



Presenting a proposed indigenous knowledge management framework to support policymaking in the Islamic Consultative Assembly of Iran: A comparative study of European and American parliaments

Mohammad Hossein Shadmanfar¹  Rouhollah Tavallaei^{2*}  Abed Rezaei³ 

1. Ph.D. Candidate, Department of Public Administration, Faculty of Management, Imam Hossein University, Tehran, Iran E-mail: Shadmanfar@ihu.ac.ir
2. Associate Professor, Department of Knowledge Management, Faculty of Management, Imam Hossein University, Tehran, Iran E-mail: Tavallaei@ihu.ac.ir
3. Assistant Professor, Department of Public Administration, Faculty of Management, Imam Hossein University, Tehran, Iran E-mail: seeyedabed@gmail.com

Abstract

Purpose: Parliaments increasingly operate in policy environments characterized by complexity, uncertainty, and accelerated decision-making cycles. As legislative bodies face growing volumes of specialized information, the ability to systematically manage, translate, and institutionalize policy-relevant knowledge has become a critical determinant of policy quality. Despite the expansion of parliamentary research services and digital infrastructures in many developed countries, evidence suggests that knowledge use in legislative policymaking often remains fragmented, person-dependent, and weakly institutionalized. The purpose of this study is to conduct a comparative analysis of knowledge management arrangements in selected European and American parliaments and to derive empirically grounded lessons for designing an indigenous model of parliamentary knowledge management to support policymaking in the Islamic Consultative Assembly of Iran.

Design/methodology/approach: This study adopts an applied, analytical-comparative research design based on a multi-case study approach. Drawing on the logic of qualitative comparative analysis, each parliament is treated as an institutional case, while knowledge management practices constitute the unit of analysis. Data collection followed a systematic literature review based on PRISMA guidelines, encompassing peer-reviewed journal articles, institutional reports, and official parliamentary documents retrieved from Scopus and Web of Science databases.

Case selection was guided by purposive theoretical sampling to maximize institutional diversity and explanatory leverage. The cases include parliamentary knowledge-support institutions such as POST (UK), TAB (Germany), STOA (European Parliament), OTA and GAO (USA), OPECST (France), and future-oriented and participatory technology assessment bodies in Nordic and continental European parliaments.

To translate comparative insights into a context-sensitive indigenous model, a second empirical stage was conducted. Based on the analytical lessons extracted from the comparative cases, twelve dimensions of parliamentary knowledge management were identified. A structured questionnaire comprising 48 items (four per dimension) was developed and administered to six experts with professional experience in

policymaking and advisory functions within the Iranian Parliament. Content validity was established through expert review, and internal consistency was assessed through item coherence across dimensions.

Data analysis proceeded in two stages. First, qualitative content analysis using a hybrid deductive-inductive coding strategy was applied to identify common themes, differentiating patterns, and explanatory factors across cases. Second, fuzzy-set qualitative comparative analysis (fsQCA) was employed to calibrate expert-based assessments of the indigenous model dimensions. Calibration thresholds were theoretically defined a priori (full membership ≥ 4.2 , crossover point = 3.0, full non-membership < 3.0 on a five-point Likert scale). All analyses were conducted using R software.

Findings: The comparative analysis reveals that while most parliaments have established formal mechanisms for accessing scientific and policy-relevant knowledge, their effectiveness depends less on the mere availability of information and more on institutional configurations governing knowledge use. Across cases, common features include the existence of intermediary knowledge units, reliance on professional non-elected staff, and formalized procedures for producing policy briefs and analytical reports. However, substantial variation emerges in the degree to which knowledge is institutionalized as organizational memory and integrated into the full policymaking cycle.

Three ideal types of parliamentary knowledge management were identified: (1) institutionalized and learning-oriented systems, characterized by stable knowledge units, codified procedures, and feedback mechanisms; (2) supportive but unstable systems, where high-quality knowledge is produced but remains project-based and weakly embedded; and (3) person-centered and fragmented systems, heavily dependent on individual actors and lacking durable institutional memory.

The fsQCA calibration results for the Iranian Parliament indicate a mixed institutional profile. Dimensions such as the institutional position of the knowledge unit, the role of knowledge intermediaries, formal procedures, translation of scientific language, and balancing speed with analytical rigor exhibit partial membership in the set of institutionalized parliamentary knowledge management. In contrast, dimensions related to institutional memory, integration of knowledge across the policy cycle, organizational learning, and avoidance of person-centered practices fall below the crossover point, indicating structural weaknesses. No single dimension appears sufficient on its own; rather, effective knowledge support emerges from specific configurations of institutional, procedural, and human factors.

Research limitations/implications: This study is subject to several limitations. First, the comparative analysis relies on secondary data and documented practices, which may not fully capture informal knowledge dynamics within parliaments. Second, the fsQCA application is based on a single institutional case (the Iranian Parliament) calibrated through expert judgment, which limits generalizability. Future research could extend the model by incorporating additional parliamentary cases or longitudinal data to assess institutional change over time. Despite these limitations, the study demonstrates the analytical value of combining comparative institutional analysis with configurational methods.

Practical implications: The findings offer practical guidance for policymakers and parliamentary administrators seeking to strengthen evidence-informed legislation. They suggest that investments in digital infrastructure or analytical capacity alone are insufficient unless accompanied by stable institutional arrangements, professional knowledge staff, formalized knowledge processes, and mechanisms for organizational learning. For the Iranian Parliament, the proposed indigenous model highlights the need to move beyond ad hoc advisory support toward a system that embeds knowledge management into routine legislative practice.

Originality/value: This study contributes to the literature in three key ways. First, it provides one of the first systematic comparative analyses of parliamentary knowledge management across European and American legislatures. Second, it advances methodological innovation by applying fsQCA to the design and assessment of an indigenous parliamentary knowledge management model. Third, it offers a context-sensitive framework that bridges comparative insights and institutional design, thereby extending existing theories of knowledge use in policymaking beyond linear and evidence-centric approaches.

Keywords: Knowledge Management, Islamic Consultative Assembly, Policy Making, Policy Knowledge, Comparative Study.

Received : 6 November 2023

Revised : 22 December 2023

Accepted : 31 December 2023

Cite this article: Mohammad Hossein Shadmanfar; Rouhollah Tavallaei; Abed Rezaei. (2026). Knowledge Management in Policymaking in Developed Countries; A Comparative Study of European and American Parliaments. *Strategic Management of Organizational Knowledge*, 9 (1), **-**. https://doi.org/10.47176/smok.2026.****

© 2024 The Authors. *Strategic Management of Organizational Knowledge* published by Imam Hussein University.

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

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Author contributions

The author A conceptualized the study, designed the research framework, conducted the comparative analysis, developed the indigenous model, collected and analyzed the data, and wrote the manuscript. The author B & C also reviewed and approved the final version of the manuscript.

Conflicts of interest

The author declares no conflict of interest.

Acknowledgments

The authors would like to thank the experts who generously shared their time and insights during the data collection process. Their contributions were invaluable to the development and validation of the indigenous model proposed in this study.

Introduction and Statement of the Problem

Rapid social and economic transformations over recent decades have brought renewed attention to the role of policy-making institutions such as parliaments in confronting complex issues and safeguarding the quality of policy decisions. Parliaments operate in an environment saturated with documents, data, and specialized analyses, and they must select logical, knowledge-grounded pathways for decision-making from within this vast informational landscape (König et al., 2006). Under such conditions, knowledge management, understood as the creation, organization, sharing, and utilization of knowledge, has become a strategic necessity for governance (Mahajan, 2024). International experience likewise indicates that the absence of integrated mechanisms can result in information fragmentation and the erosion of institutional memory (Benson & Lorenzoni, 2016). In the Parliament of Finland, for example, the continuous growth of data and the gap between information and communication technology (ICT) structures and representatives' work processes have been reported as a major knowledge-management challenge (Mustajärvi, 2003). In addition, tools such as Fakta (Nadeem, 2019), designed to verify the accuracy of claims in texts, and Finlex (Oksanen, 2019), which provides open access to laws, judicial decisions, and treaties, have helped effectively integrate parliamentary information and policy-document flows.

In Iran, the Islamic Consultative Assembly (Majles) similarly faces complex and multidimensional issues, and the quality of policy analysis is directly dependent on access to credible knowledge (Shadmanfar, 2025). Although institutions such as the Parliament Research Center play an important role in knowledge production, the lack of an organized knowledge-management system has meant that a substantial portion of generated knowledge remains dispersed. Weak documentation practices, difficulties in transferring

experience across parliamentary terms, and limited structured communication between commissions and research units are among the central challenges. This is occurring while some countries—such as Finland (Mustajärvi, 2003), Germany (Mittelstädt, 2025), the United Kingdom (Walker, 2019), and Canada (L'Heureux, 2013)—have been able to structure the flow of policy-relevant knowledge by strengthening ICT infrastructures and enabling the active participation of members of parliament in knowledge processes.

A review of the existing literature suggests that the challenges identified in the Iranian Parliament are by no means unique. In fact, it has similar structural and cultural barriers to effective knowledge management which can be observed across a wide range of parliamentary systems worldwide. Comparative research on the Parliament of Thailand, for instance, demonstrates that ambiguity in understanding the concept of knowledge management, lack of motivation for knowledge sharing among staff and legislators, and structural incoherence within parliamentary organizations are among the most significant barriers to successful KM implementation (Mingmitr, 2016a, 2016b). In a broader organizational context, other studies emphasize the critical role of transformational leadership, reward systems, participatory mechanisms, and supportive organizational culture as preconditions for knowledge-management success in public institutions (Sayyadi, 2019). In the Czech Republic, a distinct but related problem has been identified: legislators frequently misunderstand the nature of expert research services and expect parliamentary research units to perform executive-level tasks (Jágr, 2022). Similarly, in the German Bundestag, high turnover rates and the frequent replacement of parliamentary members, combined with the inherent difficulty of transferring tacit knowledge between individuals and across legislative terms, have been reported as key structural challenges to building sustainable organizational memory (Mittelstädt, 2022a). By contrast, the Italian parliamentary experience offers a more positive trajectory, indicating that the professionalization of parliamentary staff and the maintenance of a stable, career-based administrative structure can significantly strengthen a parliament's institutional knowledge capacity over time (Romanelli, 2025a). At the supranational level, a European Union report highlights the pressing need to move beyond a traditional linear model of knowledge production—where evidence flows unidirectionally from research units to decision-makers, toward interactive and networked knowledge architectures capable of addressing the complex challenges of the so-called “post-truth” era (Topp, 2018).

Overall, the evidence points to four major gaps in the literature. First, many studies address only one dimension of policy knowledge and do not offer an integrated account of policy-knowledge management. Second, multi-parliament comparative studies remain limited. Third, the relationship between the knowledge-management cycle and policy-making has not been systematically analyzed in studies of European and North American parliaments. Fourth, in Iran, no study has yet proposed a framework for knowledge management in the Islamic Consultative Assembly based on international experience and comparative lessons.

The central aim of this study is to carry out a comparative multi-case analysis of knowledge management across a number of European and North American parliamentary systems, in order to identify the underlying patterns that inform and shape the knowledge-based support of the policy-making process within Iran's Islamic Consultative Assembly. To this end, the research addresses four principal questions: (1) In what ways is knowledge management structured in selected European and North American parliaments in terms of institutional arrangements, supporting infrastructures, and formally designated roles, and how do these arrangements vary with respect to the extent to which policy knowledge has become institutionalized? (2) By what mechanisms and through which channels does policy knowledge enter the various stages of the parliamentary policy-making cycle, and under what circumstances is it employed in an “informational,” “analytical,” or “institutional-learning” capacity? (3) What combinations of institutional, cultural, and human-related conditions serve to enhance or diminish the effectiveness of knowledge management in its role of supporting parliamentary policy-making? (4) Drawing on the comparative experiences of the selected parliaments, what institutional and procedural preconditions must be in place to develop a knowledge-management framework suited to the Islamic Consultative

Assembly of Iran, one that would enable knowledge management to transcend a merely supportive function and reach the level of institutional learning?

A Review of the Literature

The use of knowledge management in parliaments over the years

In recent years, there has been a significant shift in the process of parliamentary policymaking. In the past, the role of parliamentary institutions was mainly limited to passing procedural laws and serving in an advisory capacity to governments. Over the years, however, with the advancement in modern states, parliaments gradually pivoted more towards policymaking bodies in order to address the complexities of complicated modern demands for accountability and efficiency (Serra-Silva & Leston-Bandeira, 2026). From the second half of the twentieth century onward, an increased attempt to establish knowledge infrastructures such as specialized libraries, parliamentary research units, and other types of knowledge-based services was seen in developed countries, which enabled representatives to gain access to more reliable data (Malang et al., 2019). This shift shows how parliaments moved away from merely legislative parties, and leaned more towards “Knowledge-driven” parliaments in which decisions are based upon evidence and analyzing the effects to choose the best possible policy. In other words, such parliaments view knowledge as an indispensable part of their process. Over the years, as many empirical studies have been done in European and American parliaments, this approach has been refined and polished to better suit decision making. It is pointed out that knowledge in parliaments is often used selectively and in ways dependent on the institutional context which is well beyond the technical resolution of problems (Auel & Christiansen, 2015). Knowledge can shape the parliamentary policy agenda, and help representatives to legitimize their decisions and take stronger positions (Flavin & Franko, 2017). This theoretical shift caused a change in how scholars focused on the much information is available to the fundamental mechanisms through which knowledge is utilized in parliaments. Within this framework, knowledge management gained importance as a tool for preserving institutional memory and lowering the risk turnover among representatives.

Knowledge Management in Policymaking: Definitions, Approaches, and Conceptual Distinctions

Contemporary scholars often refer to knowledge management in policymaking as a set of organized processes through which policy knowledge is produced, organized, stored, shared, and applied in public decision-making (Kazanskaia, 2025; Lee-Geiller, 2025). It is important to distinguish between evidence-based policymaking and knowledge management since the former is often concerned with the quality and validity of the data and the latter focuses on how knowledge is truly used within institutional settings. Also, there is a distinction between policy analytical capacity where the analytical capacity uses the technical ability to evaluate policy options and knowledge management which addresses how those analyses are integrated into the process of policymaking in parliaments (Süsser et al., 2021). Therefore, institutional and interactive approaches to knowledge management emphasize on how the use of knowledge is inherently nonlinear and point to the role of interpretation and within-parliament interactions that reflect the true function of parliaments (Wang et al., 2011).

