



The Compliance Officer in Nonprofit Cooperative Societies: Validation of the figure through the Best–Worst Method

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ABSTRACT

The objective of this research is to validate the responsibilities attributable to the figure of the Compliance Officer based on the International Organization for Standardization (ISO) 37301 Standard on Compliance Management Systems. The lack of previous studies and the need of the Compliance Officer as an important figure within Nonprofit Cooperative Societies justify our interest and the timeliness of this research. Besides, Nonprofit Cooperative Societies can play a significant role in advancing the United Nations Sustainable Development Goals through their unique structure and community-focused mission. Based on ISO 37301, a total of 27 indicators have been defined and grouped into 6 blocks. In order to empirically validate the proposed indicators, a questionnaire was designed and anonymously answered by a series of expert managers in the mentioned sector in Spain. Afterward, a multi-criteria decision approach, the so-called Best-Worst Method, is applied to obtain the optimal weights of such indicators from the questionnaire answers. In the event of differences of opinions regarding the resulting weights, a consensus process based on minimum cost consensus is applied to obtain agreed weights that satisfy all the experts.

1. Introduction

Nonprofit Organizations (NPOs, hereinafter) and their leaders around the world face an increasing demand for accountability and greater transparency [1,2]. The compliance function is essential to ensure the effectiveness, transparency, and accountability of NPOs. As the World Compliance Association (WCA, hereinafter) points out, the benefits of the compliance function in organizations that decide to implement it are diverse. They vary depending on the scope of their system and the types of risks to be considered, whether criminal, tax, operational, reputational, labor, etc. Given the above importance, the existence of a figure within the organization in charge of ensuring correct compliance with legislation is advisable. This is important whether there is an applicable regulation or whether there are only ethical processes to be carried out (for example, the monitoring of a sustainability report). As Thottoli [3] points out, “the compliance function may seem complicated and expensive for the organizations, but however, the cost of non-compliance will be higher”. Non-compliance and illegal behavior are generally driven by two main circumstances: the possibility of saving on costs and by strategic behavior regarding the expected punishment for non-compliance [4].

The purpose of this research is to develop an comprehensive checklist of responsibilities attributable to the Compliance Officer based on

indicators. This checklist is also attributable to Nonprofit Cooperative Societies to facilitate the identification and evaluation of their tasks. Furthermore, these indicators will obtain a weight according to the degree of importance given to them by the sector experts who participate in this research, resulting in a consensus value. To achieve this research objective, we validate the responsibilities attributable to the Compliance Officer based on the International Organization for Standardization (ISO) 37301 Standard on Compliance Management Systems (CMS, hereinafter). These responsibilities are then contrasted with the opinion of seven experts from the Spanish Nonprofit Cooperative Sector. First, we identify 27 indicators, following the ISO 37301 Standard, which are classified into 6 categories. Afterward, our goal is to evaluate the relevance of these indicators based on the opinion of experts. For this purpose, we apply a multi-criteria group decision-making (hereinafter MCGDM) method [5], known as the Best–Worst method (hereinafter BWM) [6], which allows us to optimally obtain weights for each of the indicators based on expert opinion. These opinions are collected through questionnaires. Naturally, experts may have different views on the importance of indicators. If these disagreements are not adequately addressed, the decision process may be compromised and a consensus may not be reached [7]. Therefore,

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we apply a Minimum Cost Consensus (hereinafter MCC) [8,9] process that allows us to obtain optimal consensus weights for all indicators that satisfy all experts involved in the process.

Within the nonprofit sector, the study focuses specifically on Nonprofit Cooperative Societies for three main reasons: First, due to the lack of previous literature investigating this type of organization, especially with regard to the figure of the Compliance Officer. Second, because Nonprofit Cooperative Societies are currently adopting strategies of differentiation in social aspects and not only in economic aspects. According to the International Cooperative Alliance (ICA),¹ more than 12% of the world population is a member of one of the 3 million Nonprofit cooperatives in the world. In addition to these economic issues, nonprofit cooperatives provide the services and infrastructure that society needs to prosper. The cooperative model is based on values and ethical principles, promoting self-help and empowerment, reinvestment in communities, and care for the well-being of people and the world, as pointed out by the ICA. This is the case because Nonprofit Cooperative Societies take a long-term view on sustainable economic growth, social development, and environmental responsibility. That said, a final reason is worth noting. Third, Nonprofit Cooperative Societies, with their emphasis on community, equity, and sustainability, are ideally suited to promote the Sustainable Development Goals promulgated by the United Nations [10,11]. Their member-driven approach ensures that development is inclusive and benefits the community at large, making these powerful agents of sustainable development.

Therefore, our contribution can be summarized as: (1) Define indicators based on the ISO 37301 CMS standard on the responsibilities attributable to the Compliance Officer (2) Provide a consensus weight for each indicator based on the opinion of sector experts. For professionals in the sector, our study contributes to helping those in charge of the Compliance function within Nonprofit Cooperatives to clarify the scope of their essential tasks and, therefore, the expectations placed on them by the various legal, economic and social stakeholders. For the researchers, we contribute to filling a double research gap: (1) we propose a weighting through the BWM of the main responsibilities of the Compliance Officer on the basis of ISO 37301 CMS standard, and (2) we define the responsibility of this figure in Nonprofit Cooperative Societies as a novelty.

