Responsive Knowledge Management Framework in the Philippine House of Representatives for Policy Development

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ABSTRACT: This study formulated a Knowledge Management Framework for the Philippine House of Representatives Secretariat- the organizational arm of the House of Representatives (HRep) to improve the technical and administrative support services to the House Members. The researcher interviewed employees from the Committee Affairs Department to describe their required features of a technology-based system, practices, and initiatives for the implementation of a framework as a basis for the development of a KM system. The developed KM framework integrated the models of Alshamsi and Othman, 2021 and the Input-Process-Output (IPO) model Galais et. al (2021), illustrated the cyclical nature of knowledge creation, sharing, and utilization within the organization, and the researcher included an outcome as the framework should reflect the long term development goals of the HRep. The framework will be the basis of the HRep in assessing the current systems in the HRep, evaluating the proposed systems, and developing indicators for monitoring and evaluation in case a certain system is already implemented.

KEYWORDS: Knowledge Management, Policy Development, Evidence-based Policy, Parliamentary, Systems

INTRODUCTION

The House of Representatives (HRep), along with the Senate, are the pillars of the Congress of the Philippines in accordance with the 1987 Constitution. Both chambers of Congress are responsible for creating laws to uphold the Constitution, thus, the information of offices involved in the legislation process is vital in drafting and developing policies for the welfare of the citizens. However, the HRep Secretariat, the organizational arm of the HRep, slowly adapted to changes, such as the use of technology and practicing knowledge sharing among staff. The HRep's documents needed for legislation were filed manually in-office computers and laptops. The document management system where files are forwarded electronically from office to office was not yet institutionalized. Also, many of the resources for research in aid of legislation are not yet uploaded in a centralized system. To optimize these functions, it is essential to establish a KMS based on a KMF.

To contextualize the significance of this research, the study recounted the challenges faced by the HRep in terms of information communications technology, and other factors that hindered the agency from improving its system. One of those is the sheer volume and complexity of data, particularly information from committee meetings, technical working group meetings, and local consultations, coupled with the accelerated pace of information dissemination. It also emphasized the importance of human knowledge to improve the process, as the HRep's population is aging.

The role of the HRep Secretariat in knowledge sharing and management in addressing the information needs of policymakers is evident. Four (4) offices of the
HRep Secretariat are involved in the process but the Committee Affairs Department (CAD) is mandated to participate and assist in all phases of legislation, from the conduct of public hearings and committee meetings, during plenary sponsorship of legislative measures, and up to the Bicameral Conference meetings of the House and Senate.

This study described the importance of KM in improving the policymaking process and delved into conceptualizing a KMF within the HRep, to enhance the policy development process, ensuring that bills passed are evidenced-based. This framework is the basis for developing a system that not only consolidates and archives existing information but also keeps the knowledge of people involved in the process. The proposed framework and system are not just a technological upgrade but a strategic tool for elevating evidence-based legislation in the HRep.

THEORETICAL FRAMEWORK

The theoretical framework of the study is anchored in the Knowledge Management Framework adopted in the paper of Alshamsi and Othman (2021) which is demonstrated in Figure 1. The framework below shows how organizations manage these

changes effectively. This framework served as the basis of the researcher in creating a KM framework exclusive to the policy development process.
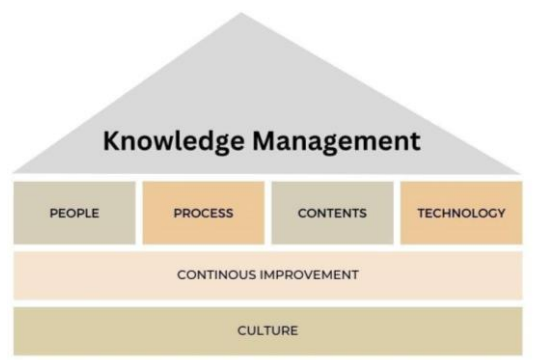

Figure 1. Knowledge Management Framework (Alshamsi and Othman, 2021)

The components of the framework are the following:

People are those who use and share knowledge. Employees in the organization should be involved and feel comfortable sharing what they know and learn.

Processes are the regular tasks or activities in an organization. In KM, organizations make sure these tasks capture and use knowledge properly to help the organization work smoothly and improve over time.

Content is the information and knowledge that the organization uses. It's about managing this information well so that it would be useful, updated, and accessible.

Technology includes the tools and systems that help share, store, and manage knowledge. It's about using the right technology to make knowledge sharing easier and more effective for all users.

