

Non-financial rewards for human resource management in technological companies

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Abstract

Purpose: This research study aims to determine the importance of non-financial rewards as an element of total compensation and its relationship to human resource management mediated by the relationship of strategic corporate governance in the technology sector.

Design/methodology/approach: A quantitative approach of extrinsic and intrinsic non-financial rewards, human resource management and strategic management of the company has been carried out. To obtain the necessary data, self-administered questionnaire were used. The results obtained from a sample of 97 human resource managers in the technology sector proves the causal relationship between each type of non-financial reward and human resource management, as well as its link to the strategic management.

Findings: Using Partial Least Squares Structural Equation Model (PLS-SEM), significant relationships occur between human resource management and strategic management, followed by the relationship between human resource management and intrinsic rewards. A significant relationship exists between human resource management and direct and indirect intrinsic rewards through strategic management. In turn, only an indirect relationship exists between human resource management and extrinsic non-financial rewards through strategic management, but there is no direct relationship.

Originality/value: These findings are highly important for human resource management, since it could allow the development of new compensation strategies with non-financial rewards under strategic management helping technology companies to generate competitive advantage by means of the same.

Keywords: Total compensation, Human resource management, Strategic management, Intrinsic rewards, Non-financial rewards

Jel Codes: J33, I96, M52

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1. Introduction

Changes in the business world have forced organisations to focus on how to overcome the challenges brought about by COVID-19 (Battaglia, Paolucci & Ughetto, 2021). In an increasingly more globalised and dynamic business environment which is continuously transforming work processes, organisational structures and technological development, human resource management (HRM) is one of the business strategy's fundamental keys (Alikaj, Ning & Wu, 2021; Gómez-Mejía, Egatz & Larraza, 2009).

This research examines the relationship between HRM and the different types of total compensation (TC) that are adapted to the requirements of strategic management (SM), carried out in previous studies (Brown, 2001; Boyd & Salamin, 2001; Dolan, Schuler & Valler-Cabrera, 2007; Hsieh & Chen, 2011), being particularly important the application on non-financial TC in a more dynamic and different environmental setting such as the current post-Covid-19 situation (Vu, Vo-Thanh, Chi, Nguyen, Nguyen & Zaman, 2022), and particularly from the perspective of Human Resources (HR) professionals.

To achieve this goal, the research is conducted on 97 HRM staff in organisations from the technology sector based in the Andalusia Technology Park (PTA), analysing the importance and repercussion of the TC model according to different SM positions. In fact, the choice of the technology sector is based on the World Economic Forum study (World Economic Forum, 2020) that highlights the significant growth it is experiencing in terms of employment; although this trend is not current, there are several studies that confirm this trend (Frey and Osborne, 2013, Arntz, Gregory & Zierahn, 2016).

Success is achieved effectively and efficiently through a company's HRM. It is also a source of sustainable competitive advantage, responding to environmental pressures by adding value in times of crisis (Farndale, Horak, Phillips & Beamond, 2019; Hamouche, 2023). In this sense, HRM can add value if it improves organisational efficiency, obtains lower costs, generates higher profit or adapts products to customers (Lepak & Snell, 2002). Furthermore, several studies show that HRM practices are strategically important and can be a source of sustainable competitive advantage for the company (Huselid, 1995; Becker & Gerhart, 1996; Boxall, 1996). Therefore, it is necessary to develop HRM practices linked to strategy and to determine how they will be combined with other resources and used to achieve the company's strategic goals (Delery & Roumpi, 2017; Collings, McMackin, Nyberg & Wright, 2021).

HRM's main objective is to attract, link and manage the people that each organisation requires based on their required strategy at any given time, thus designing dynamic processes (Ulrich, 1998). In this sense, TC forms an essential part of the formulation process of strategic human resources management (SHRM) (Mitchell & Mickel, 1999; Milkovich & Newman, 2005). Rewards in all their forms—named total compensation—consist of the monetary or non-monetary value that an organisation offers an individual in exchange for their contributions and job performance (Mallhotra, Budhwar & Prowse, 2007). Other research supports that non-financial rewards have become a widespread HRM practice with an importance on growth opportunities and job attraction (Long & Shield, 2010; Madero-Gómez, 2016).