The Position of Legislative Institutions in the Creation of Knowledge Policymaking

Legislative bodies play a crucial role in the creation of knowledge policymaking since they are both responsible for generating policy knowledge and converting knowledge into binding decisions. Parliaments gather and evaluate knowledge through specialized committees and hearings and simultaneously give meaning to it in the very fabric political interactions (Cross et al., 2021). Knowledge management is shown to be most effective when there is a clear separation between the political role of elected representatives and the role of professional parliamentary staff (Egeberg et al., 2013; Shackleton, 2018). The presence of professional and non-partisan staff and offices in the parliaments of developed countries has helped maintain knowledge continuity and reduce the dependence on the knowledge of individual

representatives. In contrast, where such mechanisms are not available, knowledge might be used in a fragmented or symbolic manner (Brandsma & Otjes, 2024).

Key Variables of Knowledge Management in Legislative Institutions

A review of the literature identifies four categories of variables that influence knowledge management in parliaments. Structural variables include the system of the committees and the separation of the political and expert roles. Process variables has to do with implicational procedures such as documenting experiences, sharing those experiences and knowledge among representatives, and analyzing evidence during legislative reviews. Technological variables are concerned with information technology infrastructures and digital tools for accessing legislative documents. Human and cultural variables cover knowledge leadership and organizational trust among members of legislative institutions (Fortunato et al., 2019). The absence of any one of these variables is shown to be disruptive to the functioning of the entire knowledge management system.

Dimensions of Knowledge Management in the Policymaking Cycle

Knowledge management within the policymaking cycle has different dimensions, with each of these dimensions serving a specific purpose. The first dimension is gathering and interpreting knowledge used in the section where the topic is defined to create a framework for issues and set priorities. The second dimension is knowledge analysis and synthesis used during policy formulation where different alternatives are compared and utilizing past experiences is essential. The third dimension is knowledge translation used at the legislative approval stage by transforming specialized knowledge into politically persuasive arguments. The fourth dimension is the preservation and transfer of the knowledge used in the evaluation part of documentation (Sieberer, 2011). The literature points to the fourth dimension as the weakest one in parliaments, leading to the erosion of institutional memory (Leston-Bandeira, 2007).

Therefore, the literature makes clear that parliamentary knowledge management is not merely a technological or informational phenomenon, rather, it is an institutional mechanism formed by the role of professional staff, formal rules governing the use of evidence, processes that make sense of knowledge, and organizational learning capacity. Thus, comparative analysis of parliaments should include not just the description of tools but it also needs to deal with the very fabric of institutional factors, since it is these factors that determine whether knowledge becomes institutional decision-making or remains at the level of individuals.

Research Background

The ever-increasing complexity of public issues as well as the high pace of political changes have all shown the need for mechanisms to be institutionalized in order to produce, organize, and apply within parliaments. Over the past decade, there has been a large body of research on the role of knowledge management in improving the quality of policymaking in the legislatures of developed countries. Table 1 provides a systematic overview of selected studies from the last ten years, summarizing and comparing the most relevant findings on knowledge management in the policy making of European and American parliaments.

Table 1. Research Background

Author (Year)	Study Title	Methodology	Key Findings Relevant to This Study
Head (2016)	The relationship between policy and evidence	Conceptual and comparative analysis	The evidence-policy relationship is interactive and shaped by multiple logics. Knowledge management becomes effective when parliaments can balance scientific, experiential, and political knowledge and integrate them into decision-making processes.

Mingmitr (2016a)	Knowledge management in the Thai Parliament	Qualitative case study; qualitative content analysis	Conceptual ambiguity, weak incentives for knowledge sharing, and limited structural coherence are major barriers to parliamentary knowledge management. These findings highlight the importance of institutional leadership and formal knowledge-management mechanisms.
Sayyadi (2019)	Leadership and knowledge management in public organizations	Analytical review; narrative review	Successful knowledge management depends on transformational leadership. Also reward systems, and organizational culture have been found effective. In parliaments, sustained knowledge processes do not emerge without active support from leaders.
Walker (2019)	Knowledge infrastructures in the UK Parliament	Case study and institutional analysis; document analysis	Strengthening ICT infrastructure and creating structured interaction between MPs and research units improve the flow of policy knowledge and reduces reliance on individual, person-bound knowledge.
Zittel & Nyhuis (2020)	Expertise, turnover, and parliamentary modernization	Comparative analysis of European parliaments	Turnover weakens knowledge transfer and institutional memory. Parliamentary knowledge management should establish formal mechanisms for transferring experience across legislative terms.
Cairney (2022)	Evidence-based policymaking	Theoretical and empirical analysis; secondary analysis	Evidence-based policymaking is political and non-linear. Parliamentary knowledge management must align with cognitive limits and time pressure. Also it should be following logical and practical policymaking.
Koryzis et al. (2021)	ParlTech: a framework for digital parliament transformation	Framework design and comparative study; comparative analysis	Digital transformation can expand parliaments' knowledge-management capacity, but its effectiveness depends on aligning technology with workflows and organizational culture.
Mittelstädt (2022b)	Knowledge management in the German Parliament	Qualitative case study; thematic analysis	The central challenges are high turnover and the difficulty of transferring tacit knowledge. Documentation and the role of professional staff are critical to maintaining institutional memory.
Romanelli (2025b)	Staff professionalization and parliamentary knowledge capacity	Comparative analysis of European parliaments	Professionalization of staff and administrative stability play a key role in strengthening knowledge management and providing knowledge support for policymaking.

Although there have been many important advances, significant theoretical challenges still remain. Many studies have focused on only one dimension of knowledge management, such as technology or culture, and

therefore lack a comprehensive perspective. The role of politics, power, and party competition in shaping how knowledge is used has also been less systematically analyzed. Moreover, comparative research across parliaments has been limited and often focused on one country. These limitations have prevented the formation of holistic frameworks for knowledge management in legislative institutions.

Overall, the literature demonstrates that knowledge management in parliamentary policymaking is an institutional and multidimensional process formed by the interaction of structural, procedural, technological, and human variables. Yet the literature lacks an integrated and holistic framework that is able to explain how these variables and dimensions affect the policymaking cycle in the parliaments of developed countries in a comparative way. This theoretical gap, then, justifies the necessity of the present study, which undertakes a comparative analysis of European and American parliaments.

Research Innovation

The present study offers three innovations.

First, in terms of topic and research problem, it is among one of the first systematic efforts to explain and analyze knowledge management within the policymaking process of the Islamic Consultative Assembly (Majlis) of Iran, seeking to address a gap in the literature among Iranian research.

Second, in terms of methodology, the study uses four distinct research strategies, each tailored to one of the four key research questions. This approach enhances the comprehensiveness of the evidence gathered and reduces the likelihood of data loss during the search and document collection stages.

Third, in terms of findings, the study uses an analytical lens to better investigate the experiences of parliaments in developed countries to extract a set of applicable and transferable lessons to be presented within a proposed framework for knowledge management support of policymaking in Iran's Islamic Consultative Assembly (Majlis)

Research Methodology

This study uses an analytical-comparative design aimed at examining and comparing knowledge management mechanisms across different parliaments and explaining their capacity to support the policymaking process. The comparative method was used based on the idea that knowledge management capacities and practices are institutional and context-dependent in nature. Their patterns can be revealed through careful cross-case comparisons (Smelser, 2013). The design of this study is therefore based on a comparative multi-case study which is used widely in policymaking and knowledge management research. The study follows the process of qualitative comparative analysis in which each parliament is treated as a case and knowledge management practices are treated as the unit of analysis (Delmas & Pekovic, 2017). The aim is to both describe practices and identify causal patterns, institutional capacities, and outcomes related to policymaking support. This design is well suited for analyzing topics in which variables are not easily quantifiable and interrelationships are formed by contextual and organizational conditions.

Data Collection

Data was collected through a systematic review according to PRISMA standards (Haddaway et al., 2022). The literature search was carried out in the Scopus and Web of Science databases, and Scimago was used to assess journal quality. The main keywords were designed differently for each of the research questions, as detailed in table 2.

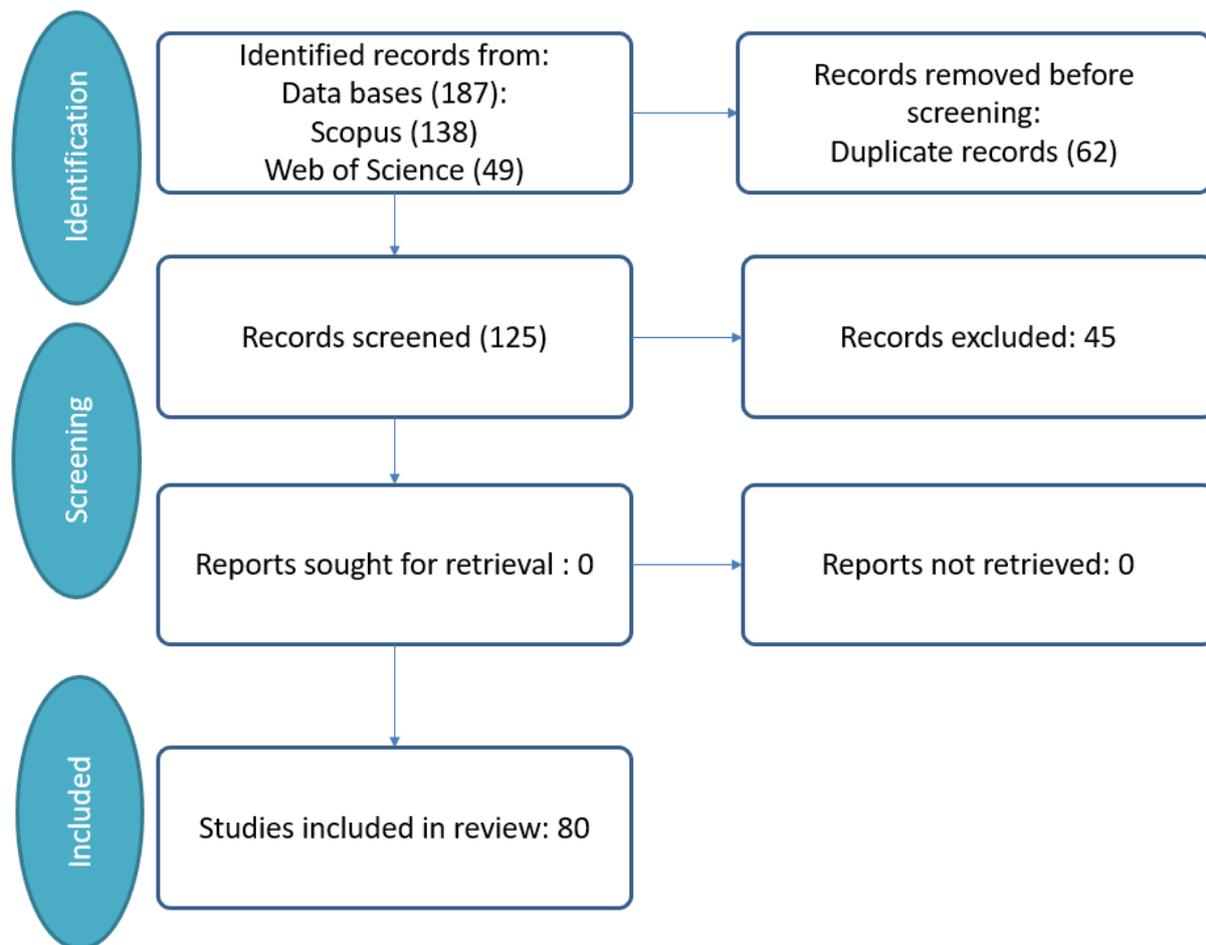
Data were collected through a systematic review conducted in accordance with PRISMA standards (Haddaway et al., 2022). The literature search was carried out in the Scopus and Web of Science databases, and SCImago was used to assess journal quality. The main keywords were designed separately for each research question, as detailed in Table 2.

Table 2. Research Search Strategy

No.	Research Question	Search String
1	How is knowledge management organized in terms of institutions, infrastructure, and formal roles in selected European and American parliaments, and what differences does this organization create in the degree to which policy knowledge is institutionalized?	("knowledge management" OR "knowledge infrastructure" OR "knowledge system*" OR "institutional memory") AND (parliament* OR legislature* OR "legislative organization") AND (infrastructure* OR mechanism* OR platform* OR "research service*" OR "parliamentary library")
2	Through what processes does policy knowledge enter the various stages of the parliamentary policymaking cycle, and under what conditions is it used in an "informational," "analytical," or "institutional learning" capacity?	("knowledge process*" OR "knowledge cycle" OR "evidence use" OR "evidence-informed") AND (legislation OR "legislative process" OR lawmaking OR "policy cycle") AND (parliament* OR legislature*)
3	Which configurations of institutional, cultural, and human conditions strengthen or weaken the effectiveness of knowledge management in supporting parliamentary policymaking?	("institutional condition*" OR culture* OR norm* OR "organizational factor*" OR "political context") AND ("knowledge use" OR "evidence use" OR "knowledge management") AND (parliament* OR legislature*)
4	Based on the comparative experience of selected parliaments, what institutional and procedural requirements are necessary for designing a proposed knowledge management framework for Iran's Islamic Consultative Assembly so that knowledge management can advance from a supportive level to the level of institutional learning?	("comparative stud*" OR "lesson* learned" OR transfer* OR adaptation OR "best practice*") AND ("knowledge management" OR "evidence-informed policy") AND (parliament* OR legislature* OR "legislative institution*")

The documents were screened in three stages, title, abstract, and full text. Only works which contained credible empirical evidence or valid institutional analysis were retained. Research samples related to parliament were selected through purposive theoretical sampling. The inclusion criteria were: (1) the availability of credible scholarly evidence on knowledge management or policy analysis capacities; and (2) purposive selection of cases with the highest explanatory and comparative potential and theoretical analytical value. The exclusion criterion was a lack of alignment between the article's title, abstract, and full text and the research questions.

