






An Evaluation and Improvement of the Quality of the Smart Ration Card by ISO 37301:2023

Shaimaa Salah Saifi Gomair Elias* 
Ministry of Trade / General Company for Trading
Construction Materials
Baghdad, Iraq

Ghani Dahham Alzubaidi  
Department of Business Administration
College of Administration and Economics
University of Baghdad
Baghdad, Iraq

*Corresponding author

Received: 3/11/2024

Accepted: 1/2/2025

Published: 1/4/2025



© 2025 The authors(s). This is an open-access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract:

In evaluating the Iraqi smart ration card system in ISO 37301:2023 compliance management, this study reveals how far the system is compliant with international requirements, what gaps exist, and what areas need strengthening for efficiency and transparency purposes. Case study methods greatly complemented by the use of checklists, interviews, and various forms of statistical analysis, were employed to study the level of compliance of the smart ration card.

The results show that there exist considerable gaps in documentation, compliance risk assessment, and resource support, which weakens the system's ability to ensure food security and prevent fraud. While high levels of adherence exist in compliance planning and internal auditing, operational barriers and a lack of regulatory enforcement prevent full implementation. The study stresses the need for effective governance, stakeholder involvement, and better compliance monitoring to ensure that the smart ration card fits global standards.

The research concludes that the implementation of the ISO 37301:2023 principles could enhance food security, improve distribution of rations, and ensure legal compliance. In closing, the authors suggest a reform agenda, better training programs, and improvements to digital infrastructure to close the compliance gaps. Future studies should look at technology-based solutions for improving compliance frameworks in public sector service delivery.

Keywords: Smart ration card, compliance management, ISO 37301, food security.

1. Introduction:

In recent years, the Iraqi Ministry of Commerce has embarked on a comprehensive project to convert the country's food distribution system from a paper-based one to an electronic smart card system (Abdul-Salam & Al-Azzawi, 2021). This shift turned into pushed by the want to modernize the distribution method, decorate transparency, and strengthen food safety features throughout the nation (Alaa Hussein * & Kamel Jawad, 2024). Historically, the traditional ration card system, established during the economic sanctions of the 1990s, played an important role in improving food security. But over time, the system has faced many challenges, including poor data handling, delays in delivery, and frequent fraud and tampering (Aboud, 2023). The transition to smart ration cards is a strategic move to align with international compliance standards including ISO 37301:2023 (Jasim Resen & Sadiq AbdulRazzaq, 2022). These initiatives may improve the accuracy of beneficiary information, streamline the monitoring of food distribution, and reduce times of corruption. However, area studies and tests have discovered numerous barriers, which include a lack of constant training for employees, deficiencies in documenting compliance methods, and difficulties in assembling the stringent requirements of ISO 37301:2023 (Directorate of Planning and Follow-Up, 2023). Additionally, there are challenges related to optimizing systems to effectively integrate compliance measures, which are necessary to ensure reliable service delivery and to hit vulnerable populations' food security (Ismail, 2019). The problem declaration of this observation centers on the present gap between the modern-day operational practices of the clever ration card system and the compliance standards set out in ISO 37301:2023. The primary difficulty lies the ineffective implementation of a complete compliance control framework, resulting in good-sized inefficiencies and elevating concerns about the general reliability of the machine. This research addresses key questions: How effectively can ISO 37301:2023 be incorporated to enhance the pleasantness of the clever ration card machine? What are the primary compliance gaps, and what challenges avoid the entire adoption of this fashion? Furthermore, how can those gaps be bridged to ensure an unbroken transition and enhance provider delivery? The shape of this paper is organized as follows: Section Two critiques the applicable literature, focusing on the software of compliance management requirements in public quarter tasks. Section Three outlines the research technique, detailing the case study method, facts collection methods, and analytical gear used. Section Four offers the important thing findings, providing an in-depth analysis of the identified gaps and their implications for the gadget's performance. Finally, Section Five discusses actionable guidelines geared toward improving the implementation of ISO 37301:2023 and enhancing the efficiency of the smart ration card system in Iraq.

