



Integrated Methodology for the Modernization of Social Systems: A Framework for Implementing Local Reforms in Public Administration, Social Policy, and the Agricultural Sector

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Abstract

This methodology addresses the problem of systemic inertia and the low effectiveness characteristic of many local social systems across public administration, social policy, and the agricultural sector. The persistent gap between the recognized need for reforms and the lack of practical implementation tools for their planning and execution on the ground creates substantial barriers to sustainable development. The objective of this work is to present and theoretically substantiate an original four-stage integrated modernization framework designed for the systemic management of local reforms. The scientific novelty of the methodology lies in the development of an interdisciplinary managerial model that synthesizes classical theories of change management, contemporary approaches to public-sector innovation, and practical project management tools. The framework's universality and practical efficacy are empirically demonstrated through a detailed analysis of three successful yet heterogeneous cases from the author's practice, and its applicability in an international context is substantiated. As a ready-made, step-by-step algorithm, the methodology allows local leaders and reformers to reliably achieve reproducible results with lasting effects.

Keywords: Modernization; Public Administration; Local Reforms; Social Policy; Agriculture; Digitalization; Stakeholder Engagement; Pilot Projects; Institutionalization.

INTRODUCTION

Local social systems today, whether social service agencies, social welfare organizations, or rural governance structures in the agriculture sector, are under unprecedented pressure to be responsive, resilient, and revolutionary in the face of globalization, digitalization, climate change, and demographic change (Milovanovic et al., 2025). On the other hand, many local social systems are plagued by deep systemic inertia arising from historically grown institutions and path dependency. These factors may constrain change and, more rarely, create windows of opportunity for reform (Kalita, 2025).

A key barrier to modernization is bureaucratic complexity. Rigid hierarchical structures, outdated regulations, and fragmented processes create an environment in which innovations are either rejected or implemented merely formally, without producing tangible improvements. This is at the very core of the New Public Management doctrine, which, since the late 20th century, calls for a variety of adaptations from the private sector, performance orientation, efficiency gain, as well as, and this is important, development of public sector entrepreneurship (Milovanovic et al., 2025). Besides

general acceptance, local managers often find themselves with few concrete steps for implementation.

A widening experience gap exacerbates the situation. Citizens accustomed to the quality, speed, and convenience of digital services in the commercial sector increasingly assess interactions with government structures critically. Statistical evidence indicates that public services consistently rank lowest in user satisfaction ratings, and most citizens prefer virtual and self-service channels (Qin et al., 2025). This gap not only poses reputational risks for authorities but also undermines fundamental trust in public institutions, thereby amplifying social and political demand for visible, measurable improvements (Judijanto et al., 2025). Hence, the problem does not lie in a failure to recognize the need for change, but rather in the paucity of systematized, reproducible methodology for its practical implementation at the local level.

The objective of this work is to present and theoretically substantiate the author's framework, a step-by-step integrated methodology for modernizing social systems that enables guaranteed achievement of measurable improvements at the local level.

Citation: Jumayeva Gulalek, "Integrated Methodology for the Modernization of Social Systems: A Framework for Implementing Local Reforms in Public Administration, Social Policy, and the Agricultural Sector", Universal Library of Multidisciplinary, 2025; 2(2): 06-16. DOI: <https://doi.org/10.70315/uloap.ulmdi.2025.0202002>.

To attain this objective, the following tasks were defined:

1. Decompose the complex process of local reform into four sequential and logically interconnected managerial stages.
2. Identify and adapt for each stage the key theoretical concepts and practical instruments from management, public administration, and the social sciences.
3. Empirically demonstrate the universality and effectiveness of the proposed framework through cross-case analysis of three implemented projects in distinct domains: modernization of public services, development of social policy, and innovations in the agricultural sector.
4. Substantiate the methodology's international applicability and adaptability using hypothetical scenarios for the U.S. public sector.

The scientific novelty of the study resides not in inventing standalone managerial tools but in their original integration into a single, interdisciplinary, and universal managerial model. Unlike narrowly specialized approaches, this framework synthesizes the following paradigms. Classical change management theories (Kurt Lewin, John Kotter) shape the general logic and sequencing of reform stages. Modern approaches to public sector innovation, particularly the tools of Public Sector Innovation Labs, complement

change management models with human-centered and experimental approaches to reform implementation (co-design, prototyping). Tools such as Root Cause Analysis (RCA) and Stakeholder Mapping enable the practical implementation of project management and systems analysis and add methodological rigor and data orientation (Harrison et al., 2021).