Ultimately, compensation systems represent an essential role in organisations, since they are one of the main tools used to attract and retain good employees (Smit, Stanz & Bussin, 2015; Pregolato, Bussin & Schlechter, 2017) and motivate staff (Ryan & Deci, 2000, Baledi & Saed, 2017). Furthermore, employees tend to perform better when they are offered adequate and fair wage compensation (Larkin, Pierce & Gino, 2012; Fulmer, Gerhart & Kim, 2023). In particular, non-financial rewards help employees develop confidence and interest in implementing organisational objectives (Nnaji-Ihedinmah & Egbunike, 2015; Pramono, 2021).

Under the concept of TC, each person shall include reward elements in accordance with their own expectations, their personal or professional life and shall or shall not value—to a greater or lesser extent—the policies and attributes developed by each company (Dominguez & Fernandez, 2010). Every company should create their own reward system based on criteria that allows them to acknowledge and appreciate their employees' work (Dominguez & Fernandez, 2010), given that there is no perfect structure.

HRM must continue to implement an appropriate compensation practice aligned with the organisation's objectives (Brown, 2001). Therefore, developing an appropriate rewards system, in all its forms, that takes into

consideration the organisation's strategic factor from HRM should provide a certain competitive advantage in this global and dynamic business environment (Dolan et al., 2007; Hsieh & Chen, 2011).

Analyses of these relationships contribute to the HR literature in different ways. Firstly, by ensuring that HRM practices are associated with the strategic needs of firms to gain competitive advantage (Lepak & Snell, 2002). Secondly, this research study independently analyses non-financial reward variables, which implies a practical advance with regards to the importance of TC as a HRM tool discussed in previous research studies; likewise, (Chen & Hsieh, 2006; Long & Shield, 2010; Jacobs, Renard & Snelgar, 2014; Pramono, 2021), it may be convenient to HRM when it comes to applying the appropriate total compensation in the organisation and its relationship with organisational behaviour.

The following section includes an overview of previous research on which the present study is based, as well as the hypotheses of the model proposed. By means of the research's design, the subsequent analysis and results of the study are obtained and, finally, a summary and the main conclusions including the practical implications and study's limitations are discussed.

2. Theoretical Framework and Hypothesis

2.1. Human Resources Management and Strategic Management

In a dynamic or post-pandemic Covid-19 environment, it is necessary to revisit the SHRM model study in order to improve the efficiency and effectiveness of the company (Brammer, Branicki & Linnenluecke, 2020). SHRM literature demonstrates that HRM practices are strategic and can be a source of sustainable competitive advantage for the company (Becker & Gerhart, 1996; Boxall, 1996). Therefore, it will be necessary to determine which HR practices constitute the system and associate them with the strategy to achieve the company's strategic goals making HRM enabling organisations to manage through and exit the crisis successfully (Delery & Roumpi, 2017; Collings et al., 2021).

SM plays an essential role as it provides cohesion to the set of practices that are circumscribed to more specific and operational functional areas (Boada-Grau & Gil-Ripoll, 2011). SM is implemented in the organisation to create and maintain competitive advantages, through the effective analysis, formulation and implementation of strategic actions aimed at guaranteeing the company's survival or success (Dess, Eisner, Lumpkin & McNamara, 2011; Guerras & Navas, 2018). In this way, within the framework of an integrated system, developing coherent strategies and policies adapted to business strategy and environment, as well as to organisation's abilities and particular characteristics (Gómez-Mejía & Larraza, 2007), allows organisations to achieve their objectives completely aligned with other organisational aspects and to respond quickly to changes in the environment.

Different classifications of strategy have been found in the scientific literature reviewed, nevertheless, the commonly accepted and applied classification in diverse organisational environments (Shortell & Zajac 1990; Hambrick 2003; DeSarbo, Di Benedetto, Song & Sinha, 2005; DeSarbo, Di Benedetto, Jedidi & Song, 2006) is that of Miles and Snow (1978). This model considers that strategy is a form of alignment between the organisation and its environment and that, in turn, internal structures and processes must be aligned with strategy in order to successfully adjust the environment and the organisation (Aleksic & Jelavic, 2017). In other words, the key dimension is the organisational response to the conditions of the dynamic and changing environment being studied. In this sense, non-financial rewards help employees develop confidence and interest in implementing organisational objectives (Nnaji-Ihedinmah & Egbunike, 2015; Pramono, 2021).

The model proposed by Miles and Snow (1978) describes four strategic concepts (prospective, defensive, analyser and reactor) to address three different problems in organisations: business, technology and administration. (Miles & Snow, 1978; Snow, Miles & Miles, 2005).