To emphasize the novelty of this contribution, we would like to clarify that, to the best of our knowledge, no previous studies in the literature adopt a similar approach within the context of Nonprofit Cooperative Societies. While it is true that the methodologies we employ — MCC and BWM — have been widely applied across various fields, such as marketing [12], economics [13], and the circular economy [14] for MCC, and health [15], transportation [16], and manufacturing [17] for BWM, their application to the nonprofit sector, particularly cooperatives, remains underexplored. Some authors of this current work have previously applied similar methodologies to research in the broader nonprofit sector [18–20]. However, those works focused on the weighting of indicators relied on predefined indicator sets developed and weighted by certifying organizations. Our objective was to validate these indicators and identify any discrepancies between the weights assigned by the organizations and those provided by experts using the MCC and BWM methods. In contrast, our current study presents a novel set of indicators based on ISO 37301, specifically tailored to assess the responsibilities of the Compliance Officer within Nonprofit Cooperative Societies. To our knowledge, there are no existing sets of indicators for the role of the Compliance Officer in Nonprofit Cooperative Societies, which makes an empirical comparison with other studies currently unfeasible.

The remaining sections are organized as follows. Section 2 focuses on two aspects: (i) The theoretical framework begins by contextualizing the nonprofit sector and then examines Nonprofit Cooperative

Societies in addition to placing its Spanish regulation; (ii) It continues by analyzing the compliance function and focusing on the figure of the Compliance Officer. Section 3 presents the methodology used to answer the research questions, and Section 4 presents the relevant results and analysis. Section 5 presents the conclusions, limitations, and implications of the study.

2. Theoretical framework

This section introduces the theoretical background of the proposal, mainly Nonprofit Cooperative Societies in Spain and their social value, and the figure of the Compliance Officer.

2.1. Nonprofit Cooperative Societies in Spain and their social value

NPOs are an increasingly important reality in both the economic and social environment known as the welfare state. Both governments and the nonprofit sector have become intertwined in recent decades [21]. Given their available capacity, governments rely on NPOs to provide humanitarian and social services [22]. Despite the professionalization of welfare states and the strength of economies, in many advanced countries, the nonprofit sector plays a fundamental role in society [23]. In addition, it highlights the sector's reliance on public trust to gain legitimacy and support to fulfill its social missions [24] by obtaining funding from governments and private donors [25,26]. Studies even conclude that donors first assess the performance of NPOs and then donate [22,27]. Even crowdfunding as a new concept of project financing has experienced a significantly increasing trend [28,29]. In other words, NPOs receive funds from various sources with different interests [30,31] but it should be noted that NPOs have access to limited resources [32]. Thus, there is a high level of interest from the internal and external stakeholders in the social work NPOs carry out. In this regard, NPOs need to maintain effective relationships with a growing number of stakeholders as their performance is scrutinized by a range of actors with different interests [33,34] that therefore influence their success [35]. Like any other type of organization, NPOs must be accountable and have transparency in order to be managed appropriately. However, the concept of transparency may vary depending on the stakeholders towards whom the practice is oriented [36]. What seems to be clear is that the lack of transparency among NPOs can lead to loss of stakeholder support, with the consequent organizational failure [37]. In this way, any NPO must be managed effectively and efficiently with the ultimate aim of achieving a social mission [38].

Of all the organizations that make up the nonprofit sector, Nonprofit Cooperative Societies stand out for their social and responsible work, although this model has been little analyzed to date, despite its importance throughout the world [39–41]. For this reason, in this study, we have the opportunity to focus specifically on Nonprofit Cooperative Societies in Spain because of their social nature and because it is a reality that has been little studied to date. In fact, there is a lack of research analyzing the figure of the Compliance Officer, focusing on the main responsibilities that this stakeholder must meet. According to the First Additional Provision of Law 27/1999, of July 16, 1999, on Cooperatives [42] (Last update published on 12/22/2021), those that manage services of collective interest or of public ownership, as well as those Cooperatives that carry out economic activities that lead to the labor integration of persons suffering from any kind of social exclusion and that are expressly included in their Bylaws, may be classified as Nonprofit Cooperative Societies [43,44]. In accordance with the aforementioned law, in its ninth additional provision, the tax regime applicable to cooperative companies classified as nonprofit entities will be that established in Law 20/1990, of December 19, 1990, on the Tax Regime for Cooperatives [45]. Thus, the Nonprofit Cooperative Society is characterized by its resilience in pooling its (non-monetary) resources to create networks and collective competences to improve its capacity for innovation and capture public funds [46]. Although

¹ <https://ica.coop/en>.

it should be noted that it is the cooperative principles that make the difference in their strategy, and therein lies their success [47–49]. Thus, if the Nonprofit Cooperative Society focuses on its social value as an intangible asset, it must constitute a figure called Compliance Officer that ensures compliance with all regulations, that is fully aware of all legislation, and that is responsible for ensuring ethics. This constitutes the justification of our research.

2.2. The figure of the Compliance Officer in the nonprofit sector

Every organization tries to maintain its image and high quality by complying with the applicable rules and regulations issued by internal and governmental regulations and policies from time to time [3]. Although the concept of “Compliance” is not recent, its implementation has become a trend due to the need for organizations to embark on more transparent paths. Increasingly, organizational boards are concerned about compliance on a variety of issues [50]. In this sense, NPOs are currently faced with the challenge of convincing society that they manage the funds they receive efficiently and that these funds are used to carry out the social missions for which they were created [51]. Therefore, the challenge for NPOs is to maintain compliance with such rules to secure the necessary resources and perceptions of organizational legitimacy [52,53].

