibility of anticipating risks associated with the loss of family control, the absence of succession, low professionalization or weak digital adaptation.

Based on this gap, the present study proposes to analyze the prediction of socio-emotional wealth in Ecuadorian family businesses using artificial intelligence techniques. The research is based on the assumption that the level of socio-emotional wealth can be estimated based on variables such as family generation, participation of family members in management, succession planning, administrative professionalization, digital transformation, innovation and use of analytical tools. With this, it seeks to provide empirical evidence on a phenomenon that has been little studied from predictive approaches in the Ecuadorian context.

The research contains theoretical, methodological and practical objectives. From a theoretical perspective, this work introduces the debate on the phenomenon of socio-emotional wealth associated with machine learning and predictive models. From the methodological aspect, the application of machine learning algorithms allows us to classify the levels of socio-emotional wealth of family businesses based on variables related to the phenomenon. From a practical point of view, this study provides relevant information for owners, executives and advisors interested in knowing what factors may be decisive in boosting or blocking the emotional and strategic continuity of the family business. As a consequence of the above, the general objective of the research was to predict the levels of socio-emotional wealth of Ecuadorian family businesses based on artificial intelligence, organizational, family and technological techniques. This objective gave rise to the research question: what are the variables that most accurately predict socio-emotional wealth in Ecuadorian family businesses according to machine learning models?

2. Methodology

The research was developed under a quantitative approach, because numerical data were collected to measure family, organizational and technological variables associated with socio-emotional wealth in Ecuadorian family businesses. The design was non-experimental, cross-sectional, explanatory and predictive. It was non-experimental because the study variables were not deliberately manipulated; transversal, because the information was collected in a single moment; explanatory, because relationships between independent factors and socio-emotional richness were analyzed; and predictive, because artificial intelligence techniques were applied to estimate the level of the dependent variable.

The population was made up of Ecuadorian family businesses belonging to the commercial, services, manufacturing, agribusiness and construction sectors. For the purposes of the study, a family business was considered to be an organization in which at least two members of the same family participated in the ownership, direction or management of the business. In addition, it was taken into account that the company had a minimum trajectory of three years, in order to guarantee that there was a basic organizational structure and sufficient experience in the family-business dynamics.

The sample was made up of 220 Ecuadorian family businesses. The selection was made by non-probabilistic sampling by inclusion criteria, considering the availability of the informants and the fulfillment of the conditions established to participate in the study. The following inclusion criteria were considered: companies located in Ecuador, family participation in the ownership or management, minimum operation of three years, presence of at least one director or family owner as an informant and voluntary acceptance to answer the questionnaire. Informal businesses without a minimum administrative structure, companies without direct family involvement, and incomplete questionnaires or with inconsistent response patterns were excluded.

Participants were owners, managers, administrators, or family members with direct involvement in business management. This decision made it possible to obtain information from people with knowledge about the structure of the company, the decision-making process, family involvement, succession planning, the use of digital tools and the strategic orientation of the business. The information was collected through a structured questionnaire, applied in digital format through online forms.

The instrument was made up of four sections. The first section collected general data about the company, such as economic sector, size, seniority, province, number of workers and family generation that ran the business. The second section measured family and management characteristics, including family participation in management, existence of family protocol, succession planning, administrative professionalization, and formalization of processes. The third section assessed socio-emotional richness based on five dimensions: family control and influence, identification of the family with the company, social ties and reputation, emotional attachment and renewal of the family legacy. The fourth section addressed technological variables, including digital transformation, use of artificial intelligence tools, data analytics, automation and innovation.

The main items were measured using a five-point Likert scale, where 1 represented "strongly disagree" and 5 "strongly agree". The dependent variable was socio-emotional wealth, understood as the set of non-economic benefits that the owning family sought to preserve through the company. For its predictive treatment, the global score of socio-emotional richness was classified into three levels: low, medium and high. This classification made it possible to turn the construct into an objective variable for machine learning models.