2. Literature Review and Hypothesis Development:

The growing complexity of regulatory landscapes globally has necessitated the adoption of established compliance management structures, particularly in public quarter initiatives in which governance, transparency, and duty are important. The creation of ISO 37301:2023 represents a huge evolution in compliance requirements, shifting from the non-certifiable tips of ISO 19600 to a completely certifiable widespread. This transition underscores the growing importance of strong compliance frameworks which might be adaptable throughout industries and organizational contexts (Jansen, 2021). ISO 37301:2023 is anchored in numerous core theoretical frameworks, commonly the Plan-Do-Check-Act (PDCA) cycle, hazard-based wondering, and principles of moral compliance. The PDCA cycle, conceptualized via W. Edwards Deming, is a cornerstone of nice management and non-stop improvement. In the context of ISO 37301:2023, the PDCA version serves as a scientific technique for agencies to plan compliance sports, execute them effectively, monitor the consequences, and enforce corrective moves when vital (Deming, 1986). This re-programming process is critical to adapting to changing regulatory requirements and ensuring that resources are not only responsive but also proactive (Alzahrani & Khan, 2016). Risk-based questioning is any other foundational element of ISO 37301:2023, aligning carefully with ISO 31000 for chance control. This method emphasizes the identity, assessment, and

mitigation of dangers associated with non-compliance, helping businesses prioritize their compliance efforts based on the capacity effect of risks. By integrating risk management principles, ISO 37301:2023 provides a comprehensive framework that addresses each inner and external compliance-demanding situation (Bleker & Hortensius, 2014). The attention to chance-based compliance permits organizations to allocate resources more successfully and increase tailored strategies to mitigate specific risks, enhancing universal resilience and sustainability. Ethical compliance is also a key principle embedded within ISO 37301:2023. The preferred encourages groups to set up a subculture of compliance that goes beyond mere adherence to policies. It promotes the development of ethical pointers and codes of behavior, fostering surroundings wherein compliance is viewed as a middle organizational cost instead of an outside responsibility. This awareness of ethics aligns with broader trends in corporate governance, where stakeholders have an increasing number of calls for transparency, integrity, and responsibility (Coglianese & Nesh, 2023). In the context of public region initiatives, the software of ISO 37301:2023 is mainly critical given the world's duty for turning in crucial services and dealing with public assets. The smart ration card system in Iraq affords an applicable case that takes a look at for examining the impact of ISO 37301:2023 on improving service delivery, enhancing statistics integrity, and decreasing times of fraud. The transition from a conventional paper-primarily based ration card machine to a digital clever card system goal to modernize meal distribution techniques, ensuring that beneficiaries receive the well-timed and accurate right of entry to vital food elements (Aboud, 2023). However, the implementation of this system has faced considerable demanding situations, mainly within the areas of compliance control and risk mitigation. Preliminary studies have highlighted problems related to inadequate documentation, insufficient schooling for employees, and resistance to the adoption of recent compliance measures. These challenges underscore the need for a strong compliance framework like ISO 37301:2023, that can offer the vital equipment and techniques to cope with those issues successfully (Directorate of Planning and Follow-Up, 2023). Several latest case research have tested the impact of compliance management structures on public provider transport. For example, studies by (Quick & Sayar, 2021) revealed that the adoption of ISO 37301:2023 in the urban sector significantly improved transparency, reduced corruption, and increased stakeholder trust (Quick & Sayar, 2021). Similarly, in India, the integration of a compliance control framework inside the digital ration card system became associated with better monitoring, fewer instances of fraudulent claims, and expanded public delight (Sony & Douglas, 2021). Implementing ISO 37301:2023 in public zone tasks is not without its challenges. One of the maximum good-sized limitations is the resistance to alternate, which is frequently rooted in deeply entrenched bureaucratic cultures. Public sector corporations, governed by using inflexible hierarchical systems, may find it tough to adapt to the bendy and dynamic requirements of a chance-primarily based compliance machine. This cultural resistance can be in addition exacerbated by way of a lack of awareness and know-how of the brand-new requirements, underscoring the want for comprehensive training and ability-constructing tasks (Jaafar, 2020). Another important challenge is to integrate ISO 37301:2023 with existing operational frameworks, such as ISO 9001 (due diligence) and ISO 37001 (anti-bribery) lack of a single approach addressing these overlapping compliance requirements may result in inconsistencies. Effective integration requires careful design of compliance mechanisms and a thorough understanding of the interplay between performance standards, which can be resource-intensive and complex (Barcik, 2020).

2.1. Previous studies:

(Wijaya, 2021): This research has a look focused on the adoption of the compliance management system in Iraqi banks based on the ISO 37301 fashion. It highlighted the lack of infrastructure and the need for a robust framework to efficiently put into effect compliance measures. Jaafar emphasized that many economic establishments confronted problems because of vulnerable internal controls and a lack of know-how about compliance requirements. The look followed a descriptive-analytical technique, utilizing surveys to accumulate insights from key stakeholders in the banking zone. The findings cautioned that better training applications and a dependent compliance framework should substantially enhance the banks' adherence to worldwide requirements.