- Prospective strategies refer to companies that aggressively pursue growth opportunities through new product development, marketing experiences and innovation with multiple technologies and flexible structures.

- Defensive strategies refer to companies that adopt a high priority on efficiency improvements, and protect a narrow and stable product-market dominance with cost-effective technologies and centralised structures.
- The analyser strategy may be an intermediary option with defensive and prospective characteristics depending on the environment and efficiency required (DeSarbo et al., 2006),
- While reactor behaviour lacks a clear and coherent strategy and are generally not viable (Yanes-Estévez, García-Pérez & Oreja-Rodríguez, 2018), it refers to short-term oriented, environmentally dependent organisations that perceive changes in their organisational environments (Aragón-Sánchez & Sánchez-Martín, 2005).

In this study, we have selected the prospective strategy to apply to our research, based on the sector and context in which it is situated.

Therefore, in light of the foregoing, the first hypothesis is presented below.

H1: HRM is significantly and positively related to SM.

2.2. Total Compensation as a Human Resource Management Tool

Employees' total compensation in an organisation should be part of an integral system that refers to the diverse components integrating the reward system, mainly formed by two large blocks (Villanueva & González, 2005; Malhotra et al., 2007; Madero-Gómez, 2016):

- The first block relates to financial aspects (fixed, variable and indirect), referring to any tangible type of extrinsic rewards, including wages, salaries, incentives, bonuses and commissions, as well as indirect payments, otherwise called benefits in kind that organisations offer to their employees; that is to say, any payment that an employee receives in exchange for the service they provide (Malhotra et al., 2007; Gómez-Mejía, Balkin & Cardy, 2016; Chiavenato, 2020).
- The other block relates to non-financial aspects (N), which contain a) extrinsic remuneration (EXT) in the form of any kind of reward, prize, recognition or gratification with no economic impact and is mainly related to the job, with the different environment and work condition aspects (Malhotra et al., 2007; Madero, 2009), and b) individual's internal rewards or intrinsic (INT) deriving from their involvement in certain activities or tasks, such as: work satisfaction, commitment, independence, growth and learning opportunities (Reiss, 2004; Deci & Ryan, 2010; Long & Shields, 2010; Jacobs et al., 2014; Schlechter, Thompson & Bussin, 2015).

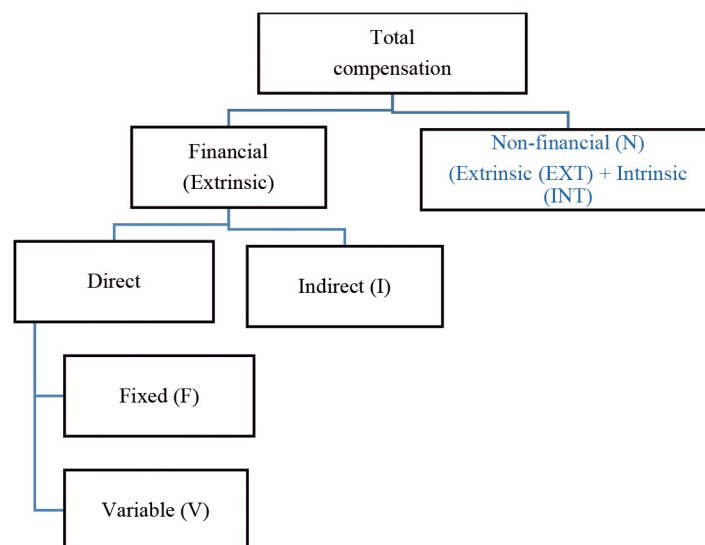


Figure 1. Types of rewards in total compensation

In this research, we considered focusing on extrinsic non-financial rewards (EXT) and intrinsic rewards (INT) as a type of non-financial reward, since, on the one hand, results from different studies suggest that INT rewards are more powerful predictors of affective engagement than monetary rewards (Jacobs et al., 2014; Kuvaas, Buch, Weibel, Dysvik & Nerstad, 2017; Malhotra et al., 2007). On the other hand, EXT rewards help employees develop confidence and interest in achieving the organisation's goals (Nnaki-Ihedimma & Egbunike, 2015; Pramono, 2021).

Based on the foregoing, the second and third hypotheses are as follows:

H2: HRM is significantly and positively related to the INT non-financial rewards factor.

H3: HRM is significantly and positively related to the EXT non-financial rewards factor.