As the Spanish Compliance Association (ASCOM, for its acronym in Spanish) points out in its White Paper on the compliance function, “phenomena such as the globalization of the economy or the need to transcend legal obligations to assume the ethical commitments demanded by society have contributed to increasing the need for compliance, accelerating the evolution of the maturity curve of a function that is perceived as a key factor of good governance” [54]. Non-compliance refers to violations of provisions of laws, regulations, contracts, or grant agreements related to an NPO [55]. Thus, the complexity and variability of compliance obligations affecting the sector has increased in recent years. According to the WCA, the term “Compliance” is a set of procedures and good practices adopted by organizations to identify and classify the operational and legal risks they face and to establish internal mechanisms to prevent, manage, control and react to them. This makes it necessary to have: (1) defined areas in the organization that facilitate the compliance function, and (2) qualified staff to carry out the compliance function. Thus, the role of the Compliance Officer is crucial to ensure that the organization complies with all applicable laws and regulations, as well as to maintain high ethical standards in its operations. A Compliance Officer ensures compliance with the organization’s laws, tax laws, rules, and other applicable regulations, as well as the provisions of other related corporate regulations, policies, and procedures [3]. According to the WCA, the responsibilities attributable to the Compliance Officer start with the duty to report potential risks and breaches affecting the organization, such as fines, penalties, legal fees, and reputation damage.

Currently, there is no consensus on all the responsibilities that the Compliance Officer must assume, but there are some common general lines of action for the function that are set out in the ISO 37301 CMS Standard. It is on the basis of this standard that the indicators we validated in this research study have been outlined through Non-profit Cooperatives Societies expert opinion and are presented in the following section.

3. Methodology and research design

This section introduces the methodology and research design applied to this paper. In addition, Fig. 1 shows a general scheme describing the phases carried out in the empirical analysis.

3.1. ISO 37301 compliance management systems standard

As a first consideration, it is worth noting that the ISO 19600 CMS Standard — Guidelines, is the result of a standardization project started in 2013 and concluded in December 2014. This standard clarifies that the compliance management guidelines can be applied to any type of organization, both private and public sector, as well as NPOs. Therefore, it is not a sectorial issue, being applicable to different sectors and organization profiles [56]. ISO 19600 CMS standard reinforces the growing concern and importance of regulatory compliance in organizations. As explained on the ISO standards website, this new standard has been published as an international reference guide to provide organizations with an effective CMS with the aim of avoiding the risks of legal non-compliance, i.e., minimizing the risks of suffering sanctions, fines, contingencies, reputational damage, etc.

Hyun-Jee [57] proposed a strategy to efficiently implement the compliance program system of strategic trade by comparing it with the ISO 19600 standard among others. The statistical results of [58] suggested significant contributions, considering that ISO 19600 positively impacts the ability of factories to respond to European and U.S. requirements for safety. Recently, in [59] were described the principles of ISO 19600 and examined in more detail the three core elements that make up a successful CMS: a high-level structure, a risk-based approach and a plan-do-check-act model. As a conclusion, the scope of this standard is applicable to all types of organizations, and thus, researches. Furthermore, it was not a certifiable standard, but a voluntary guide. We must bear in mind that ISO 37301 was published as a requirements standard in April 2021 to replace ISO 19600. With this new adaptation, organizations now have the opportunity to certify their CMS. This involves providing the organization with a more formal structure and a validation of its external stakeholders regarding its Compliance efforts. Thus, its correct implementation can be a major competitive differentiator.

The following Table 1 shows each of the responsibilities mentioned in the ISO 37301 CMS standard in indicator format. A total of 27 indicators created ad hoc for this work are grouped in 6 blocks: A. Regulatory identification, B. Comprehension, integration, and description, C. Coordination and communication with internal stakeholders, D. Relationship with external stakeholders, E. Monitoring and prevention, and F. Risk assessment and management.

3.2. The best–worst method

Among the many types of decision-making problems that exist, in this contribution we focus on MCGDM problems [5]. The MCGDM problems are characterized by a set of experts $E = \{e_1, e_2, \dots, e_m\}$ who are asked to provide their preferences on a set of alternatives $X = \{x_1, x_2, \dots, x_k\}$ according to several criteria $C = \{c_1, c_2, \dots, c_n\}$. To clarify the concept, let us use an example. A daily MCGDM problem could be the purchase of a mobile phone. The alternatives might be different phone models, and the criteria, different features related to the phones such as price, storage capacity, or camera.

However, in a MCGDM problem, not all criteria need to be of equal importance. In the example above, some people may prioritize price, while others may not mind paying more if the camera is of high quality. Therefore, criteria weighting is one of the most relevant tasks in the resolution of MCGDM problems, and several techniques have been proposed in the literature to address this issue [6,60,61].

The BWM [6] is one of the most widely used techniques for computing the criteria weights, and it has been applied in several fields [62–64]. To do so, experts are asked to compare the best and worst criteria, chosen according to their expertise, with the remaining criteria. The main advantage of the BWM for other approaches is that experts do not need to compare all criteria with each other to obtain the weights. This reduces the likelihood that they give illogical or inconsistent preferences. In our particular case, we use the BWM to derive the

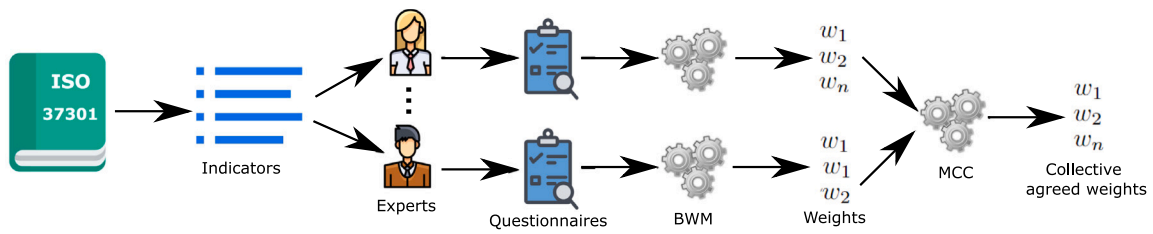


Fig. 1. Methodology scheme.