Thus, a coherent and reproducible algorithm is created that bridges the existing gap between theoretical calls for modernization and the practical need of local reformers for actionable instrumentation.

INTEGRATED MODERNIZATION FRAMEWORK: THEORETICAL FOUNDATIONS AND STEP-BY-STEP ALGORITHM

Conceptual Core and Theoretical Underpinnings of the Framework

The cyclical Change Management framework has four logically sequential and iterative phases: (1) diagnostic audit of the system, (2) designing the solution and engaging stakeholders, (3) pilot implementation and impact assessment, and (4) scaling up and institutionalizing the solution. As shown in Figure 1, the cyclical Change Management framework was designed using a systematic synthesis of the key classical and contemporary theories of change management to ensure logical completeness and applicability.

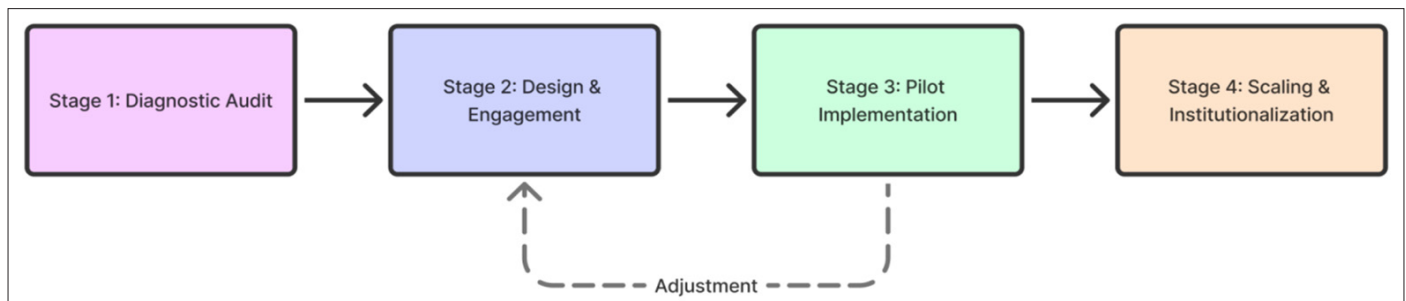


Figure 1. Cyclical model of the Integrated Modernization Framework

Conceptually, the framework aligns with Kurt Lewin's foundational three-stage model, which views any change as a transition through the states of Unfreeze, Change, and Refreeze (Galli, 2018). In the proposed model:

Stage 1 (Diagnosis) and Stage 2 (Design) comprise the Unfreezing function. The need for change is recognized at the Diagnosis phase through problem identification and at the Design phase through a vision of a better future state and a coalition of support, thereby overcoming inertia and resistance to the status quo.

Stage 3 (Pilot implementation) is functionally similar to the Change stage. This is the practical phase in which a new behavioral model or process is introduced in a controlled environment, allowing participants to adapt and gain initial experience.

Stage 4 (Scaling and institutionalization) corresponds to

the Refreezing stage. Successful experience is consolidated, becomes the new norm, and is integrated into formal regulations and organizational culture, preventing regression to old practices.

Analogously, the framework can be mapped to John Kotter's more detailed eight-step model (Galli, 2018). The Diagnostic audit stage aligns with creating a sense of urgency (Kotter's Step 1) because the diagnosis provides the evidence of the existence and magnitude of the problems. The Design and engagement stage align with forming a powerful coalition (Step 2) and with creating a vision (Step 3). Pilot testing enables short-term wins (Step 6), which improve reform feasibility and motivate participants to commit to further change. The new approaches must grow and become routine (the practical step, Step 8) so the new processes root in the organizational culture.

The framework does not invent fundamentally new ideas. Instead, it systematizes and adapts time-tested managerial concepts to local reform needs in the public and social sectors, creating a lucid, logically coherent algorithm of action.

Stage 1: Diagnostic Audit of the System

The task of this stage is to determine objectively not the symptoms but the root causes of existing problems (pain points), to identify inefficient processes, and to select specific, measurable indicators (KPIs) by which the success of the forthcoming reform will be assessed.