2.3. Strategic Management and Non-Financial Rewards

An organisation's reward policy is coherent to the strategy and is updated according to said strategy, including objectives and being perfectly defined (Miles & Snow, 1978). In purely economic terms, it is certain that rewards account for a high percentage of the total costs faced by any organisation (Zhou & Martocchio, 2001; Gómez-Mejía & Sánchez, 2006). From a strategic perspective, rewards can be seen as a useful HRM tool, which enables an organisation to control and foster behaviour in staff at all levels, being an equally adaptable tool depending on the requirements at any time and the company's objectives (McCann, 1987).

Some empirical studies have suggested the matching of TC to SM. The effectiveness of TC was contingent upon companies' strategic characteristics (Balkin & Gomez-Mejia, 1987), and strategic orientation has significant effects on compensation practices (Rajagopalan & Finkelstein, 1992).

The importance of INT and EXT non-financial rewards are proposed in the fourth and fifth hypotheses of our research study:

H4: SM is significantly and positively related to the INT non-financial rewards factor.

H5: SM is significantly and positively related to the EXT non-financial rewards factor.

Therefore, we obtain a model that directly relates HRM to the intrinsic and extrinsic factors of the non-financial rewards factor; or indirectly, from the mediating variable SM. Therefore, hypotheses 1, 4 and 5 help us to analyse the mediating role of SM. The subsequent analysis of these hypotheses, whether they are supported or not, will indicate the type of relationship.

An analysis is proposed regarding the importance that these non-financial rewards have within TC to achieve objectives from the perspective of HRM aligned and coherent with SM as an appropriate management tool for the expected staff salaries.

Hsieh and Chen (2011) have proven that the tendency of the reward method is changing from a simple to a multiple context due to the fast-changing environment, analysing the importance of non-financial rewards for the achievement of objectives from the perspective of HRM aligned and consistent with SM as a management tool appropriate to the expected salaries of staff (Brown, 2001; Boyd & Salamin, 2001; Dolan et al., 2007; Hsieh & Chen, 2011).

Researchers propose the investigation framework shown in Figure 2, which will be tested in this study.

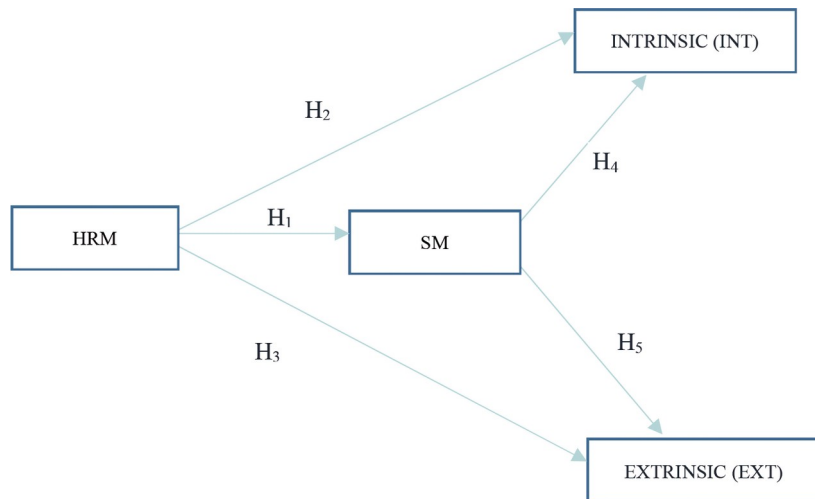


Figure 2. Research model proposed

3. Methodology

This study uses a quantitative approach in order to respond to the hypotheses set forth. The choice of a quantitative method is due to its ability to analyse and quantify variables of interest in an objective and generalisable way. This approach allows us to gather numerical data that can be statistically analysed to obtain clear conclusions and answers. To obtain the necessary data, self-administered anonymous surveys were used. These surveys were based on previously validated instruments, which guarantees the reliability of participants and validity of the data collected. The study was approved by the ethics committee of the institution in which it was conducted (328/CEIH/2017).

In order to analyse the hypotheses set forth in the study, the authors use Partial Least Squares Structural Equation Model (PLS-SEM) through the Smart PLS v.4 programme.

3.1. Research Design

To obtain the sample for this study, Malaga has been chosen because it is a city with ample business growth and due to its HR culture in different forums, social and cultural backgrounds for implementing potential measures to change and improve management. The Andalusia Technology Park (PTA) in Malaga (Spain) has been chosen, as it has represented 8.65 % of the GDP plus 9.14 % of the total employment in the province of Malaga since 2021. In addition, with a greater predominance of companies in the Electronics, Information, Computer and Telecommunications sector (63%). Furthermore, Malaga is a city with extensive business growth and due to its human resources culture in different forums, social and cultural background to implement potential measures to change and improve management.