Culture is about creating an environment where all employees are encouraged to share and seek knowledge. It ensures that sharing knowledge is part of the day-to-day work.

Continuous Improvement means the organization is always looking for ways to improve sharing and using knowledge to make changes successful in the organization. It also encourages innovation.

The study also used the Input-Process-Output Model of participation in policy development by Galais et. al (2021). Their IPO model in Figure 2 demonstrated the direct and indirect impacts of inputs on processes and outputs. The study used this model as a guide in creating a framework for the CAD on how KM will affect the policy development process.
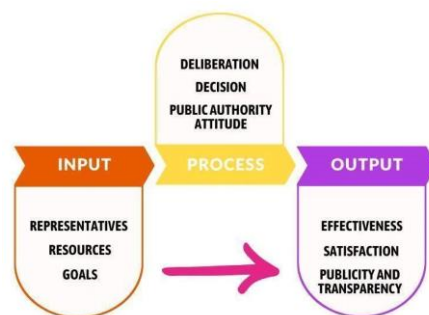

Figure 2. Input-Process-Output Model (Galais et. al, 2021)

Inputs directly impact the output factor suggesting that the quality and arrangement of inputs significantly influence the process' output. However, the impact of inputs on policy effects and participant satisfaction is mediated by the process factor of deliberation, indicating that while inputs set the stage, the nature of the process significantly shapes the substantive output.

In the process, deliberation serves as a crucial mediator between inputs and certain outputs, especially policy effects and participant satisfaction. This highlights the importance of deliberative quality in participatory processes, where the internal dynamics and quality of interactions among participants can significantly influence the effectiveness of policy development and the satisfaction of participants.

While inputs have both direct and indirect effects on outputs, the study underscores that the process of deliberation is a key mechanism through which inputs translate into meaningful policy impacts and participant satisfaction. At the same time, the direct influence of inputs on transparency points to the importance of initial conditions and context in shaping the openness of the participatory process.

RESEARCH PARADIGM

The research paradigm in Figure 3 shows how knowledge would help the organization to maintain continuous improvement and change culture. KM framework integrates into the IPO framework to show how the data will be gathered in the study.

Figure 3. Research Paradigm of the Study

At the start of the process, Inputs consist of the components required for knowledge generation such as People who are involved in the process and who perform tasks. The process where people accomplish their tasks, and generate and handle knowledge. Contents which are the actual data, information, and knowledge to be managed (Tacit and explicit knowledge), and Technology, the required systems and tools that support knowledge management activities.

These inputs are used in a KM process, where a series of actions and strategies are happened to optimize the use of knowledge. This process involves four key steps: (1) creation or identification of knowledge, (2) acquisition and storage of knowledge, (3) distribution, and (4) use of knowledge. The purpose of KM is the use of knowledge for organizational decision-making, but this will not be achieved if three of the actions are not properly executed.

The Output of this process will be attained through the form of KM products such as documents, policies, procedures, and systems that are made available for practical application and utilization. The Research Paradigm includes Outcomes, which are the results of the KM process where part of the organizational culture is continuous improvement, adapting to change for informed decision-making, and a commitment to excellence. The KMF serves as an agent for these outcomes, ensuring decision-makers are equipped with high-quality, up-to-date information to ensure policies are evidence-based and undergo a process where knowledge of involved individuals is considered.

The research paradigm served as a guide in the development of KMF to improve the policy-making process in the HRep through collaboration and involvement of individuals, and technology. Since KM values continuous improvement, monitoring, and evaluation, KM audit is also reflected in the KM framework.

STATEMENT OF THE PROBLEM

The study developed a KMF to improve the policy-making process and provide quality Bills in the HRep. The said framework would help the HRep to align its KM practices with HRep's strategic goals and objectives and to design KMS compliant with the needs of House Members, employees, and stakeholders.

Specifically, the study aims to answer the following qualitative questions:

1. What are the tacit and explicit knowledge of the employees in the Committee Affairs Department, and how are they currently being utilized in the policy development process?
2. What KM practice/s that can be developed to ensure that the bills passed are evidence-based?
3. What technological solutions or infrastructure requirements to facilitate the efficient management and sharing of knowledge of the House Members and

HRep Secretariat involved in the policy development?

4. What initiatives are necessary to prepare for the successful implementation of the KMF?
5. What KMF can be suggested that can be used to structure a responsive Knowledge management system to address the needs of the House Members and CAD employees in improving the policymaking process and ensure that bills are evidenced-based?