(Asaad, 2019): In this observation, the researcher examined the demanding situations faced by way of public businesses when transitioning from traditional ration card structures to smart digital systems. Asaad mentioned that regardless of the advantages of expanded transparency and efficiency, the implemented method changes into hindered using technical problems and resistance to alternate inside organizational structures. They examine counseled integrating a complete compliance management gadget like ISO 37301 to cope with these troubles and make certain smooth implementation. The findings indicated that adopting a danger-primarily based technique, as encouraged via ISO 37301, could assist mitigate the recognized challenges.

(Qutb, 2021): This research analyzed the mixing of ISO 37301 compliance management requirements in the Egyptian ration a card system. It highlighted the fulfillment of the Egyptian government in adopting a digital method of food distribution, which appreciably decreased fraud and advanced provider delivery. Qutb's look supplied a comprehensive assessment of the stairs taken to align the ration card machine with ISO 37301 requirements, which includes danger exams, policy development, and stakeholder training. The consequences confirmed a marked improvement in the transparency and efficiency of the gadget, which served as a model for comparable tasks inside the location.

(Villa-Gallón et al., 2024): This examination explored the evolution of ISO compliance requirements, especially the transition from ISO 19600 to ISO 37301. The researchers mentioned the demanding situations groups faced while imposing more than one compliance requirement simultaneously. By adopting a unified framework as proposed by ISO 37301, organizations could streamline their compliance approaches, lessen redundancies, and ensure a greater included approach.

This observation also emphasized the significance of aligning compliance management with broader organizational dreams, which includes satisfactory control and anti-bribery practices, which are facilitated by using the usual threat-based method.

(Al-Najjar, 2019): This research investigated the implementation of electronic ration card structures in numerous Arab countries, including Egypt and Iraq. The findings highlighted the blessings of transitioning to digital structures, consisting of accelerated statistics accuracy and progressed tracking of food distribution procedures. They take a look at also noted the challenges associated with compliance, specifically in the assembly of the standards set by using ISO 37301. Al-Najjar endorsed the adoption of a structured compliance framework to cope with those issues and ensure the sustainability of the digital transformation tasks.

(Dawood & Lafta, 2024) This study has taken a look at targeted the worldwide application of ISO 37301:2021, highlighting its significance as a certifiable compliance control fashionable. Research furnished an in-intensity evaluation of the standard's necessities, emphasizing its adaptability throughout numerous organizational contexts. This study underscored the significance of the Plan-Do-Check-Act (PDCA) cycle in fostering non-stop development in compliance activities. Jansen also discussed the alignment of ISO 37301 with other management requirements, together with ISO 9001 and ISO 37001, which allows a complete and incorporated compliance approach.

(Pelei et al., 2024) This research tested the Application of synthetic Intelligence (AI) in enhancing compliance control structures, mainly within the context of ISO 37301. Integrating AI equipment with compliance control systems should considerably improve facts analysis, danger assessment, and selection-making techniques. He highlighted the capability of AI in automating compliance assessments and providing actual-time insights, that can assist public region companies like the Ministry of Trade in Iraq to streamline their compliance activities and decrease the chance of non-compliance.

The take a look at by using (Mohammed, 2023) emphasized diagnosing weaknesses in implementing and documenting compliance instructions consistent with the necessities of the ISO 37301:2021 popular and their courting to reaching the size of monetary, social, and environmental sustainability. It additionally aimed to perceive the sizable differences inside the necessities of the compliance control system based totally on ISO 37301:2021 and the sustainability dimensions in the surveyed banks. This became performed through statistical strategies, inclusive of the mathematics mean and percentage, to determine the level of compliance and the scale of the gap among the real compliance management gadget inside the General Administration of Al-Rafidain Bank and the provision of compliance control device necessities in step with the global trendy ISO 37301:2021. The results indicated a lack of interest by the senior control of banks in providing the important cloth and human resources, which negatively impacted the compliance department, characterized with the aid of a scarcity of group of workers. The paintings burden changed into borne by using a constrained variety of personnel inside the branch, in spite of its important and distinguished position in this area. In the equal context, a study conducted by using (RGM Saudi Company, 2021) highlighted the hazard of regulatory breaches and the absence of legal defense mechanisms to take suitable movements towards allegations or accusations of organizational failure to save you bribery and related monetary crimes.