This study has been conducted on a sample of 97 professionals, all of whom are human resources managers from the technology sector with different numbers of employees and of different sizes. In this sense, a structured anonymous questionnaire has been self-administered electronically and in person and the sampling type has been by quotas according to the company type. The data collection process took place between June and July 2023. With a sample of 97 companies from a total of 631 companies based at the Technology Park in Malaga, the maximum error is 9.2% with a confidence level of 95% (considering $p=q=0.5$). Table 1 presents the research study's technical sheet.

Data collection period	1 st June 2023 – 30 th July 2023
Population	631
Sample type	Quotas by company type
Sample size	97 respondents
Survey type	Face-to-face and online questionnaires
Maximum error	9.2%
Reliability level	95%

Table 1. Study's technical sheet

3.2. Measurement

The different validated scales of the various measuring instruments are considered below. To measure HRM, 5 items have been formulated based on the adaptation of Boada-Grau and Gil-Ripoll's (2011) validated scale, which is created with the aim of diagnosing human resources practices through professional growth development factors and the formalisation of processes. To measure SM, 4 items were adopted, which were adapted based on the competitive factor scale developed by Dess and Davis (1984) from Porter (1980), as it focused specifically on operational efficiency or innovation in marketing techniques and methods. Finally, both EXT and INT non-financial rewards were measured based on Boada-Grau, Costa-Sole, Gil-Ripoll and Vigil-Colet (2012) validated scale. Personal requirements, work time, the balance between professional and personal life, recognition or development valued within the organisation. All items (see in Table 3) have been measured using a Likert scale with five positions (from 1 strongly disagree, to 5 strongly agree). The use of different Likert scale measures is a highly debated topic in market research, but according to Dawes (2008), any of the three options, 5, 7, or 10 points, are valid for analytical tools such as structural equation modeling. Therefore, the 5 point Likert scale scale is valid for our research study.

4. Results

The results obtained from the analysis of the data collected in the study are presented and described in this section. The results represent the specific findings obtained by evaluating the variables and answering the five hypotheses posed.

For the factorial exploratory analysis and descriptive analysis, the statistics programme SPSS.20 has been used. SmartPLS 3.2.7 has been used to analyse the structural equations model. To measure the non-financial dimension, an exploratory factorial analysis has been conducted based on the items obtained from reading literature. From this analysis, two factors of the non-financial dimension have been obtained (see Table 2). The first factor accounts for 55.77% of the total variance in the non-financial dimension. It has two items and corresponds to the INT non-financial factor. The second factor obtained accounts for 17.01% of the total variance of the non-financial dimension; it consists of four items and corresponds to the EXT non-financial factor. These two factors obtained account for 72.78 % of the total variance.

ITEM	Components	
	1	2
Professional and personal life balance	0.883	0.883
Awards and recognitions	0.847	0.847
Development in training opportunities	0.504	0.504
Environment, regarding work	0.899	0.899
Personal requirements	0.751	0.751
Work time	0.861	0.861
% variance explained	55.77%	17.01%
Kaiser-Meyer-- Olkin index	0.718	
Barlett's sphericity test	Chi-squared= 280.03; sig <0.000	

Note: Method of extraction: analysis of main components with Varimax normalisation

Table 2. Factorial matrix of rotated components

The descriptive results of the different items forming the measurement instrument are presented as follows, that is to say, the items that make up HRM, SM and both INT and EXT non-financial factors. Said descriptive analysis is presented in Table 3. The items with the highest ratings are “Achieving the organisation’s objectives”, followed by “Providing competitiveness”.

Having completed the descriptive analysis, partial least squares structural equation modeling (PLS-SEM) was then used for the validation of measurement and contrast of hypothesis. This multi-variant technique allows the simultaneous estimation of multiple causal relationships between latent or construct variables (Hair Jr, Hult, Ringle & Sarstedt, 2016). Over recent years, structural equation models have disseminated in social sciences (Mercadé-Melé, Molinillo & Fernández-Morales, 2017; Mercadé-Melé, Molinillo, Fernández-Morales & Porcu 2018; Mercade-Mele, Molina-Gomez & Garay 2019). To analyse the theoretical model subject to this study, Anderson and Gerbin’s (1988) recommendations have been followed. Firstly, confirmatory factor analysis and, subsequently, causal relationships between the different constructs were analysed. The Table 4 analyses the model’s psychometric properties.