Erroneous problem definition at the outset is one of the chief reasons for the failure of reform initiatives. Efforts are often directed at combating visible symptoms (e.g., long queues). At the same time, the systemic dysfunctions that generate them (e.g., illogical regulations or a lack of data exchange between departments) remain unaddressed. To avoid this trap, the diagnostic stage is founded on the methodology of

Root Cause Analysis (RCA) (U. S. Department of Education, 2025). RCA is a structured method originally developed to analyze industrial accidents but now widely used to investigate systemic failures across various fields, including healthcare and public administration (AHRQ, 2024). Within the framework, two key RCA instruments are proposed.

The Five Whys technique. A simple yet powerful method of iteratively asking Why? of each identified problem to reach its fundamental cause. This iterative approach separates superficial explanations from root problems, which should be the focus of intervention (Barsalou & Starzyńska, 2023).

Ishikawa (fishbone) diagram. A visual tool that helps systematize all possible causes of a problem, grouping them into major categories (e.g., People, Processes, Technologies, External environment). This enables a holistic view and reveals interdependencies among factors influencing the problem (Kumah et al., 2024). The example of implementation of such techniques is shown in Figure 2.

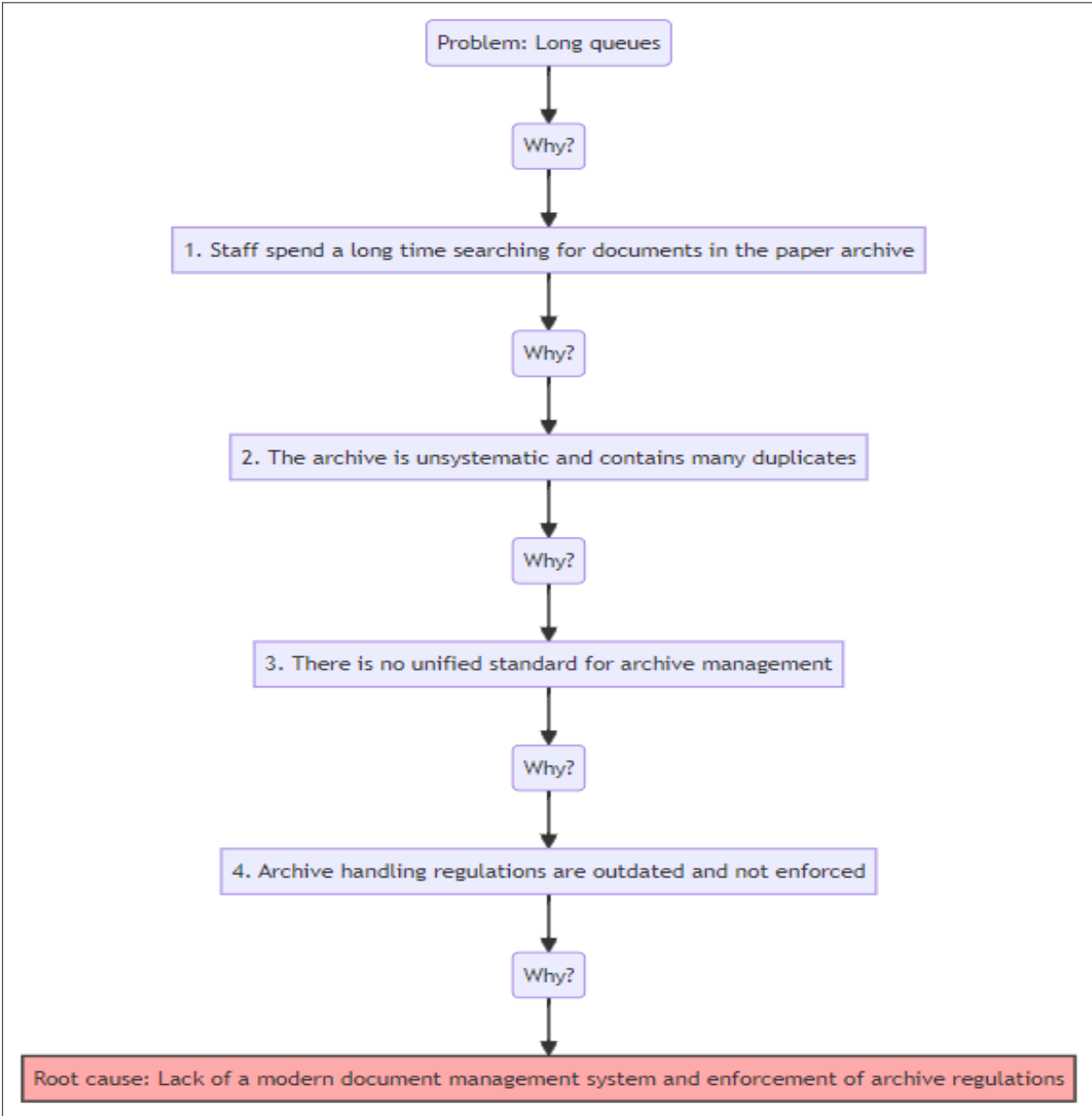


Figure 2. A simplified example of the application of the Five Whys technique

It is important to emphasize that the use of RCA in this framework differs fundamentally from its traditional, and often criticized, interpretation. Classical RCA is frequently accused of reductionism, seeking a single root cause, and of shifting focus toward blame, i.e., individual errors (Peerally et al., 2017). In contrast, the proposed approach employs RCA for systemic analysis to identify latent errors, hidden deficiencies in processes, technologies, and organizational structures that create conditions for problems to arise (AHRQ, 2024). The goal was not punishment, but to understand and fix the system.

The diagnostic phase is complete when the team has agreed on key performance indicators (KPIs) for the problem that are specific, measurable, achievable, relevant, and time-bound (SMART), and directly correlated to the root causes. For example, if slow request processing is a root cause, a KPI could be to reduce request processing time by 30% in the next six months. These KPIs will constitute the objective basis for evaluating reform effectiveness in subsequent stages.