It aimed to attain lengthy-term success, establish, and hold a subculture of compliance, and keep in mind the desires and expectations of stakeholders. It positioned compliance control structures as a possibility for any success and sustainable agency. It focused on pick Saudi companies, concluded that organizational dreams, worker rewards, and advertising processes often do no longer recollect moral and compliance targets. Additionally, 75% of global businesses no longer specifically teach C-suite executives and board contributors on ethics and corporate compliance. Only 2% of compliance sources are without delay spent on key compliance drivers: leadership, values, and lifestyle. Finally, the ISO 37301 standard emphasized three center processes—planning, assist, and leadership—that have been efficiently implemented. The implementation of a compliance management device can cope with several demanding situations related to the usage of clever ration playing cards, as highlighted through (Asaad, 2019):

1. A dependence on Technology: The use of clever cards is predicated closely on generation, and any technical failure ought to disrupt the distribution procedure.
2. Technological Limitations: Electronic playing cards may face problems which includes loss of net or conversation networks in remote regions, stopping a few beneficiaries from the usage of them.
3. Low Digital Awareness: Beneficiaries may also war with the usage of smart cards due to insufficient knowledge of digital technology, necessitating education on their utilization.
4. Security: Effective security features must be applied to defend smart cards from unauthorized use or fraud, safeguarding non-public and financial information.
5. Cost: Implementing digital playing cards for authorities assist distribution can be high priced, specifically if infrastructure development is needed. Therefore, the expenses need to be cautiously assessed before adopting this system.
6. Periodic Updates: The system requires continuous updates of beneficiary facts, demanding great and ongoing efforts from accountable authorities.

7. Social Barriers: Some beneficiaries might also face social challenges, which include poverty, illiteracy, disability, or discrimination, which hinder their potential to effectively use clever cards. To decorate the quality of services supplied by the General Company for Food Trading through the smart ration card device and to align with (ISO 37301:2023, n.d.), the subsequent key moves are endorsed to:

1. Identify and deal with internal and external problems affecting compliance system consequences.
2. Document compliance outputs and organizational modifications to align with compliance necessities.
3. Define and deal with stakeholder desires and compliance duties related to the clever ration card machine.
4. Assess and manipulate compliance dangers, making sure continuous evaluation and updates.
5. Develop obvious mechanisms for understanding and addressing stakeholder expectations.
6. Communicate compliance matters promptly and assign obligations in process roles.
7. Strengthen the competence, authority, and tradition of compliance throughout all ranges.
8. Encourage employee involvement in employer values and compliance projects.
9. Nine. Establish mechanisms to cope with non-compliance and ensure alignment with corporation desires.
10. Allocate enough sources to manage, implement, and enhance the compliance machine effectively.

3. Methodology:

A comprehensive and comprehensive approach was adopted to achieve the assessment objectives with a focus on assessing the extent of compliance with international standard requirements (ISO 37301:2023, n.d.) inside the case take a look at the company. The technique started with designing an in-depth tick list protecting the relevant clauses from clause four to clause ten of the standard, aside from the preliminary clauses that emphasize standard ideas without delay associated with the evaluation manner. To ensure assessment accuracy, unique weights have been assigned to each clause in line with the compliance scale matrix, with weights starting from zero, representing non-compliance or loss of documentation, to six, indicating full compliance with comprehensive documentation. Data were gathered from more than one asset, inclusive of direct subject observations, professional documents and records, centered questionnaires directed at personnel and stakeholders involved in compliance implementation, and in-intensity interviews with the enterprise group of workers and senior management to recognize various aspects of compliance and identify gaps between actual implementation and standard necessities. For statistics analysis, precise statistical formulas were employed to calculate the mathematics implied by the compliance stage, further to calculate the distance percentage via subtracting the compliance percent from one 100%. After studying the information, gaps were diagnosed primarily based on the comparison among compliance possibilities and well-known benchmarks, highlighting strengths and weaknesses in imposing each clause. For example, the consequences revealed full-size variations in compliance levels, with the "Compliance Management System" clause achieving complete compliance with a percentage and no gaps, reflecting excessive efficiency in this location. In evaluation, the "Risk Assessment" clause recorded a low compliance (40%), indicating a giant gap of 60%, which demonstrates clear deficiencies in this issue. Based on those analyses, a fixed of corrective moves was proposed, consisting of elevating personnel's consciousness of the importance of the standard and its necessities through workshops and specialized training applications, enhancing documentation mechanisms to ensure comprehensive coverage of all required components, and supplying the important material and human assets to effectively put in force the same old.

Table 1: Seven-Point Scale for Evaluating Conformity with Standard Requirements

No.	Scale Items	Weight (Points)
1	Fully implemented and fully documented	6
2	Fully implemented and partially documented	5
3	Fully implemented and not documented	4
4	Partially implemented and fully documented	3
5	Partially implemented and partially documented	2
6	Partially implemented and not documented	1
7	Not implemented and not documented	0

Source: Vagias, Wade M., (2006), "Likert-Type Scale," Clemson International Institute for Tourism, Parks, Recreation, and Tourism Management, Clemson University, USA.