The independent variables included company size, seniority, economic sector, family generation, family participation in management, existence of family protocol, succession planning, level of professionalization, administrative formalization, digital transformation, use of artificial intelligence, innovation, perceived performance, and entrepreneurial orientation. These variables were selected for their theoretical relationship with family continuity, strategic decision-making and technological adaptation of family businesses.

The content validity of the instrument was evaluated through expert judgment. Five specialists with experience in family businesses, research methodology, business management and applied artificial intelligence participated. The experts valued the clarity, relevance, coherence and sufficiency of the items. Based on their observations, the wording of some questions was adjusted, dimensions were reorganized and repetitive items were eliminated. Subsequently, a pilot test was carried out with 25 family businesses that were not part of the final sample.

The reliability of the instrument was determined by Cronbach's alpha coefficient. The global instrument obtained a value of $\alpha = 0.89$, which evidenced adequate internal consistency. By size, control and family influence, it reached $\alpha = 0.86$; family identification with the company, $\alpha = 0.88$; social ties and reputation, $\alpha = 0.84$; emotional attachment, $\alpha = 0.87$; and renewal of the family legacy, $\alpha = 0.85$. These values allowed us to consider that the instrument was reliable for measuring socio-emotional richness and its dimensions.

Data processing was carried out in three phases. In the first phase, the database was cleansed, incomplete responses were eliminated, and categorical variables were coded. In the second phase, descriptive analysis was applied using frequencies, percentages, means and standard deviations. The correlations between family, organizational and technological variables were also analyzed. In the third phase, predictive artificial intelligence models were developed to classify the level of socio-emotional wealth.

For the predictive stage, the database was divided into two subsets: 70% for training and 30% for testing. Six models were applied: multinomial logistic regression, decision tree, Random Forest, Support Vector Machine, Gradient Boosting and artificial neural network. The comparison of models was performed using accuracy, precision, sensitivity, F1-score and area under the ROC curve. In addition, a confounding matrix was developed to identify the capacity of each model in the classification of low, medium and high levels of socio-emotional wealth.

The model with the best performance was selected based on the balance between accuracy, F1-score and generalization capacity. To interpret the results, the relative importance of the predictor variables was analyzed, which allowed the identification of the factors with the greatest weight in the estimation of socio-emotional wealth. This procedure facilitated the understanding of the predictive behavior of the model and avoided limiting the analysis to purely technical indicators.

The study respected ethical principles of confidentiality, informed consent, and academic use of information. Participants were informed about the purpose of the research, the voluntary nature of their participation and the confidentiality of the data provided. No trade names or sensitive information were collected that would allow the participating companies to be directly identified.

3. Results

The results allowed us to identify the behavior of family, organizational and technological variables associated with socio-emotional wealth in the Ecuadorian family businesses analyzed. The sample was made up of 220 companies, distributed in different economic sectors and with different levels of seniority, size, professionalization and family participation in management. This diversity made it possible to build a database suitable for descriptive analysis and for the subsequent application of predictive artificial intelligence models.

Table 1 shows that the highest percentage of family businesses belonged to the trade sector, followed by services and manufacturing. In terms of size, small enterprises predominated, reflecting a family business structure mainly oriented towards small- or medium-scale production units. Regarding seniority, the highest proportion

corresponded to companies with 11 to 20 years of operation, which indicates that a significant part of the sample had passed the initial phase of permanence in the market. In addition, the first and second generations concentrated most of the cases, a relevant aspect for the analysis of family continuity and succession.

Table 1 General characteristics of the participating family businesses

Feature	Category	Frequency	Percentage
Economic sector	Trade	76	34.5%
	Services	58	26.4%
	Manufacturing	39	17.7%
	Agribusiness	27	12.3%
	Construction	20	9.1%
Company size	Microenterprise	48	21.8%
	Small Business	96	43.6%
	Medium Business	57	25.9%
	Large company	19	8.7%
Seniority	3 to 5 years	34	15.5%
	6 to 10 years	61	27.7%
	11 to 20 years old	79	35.9%
	More than 20 years	46	20.9%
Family generation	First generation	92	41.8%
	Second generation	83	37.7%
	Third generation or more	45	20.5%

Note. Prepared by the author based on the questionnaire applied to Ecuadorian family businesses.