Stage 2: Solution Design and Stakeholder Engagement

The task of this stage is as follows: based on data obtained during diagnosis, develop the target model of the system under reform and form a powerful coalition of support that includes all stakeholders.

This stage consists of two interrelated components: the technological (design) and the socio-political (engagement). The framework's key innovation lies in its synthesis: a technically sound solution without stakeholder support is doomed to fail, just as broad support absent a clear implementation plan is ineffectual.

Consider solution design. To develop effective, human-centered solutions, the framework proposes leveraging methodologies actively employed in Public Sector Innovation Labs (PSILabs) (Ferreira, 2024). Such structures have been established worldwide to introduce flexible, creative, and experimental approaches into the public sector (Whicher & Crick, 2019). The principal methods are as follows.

The idea is that system end-users (citizens, farmers, social workers, etc.) become co-authors of the reform, in the sense that they are engaged in the development process via workshops, focus groups and joint prototyping, such that the solution that emerges is both technically feasible and helpful, that is, useful, convenient and required (Whicher & Crick, 2019).

A study of the problem context through ethnographic techniques, informal interviews, and observations of the work process, as has been done, for example, in Denmark's MindLab, can be useful to find hidden needs and barriers to progress (Williamson, 2015).

Developing and testing inexpensive, simple model representations of the system, such as paper mock-ups of an

interface or new business-process models, or role-playing to get quick feedback from the end users and other stakeholders, and to expose weaknesses and problems for correction early on with reduced risk and cost (Williamson, 2015).

There should also be a deliberate system of stakeholder management alongside the solution design: this process should be systematic and calculated rather than ad hoc.

The first step is to compile a complete list of individuals, groups, and organizations that can influence or be affected by the reform. For their analysis and classification, the Power/Interest Grid is used. This instrument visually distributes all stakeholders across four quadrants according to their level of influence (power) and degree of interest in the project.