METHODOLOGY

The research design of the study is qualitative research as it analyzes the people's experiences using a particular research method such as interviews and content analysis (Hennink, M. et.al, 2020). This research design required an investigation in the HRep for the development of a KMF that will be used in establishing a KMS and its impact on the policy development process. The type of qualitative research is a case study, as it understands the context, experience, process, and outcomes.

Research Instrument

The researcher used key informant interviews and the participants are from the

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Committee Affairs Department who are directly involved in the policy-making process.

This approach aims to capture ideas from individuals involved in policy research, committee affairs, legislative operations, and information resources management, as well as those who will be responsible for the development and maintenance of the KMS.

Respondents of the Study

The study involved twelve participants were selected based on specific criteria, which were defined as follows:

1. The respondent must be an employee of the House of Representatives for at least 10 years.
2. Must possess sufficient knowledge or understanding of the policy development process in the CAD.
3. The participants are in supervisory positions

Data Analysis

Based on the transcribed interview, the researcher broke down the data into units/ themes to capture key concepts. The identified themes underwent careful review and refinement to ensure coherence and relevance, with revisiting the raw data to confirm the validity of emerging patterns. These themes were organized based on their

Relationships.

The responses of the respondents were analyzed using tools in knowledge management to identify important themes necessary in the framework through the

Following:

*   Knowledge Mapping describes the department's knowledge needs, where and how these can be accessed, and their capability to use and reuse them. The researcher showed a knowledge map using the input-process-output model to show how particular knowledge can be used to produce knowledge products.
*   Stakeholders Analysis shows the relationship and the exchange of knowledge between external and internal stakeholders. Maps out the communication or knowledge transmitted within the organization, among stakeholders, and across groups.
*   Knowledge Capital Planning describes the knowledge gaps, and knowledge product or activity envisioned and its status to fill the knowledge gap.

Upon finalizing the themes using the above-mentioned tools in KM, they were defined and given descriptions. These themes were used in developing the KM framework.

RESULTS AND DISCUSSION

Tacit Knowledge

Based on the mandate of CAD employees provide all services that facilitate the systematic and efficient processing of all measures referred to and initiated by the committees of the HREP specifically in connection with the following:

1. Initial processing of measures (which includes receipt and recording of measures, and the conduct of reviews, studies, and research on measures);
2. Conduct meetings, public hearings, technical working groups (TWGs), and other deliberative actions on measures;
3. Preparation and approval of draft committee reports amended/substituted/Consolidated bills or resolutions;
4. Approval and filing of committee reports; and
5. Monitoring of the status of committee reports and referrals.

Hence, in order to provide those services the tacit knowledge a committee staff shall have are technical writing (research) and administrative skills, knowledge of the subject matter, research, interpersonal skills, legislative process, and political awareness.

Political awareness is knowing the priorities of the leadership and the stance of the external stakeholders about the bills to be tackled based on their submitted research.

As far as practicable, the committee staff ensures that all public and private parties or entities affected by measures referred to their respective committees are given the opportunity through lawful means to participate in deliberations on these measures and convey their ideas, sentiments, and concerns thereon. However, prior to the scheduled committee meeting, the committee staff should inform the concerned Committee Chairperson, and authors or proponents of a particular measure, in case there are stakeholders against a particular provision in the bill so that they could plan or provide options on how they could settle differences and address concerns and issues on the bill.

It would be easy for CAD employees to have historical knowledge of the bills under their committees so that they could easily suggest to their chairperson what could be tackled in the meeting. Having historical knowledge is also beneficial when researching related bills, researchers and stakeholders are invited to the meeting that would help improve the bill.

CAD employees are expected to be knowledgeable in the technical writing style and bill drafting. Writing Minutes of the Meeting (distribute to Committee Members),

Spot Reports (Report to the House Speaker), and Committee Reports (Submit to the Bills and index after the deliberation of bill for second reading) are subjective as it always depends on the perspectives of the writers which information should be included in the

contents. However, having knowledge on the important points the readers (Committee Chairpersons, the authors, sponsors, or the leadership) wanted to see in the content, would not cause any delay in submitting these documents.

Having a good relationship with internal and external stakeholders will aid in building trust and enhance the credibility of the committee and the HRep as well. The committee staff should have a good interpersonal relationship and good communication skills to avoid misunderstandings between external and internal stakeholders, as the representatives of internal and external stakeholders are appointees or elected officials who have different perspectives, attitudes, and behaviors. It will enable a more effective and amicable conflict resolution and external stakeholders are more likely to engage in constructive dialogue and get mutually beneficial solutions. Also, the stakeholders provide valuable insights to improve the bill.