Table 1
Compliance officer responsibility indicators.

Block	Indicator
A	A.1. Identification of legal obligations (external regulations)
	A.2. Identification of sectorial code guidelines (external regulations)
	A.3. Identification of own policies or codes of ethics (internal regulations)
	A.4. Identification of good governance and organizational practices (internal regulations)
B	B.1. Understand of the organization’s internal processes and procedures ^a
	B.2. Understand compliance function obligations
	B.3. Integration of internal processes and compliance obligations
	B.4. Contribution in the description of the compliance obligations inherent to each area of the organization
	B.5. Contribution in the description of the compliance obligations inherent to each position within the organization
	B.6. Contribution in the description of compliance obligations as an objective parameter in the evaluation of staff performance
C	C.1. Coordination of continuous training on compliance matters
	C.2. Coordination with the person who will provide support in case of doubts on how to proceed with compliance obligations
	C.3. Coordination with the figure that will support whether or not certain conduct constitutes an infraction (non-compliance)
	C.4. Adequate communication of the compliance program to employees (internal stakeholders)
D	D.1. Identification and attention to risks derived from customer relationships
	D.2. Identification and attention to risks derived from supplier relationships
	D.3. Identification and attention to risks derived from relationships with distributors and external commercial agents
	D.4. Identification and attention to risks derived from relations with any collaborator
E	E.1. Implementation of corrective measures to ensure compliance effectiveness
	E.2. Implementation of prevention measures to ensure the effectiveness of compliance
	E.3. Implementation of measures to ensure compliance function reviews at planned intervals
	E.4. Compliance risk prevention system operation monitoring
F	F.1. Advice to the rest of the organization by internal experts on compliance matters
	F.2. Advice to the rest of the organization by experts from outside the organization on compliance matters
	F.3. Implementation of measures and controls to identify risks and/or incidents
	F.4. Awareness of risks and/or incidents through staff
	F.5. Knowledge of risks and/or incidents inferred from own documentation collected through internal processes ^a

^a Internal processes: (1) System for complaints, denunciations, and telephone or e-mail support; (2) Periodic meetings with those responsible for processes; (3) Periodic incident reports; (4) Mechanisms for direct support to employees who have doubts as to whether or not a conduct represents a risk, prior to executing it; (5) Checkpoints and process controls in cases where normal operating parameters are exceeded, requiring the approval of the Compliance Officer; (6) Indicators of performance and compliance with the measures established to ensure regulatory compliance, reflecting the evolution of the risk prevention system.

weights for the 27 indicators shown in Table 1, which represent the criteria of our problem.

The BWM consists of the following steps:

1. Determine the set of criteria.
2. The expert selects the best criterion (c_B) and the worst criterion (c_W).
3. The expert compares the c_B and the rest criteria, and such comparisons are collected in the Best to Others (BO) vector, $BO = \{a_{B1}, a_{B2}, \dots, a_{Bn}\}$, where a_{Bj} refers to the pairwise comparison between the best criterion c_B and the criterion c_j .
4. The expert compares the remaining criteria with c_W , and such comparisons are collected in the Others to Worst (OW) vector, $OW = \{a_{1W}, a_{2W}, \dots, a_{nW}\}$, where a_{jW} refers to the pairwise comparison between the criterion c_j and the worst criterion c_W .
5. The weights of the criteria are derived using an optimization model (see Eq. (1)). In this model, for each comparison, the optimal criteria weights satisfy $w_B/w_j = a_{Bj}$ and $w_j/w_W = a_{jW}$. Therefore, the maximum absolute differences $|w_B/w_j - a_{Bj}|$ and

$|w_j/w_W - a_{jW}|$ should be minimized:

$$\begin{aligned} & \min \xi \\ & \text{s.t.} \begin{cases} \left| \frac{w_B}{w_j} - a_{Bj} \right| \leq \xi \\ \left| \frac{w_j}{w_W} - a_{jW} \right| \leq \xi \\ \sum_{j=1}^n w_j = 1, \\ w_j \geq 0, \text{ for all } j = 1, 2, \dots, n. \end{cases} \end{aligned} \quad (1)$$

In addition to the optimization model, Rezaei proposed a consistency ratio (CR) to evaluate the consistency in experts’ preferences. This is key, since if the experts’ preferences are inconsistent, then the results would not be reliable. The consistency ratio is derived as follows:

$$CR = \frac{\xi^*}{CI} \quad (2)$$

where ξ^* represents the value obtained from the optimization model that represents the maximal absolute difference between the optimal weights and the comparisons, and CI that represents a consistency

index, a numerical value obtained from the experiments carried out in [6].

3.3. Minimum cost consensus

The BWM allows computing the criteria weights from experts' opinions, but individually. That means that if there are many experts involved in the criteria weighting, the BWM would derive different weights according to the opinion of each expert. However, experts' opinions could be conflicting to each other, and they may disagree regarding the criteria weights.

The consensus reaching processes (CRPs) are iterative processes whose goal is to smooth disagreements in decision-making processes and reach a consensual solution that satisfies all the experts. In this process, experts should change their initial views and bring their opinions closer to each other to increase the level of agreement in the group. In this paper, we apply a CRP to the individual indicators weights obtained from the BWM for each expert to obtain a global agreed weight for each indicator.