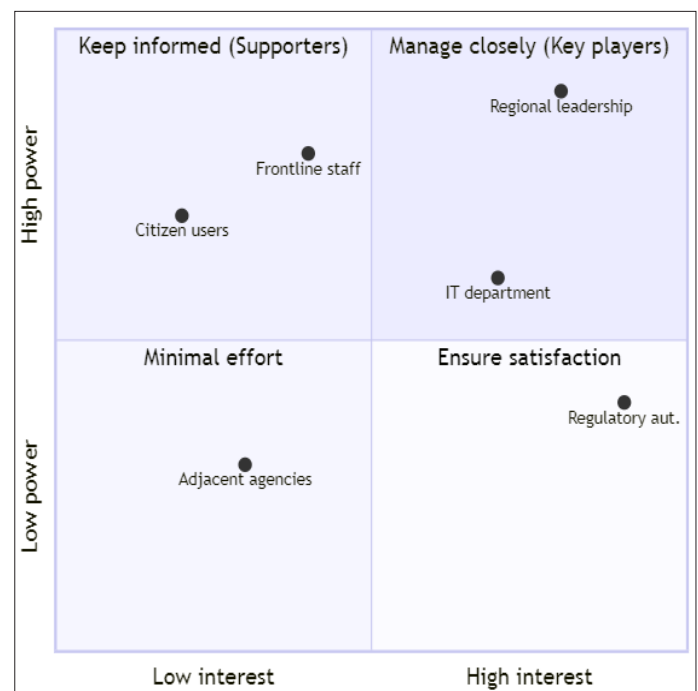


Figure 3. Example of stakeholder mapping for a digitalization project

Based on a stakeholder's position within the grid, an individualized engagement strategy is developed. High power / High interest (Manage closely) are key actors. They require close cooperation, regular meetings, and involvement in decision-making. Low power / High interest (Keep informed) are potential allies and the volunteer army of the reform. They should be regularly updated on progress and involved in discussions and testing. High-power/low-interest (Keep satisfied) stakeholders can easily block the project if their interests are infringed; they must be consulted, and care must be taken to ensure the reform does not create problems for them. Low-power/low-interest (Minimal effort) stakeholders require only general updates via public channels.

Successful completion of this stage means that the reform possesses not only a technical design but also a social contract, a shared understanding of goals, benefits, and roles of all participants in the process.

Stage 3: Pilot Implementation and Outcome Measurement

At this stage, the aim is to check whether the solution is feasible, effective, and, to some extent, implementable; to gather hard data to improve the solution; and to gather evidence of the solution's value before widespread implementation.

From this point of view, running a pilot project is used to test the applicability of a management methodology or technique. Its principal aim is less to implement than to learn: to assess the project's feasibility, uncover unforeseen problems, test the methodology, and, most importantly, reduce the risk of failure in a costly full-scale reform.

The value of pilot studies lies in their capacity to detect and help mitigate potential logistical, technical, and organizational problems that could jeopardize the integrity of a larger research or implementation (Atkin-Jones et al., 2025). For a pilot to serve as a genuine instrument of inquiry, its planning must be structured and include the following

mandatory elements. A hypothesis has to be formulated, for example, that an online pre-booking system (solution) will decrease average queue waiting time by 50 percent (measurable outcome). A pilot scope must be defined, for example, a specific unit, territory, or user group, to be used to test the pilot. The sample should be small enough to be representative and non-risky.

The very KPIs developed in Stage 1 are employed. Collecting data on these metrics before and after implementation is the core of the pilot. Equally important are the success criteria (Progression Criteria), prespecified quantitative thresholds that will determine the pilot's success and a scaling decision. For example, a decision to scale a pilot may be based on a decrease of at least 30% in the mean time taken to process a request and a lack of drop in staff satisfaction (Atkin-Jones et al., 2025). The plan could include the methods (e.g., time-and-motion observations, surveys, system log analysis), the persons responsible for data collection and analysis, potential pitfalls, and strategies to address them.

Table 1. Pilot project planning structure

Plan element	Description	Example (Civil Registry Office digitization project)
Hypothesis	Formulation of a testable assumption about the link between the solution and the outcome.	Implementing an electronic archive and online appointment booking will reduce citizen service time and decrease errors.
Pilot scope	Definition of the experiment boundaries (unit, territory, user group).	One district Civil Registry Office serving ~50,000 people.
Key metrics (KPIs)	Quantitative indicators to measure impact (from Stage 1).	1. Average request processing time (minutes). 2. Percentage of document errors. 3. Citizen satisfaction (1–5 scale).
Success criteria	Threshold KPI values to decide on scaling.	1. Processing time < 15 min (40% reduction). 2. Error rate < 1%. 3. Satisfaction > 4.5.
Data collection plan	Methods, tools, and data-collection frequency.	Time-and-motion tracking of operations (daily), error-log analysis (weekly), and exit surveys of citizens (ongoing).
Risks and mitigation	Potential problems and ways to reduce them.	Risk: Technical system failure. Mitigation: on-call IT specialist and regular data backups.