Table 2 Descriptive statistics of socio-emotional richness

Dimension	Media	Standard deviation	Interpretive level
Family Control and Influence	4.18	0.61	High
Family identification with the company	4.25	0.58	High
Social ties and reputation	4.07	0.66	High
Emotional attachment to the company	4.31	0.55	High
Renewal of the family legacy	3.74	0.79	Medium-high
Global socio-emotional richness	4.11	0.52	High

Note. Scale from 1 to 5, where higher values indicate a greater presence of socio-emotional wealth.

The descriptive results showed a high overall level of socio-emotional wealth in the family businesses studied. The dimension with the highest average was emotional attachment to the company, which suggests that family owners and managers perceived the business as an important part of the family's history, identity and stability. High values were also observed in family identification and family control and influence, which confirms that the company was not understood only as an economic unit, but as a space of family representation. The dimension with the lowest average was the renewal of the family legacy, although it remained at a medium-high level, which indicates certain weaknesses in succession planning and in the preparation of new generations.

Table 3 Correlations between predictor variables and overall socio-emotional wealth

Variable	Global socio-emotional richness
Family involvement in management	0.58
Family identification with the company	0.55
Succession planning	0.52
Administrative professionalization	0.47
Existence of family protocol	0.44
Digital transformation	0.39
Organizational Innovation	0.36
Use of artificial intelligence or data analytics	0.31
Business seniority	0.28
Company size	0.24

Note. All correlations were positive. Higher values indicate greater association with socio-emotional wealth.

Table 3 shows that family participation in management had the highest correlation with overall socio-emotional wealth. This result indicates that, when the family retains an active role in the management of the business, the perception of control, belonging, and business identity tends to be strengthened. Succession planning also showed an important association, which allows us to infer that companies with more defined continuity processes have better conditions to preserve the family legacy. Technological variables, although moderately correlated, were also positively related to socio-emotional wealth, especially digital transformation and the use of artificial intelligence or data analytics tools.

Table 4 Distribution of the level of socio-emotional wealth

Level of socio-emotional richness	Frequency	Percentage
Low	31	14.1%
Medium	78	35.5%
High	111	50.4%
Total	220	100.0%

Note. The classification was made based on the global score of socio-emotional wealth.

The classification of the global score made it possible to identify that more than half of the family businesses presented a high level of socio-emotional wealth. This group was characterized by greater family participation in management, strong identification with the company and greater appreciation of the family legacy. In contrast, the low level represented a smaller proportion of the sample and was associated with less succession formalization, low professionalization, and less incorporation of digital practices. The middle level grouped companies in the process of consolidation, with the presence of important family ties, but with weaknesses in the planning of continuity and in the formalization of their internal processes.

Table 5 Comparing the performance of predictive models

Predictive model	Accuracy	Accuracy	Sensitivity	F1-score	AUC
Multinomial logistic regression	0.74	0.72	0.71	0.71	0.78
Decision tree	0.77	0.75	0.74	0.74	0.81
Support Vector Machine	0.82	0.80	0.79	0.80	0.86
Artificial Neural Network	0.84	0.82	0.81	0.82	0.88
Gradient Boosting	0.86	0.85	0.84	0.84	0.90
Random Forest	0.89	0.88	0.87	0.87	0.92

Note. The Random Forest model presented the best overall performance.

The predictive models showed relevant differences in their ability to classify the level of socio-emotional wealth. Multinomial logistic regression presented the lowest performance, although it maintained acceptable indicators. Machine learning models outperformed traditional statistical models, especially in accuracy, F1-score, and AUC. The Random Forest algorithm obtained the best overall performance, with an accuracy of 0.89 and an AUC of 0.92, which indicates a high ability to distinguish between companies with low, medium and high levels of socio-emotional wealth.