There is a long list of CRP proposals in the literature [7], however, we will focus on MCC models [8,9] due to their simplicity and proven good performance. The MCC models formulate a decision-making problem as a linear programming model that searches for a consensual solution that preserves as much as possible the initial experts' preferences. In this sense, the MCC model obtains the best theoretically agreed solution since it requires minimal changes in the experts' preferences, and thus this will be the solution that most satisfies them. Ben Arieh and Easton defined in [8] the MCC model as follows:

$$\begin{aligned} \min_{o'} \quad & \sum_{k=1}^m c_k |o'_k - o_k| \\ \text{s.t.} \quad & |o'_k - \bar{o}'| \leq \epsilon, k = 1, 2, \dots, m \end{aligned} \tag{MCC}$$

where (o_1, \dots, o_m) represents the original weights obtained from the BWM for each expert, (o'_1, \dots, o'_m) are the modified weights computed by the optimization model automatically, \bar{o}' represents the collective opinion computed through an arithmetic mean operator and $\epsilon \in [0, 1]$ is the maximum absolute deviation of each expert and the collective opinion.

ϵ represents the maximum allowed deviation between the collective opinion, which represents the opinion of the group, and each expert. This constraint guarantees an agreed solution, since the smaller the deviation between the collective and individual opinions, the more similar the individual opinions will be to each other and, therefore, the greater the degree of agreement.

3.4. Sample description

The social importance of Nonprofit Cooperative Societies, together with the scarcity of research on them, has remained latent over the decades, which justifies the choice of our sample, without forgetting their marked social character. In this sense, to obtain the weights of the different indicators, we ask experts using a questionnaire (available in <https://bit.ly/3W2QOwR>). The questionnaires were distributed by email and the fieldwork was carried out during June and part of July. An initial telephone call was made to inform the manager of each of the selected Nonprofit Cooperative Societies of the research team's objective and the types of questions to be answered. In this phone call, the e-mail address was confirmed, and the questionnaires were then sent to them with the explanation of how to fill it in correctly. In cases where a few days passed, and no response was received, a second phone call was made to remind them to complete the survey, as well as the importance of the survey for this research work. The questionnaires were answered by seven managers (100% response rate) of seven different Nonprofit Cooperative Societies from different areas such as transportation, consulting, teaching and education, public relations and communication or training.

Table 2
BWM weights for indicators of Block A.

Block A	A.1	A.2	A.3	A.4
Expert 1	0.548	0.068	0.274	0.11
Expert 2	0.533	0.067	0.133	0.267
Expert 3	0.533	0.067	0.133	0.267
Expert 4	0.533	0.067	0.267	0.133
Expert 5	0.533	0.067	0.133	0.267
Expert 6	0.533	0.067	0.133	0.267
Expert 7	0.533	0.067	0.267	0.133
Consensus	0.5351	0.0671	0.1914	0.2063

4. Discussion of the results

This section analyzes the resulting weightings for each block of indicators based on the ISO 37301 CMS standard created ad hoc for this research. The 27 indicators are divided into six blocks (A to F). Then each block is presented in different tables below (Tables 2 to 7) where the individual weightings of the decision-makers (experts) for each indicator are shown. Individual weights are obtained by computing the BWM for each expert. Note that the total sum of the weights must be equal to 1.

Table 2 presents the BWM weights for the indicators of Block A (Regulatory identification). This block includes a total of 4 indicators. Its analysis allows us to observe that there is an almost global consensus among all experts. The experts' preferences are so close to each other that the consensual weights obtained from the MCC varies slightly to the initial views of the experts. This is a positive aspect, since, as the variation in weights is minimal, experts are satisfied with the overall calculated consensual weights. Specifically, we highlight how indicator A.1. "Identification of legal obligations (external regulations)" obtains an identical individual weighting by 6 out of 7 experts. The same happens with indicator A.2. "Identification of sectorial code guidelines (external regulations)". Furthermore, according to the consensus value, the indicator considered the most representative of this block (0.5351/1) is A.1, which obtains more than half of the score to be distributed. This means that it is clearly the most valued by experts as the vital responsibility of the Compliance Officer. This weight highlights the experts' concern regarding the level of knowledge that the Compliance Officer must have regarding legal obligations, in short, the applicable external regulations. The importance of legal regulations by a Compliance Officer cannot be overstated, as they play a critical role in ensuring that a Nonprofit Cooperative Society operates within the limits of the law and fostering a culture of ethical behavior. It should be noted that the indicator considered least important according to the level of consensus of the experts is A.2. (0.0671/1), including the identification of sectorial codes as a responsibility attributable to this figure. In the context of this block, experts assign higher values to other issues.

In relation to Block B (Comprehension, integration, and description), composed of 6 indicators (see Table 3), the consensus among the different experts is again highlighted. The individual weights obtained from the BWM are quite similar. This lack of disagreements makes the MCC provides consensual weights very similar to the initial ones provided by the experts, and makes it easier for experts to accept the collective weights associated with each indicator. In particular, similar values are obtained in the individual weights of indicators B.1. "Understand of the organization's internal processes and procedures", B.2. "Understand compliance function obligations" and B.6. "Contribution in the description of compliance obligations as an objective parameter in the evaluation of staff performance". In this case, indicator B.1. (0.4289/1) is the indicator with the highest consensus value. This indicator is about the responsibility of the Compliance Officer based on the understanding of the organization's internal processes and procedures. As internal procedures, ISO 37301 CMS standard establishes the following: (1) System for complaints, denunciations, and telephone or email

Table 3
BWM weights for indicators of Block B.