Figure 1. Research Data Collection Process from Scopus and Web of Science Databases



The dependent variable of this study is “ the capacity of knowledge management to support policymaking” which includes components such as access to information, policy analysis capability, knowledge evaluation mechanisms, formal and informal knowledge flows, and organizational learning. The independent variables include information technology infrastructure, parliamentary research centers, archiving and documentation systems, mechanisms for interaction with experts, policy learning and analysis institutions. All variables were extracted and operationalized on the basis of standard definitions in the knowledge management and policymaking literature so as to avoid any conceptual drift.

Data Analysis

A qualitative content analysis through a deductive-inductive categorization approach was used to analyze the extracted data. First, knowledge management concepts and practices were categorized on the basis of the theoretical literature. This was followed by inductive coding to uncover new themes or contextual differences. A cross-case comparative matrix was subsequently developed, enabling a systematic comparison of practices, capacities, and outcomes across the chosen parliaments.

To analyze causal patterns between conditions and outcomes, the method of qualitative comparative analysis at the fuzzy-set level was used (Avoyan, 2023; Kraus et al., 2018) to better determine which combination of conditions, such as the maturity level of the knowledge management system, or formal knowledge exchange mechanisms, are necessary or sufficient to achieve a high capacity with respect to

policymaking support. This method is especially well suited for studies with a moderate number of cases. It also makes the identification of multi-factor frameworks easier.

Since the instrument used in the localization stage was a questionnaire based on dimensions derived from the comparative study, its validity was assessed in terms of content validity. The dimension and items were reviewed by experts before administration and their conceptual basis was checked to suit the institutional context of Iran’s parliament. In terms of reliability, internal consistency of responses at the dimension level was used to ensure that the items within each dimension represent a coherent conceptual construct. In addition, transparency of the reasoning trail in the comparative analysis was strengthened by documenting the data extraction stages, developing a cross-case comparison matrix, and reporting tables of themes and explanatory factors.

The final section of the comparative analysis is designed to assess the transferability of successful practices to the context of Iran’s parliament. This assessment was based on a comparison of gaps and capacities in the information system, expert structures, and policy analysis mechanisms which was carried out with the participation of five organizational experts from the Islamic Consultative Assembly and aimed to propose a suitable knowledge management model for supporting policymaking in Iran.

Research Findings

The findings are reported through a multi-case study design using an exploratory-evaluative logic. On the one hand, exploratory analysis is used to identify and describe the missions, processes, tools, strengths, and weaknesses of knowledge management in each parliament and the ways in which they support different stages of the policymaking cycle. This part of the analysis is focused on answering the question: “How is knowledge management actually organized and applied within parliamentary institutions?”

On the other hand, evaluative analysis is used to examine shared features and key differences that either enable or limit how effective knowledge management is in supporting policymaking, thereby enabling the extraction of transferable lessons for designing a proposed knowledge management framework for Iran’s parliament. Accordingly, the results section first presents within-case findings for each parliament (Table 3). It then uses cross-case analysis to identify common patterns (Table 4), meaningful differences (Table 5), and institutional configurations associated with success or failure (Table 6) in parliamentary knowledge management across the policymaking cycle

Table 3. Within-Case Findings: Missions, Processes, and Tools of Parliamentary Knowledge Management Intermediary Bodies

Country / Institution	Primary Mission of the Intermediary Body	Process	Tools	Source (Year)
United States (OTA), 1972	Understanding the long-term consequences of technology for legislation	1) Receiving requests from committees/representatives 2) Precisely defining the problem and policy questions 3) Gathering scientific evidence and socioeconomic data 4) Consulting with experts and stakeholders 5) Constructing scenarios and alternatives 6) Writing a comprehensive report 7) Presenting and holding briefing sessions for Congress	Long-form reports explaining consequences and scenarios	Office of Technology Assessment (OTA) Archive, 2025

<p>United Kingdom (POST), 1989</p>	<p>Transforming scientific evidence into usable information for representatives</p>	<p>1) Selecting a topic based on parliamentary needs 2) Conducting a rapid and systematic review of credible sources 3) Interviewing and consulting multiple experts from different perspectives 4) Extracting key points, areas of consensus, and points of disagreement 5) Writing a brief, impartial note 6) Internal and expert review 7) Publishing and presenting to representatives and committees</p>	<p>Four-page briefing notes, rapid responses, and horizon scanning of future trends</p>	<p>Parliamentary Office of Science and Technology (POST), 2025</p>
<p>European Union (STOA), 1987</p>	<p>Comparing policy options in science and technology</p>	<p>1) Topic selection by the STOA panel 2) Defining questions and study scope 3) Selecting a research contractor (university or consortium) 4) Conducting the study and gathering evidence 5) Constructing multiple policy options and consequences for each 6) Holding workshops and sessions with representatives and experts 7) Publishing the study and option-oriented summaries</p>	<p>Outsourced studies, option-based summaries, and workshops</p>	<p>Panel for the Future of Science and Technology (STOA), 2025</p>
<p>Germany (TAB), 1990</p>	<p>Analyzing the consequences of technology for the German parliament</p>	<p>1) Receiving requests from Bundestag committees 2) Defining questions and evaluation criteria (economic, social, and environmental) 3) Gathering evidence and data 4) Consulting with experts and stakeholders 5) Analyzing consequences and risks 6) Writing a detailed report 7) Presenting to committees and parliamentary debate</p>	<p>Detailed reports on the impact of technology on the economy and society</p>	<p>Technology Assessment at the German Bundestag (TAB), 2025</p>
<p>France (OPECST), 1983</p>	<p>Providing direct scientific support for legislation</p>	<p>1) Topic selection by parliament 2) Appointing rapporteur(s) from among representatives 3) Holding hearings with scientists and stakeholders 4) Synthesizing evidence and perspectives 5) Drafting a formal report 6) Presenting to the National Assembly and</p>	<p>Formal parliamentary reports and hearings</p>	<p>Office Parlementaire d'Évaluation des Choix Scientifiques et Technologiques (OPECST), 2025</p>

		Senate and entering the legislative process		
Finland (Committee for the Future), 1993	Supporting long-term and forward-looking policymaking	1) Selecting long-term topics 2) Collecting macro trends and data 3) Constructing future scenarios 4) Engaging in dialogue with experts and stakeholders 5) Extracting implications for present-day policy 6) Drafting reports and macro-level recommendations 7) Following up on the parliamentary agenda	Scenarios and foresight reports	Committee for the Future (Eduskunta), 2025
Netherlands (Rathenau), 1986	Analyzing the impact of technology on society and values	1) Selecting a social and technological topic 2) Gathering scientific and social evidence 3) Engaging in dialogue with stakeholders and citizens 4) Analyzing ethical and governance implications 5) Drafting an accessible report 6) Public release and explanatory sessions 7) Presenting to policymaking bodies and parliament	Socio-ethical reports and public dialogues	Rathenau Instituut, 2025
Denmark (DBT), 1986	Citizen participation in technology assessment	1) Selecting a topic 2) Preparing an impartial information package 3) Selecting a citizens' group 4) Holding learning sessions with experts in attendance 5) Citizens' deliberation and synthesis 6) Drafting a citizen statement and report 7) Presenting to policymakers	Citizens' panels and public synthesis reports	Danish Board of Technology (Teknologirådet), 2025
Switzerland (TA-SWISS), 1992	Assessing the risks and social acceptance of technology	1) Selecting a technology and topic 2) Gathering scientific and social evidence 3) Analyzing risks and consequences 4) Examining ethical and legal dimensions 5) Drafting a public report 6) Presenting to stakeholders and institutions 7) Using findings in public dialogue and policymaking	Interdisciplinary public reports	TA-SWISS - Foundation for Technology Assessment, 2025
United States (GAO/STAA), 2019	Providing evidentiary support for	1) Defining the oversight topic 2) Gathering data and sources 3) Interviewing experts and	Brief reports on risk and cost	Science, Technology Assessment, and

	congressional oversight of technology	organizations 4) Analyzing risk and cost to government 5) Drafting a brief report 6) Presenting to Congress 7) Following up on oversight recommendations		Analytics (STAA), U.S. GAO, 2025
--	---------------------------------------	--	--	----------------------------------

Table 4 provides information on the shared themes, which primarily show knowledge intermediary bodies, legislative reliance on expert knowledge, formal documentation and archiving, the role of non-elected staff in knowledge transfer, and the gap between scientific and political language. These themes reflect common structural challenges that parliaments face in dealing with policy knowledge and evidence.

Table 4. Shared Themes across Parliaments

Shared Themes	OTA	POST	STOA	TAB	OPECST	Future Committee	Rathenau	DBT	TA-SWISS	GAO
Existence of a knowledge intermediary body	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Legislative reliance on expert knowledge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Formal process for integrating knowledge into legislation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Formal archiving of legislative documents	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Role of non-elected staff in knowledge transfer	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
Gap between scientific and political language (need for translation)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Avoidance of direct prescriptive recommendations	✓	✓	✓	✓	-	✓	✓	✓	✓	✓

Tension between the speed of political decision-making and the rigor of scientific inquiry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
--	---	---	---	---	---	---	---	---	---	---

In the second step of the cross-case analysis, the focus moves more towards the commonalities to distinguish which knowledge patterns are not present across all parliaments and instead they serve as differentiating factors in knowledge management performance across cases.

Table 5 presents distinctive themes that were observed in only some parliaments and are directly linked to the quality of knowledge support of the legislative cycle. These themes include policy impact assessment institutionalization, the degree of institutional neutrality of knowledge, the presence or absence of institutional learning, the extent of knowledge continuity across legislative terms, and the level of formality of knowledge management. The analysis of these themes enables us to better differentiate parliaments in which knowledge management is merely a supportive element from those that knowledge has deeply rooted into their decision-making practices.

Table 5. Distinctive Themes across Parliaments

Distinctive Theme	Distinguished Institutions	Differing Patterns	Operational Explanation
Type of role played by the knowledge intermediary body	OTA, TAB, STOA, Rathenau, DBT	Some bodies merely provide summaries and simple explanations; some produce detailed analyses; some bring society and stakeholders into the discussion	The key distinction lies in whether the body “summarizes information,” “analyzes consequences,” or “facilitates social dialogue about science”
Depth of expert knowledge utilization	POST, GAO	In some bodies, evidence is used solely for rapid briefing; in others, it serves multi-dimensional, long-term analysis	This distinction determines whether the output is intended for immediate decisions or for strategic policymaking
Mode of implementing the formal process	STOA, TAB, OTA	Some bodies conduct the work internally within parliament; others outsource most of the research to universities and external institutes	The locus of knowledge production affects speed, cost, and scientific independence
Function of policy document archiving	POST, GAO	Some documents are produced solely for short-term use; others are designed for repeated reference in subsequent years	Documents can serve as immediate decision-making tools or as part of the institutional memory of parliament
Position of non-elected staff	OPECST	In some bodies, professional experts serve as the central actors; in others, elected	This distinction affects the degree of analytical

		representatives play a more prominent role	independence and the politicization of knowledge
Intensity of scientific language translation	OTA, TAB	Some bodies heavily simplify scientific language; others preserve a degree of scientific complexity	The chosen level of simplification affects both policymaker comprehension and scientific accuracy
Degree of distance from policy recommendation	OPECST	Some bodies only explain options; others approach outright policy recommendation	The boundary between “scientific informing” and “policy guidance” is drawn differently
Management of the trade-off between timeliness and rigor	OTA, TAB, STOA	Some bodies are designed for rapid response; others are structured for thorough, time-intensive inquiry	This distinction responds to different policymaking needs
Time horizon of the policy outlook	POST, GAO	Some focus on current issues; others attend to consequences ten to twenty years ahead	The time horizon determines how evidence is selected and analyzed
Degree of engagement with society	POST, GAO, TAB	Some bodies work exclusively with parliament; others also involve citizens and stakeholders	This distinction affects the social legitimacy of decisions

The third step of the analysis moves more towards the explanatory level rather than stating the descriptions of the themes, seeking to determine why distinctive themes have emerged in some parliaments and are absent in others. Table 6 presents the explanatory factors that account for variation in knowledge management performance across cases. These factors concern the institutional position of research services, the organizational arrangement of knowledge workers, the rules governing the use of evidence, the structure of access to knowledge, representatives’ motivation to use knowledge, the culture of knowledge sharing, and the agency of key members of the parliament. This table shows that knowledge management performance is the product of a specific arrangement of institutional, cultural, and human factors and cannot be reduced to any single variable.

Table 6. Explanatory Factors for Differences

Explanatory Factor	Operational Explanation	Detailed Institutional Distinction	How This Factor Generates Difference
Institutional position of research services	Where the knowledge unit is located within the parliamentary structure (independent, under the presiding board, or affiliated with committees)	In OTA, TAB, and STOA, the knowledge unit occupies a relatively independent position at a distance from day-to-day policy; in POST and GAO, it is closer to representatives and responsive to parliament’s immediate needs	The more independent the position, the greater the analytical autonomy and the wider the distance from everyday policy; the closer it is to representatives, the more politicized and faster the outputs become

Organizational arrangement of knowledge workers	The mode of employing and dividing labor among experts (permanent, project-based, in-house, outsourced)	POST and TAB maintain permanent professional teams; STOA and OTA rely more heavily on outsourced projects and temporary teams	Permanent professional teams contribute to institutional memory and knowledge stability; extensive outsourcing enhances scientific depth but reduces speed
Rules governing the use of evidence	Formal or customary rules regarding how, when, and for what purpose evidence is used	In POST and TAB, strict impartiality rules prevail; in OPECST, reports sometimes approach policy recommendation	Stringent impartiality rules lead to avoidance of prescriptive recommendations; more flexible rules bring the body closer to policymaking
Structure of access to knowledge	Pathways for accessing scientific resources (direct, filtered, networked, restricted to specific sources)	STOA and TAB/OTA have extensive academic networks; POST and GAO have filtered and rapid access to selected resources	Broad, networked access increases the diversity of evidence; restricted access increases speed but limits the scope of analysis
Representatives' motivation to use knowledge	The degree of representatives' inclination to use scientific evidence in decision-making	In POST and OPECST, the use of knowledge is directly tied to the representative's work; in Rathenau and DBT, motivation is more institutional-societal than political	When the use of knowledge offers representatives a political or professional advantage, knowledge bodies become more active and impactful
Culture of knowledge sharing	The degree of organizational willingness to share knowledge across units and individuals	In POST and STOA, intra-parliamentary knowledge sharing is institutionalized; in OTA and OPECST, knowledge has been more project-based or person-dependent	An open culture of knowledge sharing leads to institutional learning and repeated use of evidence; a closed culture renders knowledge individualized and episodic
Role of agency of key actors	The influence of specific individuals (directors, senior experts, parliamentary rapporteurs) in advancing or undermining the use of evidence	In OPECST and DBT, key individuals (rapporteurs, directors) play a decisive role; in POST and TAB, mechanisms are less dependent on specific persons	Active agents can strengthen the use of evidence even within weak structures; when they depart, the mechanisms are weakened

The within-case and cross-case findings demonstrated that all the parliaments examined face the challenge of knowledge management within the policymaking cycle, and a set of shared themes can be identified across them. Nevertheless, the meaningful variation in the quality of knowledge support of legislation does not come from the extent of access to information, but rather from how knowledge is institutionalized, the rules governing the use of evidence, and the position of agency help by knowledge experts. Parliaments that have stable structures for transferring knowledge across legislative terms have proven successful in

linking and connecting knowledge management to institutional learning and evidence-based decision-making. By contrast, in cases where knowledge remains individual-dependent or tied to political gain and advantage, knowledge management has remained episodic and unstable. These findings provide the necessary analytical foundation for a theoretical discussion and for designing a proposed knowledge management framework suited to the institutional context of Iran's Majlis.