3.1 Methodology of Calculation:

Estimated accuracy estimates and documentation of the business continuity management system at Al-Ameed University were considered as a case study against the standard requirements, using the following steps:

The Calculation of the Weighted Arithmetic Mean:

$$\text{Weighted arithmetic mean} = \text{Sum of } \frac{(\text{weights} \times \text{their frequencies})}{\text{Total repetitions}}$$

The Percentage of Conformity:

$$\text{The Percentage of conformity} = \frac{\text{Arithmetic mean}}{\text{Highest weight on the scale}} \times 100\%$$

Gap Size Calculation:

$$\text{Gap Size for Each Checklist} = 1 - \text{Percentage of Conformity}$$

The sign of the result

The following measures were used to accurately represent the results.

Pareto chart: Show the relative importance of groups contributing to inconsistency.

4. Results:

Table 2: The level of Application of International Standard Requirements, Documentation, and Gap Size

Code	International Standard Requirement	Mean Score	Application Rate %	Application Level	Gap Size %
4-1	Understanding the Organization and Its Context	3.20	45.71%	Low	54.29%
4-2	Understanding the Needs and Expectations of Interested Parties	3.67	61.17%	High	38.83%
4-3	Defining the Compliance Management System	4	66.67%	High	33.33%
4-4	Compliance Management System	6	100.00%	Fully High	0%
4-5	Compliance Obligations	4.60	76.67%	Very High	23.33%
4-6	Compliance Risk Assessment	2.40	40.00%	Very Low	60%
5-1	Leadership and Commitment	4.26	71%	High	29%
5-2	Compliance Policy	3.30	55%	Low	45%
5-3	Roles, Responsibilities, and Authorities	3.38	56.33%	Low	43.67%

6-1	Actions to Address Risks and Opportunities	4.83	80.50%	Very High	19.50%
6-2	Compliance Management Objectives and Planning	5.27	87.83%	Fully High	12.17%
6-3	Planning for Changes	4.17	69.50%	High	30.50%
7-1	Resource Support	1	16.17%	Extremely Low	83.33%
7-2	Adequacy of Support	4.09	68.17%	High	31.88%
7-3	Awareness Support	4	66.67%	High	33.33%
7-4	Communication Support	3	50%	Low	50%
7-5	Documented Information Support	4.39	73.17%	Very High	26.83%
8-1	Operational Planning and Education	4	66.67%	High	33.33%
8-2	Control and Procedures Implementation	3	50%	Low	50%
8-3	Raising Concerns	4.75	79.17%	Very High	20.83%
8-4	Investigation Processes	4.60	76.67%	Very High	23.33%
9-1	Monitoring, Measurement, Analysis, and Evaluation	5.31	88.50%	Fully High	11.50%
9-2	Internal Audit	5.55	92.50%	Fully High	7.50%
9-3	Management Review	4.79	79.83%	Very High	20.17%
10	Improvement	4.81	80.21%	Very High	19.79%
Overall	General Level of Measurement for the International Standard	4.13	71.76%	Very High	28.24%

Source: Prepared by researchers based on analysis of practical data.

The findings derived from the inspection checklists used within the case observation of the General Company for Foodstuffs to measure the level of utility and documentation of the necessities of the global well-known (ISO 37301:2023) and the distance length in the digital ration card, as presented in Table 2, indicate the following:

The specs represented using (Compliance Management Objectives and Planning, Monitoring, Measurement, Analysis, and Evaluation, Internal Audit, and Compliance Management System) were completely implemented and documented within the digital ration card, accounting 16% of the overall specifications. On the other hand, the specs (Documented Information Support, Compliance Obligations, Investigation Processes, Raising Concerns, Management Review, Improvement, and Actions to Address Risks and Opportunities) were completely implemented however simplest in part documented in the digital ration card, representing 28% of the total specs. Meanwhile, the information provided in Table 2 showed that the specs (Understanding the Needs and Expectations of Interested Parties, Defining the Compliance Management System, Awareness Support, Operational Planning and Education, Adequacy of Support, Planning for Changes, Leadership, and Commitment) have been fully applied but now not documented inside the electronic ration card, accounting for 28% of the total specs. Additionally, the specifications (Communication Support, Control and Procedures Implementation, Understanding the Organization and Its Context, Compliance Policy, Roles, Responsibilities, and Authorities) have been partially applied however completely documented in the digital ration card, representing 20% of the total specs. The inspection checklist findings also discovered that the specification (Compliance Risk Assessment) became in part applied and partially documented within the digital ration card, accounting for 4% of the full specifications.