The good performance of Random Forest can be explained by its ability to work with family, organizational, and technological variables together, without requiring linear relationships between predictors. This was especially useful in the study of socio-emotional wealth, because this construct combines affective, identity, strategic, and generational dimensions. Gradient Boosting and the artificial neural network also presented high results, although slightly lower than the Random Forest model.

Table 6 Importance of variables in the Random Forest model

Predictor variable	Materiality
Family involvement in management	18.6%
Succession planning	15.4%
Family identification with the company	13.9%
Administrative professionalization	11.7%
Existence of family protocol	10.8%
Emotional attachment to the company	9.6%
Digital transformation	7.8%
Organizational Innovation	5.4%
Use of artificial intelligence or data analytics	4.1%
Business seniority	2.7%

Note. The values represent the relative weight of each variable in the model's prediction.

Table 6 shows that family variables had greater weight in the prediction of socio-emotional wealth. Family involvement in management was the most important predictor, followed by succession planning and family identification with the company. These results indicate that socio-emotional wealth depends mainly on the way in which the family maintains its influence in management, projects generational continuity and preserves identification with the business.

Both administrative professionalization and the existence of family protocol also acquired significant relevance; that is, socio-emotional wealth is not only reinforced through affectivity, but also the formal structures that regulate the relationship between family, property and business are consolidated in parallel. In this sense, companies that have a degree of family participation, but at the same time clearer management rules, seem to have more favorable conditions to maintain socio-emotional benefits.

On the other hand, technological variables had a lower weight than family variables, but it is not that they were not important. Digital transformation, innovation, using artificial intelligence or data analytics contributed to improving the predictive capacity of the model. This shows that technological adaptation can act as a complementary factor to support business continuity, improve decision-making and, ultimately, the survival of family businesses in competitive environments.

4. Discussion

The results obtained show that socio-emotional wealth in Ecuadorian family businesses was configured as a construct highly associated with family participation in management, succession planning, identification with the company and administrative professionalization. This finding confirms that the family business cannot be interpreted solely from economic indicators, since its internal dynamics also respond to affective ties, generational continuity, reputation and preservation of family control. In this sense, the results coincide with Esparza-Aguilar et al. (2021), who argue that socio-emotional wealth influences the way in which small and medium-sized family businesses value their performance and make strategic decisions.

The high valuation of emotional attachment to the company confirms that, in the Ecuadorian context analyzed, the family business was perceived as an extension of the family identity. This result is related to Brundin et al. (2023), who explain that psychological ownership within family businesses generates deep bonds between family members and the organization. From this perspective, permanence in the company does not depend only on profitability, but also on the sense of belonging and the shared history that the family builds around the business.

Family participation in management was the most important predictor within the Random Forest model. This finding allows us to argue that socio-emotional wealth increases when the family retains real influence over business decisions. Gu and Mo (2025) point out that family control can have an impact on the sustainable development of companies, especially when the characteristics of those who exercise control favor a long-term vision. Therefore, in the Ecuadorian family businesses studied, the permanence of the family in management seems to strengthen the emotional and strategic continuity of the business.

Another relevant finding was the weight of succession planning in the prediction of socio-emotional wealth. Although the dimension of renewal of the family legacy obtained a lower mean compared to emotional attachment and family identification, its predictive importance was high. This indicates that many companies recognize the value of legacy, but do not always have formal processes in place to ensure its transfer. This result coincides with Huerta Galindo et al. (2025), who identify that succession in family businesses depends on organizational, family, and personal factors that must be managed in advance to avoid conflicts or generational breaks.

Along the same lines, Pahnke et al. (2024) warn that succession in family businesses is usually marked by a distance between the desire for continuity and the reality of succession processes. This tension is also observed in the results of this study, where the renewal of the legacy reached a medium-high level, but it was not the most consolidated dimension. This suggests that Ecuadorian family businesses value continuity, although they still need to strengthen formal mechanisms such as family protocols, preparation of successors, distribution of responsibilities and intergenerational agreements.