Evaluating the Effectiveness of Knowledge Management in Supporting Policymaking

In this section, the analysis moves beyond description and explanation to adopt an evaluative approach, addressing the question of under what conditions and through what combination of infrastructures, processes, and institutional arrangements knowledge management leads to more effective support for the policymaking cycle. In line with the logic of evaluative studies in multi-case research, the dependent variable of the study has been operationalized as “the capacity of knowledge management to support policymaking,” and the analytical focus is on identifying the configurations that either strengthen or weaken this capacity.

Operationalization of Knowledge Management Success Indicators in Policymaking

Based on the data extracted from documents and within-case analysis, the success of knowledge management in supporting policymaking has been assessed through a set of functional indicators (Table 7). These indicators refer the practical function of knowledge in parliamentary decision-making.

Table 7. Knowledge Management Success Indicators in Supporting Public Policymaking

Success Indicator	Operational Definition	Output	Evaluative Question
Timely access to policy evidence	The extent to which representatives and parliamentary committees can access credible, concise, and relevant analyses during the stages of drafting, reviewing, and amending bills and proposals, such that evidence is available prior to final decision-making and can influence the content of legislation	Production of briefing notes and reports concurrent with the review of bills and proposals; rapid response to committee requests	Is evidence made available before the decision is taken, or only after it?
Quality of knowledge products	The degree of transparency, impartiality, scientific rigor, and usability of knowledge products, including policy briefs, analytical reports, and expert annexes, such that they are comprehensible to non-specialist representatives while accurately reflecting scientific complexities and uncertainties	Transparency of sources; explanation of uncertainties; avoidance of bias; clear structure	Can a policymaker understand and trust the text without specialized expertise?
Sustainability of institutional memory	Parliament's capacity to preserve, archive, and transfer policy knowledge and accumulated experience across different legislative terms and through staff turnover, ensuring that the knowledge produced is not lost and that reuse and institutional learning remain possible	Formal archives; public and internal access; frequent citation of previous documents	When representatives or staff change, does previously generated knowledge remain accessible and usable?

Integration of knowledge into the policymaking cycle	The degree of systematic linkage between the knowledge produced and the various stages of the policymaking cycle, from agenda-setting and legislative drafting to implementation, ex-post oversight, and evaluation, so that evidence serves not merely an informational function but plays an active role in decision-making and policy revision	Citation of evidence in committee reports; use in legislative amendments; linkage with policy evaluation	Is knowledge merely “informational,” or does it actually enter the decision-making and policy revision process?
Institutional learning and knowledge feedback	The extent to which parliament and its evidence-support bodies use the results of evaluations, feedback, and implementation experience to revise, update, or redesign laws and policies, as well as to continuously improve the processes of knowledge production and utilization	Revision of templates and formats; process improvements; incorporation of representatives’ feedback	Does the body modify its working methods on the basis of experience and feedback?

These indicators have served as the basis for the comparative evaluation of knowledge management performance across the parliaments under study.

Institutional Configurations Affecting Knowledge Management Success

The comparative analysis reveals that no single component of knowledge management guarantees success on its own. That is to say success is achieved when a specific combination of infrastructures, processes, and institutional conditions is simultaneously in place. On this basis, a typology of parliamentary knowledge management can be derived (Table 8).

Table 8. Typology of Parliaments Under Study

Typology	Characteristics	Operational Description	Institutions and Countries
Institutionalized and learning-oriented knowledge management	Presence of a stable intermediary body; formal and repeatable processes; central role of professional experts; active document archiving; use of feedback	In this type, policy knowledge management is part of the routine and formal operations of parliament. Policy knowledge is regularly produced or translated, recorded and maintained in formal documents, and reused in subsequent decisions. The use of evidence is not dependent on specific individuals and does not suffer discontinuity when representatives or staff change. The knowledge produced serves not merely an informational purpose but is employed across various stages of the policymaking cycle, from problem definition and legislative drafting to amendment and oversight. The existence of feedback mechanisms enables the	United Kingdom (POST), Germany (TAB), European Parliament (STOA), Finland (Committee for the Future)

		parliament to learn from past experience and gradually improve its processes.	
Supportive but unstable knowledge management	High-quality knowledge production; project-based orientation; dependence on ad hoc requests; relative weakness in continuity and institutional learning	In this type, parliament supports the production and use of policy knowledge, and knowledge products are generally scientifically credible; however, this knowledge has not been fully embedded in stable institutional structures. The use of evidence is more closely tied to specific projects, particular mandates, or short-term needs. Although documents and reports are produced, their linkage with the full policymaking cycle is limited, and the systematic transfer of experience across legislative terms is not guaranteed. When political or organizational conditions shift, the intensity of knowledge use may decline.	United States (OTA), United States (GAO - Science & Technology Assessment), Switzerland (TA-SWISS)
Person-dependent and fragmented knowledge management	Prominent role of key individuals; high social or political engagement; unsystematic processes; weak institutional memory	In this type, the use of policy knowledge is largely dependent on individuals, particular representatives or key actors. Although knowledge-related activities, hearings, or scientific and public deliberations do take place, these activities are not firmly established within the formal processes of parliament on a lasting basis. The knowledge produced is typically not converted into institutional memory and is lost when individuals or priorities change. The connection between knowledge and the policymaking cycle is discontinuous, and learning remains largely at the individual or case-specific level.	France (OPECST), Denmark (Danish Board of Technology - DBT), Netherlands (Rathenau Instituut)

Analytical Lessons for Designing the Proposed Framework

The comparative lessons show that designing a proposed framework for parliamentary knowledge management depends less on new tools and more on the institutionalization of processes, the stabilization of roles, and the creation of a knowledge learning cycle. The experience of successful parliaments shows that the institutional independence of research services, clear rules for the use of evidence, and formal mechanisms for transferring knowledge across legislative terms are the key elements of effective policymaking support. Conversely, reliance solely on technology or individual initiative, without institutional backing, leads to unsustainable outcomes. Table 9 presents the proposed dimensions based on the analytical lessons drawn for designing a framework applicable to the Islamic Republic of Iran.

The model's twelve dimensions were initially identified through a cross-case comparison of selected parliaments, capturing both commonalities and unique institutional insights. These dimensions then entered a localization stage as a provisional framework, where their relevance to Iran's Majlis was vetted by specialists. In that phase, experts acted not as originators of the dimensions but as conceptual facilitators and evaluators of how well each aspect fit the Iranian institutional context. Among all, the "institutional localization" element stands out as a meta-level design principle: it directs how the other dimensions must be tailored to Iran's legal framework, parliamentary norms, and administrative capacity. Rather than opposing the operational dimensions, this overarching principle ensures that foreign experiences are adapted thoughtfully instead of being copied mechanically.

Table 9. Proposed Dimensions Based on Analytical Lessons from Parliaments of Selected Countries

Proposed Framework Dimension	Analytical Lesson	Explanation for the Proposed Framework	Source (Year)
Institutional position	The knowledge translation body must have a formal, stable, and non-personalized standing	The experience of POST, TAB, and STOA shows that if the knowledge body is dependent on individuals or the executive branch, it will be weakened by political changes; therefore, in the proposed framework, this body must be formally established within the parliamentary structure.	(Auel & Christiansen, 2015; Brandsma & Otjes, 2024; König et al., 2006; Romanelli, 2025a, 2025b; Shackleton, 2018; Sieberer, 2011)
Role of the knowledge intermediary body	Parliament cannot effectively use science without an effective knowledge intermediary	Direct contact between representatives and academic research is not efficient; the proposed framework must include a professional body or unit tasked with translating, refining,	(Cairney, 2022; Head, 2016; Jágr, 2022; Serra-Silva & Leston-Bandeira, 2026; Topp, 2018; Walker, 2019)

		and simplifying knowledge.	
Organization of knowledge workers	Professional non-elected staff are the backbone of knowledge management	The experience of institutionalized bodies shows that the continuity and quality of knowledge depend on stable expert teams, not on representatives or temporary advisors.	(Brandsma & Otjes, 2024; Egeberg et al., 2013; L'Heureux, 2013; Serra-Silva & Leston-Bandeira, 2026)
Formal processes	The use of evidence must be phased and repeatable	In successful models, the use of evidence follows a clear process that begins with problem definition, proceeds through evidence gathering and analysis, produces a knowledge output that is presented to decision-makers, and concludes with the receipt of feedback for process improvement. The absence of such a process leads to discretionary use of knowledge.	(Mingmitr, 2016a, 2016b; Mittelstädt, 2022a, 2022b, 2025; Nilsson, 2006; Walker, 2019)
Translation of scientific language	Active knowledge translation is an institutional necessity, not an individual skill	The gap between the language of science and the language of policy exists in all parliaments; therefore, in the proposed framework, the translation of evidence must be defined as a formal and ongoing function.	(Cairney, 2022; Cooke et al., 2020; Head, 2016; Topp, 2018; Walker, 2019)
Institutional memory	Without institutional memory, knowledge management remains unsustainable	The experience of unstable and person-dependent types shows that the absence of an active and retrievable archive leads to the loss of accumulated experience; the proposed framework must institutionalize	(Ebberts & Wijnberg, 2009; Mittelstädt, 2025; Nilsson, 2006; Romanelli, 2025a, 2025b)

		the storage and retrieval of policy knowledge.	
Integration into the policymaking cycle	Knowledge must be present throughout the entire policymaking cycle	Successful bodies do not employ knowledge only at the legislative drafting stage but also use it in agenda-setting, legislative amendment, oversight, and evaluation.	(Benson & Lorenzoni, 2016; Head, 2016; Süsser et al., 2021; Topp, 2018)
Institutional learning	Continuous feedback and reform are prerequisites for institutional maturity	The proposed framework must provide the possibility of learning from the implementation of laws, evaluations, and past experience; otherwise, knowledge will not remain in an accumulated and usable form.	(Avoyan, 2023; Delmas & Pekovic, 2017; Ebbers & Wijnberg, 2009; Nilsson, 2006; Topp, 2018)
Avoidance of person-dependency	Dependence on individuals is the greatest threat to the sustainability of knowledge	The experience of person-dependent models shows that when key individuals leave, the entire knowledge mechanism is weakened; therefore, the proposed framework must rely on processes, not on persons.	(Leston-Bandeira, 2007; Mittelstädt, 2025; Serra-Silva & Leston-Bandeira, 2026; Zittel & Nyhuis, 2020)
Balance between speed and rigor	The proposed framework must be responsive to both urgent needs and provide in-depth analysis	The experience of POST alongside OTA and TAB shows that an effective model must have rapid tools for urgent decisions and deep analytical pathways for strategic decisions.	(Cairney, 2022; Walgrave & Vliegthart, 2012; Walker, 2019)
Representatives' motivation	The use of knowledge will not be sustained without political motivation	The proposed framework must demonstrate how the use of evidence helps representatives reduce decision risk, enhance credibility, and	(Flavin & Franko, 2017; Sayyadi, 2019; Wang et al., 2011)

		strengthen the defensibility of policies.	
Institutional localization	Direct institutional imitation is typically ineffective	Comparative experience shows that every model must be adapted to the country's legal system, parliamentary culture, and administrative capacity, rather than simply copied from foreign examples.	(Avoyan, 2023; Kraus et al., 2018; Smelser, 2013)

These findings provide the necessary empirical foundation for designing a proposed knowledge management framework for the Islamic Consultative Assembly of Iran, a model which must attend to infrastructures, processes, and institutional conditions, and elevate knowledge management from a support activity to an integral part of decision-making logic in parliaments. As reported in Table 10, the proposed parliamentary knowledge management framework succeeds when the creation, sharing, storage, use, and evaluation of knowledge are designed on the basis of institutional lessons, rather than in an episodic and individual-dependent manner.

Table 10. Mapping Lessons Learned onto the Parliamentary Policymaking Knowledge Management Cycle

Knowledge Management Cycle	Related Lessons Learned	Explanation of Mapping onto the Parliamentary Model
Knowledge Creation	Institutional position of the knowledge body; Role of the knowledge intermediary body; Organization of knowledge workers	The creation of policy knowledge in parliament is credible only when it takes place within a formal, stable, and non-personalized institution. The presence of an intermediary body and professional non-elected staff ensures that policy knowledge is systematically produced or translated, independently of particular individuals or political cycles. This independence is what lends the knowledge output its analytical legitimacy and shields it from the volatility of electoral turnover.
Knowledge Sharing	Translation of scientific language; Representatives' motivation to use knowledge; Avoidance of person-dependency	Knowledge sharing in parliament is not merely the dissemination of documents; rather, it entails the effective transfer of knowledge to representatives and committees. Active translation of scientific language and the cultivation of motivation to use evidence constitute the primary conditions for knowledge to pass from the expert level to the decision-making level. If knowledge remains dependent on specific individuals, its sharing will be inherently unstable and discontinuous.
Knowledge Structuring and Storage	Institutional memory; Formal processes	This stage is where policy knowledge is converted into institutional memory. Active archiving, the capacity to retrieve and reference prior experiences, and the definition of formal processes ensure that the knowledge produced is not lost and remains available for subsequent decisions. Without structured storage, each parliamentary term effectively starts from zero, rendering accumulated insight inaccessible.