Validity measurements are optimum, both the standardised coefficients which are higher than 0.5 and the weight average which is higher than 0.7 (Hair Jr et al., 2016). The composite reliability and average variance extracted (AVE) also provide appropriate values (Hair Jr et al., 2016). Furthermore, the discriminant validity is confirmed, that is to say, items must be mainly correlated with its constructor and not so much with other constructs.

Factor	ITEMS	Average	Standard deviation
HRM (Boada-Grau & Gil-Ripoll, 2011)	HRM1 Achieving the organisation’s objectives (processes, budgets, business, etc.)	4.01	0.88
	HRM2 Providing competitiveness (supplying motivated staff, performance, etc.)	3.89	0.96
	HRM3 Managing change (new, more flexible and agile approaches adapted to the organisation)	3.55	1.09
	HRM4 Developing and maintaining quality of life (leadership style, working environment, independence, etc.)	3.57	0.93
	HRM5 Establishing ethical policies and responsible behaviour	3.54	1.14
SM (Miles & Snow, 1978)	SM1 Employees have unambiguous and complete communication (advertising)	3.36	1.1
	SM2 The rewards system is adapted to employees’ needs (brand identification)	2.68	1.27
	SM3 The rewards policy is coherent with the general strategy (operational efficiency)	3.61	0.98
	SM4 The rewards policy is modified according to structural changes (innovation in marketing techniques and methods)	2.91	1.2
INTRINSIC (INT) (Boada-Grau, et al., 2012)	INT1 The balance between professional and personal life (flexibility...) is valued within the organisation	3.41	1.22
	INT2 Awards and recognition (formal and informal) are valued within the organisation	2.87	1.23
	INT3 Development, with regards to training opportunities, is valued within the organisation	3.42	1.04
	INT4 The environment, with regards to work (job post and organisation), is valued within the organisation	3.22	1.13
EXTRINSIC (EXT) (Boada-Grau, et al., 2012)	EXT1 Personal requirements (childcare services,...) are valued within the organisation	2.44	1.22
	EXT2 Work time (holidays, sick leave...) is valued within the organisation	3.55	1.02

Table 3. Descriptive analysis

Factor	Items	Weight	Average Weight	Composite Reliability	AVE
HRM (Boada-Grau & Gil-Ripoll, 2011)	HRM1	0.632	0.7834	0.891	0.624
	HRM2	0.772			
	HRM3	0.868			
	HRM4	0.859			
	HRM5	0.796			
SM (Miles & Snow, 1978)	SM1	0.71	0.71375	0.808	0.516
	SM2	0.7			
	SM3	0.59			
	SM4	0.842			
INT (Boada-Grau, et al., 2012)	INT1	0.826	0.8415	0.908	0.713
	INT2	0.867			
	INT3	0.737			
	INT4	0.935			
EXT (Boada-Grau, et al., 2012)	EXT1	0.853	0.848	0.836	0.719
	EXT2	0.843			

Table 4. Reliability and validity of the construct

Factor	HR	SM	INT	EXT
HRM	0.790			
SM	0.652	0.718		
INT	0.705	0.687	0.845	
EXT	0.287	0.362	0.48	0.848

Note: The diagonal represents the square root of the AVE. Correlations are presented below the diagonal

Table 5. Discriminant validity

Once the measurement model has been evaluated, the structural model is then analysed, that is, the structural coefficients, which present estimations of the model's relations (see Table 6).

Hypothesis	Relationships	Original Sample (O)	Standard Deviation (STDEV)	Statistics st (O/STDEV)	P Values	Contrast
(H1)	HRM -> SM	0.652***	0.046	14.231	0.000	Not rejected
(H2)	HRM -> INT	0.448***	0.079	5.7	0.000	Not rejected
(H3)	HRH -> EXT	0.089	0.189	0.471	0.638	Rejected
(H4)	SM -> INT	0.395***	0.076	5.214	0.000	Not rejected
(H5)	SM -> EXT	0.304*	0.158	1.929	0.054	Not rejected

Note: *= $p < 0.1$; **= $p < 0.05$; ***= $p < 0.01$

Table 6. Evaluation of structural relationships

The table shows that all causal relationships are significant, except for the relationship between SM and EXT non-financial rewards. Significant relationships occur between HRM and SM ($\beta = 0.652$; $p < 0.01$), followed by relationship between HRM and INT rewards ($\beta = 0.448$; $p < 0.01$). Therefore, a significant relationship exists between HRM and direct and indirect INT rewards through SM.