At the end of the pilot, data analysis will conclude that one of three potential states: 1. Good result: The pilot proved the hypothesis, met success factors, and the project can scale further. (2) The second possible outcome involves a pilot who succeeds in some way, i.e., the results promise well, but something flaws the solution (for example, the interface inconvenienced people). In this case, the project returns. It returns to Stage 2. (3) The third result is failure, in which the pilot has shown that the solution does not work, at which point the project is either terminated with minimal loss or completely restructured. For this reason, the pilot implementation is a critical filter, allowing only proven, fully developed solutions to proceed.

Stage 4: Scaling and Institutionalization

The goal of the final stage is to disseminate the results generated in the pilot to the entire target system and embed the newly created rules, procedures, and perceived

organizational culture to make the changes irreversible. The final stage consists of two processes: dissemination (or scaling) and consolidation.

Scaling is the process of replicating an innovation. The public-innovation management literature distinguishes several scaling strategies. Scaling out (horizontal scaling) refers to the diffusion of an innovation to analogous units or territories, for example, deploying a successful operational model piloted in one Civil Registry Office across all Civil Registry Offices in the region. Scaling up (vertical scaling) refers to integrating an innovation into policy and the regulatory framework at a higher level of governance, for example, when a successful local project becomes the foundation for a regional or national standard.

A critical success factor in scaling is not mechanical copying but rather context-sensitive adaptation of the solution to each new unit. Differences in resources, human and operational

capital have to be taken into account. A scaling roadmap, comprehensively describing the steps of scaling with a time schedule and necessary resources, can be suggested, together with a support and mentoring system for the other participating organizations in the scaling process.

If scaling is the expansion of practice, institutionalization is the transformation of practice into the new normal of organizational life. This is the terminal phase that ensures the reform's durability and completes Lewin's Refreezing cycle (Palazzi et al., 2025). Institutionalization includes the following key actions. First, amendments must be introduced into official documents: administrative regulations, quality standards, job descriptions, and departmental bylaws. New processes must be clearly codified and rendered mandatory. Changes should be reflected in incentive systems (e.g., new KPIs for employees), training (updates to professional development programs), and budgeting (allocation of funds to support the new processes). Thereafter comes embedding into the organizational DNA: through sustained communication, leadership endorsement, and the demonstration of positive outcomes, new practices must become part of the organization's informal culture. Only upon successful institutionalization can one assert that the reform has achieved its ultimate aim, not a transient improvement but a sustainable systemic transformation.

PRACTICAL IMPLEMENTATION OF THE FRAMEWORK: CASE ANALYSES

The theoretical model described in Chapter 1 gains practical value only to the extent that its effectiveness and universality are corroborated by real-world experience. This chapter provides a detailed analysis of three successful projects implemented by the author in entirely different domains: modernization of public services, development of social policy, and the introduction of innovations in the agricultural sector. The aim of the analysis is not merely to describe the projects but to demonstrate how each of the four stages of the integrated framework was applied in practice and to show that adherence to this universal managerial algorithm was the key to achieving measurable results in every instance.

Case 1. Modernization of Public Services: Civil Registry Office Digitization Project

The activities of Civil Registry Offices in the Tagtabazar District were characterized by a high degree of bureaucratization, reliance on paper archives, and, consequently, slow service and a heightened risk of errors.

As the first stage, a comprehensive analysis of current processes was conducted. Through time-and-motion measurement of operations and analysis of registration logs, key pain points were identified: the average time to locate a document in the paper archive was 25–30 minutes, which was the principal cause of long queues. A year-long analysis of data showed that up to 5% of documents contained errors

or inaccuracies due to human factors. Citizen exit surveys indicated low satisfaction. The following were selected as key KPIs for the project: (1) average processing time per request; (2) percentage of errors in issuing duplicate documents; (3) citizen satisfaction index.

Next, the second stage, solution design and stakeholder engagement, was undertaken. Based on the diagnosis, a target model was formulated: creation of a unified digital archive and implementation of an online pre-appointment system. Co-design methods were applied to engineer the solution: working sessions with Civil Registry Office staff were conducted to develop a user-friendly search interface. Key stakeholders included staff, IT specialists, the Department of Justice leadership, and citizens. Tailored engagement plans were crafted for each group: training and participation in design for staff; regular reports on prospective economic efficiency for leadership; and a public information campaign on the system's advantages for citizens.

In the third stage, a pilot project was launched in the district branch. Over three months, continuous data collection was carried out for the approved KPIs. The average request-processing time decreased to 5–7 minutes, implying an operational efficiency increase of 35–40%. Errors associated with misreading archival records have been virtually reduced to zero. Feedback from citizens and staff was overwhelmingly positive.