Structured Knowledge Application	Integration of knowledge into the policymaking cycle; Balance between speed and rigor	At this stage, structured knowledge enters practice in the form of knowledge products (policy briefs, analytical reports), knowledge services (committee support and advisory functions), or knowledge processes (decision-support procedures). The balance between rapid response and in-depth analysis determines the extent to which knowledge proves consequential in actual policymaking. A model that privileges speed at the expense of analytical depth risks superficiality, while one that insists on exhaustive rigor at the cost of timeliness risks irrelevance.
Evaluation, Audit, and Learning	Institutional learning; Institutional localization	This stage ensures that parliament learns from its past experiences. Evaluating the quality of knowledge use, assessing its effectiveness in shaping policies, and redesigning processes on the basis of those assessments enable the knowledge management model to become progressively more compatible with the indigenous legal, organizational, and cultural conditions of the parliament. It is through this iterative feedback that the model avoids ossification and remains responsive to evolving institutional needs.

This parliamentary knowledge management cycle demonstrates that the use of scientific evidence in legislation is neither an episodic nor an individual activity, but rather an institutional, repeatable, and learning-oriented process. The cycle begins with the creation of policy knowledge, yet this “creation” does not necessarily denote the production of new scientific findings; rather, it encompasses the translation, reformulation, and adaptation of existing scientific knowledge to the needs of parliament. At this stage, the existence of a knowledge intermediary body and professional non-elected staff is of fundamental importance, as they are responsible for framing policy problems in a manner that is simultaneously compatible with the logic of parliamentary decision-making and grounded in credible scientific evidence. Without such institutional framing, scientific knowledge either remains excessively technical, and therefore inaccessible to legislators who must weigh competing priorities under time constraints, or it is used selectively and according to individual discretion, thereby undermining the very objectivity it was intended to provide.

Rather than being a matter of publishing documents or circulating reports, knowledge sharing is an active and intelligible practice of transferring of knowledge to representatives and committees in meaningful forms. At this stage, the translation of scientific language into the language of policy, responsiveness to the specific questions posed by representatives, and the cultivation of genuine motivation to consult evidence all play a decisive role. If knowledge is not shared effectively, if it remains confined to expert units, buried in technical appendices, or communicated in registers that legislators find impenetrable, even the highest-quality analyses will fail to inform decision-making, and the cycle will stall at precisely this juncture. The implication is clear: analytical excellence without communicative effectiveness is, from the standpoint of parliamentary governance, functionally equivalent to the absence of analysis altogether.

During the organization and retention phase, policy insights shift from ad hoc utilities into enduring institutional capital. The core objective at this juncture is to establish dynamic archives where information remains readily searchable and highly verifiable. Legislative bodies inherently suffer from chronic instability due to electoral cycles and shifting personnel; if rigorous frameworks are not implemented to capture these insights, accumulated operational wisdom evaporates almost immediately. Fresh cohorts of lawmakers typically step into their roles lacking a systematic bridge to the analytical labor of previous administrations. This disconnect forces newly appointed committees to redundantly debate matters that earlier iterations had already resolved. Consequently, formalizing this retention process acts as a requisite bridge, shifting the paradigm from individual-centric expertise to true organizational intellect. Such a

structural anchor is necessary to preserve the continuity of the policy cycle against the temporal disruptions built into democratic systems.

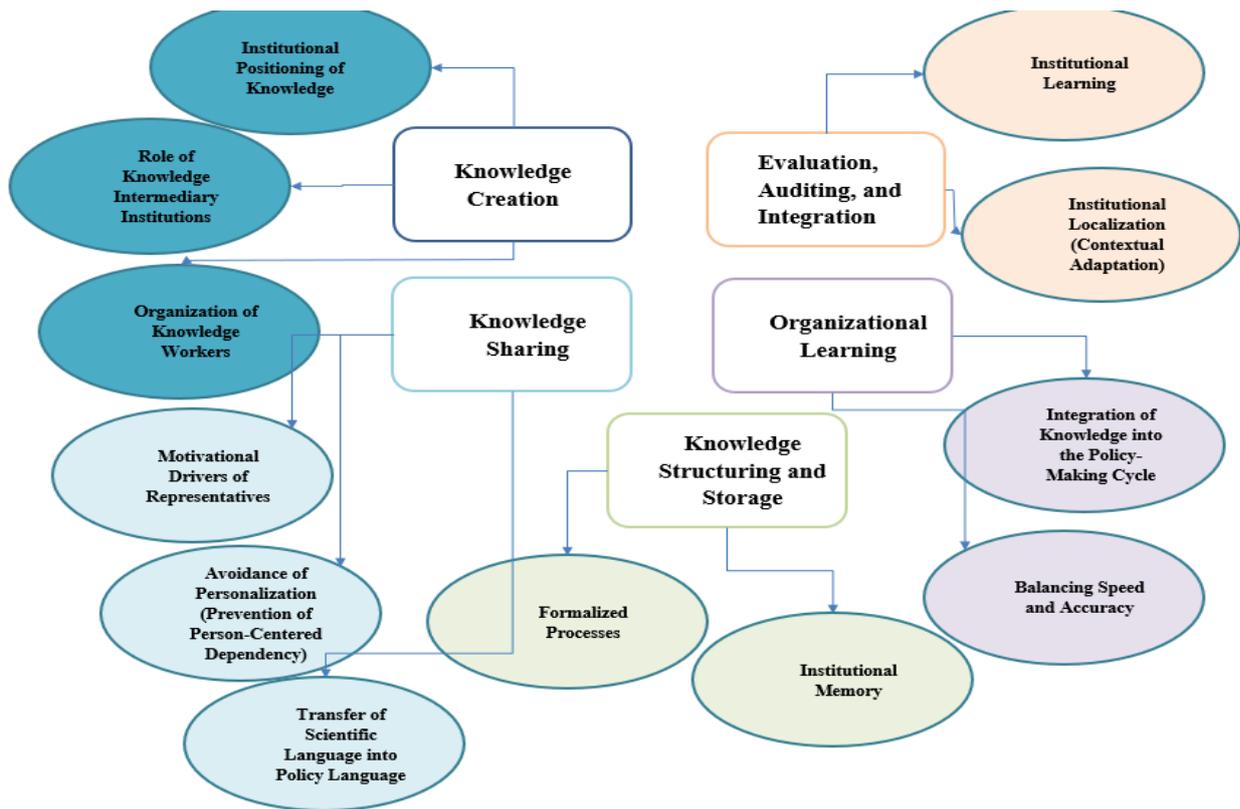
The structured knowledge application stage illustrates how stored knowledge re-enters the practice of policymaking. At this stage, policy knowledge is made available to parliament in the form of knowledge products, analytical services, or decision-support procedures, and is deployed across the various phases of the policymaking cycle, from agenda-setting and legislative drafting through to amendment, and oversight. This stage brings into particular relief the importance of striking a balance between speed and rigor, for parliament simultaneously requires rapid responses for urgent decisions and in-depth analyses for strategic policies. A system that can furnish only one of these modalities will inevitably fail the legislature at critical moments: urgent questions left without timely guidance erode confidence in the knowledge system, while strategic deliberations conducted without sufficiently deep analysis produce legislation that is poorly calibrated to the complexity of the problems it purports to address.

In the subsequent operational phase, diagnostic auditing functions to elevate the standard framework into a responsive pedagogical model. Analysts systematically interrogate how empirical insights actually shaped executive choices, alongside tracking the real-world performance of enacted legislation and synthesizing user appraisals from political actors. Findings from these reviews directly dictate the restructuring of workflow architectures, reporting templates, and future investigative priorities. Consequently, the organizational memory apparatus is shielded from becoming a stagnant repository; it intrinsically morphs to accommodate novel challenges, rectify prior miscalculations, and align with specific parliamentary cultures. By doing so, the architecture proves capable of not just referencing facts, but critically absorbing lessons generated by the friction of applying those facts. This capacity for reflexive recalibration represents a hallmark of structural maturity, drawing a sharp contrast against less sophisticated models that stockpile information but lack the capacity for self-correction.

Crucially, the “evaluation, audit, and learning” stage is a mechanism for generating new knowledge that creates the next iteration of the cycle. The outputs of evaluation include: (1) identification of policy failure points; (2) extraction of operational lessons learned; (3) redefinition of the problem itself; and (4) revision of the formats and standards governing knowledge products. These outputs return to the “knowledge creation” stage and ensure that knowledge creation in the subsequent cycle does not start from a blank slate but proceeds on the basis of documented and evaluated experience. In this way, the proposed model delineates a learning cycle in which new knowledge is generated through the re-engineering of processes and the updating of knowledge procedures.

The lesson-learning cycle derived from the parliaments under study, designed to support knowledge management for policymaking in the Islamic Consultative Assembly of Iran, is presented in Figure 2.

Figure2. Lessons learnt for parliaments in the cycle of knowledge management



Building upon the lessons drawn from the parliaments under study within the knowledge management cycle, a set of recommendations was formulated as follows.

Recommendation One: Institutional Position of the Knowledge Body

In the design of the proposed framework, the parliamentary knowledge body must possess a formal, stable, and non-personalized standing within the structure of the Majlis. The experience of successful parliaments demonstrates that when the knowledge body is dependent on particular individuals, or transient administrations, it is weakened by political changes. The proposed framework must therefore position the knowledge body in such a manner that the continuity of knowledge is guaranteed independently of changes in representatives and managers. What this means in practical terms is that the body's mandate, budget lines, and reporting structures should be anchored in parliamentary statute rather than in administrative discretion, so that no single electoral outcome or leadership transition can fundamentally compromise its operational capacity.

Recommendation Two: Role of the Knowledge Intermediary Body

The proposed framework must envisage the existence of a professional knowledge intermediary body as its central component. This body bears responsibility for the translation, refinement, and reformulation of scientific and experiential knowledge for use in the policymaking process. Comparative findings demonstrate that direct contact between representatives and scientific knowledge is inefficient, and that without an intermediary body, the use of knowledge proceeds in a discretionary and unsystematic fashion. The intermediary does not merely simplify; it reframes, recasting research findings in terms of the policy options, trade-offs, and implementation considerations that legislators actually confront in their deliberative work.

Recommendation Three: Organization of Knowledge Workers

Within the proposed framework, professional non-elected staff must be defined as the backbone of parliamentary knowledge management. The design of stable career pathways, clearly delineated roles, and

the continuity of expert teams ensures that policy knowledge is converted into institutional memory, thereby reducing dependence on representatives or temporary advisors. This organizational architecture acknowledges that the analytical competence required for rigorous policy support cannot be developed or sustained through short-term contractual arrangements; it demands professional investment, progressive specialization, and the kind of tacit institutional knowledge that accrues only through sustained engagement with parliamentary processes.

Recommendation Four: Formal Processes

The proposed framework must institutionalize the use of evidence and policy knowledge through phased, repeatable, and formal processes. These processes must commence with problem definition, proceed through knowledge gathering and analysis, generate a knowledge output, present it to representatives, and conclude with the receipt of feedback. The absence of formal processes confines knowledge to episodic and unstable use, a pattern in which evidence appears sporadically in legislative debate without any systematic guarantee that it has been sought, vetted, or integrated into the deliberative record.

Recommendation Five: Translation of Scientific Language

The translation of scientific language into the language of policy must be defined within the proposed framework as a continuous institutional function, not an individual skill. The experience of successful parliaments demonstrates that without active translation, even the most credible analyses fail to enter decision-making. Consequently, the design of standardized formats and explicit quality standards for knowledge products is essential. These standards should specify not only the structure and length of policy briefs but also the manner in which uncertainty, evidentiary limitations, and competing interpretations are communicated to non-specialist readers.

Recommendation Six: Institutional Memory

The proposed framework must provide a dedicated stage for the storage, retrieval, and reuse of policy knowledge. An active institutional memory prevents the dissipation of accumulated experience resulting from the rotation of representatives and enables learning from prior decisions. The mere archiving of documents, without their connection to subsequent decisions, is insufficient to realize this objective. What distinguishes active institutional memory from passive archiving is precisely this functional linkage: stored knowledge must be indexed, searchable, and systematically consulted at identifiable decision points, rather than deposited in repositories that no one is procedurally required to access.

Recommendation Seven: Integration of Knowledge into the Policymaking Cycle

Within the proposed framework, knowledge must be present throughout all stages of the policymaking cycle, from agenda-setting and legislative drafting through to approval, oversight, and evaluation. Comparative experience demonstrates that the restricted use of knowledge solely at the legislative drafting stage impedes the formation of institutional learning. When evidence informs only the initial formulation of a bill but is absent from its amendment, implementation monitoring, and subsequent revision, the parliament forfeits the capacity to assess whether its legislative interventions have achieved their intended effects.

Recommendation Eight: Institutional Learning

The proposed framework must incorporate clearly defined mechanisms for feedback, evaluation, and the reform of knowledge processes. Institutional learning is realized when parliament not only uses knowledge but also learns from the experience of using knowledge, progressively improving its own processes on that basis. This second-order reflexivity, learning about learning, is what transforms a knowledge management system from a static information-delivery apparatus into a dynamic institutional capability that matures over successive parliamentary terms.

Recommendation Nine: Avoidance of Person-Dependency

The proposed framework must consciously reduce the dependence of knowledge management on key individuals. The findings demonstrate that person-dependency constitutes the greatest threat to knowledge sustainability. Reliance on roles, processes, and institutions rather than on persons is a necessary condition for the institutionalization of knowledge management. This principle applies not only to the knowledge body's staff but equally to the parliamentary leadership: if the utilization of evidence depends on the personal commitment of a particular speaker or committee chair, it will inevitably fluctuate with changes in those positions.