Block B	B.1	B.2	B.3	B.4	B.5	B.6
Expert 1	0.43	0.25	0.131	0.074	0.074	0.04
Expert 2	0.447	0.252	0.077	0.09	0.09	0.044
Expert 3	0.423	0.247	0.129	0.094	0.068	0.039
Expert 4	0.43	0.25	0.131	0.074	0.074	0.04
Expert 5	0.42	0.25	0.128	0.068	0.096	0.039
Expert 6	0.42	0.25	0.128	0.096	0.068	0.039
Expert 7	0.43	0.25	0.131	0.074	0.074	0.04
Consensus	0.4289	0.2499	0.1219	0.0814	0.077	0.0403

Table 4
BWM weights for indicators of Block C.

Block C	C.1	C.2	C.3	C.4
Expert 1	0.533	0.267	0.133	0.067
Expert 2	0.533	0.267	0.133	0.067
Expert 3	0.533	0.133	0.267	0.067
Expert 4	0.533	0.267	0.133	0.067
Expert 5	0.533	0.267	0.133	0.067
Expert 6	0.533	0.133	0.267	0.067
Expert 7	0.533	0.267	0.133	0.067
Consensus	0.533	0.2287	0.1713	0.067

support; (2) Periodic meetings with those responsible for processes; (3) Periodic incident reports; (4) Mechanisms for direct support to employees who have doubts as to whether or not a conduct represents a risk, prior to executing it; (5) Checkpoints and process controls in cases where normal operating parameters are exceeded, requiring the approval of the Compliance Officer; (6) Indicators of performance and compliance with the measures established to ensure regulatory compliance, reflecting the evolution of the risk prevention system. In the context of Nonprofit Cooperative Societies, a Compliance Officer who understands internal processes can ensure that the organization acts transparently and is accountable for its activities and finances, which is crucial to maintaining trust and support. A correct understanding not only helps to comply with legal and regulatory obligations. It also strengthens trust and will ensure that every report disclosed is accurate and meets the requirements demanded by stakeholders. In contrast, the indicator least valued by the experts is B.6.(0.0403/1) “Contribution in the description of compliance obligations as an objective parameter in the evaluation staff performance” as shown by the results.

Table 4 shows the BWM weightings for the indicators in Block C (Coordination and communication with internal stakeholders), which is made up of 4 indicators. Effective communication between the Compliance Officer and internal stakeholders is crucial to foster a culture of compliance. Establishing open dialogue, asking questions, seeking guidance on or regular meetings can ensure that the compliance function is integrated into the overall Nonprofit Cooperative Society strategy. It should be noted that indicators C.1. “Coordination of continuous training on compliance matters” and C.4. “Adequate communication of the compliance program to employees (internal stakeholders)” obtain the same individual weight by the 7 experts. Similarly, between these two indicators is the best and the worst rated. Specifically, the best weight indicator is C.1. since it obtains more than half of the weight to be distributed (0.533/1) where coordination in relation to continuous training on compliance issues by the Compliance Officer is very important. Regular training sessions are essential to educate the Compliance Officer about relevant laws, regulations, and internal policies. In contrast, the worst weight in block C is the indicator C.4. (0.067/1) which refers to the adequate communication of the compliance program to the organization’s employees.

The following comments refer to Table 5. It details the weights of Block D (Relationship with external stakeholders), which is made up of 4 indicators. The role of a Compliance Officer in a Nonprofit Cooperative Society involves not only managing internal compliance

Table 5
BWM weights for indicators of Block D.

Block D	D.1	D.2	D.3	D.4
Expert 1	0.533	0.133	0.267	0.067
Expert 2	0.533	0.133	0.267	0.067
Expert 3	0.533	0.267	0.133	0.067
Expert 4	0.533	0.133	0.267	0.067
Expert 5	0.533	0.133	0.267	0.067
Expert 6	0.533	0.267	0.133	0.067
Expert 7	0.533	0.133	0.267	0.067
Consensus	0.533	0.1713	0.2287	0.067

Table 6
BWM weights for indicators of Block E.

Block E	E.1	E.2	E.3	E.4
Expert 1	0.133	0.533	0.067	0.267
Expert 2	0.133	0.533	0.067	0.267
Expert 3	0.133	0.533	0.067	0.267
Expert 4	0.133	0.533	0.067	0.267
Expert 5	0.133	0.533	0.067	0.267
Expert 6	0.267	0.533	0.067	0.133
Expert 7	0.133	0.533	0.067	0.267
Consensus	0.1521	0.533	0.067	0.2479

but also communicating, engaging, and interacting effectively with external stakeholders. Again we find the same individual value of the 7 experts on indicators D.1”. Identification and attention to risks derived from customer relationships” and D.4. “Identification and attention to risks derived from relations with any collaborator”. From the analysis, it is concluded that the highest weight given by the experts is to indicator D.1. (0.533/1) which is based on the responsibility of the Compliance Officer for the identification and attention to risks derived from customer relationships. The experts then evaluate the same issue but in relation to distributors and external commercial agents (D.3. = 0.2287/1), followed by suppliers (D.2. = 0.1713/1) and, finally, with any collaborator (D.4. = 0.067/1).