Finally, the inspection tick list findings for the General Company for Foodstuffs to degree the software stage and documentation of (ISO 37301:2023) requirements and the gap length in the electronic ration card, as proven in Table 2, indicated that the specification (Resource Support) changed into partially implemented and no longer documented, accounting for four% of the entire specifications.

Table 3: The percentage difference is the magnitude of the difference between the cumulative percentages used in the international standard requirements and its documents.

Code	International Standard Requirement	Gap Percentage (%)	Adjusted Percentage (%)	Cumulative Percentage (%)
7.1	Resource Support	83.33%	10.40%	10.40
4.6	Compliance Risk Assessment	60%	7.48%	17.88
4.1	Understanding the Organization and Its Context	54.29%	6.77%	24.65
7.4	Communication Support	50%	6.24%	30.89
8.2	Control and Procedures Implementation	50%	6.24%	37.13
5.2	Compliance Policy	45%	5.62%	42.75
5.3	Roles, Responsibilities, and Authorities	43.67%	5.45%	48.20
4.2	Understanding Needs and Expectations of Interested Parties	38.83%	4.85%	53.05
4.3	Defining the Compliance Management System	33.33%	4.16%	57.21
7.3	Awareness Support	33.33%	4.16%	61.37
8.1	Operational Planning and Education	33.33%	4.16%	65.53
7.2	Adequacy of Support	31.88%	3.98%	69.51
6.3	Planning for Changes	30.50%	3.81%	73.32
5.1	Leadership and Commitment	29%	3.62%	76.94
7.5	Documented Information Support	26.83%	3.35%	80.29
4.5	Compliance Obligations	23.33%	2.91%	83.20
8.4	Investigation Processes	23.33%	2.91%	86.11
8.3	Raising Concerns	20.83%	2.60%	88.71
9.3	Management Review	20.17%	2.52%	91.23
10	Improvement	19.79%	2.47%	93.70
6.1	Actions to Address Risks and Opportunities	19.50%	2.43%	96.13
6.2	Compliance Management Objectives and Planning	12.17%	1.52%	97.65
9.1	Monitoring, Measurement, Analysis, and Evaluation	11.50%	1.44%	99.09
9.2	Internal Audit	7.50%	0.94%	100

Source: Prepared by researchers based on analysis of practical data.

The Pareto analysis shows that the largest gap in implementation in terms of international standard requirements is supporting resources with 83.33%, followed by compliance-related risk assessment with 60%, understanding the organization and its context with 54.29%, while there is

very little difference in internal audit at 7.50%. The cumulative percentages range from 10.40% to 100%, indicating that addressing large variance requirements such as inputs and risk assessment should be a priority because they contribute significantly to the overall variance that occurs when small differences required such as internal audit reflect a high degree of application.

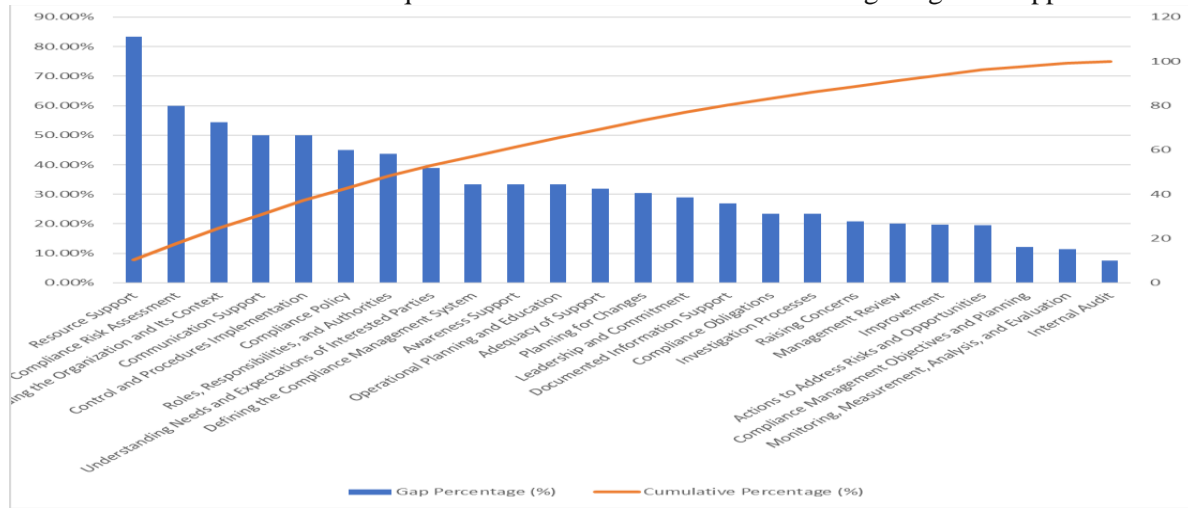


Figure 2: The Pareto analysis of the level of gaps in terms of identifying the most influential minority