Technically based on the qualifications of the committee staff, not all employees are required to have a law and research background but they should have at least knowledge of the subject matter as they need to write and prepare a Substituted/amended/consolidated bill. Documents on any measure referred to and acted upon by a committee are put together as one bill, in case several measures are contained in one committee report (e.g. consolidated or substitute bill). Having these backgrounds will make it easy to write clear, precise, and legally sound documents as it will ensure that the incorporated insights in the bill are accurate, based on the recommendations during the deliberations.

This tacit knowledge is acquired through experiences, however, these were being shared through coaching and mentoring. The new employees were assigned directly to the committee work with guidance from the supervisors or their committee secretaries. Apart from the knowledge, skills, and behaviors needed, knowledge also comes from documents that might be provided by the committee or shared by the stakeholders. These documents are mentioned in Table 4, including how these documents were stored and shared.

Explicit knowledge

The important explicit knowledge is the legislative and legal documents (bills and laws) external stakeholder documents (positions and research papers), and internal and committee documents (invitations, committee reports, Transcript of Stenographic Notes administrative documents, etc).

Knowledge Utilization

Currently, documents can be accessed by CAD employees through a cloud drive, they can also access through their filing cabinets, and database system designed by the ICTS of the HRep, external hard drives. However, important files are accessible to only a few individuals.

Knowledge can be passed on through their CAD Talks (knowledge-sharing sessions of the department), mentoring, and coaching during committee meetings especially to new employees. Retiring employees train their successors by taking their place during committee meetings and other activities.

Not all respondents agreed on having a KM practice since it is the discretion of the leadership, and every committee has its system of sharing knowledge. However, some of them suggested establishing a centralized database system, to archive and access relevant research data, exit interviews for employees who are retiring, and leadership support through recommendation of projects or systems to the management, and implementing a system without disregarding the previous one. Maintaining good relationships with Stakeholders such as NGOs, civil society groups, academe, and international organizations. These experts are able to provide insights and opinions based on facts that reflect their firsthand knowledge, which is valuable during policy deliberations. Their contributions help shape the content and resolve conflicts through technical working groups (TWGs) and during committee meetings. Effective coordination with stakeholders ensures the integration of relevant data and the resolution of any conflicts. Continued education for current employees is also encouraged so that the employees are knowledgeable with the latest information and skills.Based on the data gathered. The respondents mentioned the following
Characteristics to be integrated into a system:

1. Accessibility ensures that knowledge resources are available and usable to all stakeholders within the organization. It involves removing barriers to acces, such as physical, and technological so that everyone can easily find, retrieve, and utilize knowledge resources.
2. Collaboration involves individuals or committees working together for a certain bill or related subject matter.
3. Security focuses on protecting systems, data, and assets from unauthorized access, breaches, and malicious activities. It is essential for protecting sensitive information, maintaining compliance with regulations, and preserving trust with stakeholders.
4. System integration involves connecting different systems, applications, and processes to work together seamlessly and efficiently. It enables the exchange of data and information across systems. It eliminates silos and redundancy and leverages investments in technology and infrastructure more effectively.
5. Continuous learning fosters a culture of curiosity, exploration, and self-improvement to encourage employees to seek out new knowledge, skills, and perspectives through capacity development programs and informal learning opportunities, for example inviting stakeholders to provide brief discussions on aparticular bill.

For the respondents to make the new system successful, the CAD would need proper training and orientation to ensure all members and staff are comfortable and skilled in its use. In addition, gradual implementation and step-by-step training are recommended to prevent the House Members become overwhelmed in using the system, as one of the respondents has experience of creating a system but the House Members are reluctant to use it. One of the factors that would help its implementation is the leadership's support and prioritize this initiative, ensuring regular updates and proper maintenance to keep the system up-to-date.

The respondents also mentioned the indications that a system is successful if it has quicker access to files and the ability to identify similar bills across different committees through AI, resulting in more efficient and coordinated legislative work.

Long-term strategies for maintaining and improving the system involve continuous training for staff, regular system updates, and ensuring the system is centralized and accessible to all committees and other offices involved and committees have networks with different experts and can collaborate through the system and subscribe to international standards to remain a learning organization.