Recommendation Ten: Balance between Speed and Rigor

The proposed framework must simultaneously provide for two types of knowledge output: rapid-response tools for addressing the immediate needs of representatives and deep analytical pathways for strategic policies. The experience of successful parliaments demonstrates that subjecting all issues to a single knowledge format is inefficient. A dual-track system, one calibrated for urgency, the other for depth, ensures that the knowledge body remains relevant across the full spectrum of parliamentary demand, from questions that arise during committee markup sessions to those that require months of systematic investigation.

Recommendation Eleven: Representatives' Motivation

Within the proposed framework, the use of knowledge must carry a political and professional advantage that is intelligible to representatives. Linking the use of evidence to the reduction of decision risk, the enhancement of defensibility, and the strengthening of legislative credibility constitutes a condition for the sustainability of knowledge management. Representatives must be able to perceive, concretely and in terms that resonate with their electoral and institutional incentives, that evidence-informed legislation is not merely a normative ideal but a practical asset that shields them from accountability failures and enhances the durability of the policies they champion.

Recommendation Twelve: Institutional Localization

The proposed framework must be rendered compatible with the legal structure, parliamentary culture, and administrative capacity of Iran's Majlis. Comparative findings demonstrate that the direct imitation of foreign models without institutional adaptation leads to unsustainable outcomes. Localization, in this sense, is not a concession to parochialism; it is an analytical imperative rooted in the recognition that institutional arrangements derive their efficacy from their fit with the broader governance ecology in which they are embedded, and that arrangements which function effectively in one parliamentary context may produce entirely different results when transplanted without careful calibration.

The recommendations presented above demonstrate that the dimensions of the proposed parliamentary knowledge management framework leads to effectiveness only when they are designed in an integrated and institutional manner. The alignment of institutional position, formal processes, the role of knowledge workers, and institutional learning mechanisms constitutes the condition for elevating knowledge management from a supportive level to the level of decision-making and institutional learning in the Islamic Consultative Assembly of Iran. Taken together, these twelve recommendations do not represent isolated prescriptions but rather the interdependent components of a coherent institutional architecture, one in which the weakness of any single element compromises the functioning of the whole, and in which the cumulative effect of their joint implementation is substantially greater than the sum of their individual contributions.

In the subsequent phase, a questionnaire based on the twelve proposed dimensions was designed and administered to a panel of experts. For each expert, the mean of the four items corresponding to each dimension was calculated, after which the aggregate mean across experts was computed for every dimension. Calibration rules, as specified in the table below, were applied uniformly to all dimensions. Six experts with backgrounds directly relevant to policymaking in the Islamic Consultative Assembly of Iran were selected through purposive sampling (Table 11). At this stage, the research objective was not to obtain a statistical estimate but rather to extract and evaluate an institutional profile grounded in expert judgment

within the logic of Qualitative Comparative Analysis (QCA). In fuzzy-set QCA (fsQCA), the validity of data depends less on sample size than on the quality and depth of expertise and on the appropriateness of respondents' roles to the phenomenon under investigation. Accordingly, experts were selected purposively on the basis of direct experience in legislation, oversight, and research services within the Majlis. Nevertheless, the limited number of experts is explicitly acknowledged as a limitation of the study, and it is recommended that future research strengthen this phase through an expanded sample or the integration of mixed-method data.

Table 11: Demographic Data of Participants (Experts)

Participant ID	Role in Parliament	Years of Experience with the Majlis	Primary Area of Activity	Familiarity with Knowledge Management
E1	Member of the Islamic Consultative Assembly	8 years (two parliamentary terms)	Legislation and Oversight	Moderate
E2	Member of the Islamic Consultative Assembly	12 years (three parliamentary terms)	Legislation and Oversight	Moderate
E3	Member of the Islamic Consultative Assembly	8 years (two parliamentary terms)	Legislation	High
E4	Researcher, Majlis Research Center	More than 5 years	Legislation	Moderate
E5	Researcher, Majlis Research Center	6 years	Oversight	Very High
E6	Parliamentary Expert and Former Member of the Majlis	18 years (four parliamentary terms)	Oversight	High

Table 12 reports descriptive statistics and calibration results for the twelve dimensions of the localized knowledge management model. For each dimension, the table presents the mean score of the four corresponding questionnaire items across expert respondents, the aggregated mean across all experts, and the resulting fuzzy membership score. In this study, fuzzy set calibration was performed on the basis of the theoretical logic underlying the five-point Likert scale. The crossover point was set at 3.0, since on the Likert scale this value represents a “neutral or middling” state and marks the boundary between “relative acceptance” and “relative non-acceptance.” From the perspective of fuzzy set theory, the crossover point should be located at the position where the researcher encounters maximum ambiguity regarding membership or non-membership in the set of interest. Accordingly, the value of 3.0 was selected as the point of maximum ambiguity, so that responses approximating the neutral state are represented as partial

membership (0.5). Furthermore, the value of 4.2 was adopted as the threshold for full membership, since it indicates a level of “strong agreement” and prevents the mechanical conversion of a simple “4” into full membership; in this manner, only dimensions that approached the level of strong agreement in expert evaluations receive full membership. Conversely, values below 3.0 were defined as full non-membership, so that dimensions for which expert perceptions fell below the midpoint threshold are identified as structural weaknesses.

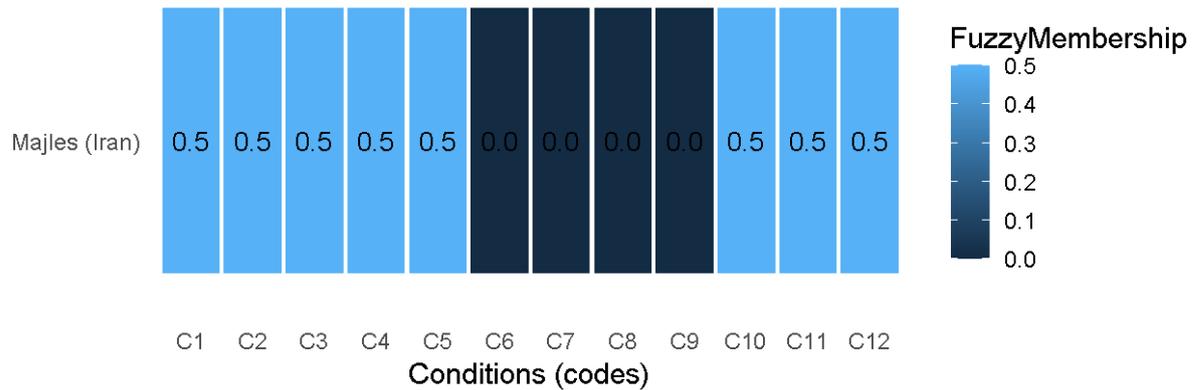
Accordingly, the calibration thresholds were defined a priori on the basis of the theoretical definitions of each dimension, such that full membership was set at 4.2 or above, the crossover point at 3.0, and full non-membership below 3.0 on the five-point Likert scale.

Table 12: Measurement, Aggregation, and Calibration of Localized Knowledge Management Dimensions

Code	Proposed Framework Dimension	Mean Item 1	Mean Item 2	Mean Item 3	Mean Item 4	Aggregate Expert Mean	Dimension Calibration
C1	Institutional Position of the Knowledge Body	3.42	3.33	3.46	3.71	3.50	0.5
C2	Role of the Knowledge Intermediary Body	3.33	3.42	3.25	3.50	3.38	0.5
C3	Organization of Knowledge Workers	3.08	3.17	3.25	3.33	3.21	0.5
C4	Formal Processes	3.17	3.25	3.33	3.42	3.29	0.5
C5	Translation of Scientific Language	3.33	3.42	3.25	3.50	3.38	0.5
C6	Institutional Memory	2.42	2.50	2.58	2.50	2.50	0
C7	Integration of Knowledge into the Policy Cycle	2.92	3.00	2.92	3.00	2.96	0
C8	Institutional Learning	2.50	2.58	2.50	2.58	2.54	0
C9	Avoidance of Person-Dependency	2.42	2.50	2.58	2.50	2.50	0
C10	Balance between Speed and Rigor	3.17	3.25	3.33	3.42	3.29	0.5
C11	Representatives' Motivation	2.92	3.00	3.08	3.00	3.00	0.5
C12	Institutional Localization	4.08	4.00	4.17	4.08	4.08	0.5

Figure 3. Profile of Fuzzy Membership of the Proposed Framework

Membership levels shown for each condition (codes) – key below



As illustrated in Figure 3, several dimensions of the proposed framework exhibit partial membership in the set of institutionalized parliamentary knowledge management. Dimensions such as the institutional position of the knowledge body (C1), the role of knowledge intermediaries (C2), formal processes (C4), and the balance between speed and analytical rigor (C10) are calibrated at the crossover point, indicating the existence of formal arrangements that remain only partially consolidated. These dimensions occupy an analytically ambiguous zone: the institutional infrastructure is not absent, yet neither has it achieved the degree of routinization and normative entrenchment that would warrant classification as fully institutionalized. In practical terms, this means that while the Majlis possesses recognizable structures and procedures in these areas, their operation remains contingent on factors, political will, administrative continuity, resource allocation, that have not yet been stabilized through self-reinforcing institutional mechanisms.

In contrast, the dimensions pertaining to institutional memory (C6), integration of knowledge into the policymaking cycle (C7), institutional learning (C8), and avoidance of person-dependent practices (C9) fall below the crossover threshold, indicating structural weaknesses in the retention and reuse of policy-relevant knowledge. The non-membership scores assigned to these four dimensions are particularly consequential, for they identify precisely those capabilities that distinguish a learning-oriented parliament from one that merely possesses informational resources. The absence of effective institutional memory means that knowledge generated in one parliamentary term is not systematically available to the next; the failure to integrate evidence across all stages of the policy cycle confines knowledge use to episodic interventions rather than sustained analytical engagement; the deficit in institutional learning implies that the parliament does not systematically evaluate and refine its own knowledge processes; and the persistence of person-dependency ensures that whatever knowledge capacity does exist remains vulnerable to the departure of particular individuals. Taken together, these four deficits constitute an interconnected syndrome of institutional fragility in which knowledge is generated but neither preserved, circulated, nor reflexively improved upon.

Finally, while the contextual adaptation of knowledge management arrangements (C12) displays relatively high mean scores, it does not attain full membership, thereby highlighting a gap between contextual awareness and complete institutionalization. This finding is both instructive and paradoxical: experts recognize the importance of adapting knowledge management to the specific legal, cultural, and administrative characteristics of the Majlis, indeed, this dimension receives the highest aggregate score among all twelve, yet the institutional mechanisms required to translate this awareness into operational practice have not been fully established. The gap between recognition and realization suggests that localization remains, for the present, more an aspiration articulated in expert discourse than a design principle embedded in institutional routines. Closing this gap would require not merely rhetorical commitment to contextual adaptation but the development of concrete procedural instruments, guidelines for assessing the transferability of foreign models, protocols for consulting domestic legal and cultural

constraints during institutional design, and feedback mechanisms for evaluating the fit between adopted practices and the Majlis's operating environment.

Table 13: Item-Level Descriptive Statistics and Fuzzy Set Calibration Results

Code	Dimension	Item	Expert Mean	Fuzzy Membership Score
C1	Institutional Position of the Knowledge Body	C1-Q1: Formal legal mandate for knowledge production	3.42	0.5
		C1-Q2: Organizational placement within the parliamentary hierarchy	3.33	0.5
		C1-Q3: Budgetary independence and resource allocation authority	3.46	0.5
		C1-Q4: Institutional recognition by legislators and committees	3.71	0.5
C2	Role of the Knowledge Intermediary Body	C2-Q1: Active facilitation of knowledge flow between producers and users	3.33	0.5
		C2-Q2: Capacity for synthesizing and packaging research outputs	3.42	0.5
		C2-Q3: Responsiveness to committee-level information demands	3.25	0.5
		C2-Q4: Linkage to external knowledge networks and academic institutions	3.50	0.5
C3	Organization of Knowledge Workers	C3-Q1: Recruitment criteria based on analytical and research competence	3.08	0.5
		C3-Q2: Availability of structured professional development programs	3.17	0.5
		C3-Q3: Clear role definitions and task specialization among staff	3.25	0.5
		C3-Q4: Retention mechanisms and career progression pathways	3.33	0.5
C4	Formal Processes	C4-Q1: Codified procedures for requesting and delivering research products	3.17	0.5
		C4-Q2: Standardized formats for policy briefs, reports, and analyses	3.25	0.5
		C4-Q3: Scheduled reporting cycles aligned with legislative calendar	3.33	0.5
		C4-Q4: Quality assurance and peer review protocols	3.42	0.5

C5	Translation of Scientific Language	C5-Q1: Use of plain-language summaries for technical research	3.33	0.5
		C5-Q2: Availability of infographic and visual communication tools	3.42	0.5
		C5-Q3: Training of knowledge workers in policy communication skills	3.25	0.5
		C5-Q4: Feedback loops between legislators and research staff on clarity	3.50	0.5
C6	Institutional Memory	C6-Q1: Systematic archiving of committee deliberations and decisions	2.42	0
		C6-Q2: Accessible repositories of past legislative impact assessments	2.50	0
		C6-Q3: Documentation of lessons learned from previous policy cycles	2.58	0
		C6-Q4: Mechanisms for retrieving historical policy knowledge	2.50	0
C7	Integration of Knowledge into the Policy Cycle	C7-Q1: Embedding evidence review at the agenda-setting stage	2.92	0
		C7-Q2: Mandatory impact assessment during policy formulation	3.00	0.5
		C7-Q3: Use of analytical inputs during legislative deliberation	2.92	0
		C7-Q4: Ex-post evaluation mechanisms linked to future legislation	3.00	0.5
C8	Institutional Learning	C8-Q1: Regular review and revision of knowledge management procedures	2.50	0
		C8-Q2: Formal mechanisms for incorporating evaluation feedback	2.58	0
		C8-Q3: Cross-committee sharing of analytical insights and best practices	2.50	0
		C8-Q4: Organizational capacity to adapt practices based on past outcomes	2.58	0
C9	Avoidance of Person-Dependency	C9-Q1: Documented standard operating procedures for knowledge tasks	2.42	0
		C9-Q2: Redundancy in expertise so that no single individual is critical	2.50	0
		C9-Q3: Systematic handover protocols during staff transitions	2.58	0

		C9-Q4: Institutional rather than personal ownership of knowledge products	2.50	0
C10	Balance between Speed and Rigor	C10-Q1: Tiered service delivery matching urgency to depth of analysis	3.17	0.5
		C10-Q2: Fast-track briefing protocols for time-sensitive legislation	3.25	0.5
		C10-Q3: Quality benchmarks maintained even under time pressure	3.33	0.5
		C10-Q4: Clear communication of methodological limitations in rapid outputs	3.42	0.5
C11	Representatives' Motivation	C11-Q1: Perceived usefulness of research products among legislators	2.92	0
		C11-Q2: Frequency of voluntary engagement with knowledge services	3.00	0.5
		C11-Q3: Incentive structures encouraging evidence-based argumentation	3.08	0.5
		C11-Q4: Legislators' trust in the impartiality of knowledge outputs	3.00	0.5
C12	Institutional Localization	C12-Q1: Adaptation of international KM models to domestic legal traditions	4.08	0.5
		C12-Q2: Sensitivity to cultural and political norms in knowledge design	4.00	0.5
		C12-Q3: Incorporation of local governance structures into KM frameworks	4.17	0.5
		C12-Q4: Expert recognition of the need for contextually tailored approaches	4.08	0.5

Table 14: Final Fuzzy Set Membership Matrix for fsQCA Analysis

Case	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Iranian Parliament (Majlis)	0.5	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0.5	0.5

Table 13 presents descriptive statistics at the item level and calibration results for each of the forty-eight questionnaire items. Reporting item-level means and fuzzy set membership scores provides transparency in the calibration process and enables evaluation of internal consistency within each dimension. This level

of detail supports the robustness of the calibration procedure by demonstrating how individual indicators contribute to overall dimension scores.