Source: Prepared by researchers based on analysis of practical data

Table 4: Descending order of the main and secondary reasons that prevent the application of the international specification in the electronic ration card with high-quality

Main Causes	Sub-Causes
7 Support	7-4 Weakness in Communication Support
	7-3 Weakness in Awareness Support
	7-2 Weakness in Adequacy of Support
	7-5 Weakness in Documented Information Support
5 Leadership	7-1 Weakness in Resource Support
	5-2 Weakness in Compliance Policy
	5-1 Weakness in Leadership and Commitment
8 Operational Processes	5-3 Weakness in Roles, Responsibilities, and Authorities
	8-2 Weakness in Control and Procedures Implementation
	8-1 Weakness in Operational Planning and Education
4 Company Context	8-4 Weakness in Investigation Processes
	8-3 Weakness in Raising Concerns
	4-6 Weakness in Compliance Risk Assessment
	4-2 Weakness in Understanding Needs and Expectations of Interested Parties
	4-3 Weakness in Defining the Compliance Management System
6 Planning	4-5 Weakness in Compliance Obligations
	4-1 Weakness in Understanding the Organization and Its Context
	6-3 Weakness in Planning for Changes
9 Performance Evaluation	6-1 Weakness in Actions to Address Risks and Opportunities
	6-2 Weakness in Compliance Management Objectives and Planning
9 Performance Evaluation	9-3 Weakness in Management Review
	9-1 Weakness in Monitoring, Measurement, Analysis, and Evaluation
	9-2 Weakness in Internal Audit

Source: Prepared by researchers based on analysis of practical data.

5. Conclusion:

Based on the evaluation of the outcomes, the conclusion emphasizes that the extent of software and documentation of the worldwide trendy requirements (ISO 37301:2023) in the electronic ration card gadget varies extensively throughout exclusive categories. Fully carried out and documented requirements, which included compliance management objectives and planning, monitoring, measurement, analysis, evaluation, and internal audit, accounted for the highest sixteen percent of the whole. Conversely, a big component, 28%, became completely implemented but simplest partly documented, reflecting gaps in areas together with documented information support and investigation processes. Furthermore, 28% of the requirements, such as understanding needs and expectations of interested parties and awareness support, have been completely implemented however lacked documentation. A smaller percentage, 20%, representing requirements that include communication support and compliance policy, have been in part carried out yet completely documented, indicating obstacles in realistic implementation. The analysis additionally highlights critical regions with substantial gaps, drastically resource support (38.33%), and compliance risk assessment (60%), requiring prioritized intervention. In comparison, requirements like internal audit show minimal gaps, demonstrating better implementation in adulthood. These findings underline the want for focused strategies to address fundamental gaps, improve documentation techniques, and ensure more complete compliance with global requirements, improving the general device's effectiveness and excellent.

Authors Declaration:

Conflicts of Interest: None

-We Hereby Confirm That All The Figures and Tables In The Manuscript Are Mine and Ours. Besides, The Figures and Images, which are Not Mine, Have Been Permitted Republication and Attached to The Manuscript.

- Ethical Clearance: The Research Was Approved by The Local Ethical Committee in The University.

References

- Abd AL-Salam, E.I. and Younis, F.R. (2021) "Availability Assessment of the Managing the Audit Program. According to the Specification Standard (ISO 19011:2018): A case study in Ministry of Construction Housing and General Municipalities", *Journal of Economics and Administrative Sciences*, 27(126), pp. 327–348. doi:10.33095/jeas.v27i126.2113.
- About, H. (2023). Gap analysis in the smart ration card system. *Journal of Economics and Development*, 10(1), 27–35.
- Alaa Hussein *, H., & Kamel Jawad, M. (2024). Evaluation of Risk Management in the Ministry Interior of Iraq According to the Standards (ISO 31000: 2018). *Journal of Economics and Administrative Sciences*, 30(142), 69-85. <https://doi.org/10.33095/e21b7x84>
- Al-Najjar, N. (2019). Digital transformation in ration card systems: A comparative study between Egypt and Iraq. *Arab Journal of Digital Innovation*, 6(2), 13–28.
- Alzahrani, S., & Khan, A. (2016). Risk-based Thinking in Compliance Management. " *Journal of Risk Management*," 10(2), 10–25.
- Asaad, N. (2019). Challenges in transitioning from the traditional ration card system to smart electronic systems. *Journal of Public Administration and Governance*, 8, 23–40.
- Barcik, A. (2020). Compliance systems as a determinant for the functioning of social responsibility instruments in an organization. *Zeszyty Naukowe. Organizacja i Zarządzanie, Vol. 147. Politechnika Śląska*, 7–23.
- Bleker, H., & Hortensius, D. (2014). Integrating ISO 31000 with Compliance Management. " *International Journal of Compliance and Risk*," 20(5), 10–20.
- Coglianesi, C., & Nesh, J. (2023). Ethical Compliance in Public Sector Projects. " *Public Administration Review*," 78(4), 15–32.