In turn, only an indirect relationship exists between HRM and EXT non-financial rewards through SM, but no direct relationship exists. There is a full mediation from HRM to EXT non-financial rewards through SM and a partial mediation from HRM to INT rewards through SM, because HRM on its own relates to INT.

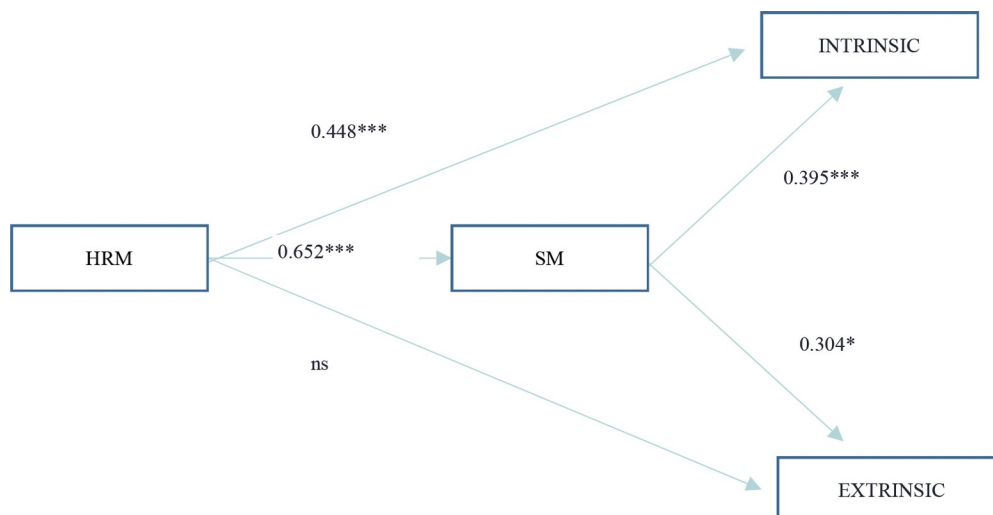


Figure 3. Model with structural relationships

5. Discussion and Conclusions

The purpose of this research study is to determine the importance of non-financial rewards as an element of total compensation and its link to human resource management mediated by the relationship of strategic corporate governance in the technology sector. These findings are of high importance to HRM, since it could allow the development of new compensation strategies under SM, helping technology companies to create a competitive advantage by means of the same.

The research study's results confirm, on the one hand, that there is a significant and positive relationship between HRM and SM, thus proving the first hypothesis. These findings align with existing research, indicating that HRM practices are strategically important and can serve as a sustainable competitive advantage for the company (Huselid, 1995; Becker & Gerhart, 1996; Boxall, 1996). Therefore, it is essential to develop HRM practices that are aligned with the company's strategy and to determine how they will be integrated with other resources to achieve the organisation's strategic objectives (Delery & Roumpi, 2017; Collings et al, 2021).

Our second hypothesis, HRM significantly influences the INT non-financial factor, has also been confirmed. Furthermore, the fourth hypothesis has also been proven, as SM significantly influences the INT non-financial factor according to research, indicating that, from a strategic perspective, INT non-financial are of particular importance to HRM (Long & Shield, 2010; Jacobs et al., 2014; Pramono, 2021).

Regarding the third hypothesis, which states that HRM significantly influences the EXT non-financial factor, researchers could not confirm it. Therefore, we were unable to confirm the research that EXT non-financial rewards have become a widespread HRM practice with an importance on growth opportunities and job attraction (Madero-Gómez, 2016; Long & Shield, 2010).

However, a relationship concerning its EXT non-financial reward only exists indirectly through SM, but not directly with HRM. On the other hand, the relationship between HRM to INT has a partial mediation through SM, because both the direct and indirect relationships are significant. Both types of relationship therefore exist, a full mediation from HRM to EXT non-financial factor through SM and a partial mediation from HRM to INT non-financial through SM.

Finally, it should be noted that the strongest of these relationships is that between SM and INT non-financial rewards. Likewise, there is a significant relationship between the organisation's HRM and SM.

In light of the foregoing, it can therefore be concluded that four of the five research hypothesis have been confirmed, thus achieving the main objectives of this research and highlighting the importance of INT non-financial rewards within the TC strategy of the company and the mediating role of SM in a very competitive technological sector.