The item-level results in Table 13 reveal a consistent pattern within each dimension, with most items clustering around similar membership scores. This pattern indicates that the calibrated dimensions are not driven by isolated indicators but rather reflect cohesive institutional characteristics as perceived by the expert respondents.

Significantly, items associated with institutional memory (C6), learning mechanisms (C8), and person-dependency avoidance (C9) consistently score below the crossover point, reinforcing the interpretation that these represent systemic weaknesses rather than item-specific anomalies. Conversely, items related to knowledge translation (C5) and formal procedures (C4) tend to cluster around partial membership, indicating uneven but emergent institutional practices rather than complete absence.

Table 14 presents the final fuzzy set membership matrix used for the fsQCA analysis. Each condition corresponds to one of the twelve proposed framework dimensions, and the membership scores represent the calibrated degree to which the Iranian Parliament belongs to each set. This matrix constitutes the empirical input for the subsequent necessity and sufficiency analyses.

The fuzzy set membership matrix shown in Table 14 highlights a mixed institutional profile characterized by partial institutionalization across several dimensions and clear deficiencies in others. This configuration shows that while some formal and procedural elements of knowledge management exist, the absence of institutional memory, learning mechanisms, and non-personalized routines limits the transformation of knowledge use from a merely supportive function to an institutionalized, learning-oriented practice.

Critically, this configuration underscores the importance of a configurational approach: no single dimension appears sufficient on its own, and the observed outcome depends on how partially established conditions combine with absent ones. This finding provides robust justification for employing fsQCA to investigate causal configurations rather than relying on linear or additive explanations.

Taken together, these three tables document the complete analytical chain from expert-based measurement through fuzzy set calibration to configurational analysis. By explicitly linking questionnaire items to calibrated set memberships, the study ensures transparency, theoretical grounding, and methodological rigor in applying fsQCA to parliamentary knowledge management analysis.

Conclusion: Findings Deviating from Literature Expectations

The comparative case analysis revealed that certain findings do not fully align with prevailing theoretical expectations in the knowledge management and policymaking literature, and that the performance of knowledge mechanisms has not led to predicted outcomes under all conditions. Reporting these deviations, rather than weakening the results, serves to clarify the boundaries of model validity and the role of institutional context.

1. Technology versus Effective Use

Contrary to technology-centric expectations in the knowledge management literature, the presence of advanced document management systems and digital databases did not unilaterally lead to more effective knowledge use in legislation, a finding consistent with Colombo (2024). In some parliaments, despite broad access to digital data and documents, the knowledge produced did not systematically enter the decision-making process and remained largely at the archival level (Martin & Vanberg, 2005). This finding suggests that technology, without clear human intermediaries and explicit institutional rules, plays a limited role in supporting policymaking (Lončarević et al., 2021).

2. Analytical Capacity versus Institutional Learning

It was expected that increased analytical capacity would directly lead to ex-post institutional learning. However, in certain cases, even the regular production of policy briefs and analytical reports did not

necessarily result in the subsequent revision of policies or the redesign of laws, a pattern consistent with Nilsson (2006). According to Cooke et al. (2020), this indicates a disconnect between knowledge production and institutional feedback mechanisms: the pipeline from analysis to institutional adaptation is not automatic but requires dedicated organizational structures that translate outputs into reflective action.

3. Erosion of Organizational Memory in High-Turnover Contexts

The findings demonstrated that the efficiency of knowledge management mechanisms weakens under specific conditions. In contexts characterized by high representative turnover where formal rules for transferring experience and documenting tacit knowledge are weak, organizational memory erodes rapidly (Rhodes, 2008). Under these circumstances, even active research units are compelled to adopt short-term reactive responses, and the capacity for accumulating policy knowledge is significantly diminished (Ebbers & Wijnberg, 2009). This observation underscores that institutional memory is not merely a technical storage problem but a social and procedural challenge that requires deliberate design.

4. Political Competition as a Constraint on Knowledge Sharing

In environments where intense political competition prevails and knowledge use is perceived as a source of political advantage, knowledge sharing among representatives and committees remains restricted (Zvobgo, 2020). In such settings, formal knowledge management mechanisms fail to activate fully, and individual agency supersedes institutional procedures (Thalmann, 2024). This finding highlights a fundamental tension between the collaborative logic of institutional knowledge management and the competitive logic of partisan politics, a tension that no purely procedural or technological solution can resolve without addressing the underlying incentive structures.

These four patterns of deviation collectively reinforce the central argument of the study: that parliamentary knowledge management cannot be understood through isolated variables or linear causal models. The interplay between technological infrastructure, human intermediation, organizational continuity, learning routines, and political incentives produces outcomes that are irreducibly configurational in nature. The fsQCA approach adopted in this research is therefore not merely a methodological preference but an analytical necessity dictated by the empirical complexity of the phenomenon under investigation.

Knowledge Sharing and Internal Tensions in Knowledge Management

The comparative analysis demonstrated that parliamentary knowledge management is accompanied by a set of organizational trade-offs that cannot be entirely eliminated. One of the most significant of these trade-offs is the tension between confidentiality and knowledge sharing (Nelson, 2016). In parliaments where the protection of information and the confidentiality of processes hold high priority, the free flow of knowledge becomes restricted, and the reuse of past experiences becomes more difficult.

Another trade-off was observed between institutional neutrality and responsiveness to the political needs of representatives. In some cases, emphasis on analytical neutrality has reduced the flexibility of research units in responding quickly to the specific demands of legislators, while excessive proximity to political preferences weakens knowledge credibility (Hustedt & Salomonsen, 2014; Leston-Bandeira, 2007).

Finally, there exists a tension between standardization of knowledge and contextual flexibility. Rigorous standards for the production and use of evidence increase analytical quality, but under certain circumstances, they slow the parliament's response to urgent issues.

Accordingly, the findings demonstrated that knowledge management in parliaments is not a linear and frictionless system, but rather a context-dependent process accompanied by institutional constraints and trade-offs. Attention to counter-expectation findings and the conditions under which mechanisms fail provides a more realistic picture of the capacities and limitations of knowledge management and prevents excessive simplification in the design of localized models (Walgrave & Vliegthart, 2012).

General Conclusion

The present research was conducted with the aim of comparative analysis of knowledge management mechanisms in selected parliaments and the design of a proposed framework for supporting policymaking in the Islamic Consultative Assembly of Iran (Majlis). The research findings demonstrated that effective use of knowledge in parliaments is not the result of a single factor, but rather the outcome of a specific configuration of institutional, procedural, and human factors that gain meaning in interaction with one another. This conclusion clearly indicates the limitation of linear and tool-centric approaches in explaining knowledge function in legislative institutions.

The results of the comparative analysis indicate that parliaments successful in utilizing policy knowledge possess stable intermediary institutions, professional knowledge workers, formal processes for knowledge production and translation, and institutional learning mechanisms. In contrast, parliaments where knowledge management depends on individuals, informal relationships, or episodic projects face challenges of continuity, accumulation, and knowledge transfer. These patterns demonstrate that the institutionalization of knowledge requires moving beyond person-centricity toward institutional memory and sustainable organizational procedures.

In the localization section, the fsQCA analysis results showed that certain dimensions of the proposed model, including the institutional position of the knowledge body, the role of intermediary institutions, and the existence of formal processes, exist to a relative degree in the Islamic Consultative Assembly. However, dimensions such as institutional memory, organizational learning, integration of knowledge into the complete policymaking cycle, and avoidance of person-dependency face structural weakness. This combination indicates that parliamentary knowledge management in Iran remains at a “supportive and semi-institutionalized” level and has not yet transformed into a learning and sustainable system.

In the findings section, the zero set membership of the dimensions “institutional memory,” “institutional learning,” “integration of knowledge into the policy cycle,” and “avoidance of person-dependency” demonstrated that the main issue is not merely a lack of technology or representative turnover, but rather a structural weakness in transforming knowledge into sustainable organizational procedures. In the Iranian Majlis, a significant portion of policy knowledge is produced and consumed in the form of informal interactions, personal experiences, and individual networks, and is rarely converted into standardized documents, retrievable archives, and institutional feedback cycles.

Furthermore, although staff of the Islamic Consultative Assembly or representatives from stable terms could play the role of carriers of institutional memory, several institutional barriers limit this role:

1. Lack of binding standards for documentation and experience transfer
2. Weakness of incentive and reward systems for recording knowledge
3. Disconnect between research units and the decision-making process of committees
4. Precedence of short-term political logic over ex-post learning

As a result, even with knowledge production by institutions such as the Research Center of the Majlis, knowledge does not enter the complete policy cycle and largely remains at the supportive level. This weakness can be understood as a type of institutional failure in transforming knowledge into procedural memory.

Accordingly, the present research demonstrated that the design of a proposed parliamentary knowledge management framework must focus on the institutional configuration of conditions, not merely on the creation of research units or technological tools. The establishment of such a model can provide the groundwork for enhancing policymaking quality, reducing decision-making uncertainties, and strengthening institutional rationality in the Islamic Consultative Assembly of Iran.

Practical Recommendations

Structural Recommendations Aligned with the Proposed Localized Framework

Based on the configurational analysis and the identification of systemic weaknesses in the Iranian parliamentary context, the following practical recommendations are offered. These recommendations are organized according to the twelve dimensions of the proposed framework, with particular emphasis on addressing the four dimensions that exhibited non-membership in the fuzzy set analysis.

Priority Area 1: Institutional Memory (C6)

Recommendation	Implementation Mechanism	Expected Outcome
Establish mandatory documentation protocols for all committee deliberations	Amend internal regulations to require standardized minutes and decision rationales	Retrievable record of legislative reasoning
Create a centralized legislative knowledge repository	Develop a searchable database linking bills, analyses, debates, and outcomes	Reduced loss of institutional knowledge across terms
Institute exit interviews and knowledge transfer sessions	Require departing staff and representatives to document key insights	Preservation of tacit knowledge
Develop historical policy briefs for recurring legislative topics	Task Research Center with maintaining updated dossiers on perennial issues	Continuity of analytical foundation

Priority Area 2: Institutional Learning (C8)

Recommendation	Implementation Mechanism	Expected Outcome
Mandate ex-post legislative evaluation	Require formal review of major legislation 3-5 years after enactment	Evidence base for policy revision
Create cross-committee learning forums	Establish quarterly sessions for sharing analytical insights	Diffusion of best practices

Integrate evaluation findings into new legislation	Develop protocols linking past assessments to current drafting	Feedback loop between analysis and action
Establish a “lessons learned” publication series	Task Research Center with annual synthesis of policy outcomes	Institutional reflection mechanism

Priority Area 3: Integration of Knowledge into the Policy Cycle (C7)

Recommendation	Implementation Mechanism	Expected Outcome
Embed evidence requirements at agenda-setting	Require preliminary impact assessment before bill introduction	Early-stage knowledge integration
Strengthen research-committee linkages	Assign dedicated research liaisons to each standing committee	Continuous analytical support
Develop stage-specific knowledge products	Create differentiated outputs for formulation, deliberation, and evaluation	Fit between knowledge supply and legislative demand
Institutionalize post-legislative scrutiny	Establish formal procedures for reviewing law implementation	Closing the policy cycle

Priority Area 4: Avoidance of Person-Dependency (C9)

Recommendation	Implementation Mechanism	Expected Outcome

Codify standard operating procedures for all knowledge tasks	Develop comprehensive procedural manuals	Reduced vulnerability to staff turnover
Build redundancy in analytical expertise	Ensure multiple staff possess competence in each policy domain	Continuity of service provision
Implement systematic handover protocols	Require structured transition periods during personnel changes	Knowledge transfer across generations
Shift ownership of knowledge products from individuals to units	Attribute outputs to institutional entities rather than personal authors	Depersonalization of knowledge assets

Limitations

Despite its analytical contributions, this research has several limitations.

First, the localization study focused on a single institutional case (the Islamic Consultative Assembly of Iran), which, although enabling in-depth analysis, means that the generalizability of findings to other parliaments requires complementary studies.

Second, the calibration of fuzzy sets was conducted based on expert judgment, and although transparent theoretical thresholds were employed, results are to some extent dependent on the interpretations of expert respondents.

Third, the analysis conducted has a cross-sectional nature and does not cover temporal dynamics and institutional changes across different parliamentary terms.

Finally, the fsQCA method inherently addresses the analysis of causal configurations and does not seek statistical generalizations or estimation of variable effect sizes; therefore, findings should be interpreted within the framework of set-theoretic logic.

Author Contributions

Author A conceptualized the study, designed the research framework, conducted the comparative analysis, developed the proposed framework, collected and analyzed the data, and wrote the final version of the manuscript.