- Dawood, O. A., & Lafta, B. S. (2024). Diagnosing the Gap in Operational Requirements for the Compliance Management System According to the International Standard ISO 37301:2021 In the General Management of Al-Rasheed Bank / An Applied Research. *Journal of Ecohumanism*, 3(8). <https://doi.org/10.62754/joe.v3i8.5178>
- Deming, W. E. (1986). *Principles for transformation. Out of the Crisis*. 18, 96.
- Directorate of Planning and Follow-Up. (2023). *Report on the performance evaluation of the smart ration card system*.
- Ismail, A. (2019). Difficulties in implementing the smart ration card system in public institutions. *Journal of Public Administration and Governance*, 5(1), 23–34.
- ISO 37301:2023. (n.d.). *This Australian Standard® was prepared by QR-017, Organizational Governance. It was approved on behalf of the Council of Standards Australia on 20 January 2023*.
- Jaafar, M. (2020). Adopting compliance management systems in Iraqi banks: Challenges and opportunities. *Iraqi Journal of Administrative Sciences*, 15(2), 27–36.
- Jansen, R. D. (2021). A (In) Devida Divisão Do Compliance À Luz Da Abnt Nbr Iso 37301: 2021. *Revista De Extensão E Iniciação Científica Da Unisociesc*, 8(2).
- Jasim Resen, E., & Sadiq AbdulRazzaq, M. (2022). An Evaluation of Environmental Performance According to The International Standard (ISO14001: 2015) in a Field East of Baghdad / A Case Study in the Midline Oil Company. *Journal of Economics and Administrative Sciences*, 28(134), 29-56. <https://doi.org/10.33095/jeas.v28i134.2420>
- Mohammed, T. F. (2023). *Evaluating the Reality of the Compliance Management System According to the International Standard 37301 and Its Role in Achieving Sustainability Dimensions: A Case Study in Al-Rafidain Bank*. [Master's Thesis]. Middle Technical University.
- Pelei, A., Bognár, F., & Juhász, M. (2024). Compliance as Business Development Potential in the Credit Institution Sector. *Financial and Economic Review*, 23(3), 171–192. <https://doi.org/10.33893/FER.23.3.171>
- Quick, R., & Sayar, M. (2021). The Impact of ISO 37301 on Transparency in Municipal Services. *Journal of Public Sector Management*, 29(3), 2–15.
- Qutb, A. (2021). Integration of compliance management according to ISO 37301 in the Egyptian ration card system. *Egyptian Journal of Economic Studies*, 12(3), 162–180.
- RGM Saudi Company. (2021). *Compliance Management System Consultancy for the Implementation of the International Standard ISO 37301:2021: A Case Study*. Kingdom of Saudi Arabia.
- Rusul, S. S. A. H., & Al-Taie, Y. A. A. (2020). The effect of the environmental management system on the clean production strategy / case study in Middle Refineries Company. *Journal of Economics and Administrative Sciences*, 26(121), 257-281. <https://doi.org/10.33095/jeas.v26i121.1950>
- Sony, A., & Douglas, B. (2021). Evolution of ISO Compliance Standards: From ISO 19600 to ISO 37301. *International Compliance Review*, 36(1), 2–10.
- Villa-Gallón, J. E., Valencia-Bernal, J. A., & Garcés-Gómez, Y. A. (2024). ISO Standards in Healthcare Organizations: Research Evolution and Trends from a Bibliometric Analysis. *Publications*, 12(3), 27. <https://doi.org/10.3390/publications12030027>
- Wijaya, O. Y. A. (2021). Risk Management Mitigation in the New Normal Era. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1), 1088–1097. <https://doi.org/10.33258/birci.v4i1.1716>