As previously indicated in the theoretical framework, in Nonprofit Cooperative Societies, the figure of the Compliance Officer plays a vital role in monitoring and preventing unwanted circumstances that may arise from non-compliance. By establishing robust internal controls, conducting regular audits, promoting ethical standards, and engaging members, the Compliance Officer helps ensure that the organization operates within legal and ethical boundaries. This not only safeguards the organization’s reputation, but also fosters trust, transparency, and accountability among its own members and stakeholders and contributes to the achievement of the United Nations Sustainable Development Goals. Table 6 indicates that two of the indicators of Block E (Monitoring and prevention) unanimously present a high initial level of consensus on the responsibilities attributable to the figure of the Compliance Officer in Nonprofit Cooperative Societies. This means that each expert, in their individual decision, has given the same value for that indicator and that they all agree on the said value, and no major disagreements are identified. In detail, the indicators are E.2. “Implementation of prevention measures to ensure the effectiveness of compliance” and E.3. “Implementation of measures to ensure compliance function reviews at planned intervals”. The indicator with the highest weight is E.2. (0.533/1) “Implementation of prevention measures to ensure the effectiveness of compliance”, followed by E.4. (0.2479/1) “Compliance risk prevention system operation monitoring”. Then, E.1. (0.1521/1) “Implementation of corrective measures to ensure compliance effectiveness” and finally E.3. (0.067/1) “Implementation of measures to ensure compliance function reviews at planned intervals”.

Finally, Table 7 presents a list of 5 indicators that make up Block F (Risk assessment and management). The analysis of the weighted values in this table indicates the existence of one highly valued indicator and

Table 7
BWM weights for indicators of Block F.

Block F	F.1	F.2	F.3	F.4	F.5
Expert 1	0.082	0.046	0.476	0.127	0.268
Expert 2	0.082	0.046	0.476	0.127	0.268
Expert 3	0.084	0.047	0.486	0.274	0.108
Expert 4	0.082	0.046	0.476	0.127	0.268
Expert 5	0.082	0.046	0.476	0.127	0.268
Expert 6	0.082	0.046	0.476	0.127	0.268
Expert 7	0.082	0.046	0.476	0.127	0.268
Consensus	0.083	0.0463	0.4774	0.148	0.2452

two indicators whose value is notably low. Specifically, the indicator most valued by the group of experts is F.3. (0.4774/1) “Implementation of measures and controls to identify risks and/or incidents”. This indicator reaches almost half of the total score, so it is clearly the most valued. By implementing these measures and controls, a Compliance Officer can effectively assess and manage risks and incidents, ensuring that the organization maintains the compliance function while fostering a culture of integrity and accountability. In contrast, the least valued indicators are F.1. (0.083/1) “Advice to the rest of the organization by internal experts on compliance matters” and F.2. (0.0463/1) “Advice to the rest of the organization by experts from outside the organization on compliance matters”.

To conclude this analysis, Table 8 shows the final set of indicators proposed in this paper focusing on evaluating the responsibilities and effectiveness of a Compliance Officer. In addition, we include the importance that should be considered for each indicator according to the knowledge of several experts in the field. Notice, although the derived weights allow an ordinal hierarchy of governance indicators to be established, small differences between some of them (e.g., between 0.31 and 0.29) may not be statistically or practically significant. In this sense, experts in Nonprofit Cooperative Societies should interpret these weights as general guidelines, considering also the specific context of their organization, available resources, and other qualitative factors. Therefore, the results of the present study should be used as a support tool, rather than as a strict rule for prioritization.

The weights of the indicators in Table 8 correspond to the consensus weights calculated in each block. To obtain these weights, the initial opinions of the experts have been modified through the MCC model. Undoubtedly, if these modifications were too large, they would jeopardize the consensus solution, since the experts would not be willing to modify their opinions too much. However, on the one hand, Tables 2–7 show that the initial opinions of the experts, prior to consensus, are not very far apart. In fact, the weights obtained individually from each expert’s opinions through the BWM are very similar or even equal to each other on most indicators. Therefore, initially, there are not very different opinions among experts. On the other hand, the MCC model guarantees a consensual solution by changing as little as possible the individual opinions of the experts, which, mathematically speaking, is the optimal solution.

5. Conclusions

Over the decades, the importance of Nonprofit Cooperative Societies has remained constant, above all because of the social benefit they provide. Moreover, to date, there are few studies that have focused on analyzing these types of NPOs. This raises the need to address not only economic objectives, but also social ones that help these organizations to improve their social function and their accountability. In this sense, we highlight the Compliance Officer of the Nonprofit Cooperative Societies and the responsibilities attributable to this role, contributing to the accountability and verification of the ethical objectives that are the DNA of the NPOs. Consequently, the above justifies the opportunity

presented by this research, whose objective is to validate the responsibility attributable to the figure of the Compliance Officer based on ISO 37301 CMS standard in Nonprofit Cooperative Societies.

The battery of indicators that we propose based on ISO 37301 CMS standard is useful for various issues that affect the organization’s compliance. It aims to help the Compliance Officer on different issues, such as monitoring the performance of the compliance program and identify areas that require attention or improvements, in addition to support to make correctly informed decisions. With the validation of this battery and its correct application by the Nonprofit Compliance Officer, we demonstrate to both regulators and other interested parties that the organization meets its obligations. The application of these indicators on the responsibilities attributable to the Compliance Officer and their practical implications can be extrapolated to the public and private sectors. If we extend the practical implications to the private sector, it is worth noting that in small and medium-sized enterprises it would imply several benefits, such as the effective management of legal and regulatory risk, as companies operate in a highly regulated environment. Thus, the validated indicators allow the Compliance Officer to accurately address national and international regulations, reducing the likelihood of legal sanctions. Extending the results to the public sector context could strengthen accountability. The application of indicators can ensure that public policies and administrative procedures comply with legal and ethical frameworks. In addition, corruption risk as a battery of indicators helps to implement corrective measures in time.