KM Framework

Both frameworks of Alshamsi and Othman (2021) and Galais et. al (2021), are used in the formulation of KMF. The elements of both frameworks are reflected in the HRep KMF as described below:

1. Inputs- The elements of knowledge sources, technology, leadership, and organization capability are those elements that were mentioned by the respondents. These elements have to be well integrated as they affect the performance of KM.
a. Knowledge Sources- Knowledge sources of CAD come in two types:
   Explicit and tacit. Explicit knowledge is found in documents, publications, registries, and databases while tacit knowledge is in the minds of its stakeholders. Either type of knowledge becomes active when it is shared, used, or brought into discussions with stakeholders. Managing them presents different challenges and requires different ways of dealing with them.
b. Technology- The second element is technology which includes knowledge repositories, communication systems, and collaboration platforms.
c. Leadership- is one of the elements as the organization needs a champion for the implementation of KM Framework. Leadership in KM is manifested in the quality of the HRep Strategic Plan, leadership directives on the institutionalization of KM, and capacity development initiatives related to KM.
d. Organizational capability- Employees are willing to adopt change, availability of budget for the implementation of framework, systems, and procedures must be enhanced and there should be a culture of collaboration, continuous learning, and innovation.
2. Processes
KM Processes are at the center of the KM Framework. The quality and relevance of knowledge products and services depend on the processes it has undergone. This KM Framework takes a cycle view of knowledge in organizations which includes knowledge production, validation, and integration.
a. Knowledge production involves identifying, acquiring, codifying, and mapping existing knowledge within the organization and its external environment. It also involves the creation and acquisition of new knowledge when existing knowledge is deemed inadequate.
b. Knowledge validation entails the approval of knowledge. Depending on the nature of knowledge, approval can be with the commec and employees. Knowledge to be included in the initial KM system should be identified and validated. Ultimately, a fully functional KM system will facilitate the inclusion of other knowledge, including tacit knowledge from individuals and groups.
c. Knowledge integration involves storing, sharing, and using knowledge to provide products and services throughout the organization. Knowledge integration activities include coaching and mentoring; implementation, monitoring, and evaluation of knowledge; and getting feedback from end-users.
Feedback from users and results of monitoring and evaluation (M&E) can be used as a foundation for learning – creating new or improving existing knowledge. Improvement involves deconstructing, combining, and internalizing new knowledge into the KM system.
At the end of integration, knowledge becomes embedded in the system supported by policy directives.
3. Outputs
Empowered by technology, leadership, and organizational capability, the outputs of KM are the following:
a. Knowledge products and services - Bills, committee reports, spot reports, highlights of the meeting, administrative services before, during and after the deliberation;
b. Knowledge-driven individuals- employees who are always learning, sharing, and using knowledge in performing their duties and responsibilities; and
c. Learning teams or Communities of Practice (CoP) who share a common interest, profession, or passion and interact regularly to learn from each other, share experiences, and develop their collective knowledge and expertise in a particular domain.

4. Outcome

This element is added by the researcher in order to identify the direction of having KM and serve as an indicator that the implementation of a KM Framework is successful and effective.

An effective KM system will advance HRep into a learning organization, improved performance, responsive services, and evidence-based policies are ensured.

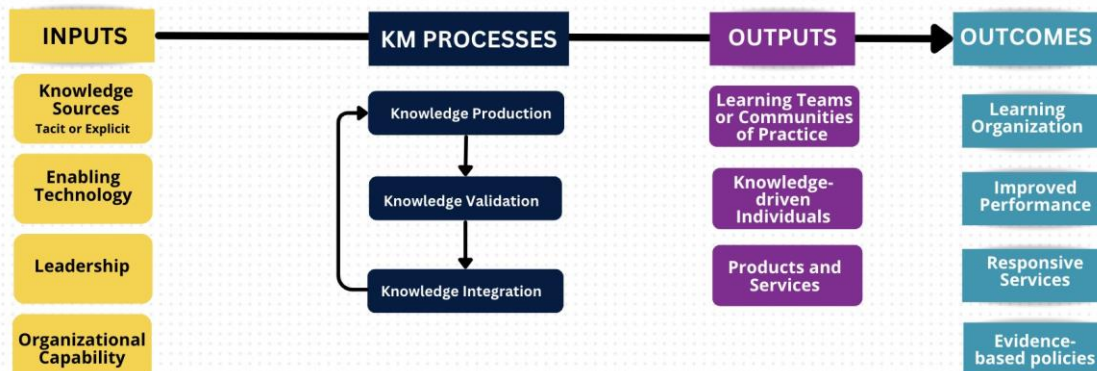These elements are integrated into a KM framework, as illustrated in Figure 4.