5.1. Theoretical or Empirical Contributions

The results contribute to the HRM literature by demonstrating the importance of non-financial rewards as an element of TC and its relationship to HRM, mediated by the relationship of SM in the technology sector, creating an effective competitive advantage.

Furthermore, according to the significant relationships determined herein, an INT non-financial reward system that leverages the relationship between HRM and SM provides HR managers with an effective management practice to adapt to a fast-changing environment.

5.2. Managerial Perspective

We believe that these results suggest not only the importance of properly implementing the best TC according to the firm's HRM, but also the different contributions they make through the company's SM.

Conducting this research study represents a practical advancement in the perception of HRM, emphasising the importance of TC and the non-financial variables that comprise it, all aligned and coherent with the organisation's SM.

Furthermore, these results are significant given previous evidence and theories suggesting their potentially positive effects. For instance, INT non-financial rewards can boost employees' performance (Pramono, 2021) and sustain it over time. In contrast, EXT rewards might attract employees to an organisation but are insufficient to retain them for a long period of time, thus resulting in high employee turnover rates (Nnaki-Ihedinmah & Egbunike, 2015). Individuals who receive high levels of INT non-financial rewards generally experience higher levels of participation at work and, therefore, they are more willing to make an additional effort, as well as being more dedicated and actively involved in their job (Bandura, 1977; Schaufeli & Bakker, 2003). The characteristics of jobs with INT non-financial rewards such as independence, growth opportunities, variety, learning opportunities and social support are strongly related to work commitment (Mosquera, Soares & Oliveira, 2020). INT non-financial rewards may create long-term sustainable motivation and reduce the need for supervision and intermediary management (Goleman, 1995; Reiss, 2004; Pink, 2009; Deci & Ryan, 2010).

Employee wellbeing has become an essential area for organisations to consider in order to ensure a healthy and well-functioning workforce (Roemer, Sutton & Medvedev, 2021; Vyas, 2022). A thriving workforce of growing and energised individuals and groups is the key to achieving organisations' sustainable strategic objectives (Spreitzer, Porath & Gibson, 2012). Companies can and should contribute to this welfare through their TC system.

Ultimately, the research findings provide a comprehensive, implementable framework to facilitate adaptive TC best practices for HR professionals due to the fast-changing environment. It could also be an important tool to boost employee confidence and organisational sustainability. These findings could help technological organisations to improve their HR strategy and, furthermore, competitiveness. Moreover, a technology company's success depends on its ability to better manage its HRM as professionals with specialised skills, which are vital to them. A competitive and well-designed compensation strategy will contribute to attracting and retaining valuable staff with the support of a well-thought-out HRM strategy.

5.3. Limitations and Future Lines of Research

It should be noted that this study has certain limitations. With regards to the sample of human resources managers, it may be of interest to increase the sample size, so that the study is more significant. Another limitation, which is also a future line of research, could be to discriminate by sector, size, geographical regions (Cooke, 2018), and to consider gender perspectives (De Cieri, 2009), among other aspects. On the other hand, organisations and human resources functions, as well as organisational behaviour, are ever-changing processes, thus the research study's results are temporarily specific. Since data is cross-sectional, causality cannot be inferred, which in turn suggests that future research look at those relationships using longitudinal data.

Other limitations of the study lie both in the possibility of increasing the SM and HRM constructs in the impact of the results, and in the types of TC analysed. Specifically, for SM, establishing different lines of research according to the strategic orientations of Miles and Snow (1978). In addition, this research study focuses solely on the HR manager's perspective; it should be complemented by the perspective of other actors in the system

such as the employees themselves, varying in other company departments, as well as in different sectors in which the environment changes substantially. The analysis used in this research is quantitative, obtaining robust and reliable results, which should be cross-checked with qualitative aspects to provide more consistency to the research.

The conclusions obtained encourage us to evaluate new research studies regarding our third hypothesis, where HRM significantly influences the extrinsic non-financial factor as future lines of investigation from the perspective of other causal attributes implied in the organisation. This may allow us to compare results, as well as the application of different variables dependent on organisational behaviour, which may provide new results and practical valuations to organisations, such as attraction and satisfaction, among others. Likewise, it would be of interest to future research studies to conduct more research on the long-term evolution and variation of the results provided. These hypotheses should also be tested in different business contexts and sectors, in order to test its validity in the technological companies sector in Spain, observing whether these variables affect strategic defensive, analytical, and reactor models in the same way.

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