Implementing a robust battery of indicators allows the Compliance Officer to not only fulfill their responsibilities, but also strengthen the culture of compliance within the organization. This is important in terms of accountability. Accountability and compliance are closely related concepts in organizational management. Understanding their relationship is critical for ensuring that a Nonprofit Cooperative Society adheres to legal and ethical standards while maintaining operational and managerial integrity, by contributing to the achievement of the Sustainable Development Goals promulgated by the United Nations.

In relation to the elaboration of the battery of indicators, we apply a well-known MCGDM weighting methodology, the BWM, to obtain optimal weights from expert knowledge from different sectors of Nonprofit Cooperative Societies. In addition, we used a collective agreed weight for each indicator by using a consensus optimization process, capable to analyze the possible disagreements in the individual experts’ weights, smooth them out, and obtain a consensual weight for each indicator that satisfies all the experts. This allows us to offer a validation of each of the indicators with a high level of consensus. With these indicators based on the ISO 37301 CMS standard, we aim to help professionals in the sector (especially those who perform the role of Compliance Officer) to monitor the performance of the compliance function and ensure that appropriate measures are being taken to identify, manage, and mitigate risks and incidents.

Regarding the limitations of this research, although this method could be applicable to any context of the nonprofit sector, the specific results are limited to the Spanish field and to the Nonprofit Cooperative Societies. A geographically and professionally homogeneous group may not capture the full range of relevant ideas, especially if the research has international or cross-cultural dimensions. However, this is not our case, since the study focuses on the Spanish case. Although the present research does not pursue statistical generalization, it often strives for analytical generalization (i.e., drawing conclusions that can be applied to similar contexts). Analyzing how the local context of Spain may influence expert opinions is crucial to help readers assess the potential applicability of findings elsewhere. In relation to the robustness of our findings, small, localized samples may increase the risk of bias or over-reliance on context-specific factors. Nevertheless, BWM is a multi-criteria decision-making method that prioritizes the quality of expert judgment, not sample size. It is based on pairwise comparisons performed by highly trained experts, so even a small

Table 8
Battery of compliance officer responsibility indicators and their relevance.

Block	Indicator	Weight
A	A.1. Identification of legal obligations (external regulations)	0.5351
	A.2. Identification of sectorial code guidelines (external regulations)	0.0671
	A.3. Identification of own policies or codes of ethics (internal regulations)	0.1914
	A.4. Identification of good governance and organizational practices (internal regulations)	0.2063
B	B.1. Understand of the organization's internal processes and procedures	0.4289
	B.2. Understand compliance function obligations	0.2499
	B.3. Integration of internal processes and compliance obligations	0.1219
	B.4. Contribution in the description of the compliance obligations inherent to each area of the organization	0.0814
	B.5. Contribution in the description of the compliance obligations inherent to each position within the organization	0.0777
	B.6. Contribution in the description of compliance obligations as an objective parameter in the evaluation of staff performance	0.0403
C	C.1. Coordination of continuous training on compliance matters	0.533
	C.2. Coordination with the person who will provide support in case of doubts on how to proceed with compliance obligations	0.2287
	C.3. Coordination with the figure that will support whether or not certain conduct constitutes an infraction (non-compliance)	0.1713
	C.4. Adequate communication of the compliance program to employees (internal stakeholders)	0.067
D	D.1. Identification and attention to risks derived from customer relationships	0.533
	D.2. Identification and attention to risks derived from supplier relationships	0.1713
	D.3. Identification and attention to risks derived from relationships with distributors and external commercial agents	0.2287
	D.4. Identification and attention to risks derived from relations with any collaborator	0.067
E	E.1. Implementation of corrective measures to ensure compliance effectiveness	0.1521
	E.2. Implementation of prevention measures to ensure the effectiveness of compliance	0.533
	E.3. Implementation of measures to ensure compliance function reviews at planned intervals	0.067
	E.4. Compliance risk prevention system operation monitoring	0.2479
F	F.1. Advice to the rest of the organization by internal experts on compliance matters	0.083
	F.2. Advice to the rest of the organization by experts from outside the organization on compliance matters	0.0463
	F.3. Implementation of measures and controls to identify risks and/or incidents	0.4774
	F.4. Awareness of risks and/or incidents through staff	0.148
	F.5. Knowledge of risks and/or incidents inferred from own documentation collected through internal processes	0.2452

number of participants can provide valid results if they have adequate knowledge.

Furthermore, we encourage more research to be carried out on this function, which remains underdeveloped in the nonprofit sector in general and, in particular, in Nonprofit Cooperative Societies. A possible future research line may be to consider the linguistic representation of experts' preferences and weights, through the use of fuzzy logic [65]. In this sense, experts could use linguistic expressions that are closer to their usual way of thinking to give their assessments about indicators, such as "an indicator is more important than another". The resulting weights could also be expressed linguistically rather than numerically, with expressions such as "important", "very important", which could facilitate the interpretation of the importance of the indicators. Another possible future research line could be to address a similar study following a large-scale group decision-making approach with hundreds or even thousands of experts involved in the decision process. Increasing the number of experts would provide a greater diversity of perspectives, which enrich the analysis, and it would be particularly important in the case of nonprofit cooperative societies, as their structure and functioning may vary between countries or sectors.

CRediT authorship contribution statement

Cristina Ortega-Rodríguez: Writing – review & editing, Writing – original draft, Supervision, Formal analysis, Conceptualization. **Álvaro Labella:** Writing – review & editing, Validation, Software, Methodology. **Ma del Consuelo Ruiz-Rodríguez:** Writing – review & editing, Data curation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data availability

Data will be made available on request.

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