Figure 4. CAD KM Framework

CONCLUSION

CAD employees experience challenges in managing knowledge and optimizing resources such as accessibility. The majority of the respondents answered and indicated gaps such as the apparent lack or limited data accessibility in the department. Relating these responses with another query about usual problems encountered in preparing reports and documents replied to lack of reference materials as they need to do intense research, which can be construed, by a stretch, to depict the issue of data accessibility. Although the LEGIS system in the HRep website is helpful, other resources, particularly coming from the stakeholders are needed. The historical background of the bills may be useful for the committee, thus, the committee staff needs to research in the HRep's library.

They also need the online live streaming to review the meeting as the stenographers produce the verbatim transcript several months after the meeting. Thus, other committees prefer that the IT offive explore the use of AI that can be used for transcribing and easily uploading bills where it can be referred to appropriate committees so that a bill can be deliberated jointly by two or more committees. On the administrative side, some committees prefer that in case there would be a centralized database system there should be a portion where they could reserve a venue within the HRep on their preferred schedule or cancel it so that they would not need to call the engineering department to verify the availability of conference rooms.

On the aspect of human resources, some employees wanted to be trained about opportunities for improvement in the office. However, recently the department has conducted a series of CAD Talks where they train new and current.

Technological gaps are apparent with replies from respondents clamoring to have updated computers unlimited digital storage, and related equipment improved to promote a conducive working environment in the department. CAD still stores explicit knowledge in filing cabinets and individual databases. Information such as briefers, position papers, and compiled reports are kept in these storage media. However, each committee has their system of filing and keeping this information, but the majority of them do not upload it online or on any internet platform.

The CAD predominantly relies on tacit knowledge, as they share knowledge through coaching, which is yet to be documented. However, as they want to formalize coaching and mentoring, they conduct CAD Talks. The department has effective communication channels and strategies with internal and external stakeholders thereby facilitating the sharing of their position papers and submitting them through email before the scheduled committee meeting.

Lack of support from leadership for a centralized system, budget restrictions, lack of funds, and political patronage are also a factor.

On the issue of evaluating their services, there exists no recorded feedback mechanism in the services rendered by each committee or the system itself online on the HRep website (house.gov.ph). This feedback mechanism is somehow supported in the query on why end users are not using a system.

These challenges and gaps may be addressed by a framework that guides how to implement KM in the CAD. The KM framework serves as the basis for formulating a KM assessment tool to evaluate the current system, select appropriate systems for the organization, and guide in creating indicators for monitoring and evaluation.

RECOMMENDATIONS

Based on the data gathered, analysis conducted, and formulated KM Framework, the research recommends the creation of awareness and establishment of KM

Infrastructure through approval of the leadership on the adoption pf KM framework. Issuing an organizational policy is necessary for its implementation. The agency shall conduct KM audit in all offices to assess the current state of knowledge management practices, including existing systems, processes, and technologies, and Identify and analyze the specific knowledge needs and challenges within the department. Engage with key stakeholders including officials and employees, to understand their perspectives, requirements, and expectations regarding KM. Develop a strategic plan outlining the goals, scope, budget, timeline, and resources required for implementing a KM system in the organization. Evaluate and select appropriate technologies and tools for knowledge capture, storage, retrieval, and dissemination, such as document management systems, collaboration platforms, and data analytics tools. Set up necessary KM infrastructure such as hardware, software, networks, and servers and ensure its scalability, reliability, and security to handle diverse knowledge assets of the HRep. Then identify and migrate relevant knowledge assets from existing systems, databases, and repositories to the new KM platform.

Expanding KM Capabilities is also recommended by providing capacity-building programs to educate users on how to effectively use the KM system. Conduct a pilot implementation of the KM system in select offices to test its functionality, usability, and performance. Then Gather feedback and insights from users to identify areas for improvement and optimization. Roll out the KM system across the department based on the lessons learned from the pilot implementation. Lastly, Establish mechanisms for ongoing monitoring, evaluation, and improvement of the KM system. It is also necessary to Implement updates and upgrades to the KM system to ensure its relevance and effectiveness over time.

The above-mentioned recommendations will aid other government agencies in enhancing organizational efficiency, effectiveness, and innovation through knowledge management practices. However, the milestones suggested are only based on the legislative context, other agencies might have different issues and concerns on how they will improve their knowledge management systems. Other agencies may cover highly sensitive documents and informal knowledge-sharing practices.

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