The results also show that administrative professionalization and the existence of family protocol had a considerable weight in the prediction of socio-emotional wealth. This finding is important because it allows us to overcome the idea that socio-emotional wealth depends only on affection or family tradition. On the contrary, the data suggest that family ties are best preserved when rules, processes, and management structures are in place. Saltos Buri et al. (2024) point out that succession problems in family businesses are related to the lack of planning and formalization, so professionalization becomes a necessary condition to protect both the business and the family unit.

The positive relationship between digital transformation, innovation and socio-emotional wealth shows that family continuity is not necessarily opposed to technological change. Although technological variables had less weight than family variables, their contribution to the predictive model was significant. Morales Pulido (2025) argues that digital transformation allows SMEs to improve their processes, adapt to the environment, and strengthen their

innovative capacity. In this study, digitalization appeared as a complementary factor that can support the permanence of the family business, as long as it is integrated with culture, leadership and continuity objectives.

The use of artificial intelligence techniques made it possible to identify patterns that would not have been observed with a traditional descriptive analysis. The Random Forest model presented the best performance, surpassing logistic regression and other algorithms in accuracy, F1-score and AUC. This result coincides with Monterrey Mayoral and Sánchez Segura (2017), who highlight that prediction methods can provide useful evidence when analyzing corporate variables associated with business behavior. In this case, the usefulness of the predictive models lay in classifying the level of socio-emotional wealth based on family, administrative and technological variables.

Additionally, Sevilla and Velastegui (2026) comment that data science and artificial intelligence applied to prediction promote decision-making in the field of information systems, since it allows not only to process information, but also to anticipate acts or behaviors. The results of this research corroborate this statement, since the algorithms used were able to effectively calculate the level of wealth from socio-emotional capital; which shows that artificial intelligence is useful not only for the analysis of financial or commercial variables, but also for the exploration of complex organizational constructs that are insinuated in the contexts associated with family identity, succession or family continuity.

Finally, the results are related to the resilience of the family business. Yilmaz et al. (2024) would attribute to this that the resilience of family businesses would depend on the ability to maintain family ties, adapt to their environment and maintain strategic resources over time. This study points out that the interactions between family participation, succession, professionalization and digital transformation suggest that the wealth of socio-emotional capital can emerge as an intangible resource that sustains the permanence of the company; although it can be sustained as long as there is a balance between tradition and adequacy; This being the family business, one that has a strong emotional attachment but whose business planning is poor, may, in fact, fall into the risk of not surviving.

5. Conclusions

The research allowed to establish that socio-emotional wealth in Ecuadorian family businesses was materialized from emotional attachment, family identification with the company and the control exercised by the family in management. As these elements were the ones that indicated that the family business was not only an economic unit, but that it has been the place of continuity, belonging and care of the family legacy,

The concrete results showed that family participation in management was the potentially most relevant determinant of socio-emotional wealth. This means that the existence of family decisions increases business identity, family influence, and perceived continuity, especially in the case of companies where the duality between family and business remained consolidated.

Succession planning and the existence of formal management mechanisms were determinants in socio-emotional wealth. Although family businesses were valued over the family legacy, the results showed that the aspect of generational continuity is still in the process of being formed with formalization, through family protocols, preparation of successors and the delimitation of responsibilities between generations.

Variables associated with technology, such as digitalization, innovation and the use of artificial intelligence or data analytics, contributed to the prediction of socio-emotional wealth, although with a lower weight than family factors. This finding gives rise to the possibility of concluding that digitalization can only complement family continuity if it is related to organizational culture, the professionalization of the family and the strategic objectives of the company.

The Random Forest model was the one that obtained a better degree of predictive capacity since, compared to the other algorithms that were tested, it obtained better results in terms of accuracy, F1-score and AUC. This confirms that artificial intelligence techniques are a way to classify the degree of socio-emotional wealth in family businesses, especially if family, administrative and technological variables complement and integrate.

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