Authors B and C reviewed and approved the final version of the manuscript.

Conflict of Interest

From the authors' perspective, no conflict of interest existed in the research process.

Acknowledgments

The authors thank the research participants who generously shared their time and knowledge during the data collection process. Their contribution to the development and validation of the proposed framework in this study is highly valued by the authors.

References

1. Auel, K., & Christiansen, T. (2015). After Lisbon: National Parliaments in the European Union. *West European Politics*, 38(2), 261–281. <https://doi.org/10.1080/01402382.2014.990693>
2. Avoyan, E. (2023). Collaborative Governance for Innovative Environmental Solutions: Qualitative Comparative Analysis of Cases from Around the World. *Environmental Management*, 71(3), 670–684. <https://doi.org/10.1007/s00267-022-01642-7>
3. Benson, D., & Lorenzoni, I. (2016). Climate change adaptation, flood risks and policy coherence in integrated water resources management in England. *Regional Environmental Change*, 17(7), 1921–1932. <https://doi.org/10.1007/s10113-016-0959-6>
4. Brandsma, G. J., & Otjes, S. (2024). Gauging the roles of parliamentary staff. *Parliamentary Affairs*, 77(3), 537–557. <https://doi.org/10.1093/pa/gsae001>
5. Cairney, P. (2022). 15.: Evidence-based policymaking
6. Elgar Encyclopedia of European Union Public Policy. In (pp. 138–147). Edward Elgar Publishing. <https://doi.org/10.4337/9781800881112.ch15>
7. Colombo, A. (2024). Leveraging Knowledge Graphs and LLMs to Support and Monitor Legislative Systems.
8. *Committee for the Future (Eduskunta)*. (2025). <https://www.eduskunta.fi/EN/valiokunnat/tulevaisuusvaliokunta/Pages/default.aspx>
9. Cooke, S. J., Mandrak, N. E., Reid, A. J., Semeniuk, C. A., Chapman, J. M., Landsman, S. J., Hinch, S. G., Schott, S., Young, N., & Nguyen, V. M. (2020). Knowledge co-production: A pathway to effective fisheries management, conservation, and governance. *Fisheries*, 46(2), 89–97. <https://doi.org/10.1002/fsh.10512>
10. Cross, J. P., Eising, R., Hermansson, H., & Spohr, F. (2021). Business interests, public interests, and experts in parliamentary committees: their impact on legislative amendments in the German Bundestag. *West European Politics*, 44(2), 354–377. <https://doi.org/10.1080/01402382.2019.1672025>
11. *Danish Board of Technology (Teknologirådet)*. (2025). <https://www.tekno.dk/>
12. Delmas, M. A., & Pekovic, S. (2017). Organizational Configurations for Sustainability and Employee Productivity: A Qualitative Comparative Analysis Approach. *Business & Society*, 57(1), 216–251. <https://doi.org/10.1177/0007650317703648>
13. Ebbers, J. J., & Wijnberg, N. M. (2009). Organizational Memory: From Expectations Memory to Procedural Memory. *British Journal of Management*, 20(4), 478–490. <https://doi.org/10.1111/j.1467-8551.2008.00603.x>
14. Egeberg, M., Gornitzka, Å., Trondal, J., & Johannessen, M. (2013). Parliament staff: unpacking the behaviour of officials in the European Parliament. *Journal of European Public Policy*, 20(4), 495–514. <https://doi.org/10.1080/13501763.2012.718885>
15. Flavin, P., & Franko, W. W. (2017). Government's Unequal Attentiveness to Citizens' Political Priorities. *Policy Studies Journal*, 45(4), 659–687. <https://doi.org/https://doi.org/10.1111/psj.12184>
16. Fortunato, D., Martin, L. W., & Vanberg, G. (2019). Committee Chairs and Legislative Review in Parliamentary Democracies. *British Journal of Political Science*, 49(2), 785–797. <https://doi.org/10.1017/S0007123416000673>
17. Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for

- optimised digital transparency and Open Synthesis [<https://doi.org/10.1002/cl2.1230>]. *Campbell Systematic Reviews*, 18(2), e1230. <https://doi.org/https://doi.org/10.1002/cl2.1230>
18. Head, B. W. (2016). Toward More “Evidence-Informed” Policy Making? *Public Administration Review*, 76(3), 472–484. <https://doi.org/https://doi.org/10.1111/puar.12475>
 19. Hustedt, T., & Salomonsen, H. H. (2014). Ensuring political responsiveness: politicization mechanisms in ministerial bureaucracies. *International Review of Administrative Sciences*, 80(4), 746–765. <https://doi.org/10.1177/0020852314533449>
 20. Jágr, D. (2022). Parliamentary research services as expert resource of lawmakers: The Czech way. *The Journal of Legislative Studies*, 28(1), 93–121. <https://doi.org/10.1080/13572334.2020.1831127>
 21. Kazanskaia, A. N. (2025). Public Policy: Power and Influence in Decision-Making. In: NEYA Global Publishing. <https://doi.org/10.64357/public-policy-2025>.
 22. König, T., Dannwolf, T., & Luetgert, B. (2006). Quantifying European Legislative Research. *European Union Politics*, 7(4), 553–574. <https://doi.org/10.1177/1465116506069444>
 23. Koryzis, D., Dalas, A., Spiliotopoulos, D., & Fitsilis, F. (2021). Parltch: Transformation framework for the digital parliament [Article]. *Big Data and Cognitive Computing*, 5(1), Article 15. <https://doi.org/10.3390/bdcc5010015>
 24. Kraus, S., Ribeiro-Soriano, D., & Schüssler, M. (2018). Fuzzy-set qualitative comparative analysis (fsQCA) in entrepreneurship and innovation research – the rise of a method. *International Entrepreneurship and Management Journal*, 14(1), 15–33. <https://doi.org/10.1007/s11365-017-0461-8>
 25. L’Heureux, S. (2013). The Library’s Research Service: Added Value for Parliamentarians. *Canadian Parliamentary Review*, 17.
 26. Lee-Geiller, S. (2025). Integrating Civic and Artificial Intelligence in Policymaking: Experimental Insights on Public Perceptions of Policy Proposals. *Policy & Internet*, 17(3), e70017. <https://doi.org/10.1002/poi3.70017>
 27. Leston-Bandeira, C. (2007). The Impact of the Internet on Parliaments: a Legislative Studies Framework. *Parliamentary Affairs*, 60(4), 655–674. <https://doi.org/10.1093/pa/gsm040>
 28. Loncarevic, N., Andersen, P. T., Leppin, A., & Bertram, M. (2021). Policymakers’ Research Capacities, Engagement, and Use of Research in Public Health Policymaking. *International Journal of Environmental Research and Public Health*, 18(21), 11014. <https://doi.org/10.3390/ijerph182111014>
 29. Mahajan, S. L. (2024). Introducing Elinor for monitoring the governance and management of area-based conservation. *Conservation Biology*, 38(2). <https://doi.org/10.1111/cobi.14213>
 30. Malang, T., Brandenberger, L., & Leifeld, P. (2019). Networks and Social Influence in European Legislative Politics. *British Journal of Political Science*, 49(4), 1475–1498. <https://doi.org/10.1017/S0007123417000217>
 31. Martin, L. W., & Vanberg, G. (2005). Coalition Policymaking and Legislative Review. *American Political Science Review*, 99(1), 93–106. <https://doi.org/10.1017/S0003055405051518>
 32. Mingmitr, P. (2016a). Critical success factors for knowledge management implementation: The case study of Thai parliament. *Journal of Public and Private Management*, 23(2), 57.
 33. Mingmitr, P. (2016b). *Implementation of knowledge management: a comparative study of the secretariat of the house of representatives and the senate of the Thai parliament*.
 34. Mittelstädt, R. M. (2022a). Knowledge Management in a Political Context: A Case Study About the Members of the German Bundestag. In *Eurasian Studies in Business and Economics* (Vol. 22, pp. 93–107). Springer Science and Business Media B.V. https://doi.org/10.1007/978-3-030-94672-2_6
 35. Mittelstädt, R. M. (2022b). Knowledge Management in a Political Context: A Case Study About the Members of the German Bundestag. In *Eurasian Business and Economics Perspectives*. https://doi.org/10.1007/978-3-030-94672-2_6

36. Mittelstädt, R. M. (2025). Knowledge is Power: An Explorative Study of Knowledge Work Among European Members of Parliament [Article]. *Electronic Journal of Knowledge Management*, 23(1), 34–46. <https://doi.org/10.34190/ejkm.23.1.3735>
37. Mustajärvi, O. (2003). MPs and KM: How Strict ICT Policy Has Enabled Development of Personalized KM Services in the Parliament of Finland. In *Knowledge Management in Electronic Government*. https://doi.org/10.1007/3-540-44836-5_11
38. Nadeem, M. (2019). FAKTA: An automatic end-to-end fact checking system. <https://doi.org/10.48550/arXiv.1906.04164>
39. Nelson, A. J. (2016). How to Share “A Really Good Secret”: Managing Sharing/Secrecy Tensions Around Scientific Knowledge Disclosure. *Organization Science*, 27(2), 265–285. <https://doi.org/10.1287/orsc.2015.1040>
40. Nilsson, M. (2006). The Role of Assessments and Institutions for Policy Learning: A Study on Swedish Climate and Nuclear Policy Formation. *Policy Sciences*, 38(4), 225–249. <https://doi.org/10.1007/s11077-006-9006-7>
41. *Office of Technology Assessment (OTA) Archive*. (2025). <https://ota.fas.org/otareports/>
42. *Office Parlementaire d’Evaluation des Choix Scientifiques et Technologiques (OPECST)*. (2025). <https://www.senat.fr/office-parlementaire.html>
43. Oksanen, A. (2019). Semantic Finlex: Transforming, publishing, and using Finnish legislation and case law as linked open data on the web. In *Knowledge of the Law in the Big Data Age*. <https://doi.org/10.3233/FAIA190023>
44. *Panel for the Future of Science and Technology (STOA)*. (2025). <https://www.europarl.europa.eu/stoa/en>
45. *Parliamentary Office of Science and Technology (POST)*. (2025). <https://post.parliament.uk/>
46. *Rathenau Instituut*. (2025). <https://www.rathenau.nl/>
47. Rhodes, J. (2008). Factors influencing organizational knowledge transfer: implication for corporate performance. *Journal of Knowledge Management*, 12(3), 84–100. <https://doi.org/10.1108/13673270810875886>
48. Romanelli, M. (2025a). Parliamentary Organisation, History and Knowledge. European Conference on Knowledge Management,
49. Romanelli, M. (2025b). Parliamentary Organisation, History and Knowledge. Proceedings of the European Conference on Knowledge Management, ECKM,
50. Sayyadi, M. (2019). How effective leadership of knowledge management impacts organizational performance. *Business Information Review*, 36(1), 30–38. <https://doi.org/10.1177/0266382119829643>
51. *Science, Technology Assessment, and Analytics (STAA)*, U.S. GAO. (2025). <https://www.gao.gov/about/what-gao-does/science-technology-assessment-and-analytics>
52. Serra-Silva, S., & Leston-Bandeira, C. (2026). The invisible architects of public engagement: understanding the different types of roles played by parliamentary staff. *Politics and Governance*, 14. <https://doi.org/https://doi.org/10.17645/pag.10589>
53. Shackleton, M. (2018). Transforming representative democracy in the EU? The role of the European Parliament. In *Political Leadership in the European Union* (pp. 89–104). Routledge. <https://doi.org/10.1080/07036337.2016.1277713>
54. Shadmanfar, M. H. (2025). A Bibliometric Analysis of Knowledge Management Support for Public Policymaking. *System Engineering and Productivity*. <https://doi.org/10.22034/sep.2025.2073858.1405>
55. Sieberer, U. (2011). The Institutional Power of Western European Parliaments: A Multidimensional Analysis. *West European Politics*, 34(4), 731–754. <https://doi.org/10.1080/01402382.2011.572389>
56. Smelser, N. J. (2013). *Comparative methods in the social sciences*. Quid Pro Books.
57. Süsser, D., Ceglarz, A., Gaschnig, H., Stavrakas, V., Flamos, A., Giannakidis, G., & Lilliestam, J. (2021). Model-based policymaking or policy-based modelling? How energy models and energy policy

- interact. *Energy Research & Social Science*, 75, 101984. <https://doi.org/10.1016/j.erss.2021.101984>
58. TA-SWISS – Foundation for Technology Assessment. (2025). <https://www.ta-swiss.ch/en>
 59. Technology Assessment at the German Bundestag (TAB). (2025). <https://www.tab-beim-bundestag.de/en/>
 60. Thalmann, S. (2024). Connect with care: informal knowledge protection practices to enhance knowledge sharing in networks of organizations. *VINE Journal of Information and Knowledge Management Systems*, 55(3), 730–750. <https://doi.org/10.1108/vjikms-02-2022-0051>
 61. Topp, L. (2018). Knowledge management for policy impact: the case of the European Commission's Joint Research Centre. *Palgrave Communications*, 4(1). <https://doi.org/10.1057/s41599-018-0143-3>
 62. Walgrave, S., & Vliegthart, R. (2012). The Complex Agenda-Setting Power of Protest. *Mobilization*, 17(2), 129–156. <https://doi.org/10.17813/maiq.17.2.pw053m281356572h>
 63. Walker, L. A. (2019). Supporting evidence-informed policy and scrutiny. *PLOS One*, 14(3). <https://doi.org/10.1371/journal.pone.0214136>
 64. Wang, S., Noe, R. A., & Wang, Z.-M. (2011). Motivating Knowledge Sharing in Knowledge Management Systems: A Quasi-Field Experiment. *Journal of Management*, 40(4), 978–1009. <https://doi.org/10.1177/0149206311412192>
 65. Zittel, T., & Nyhuis, D. (2020). The Legislative Effects of Campaign Personalization An Analysis on the Legislative Behavior of Successful German Constituency Candidates. *Comparative Political Studies*, 54(2), 312–338. <https://doi.org/10.1177/0010414020938103>
 66. Zvobgo, K. (2020). Demanding Truth: The Global Transitional Justice Network and the Creation of Truth Commissions. *International Studies Quarterly*, 64(3), 609–625. <https://doi.org/10.1093/isq/sqaa044>