The successful pilot was recognized as sufficient grounds for full-scale deployment, which served as the basis for the fourth stage. Over the following year, the system was rolled out across all Civil Registry Offices in the region. To consolidate the changes, a new administrative regulation governing service provision was developed and approved, rendering work with the electronic archive an obligatory standard.

Case 2. Development of Social Policy: Conference Organization Project

In the domain of family and marriage policy, coordination between various agencies (justice authorities, the education system, law enforcement, local councils, councils of elders) was weak, leading to duplication of functions and the absence of a unified approach to social problem-solving.

At the first stage, the diagnosis was conducted through in-depth interviews with leaders and specialists from key agencies. The principal pain point identified was the lack of systematic dialogue and information exchange. Agencies operated in isolation, unaware of one another's initiatives. Proposed KPIs were: (1) the number of interagency initiatives implemented over the year; (2) specialists' subjective assessment of their awareness of the work of adjacent structures (on a 1–10 scale).

The second stage consisted of solution design and

stakeholder engagement. The target model was to create a regular, authoritative platform for interagency dialogue. As a concrete solution, the format of an annual scientific-practical conference was selected. The participants were all the heads of the agencies and the elders. This was ensured by establishing an organizing committee composed of a representative from each party, thereby giving the committee ownership and support at the highest level.

The conference was first organized and held as a pilot during the third stage. The event validated the concept's viability. One hundred twenty-one specialists from all target agencies participated. Joint resolutions and practical recommendations were adopted, forming the basis for several local initiatives. Success was confirmed by an official letter of appreciation from the district head.

For the fourth stage, the success of the first conference led to a decision to make it annual. The event was included in the district administration's official work plan and received stable funding. Resolutions adopted at the conference began to serve as a foundation for drafting local regulatory acts and joint programs, thereby consolidating interagency interaction as a standing practice.

Case 3. Innovations in the Agricultural Sector: Digital Recordkeeping and Seeds Project

Farms in the district suffered low yields due to frequent droughts. Moreover, there was no precise and timely system for collecting yield data, which complicated planning and the evaluation of agricultural policy effectiveness.

As the first stage, a five-year statistical analysis was conducted, revealing a direct correlation between precipitation and cereal yields. Farmer surveys confirmed that drought-induced losses were the principal economic problem. Pain points: high dependence on weather conditions and data inaccuracies for managerial decision-making. KPIs were

established as: (1) average yield (centners/ha); (2) economic profitability of farms.

During the second stage, a complex solution for improving the resilience and productivity of the agricultural sector was implemented. This solution comprises a technological component (the implementation of a digital monitoring system to improve yield accounting) and an agronomic component (the dissemination of drought-resistant seed varieties). The target markets of farmers, agronomists, and local officials were given training in digital technology. Furthermore, farmers were provided with demonstration plots to see the benefits of the new seeds themselves.

At the third stage, the project was launched in several pilot farms. At the end of the season, KPI data were collected and analyzed. Comparison with a control group of farms using the old technology showed that, despite adverse weather conditions, yields in the pilot group increased by an average of 25%. Economic indicators likewise demonstrated significant improvement.

At the fourth stage, the pilot's demonstrated effectiveness became a powerful argument for district-wide dissemination. The program was expanded, and administrative levers were employed to incentivize adoption: access to drought-resistant seeds and participation in subsidy programs were tied to the mandatory introduction of the digital yield-accounting system.

Synthesis and Proof of the Framework's Universality

The analysis of the three cases enables a key conclusion: success in domains as disparate as bureaucratic procedures, social coordination, and agricultural technology was achieved not through three distinct skill sets but through the consistent application of a single universal managerial framework. This thesis is illustrated in the comparative table below.

Table 2. Cross-case analysis of the application of the Integrated Modernization Methodology

Stage of the framework	Case 1: Civil Registry Office modernization (e-Services)	Case 2: Organizing conferences (Social policy)	Case 3: Digitization and seeds (Agricultural sector)
1. Diagnostic audit	Problem: Long queues, errors. Tools: Time-and-motion studies, document analysis, surveys. KPI: Processing time, % of document errors, and citizen satisfaction.	Problem: Lack of interagency dialogue. Tools: In-depth interviews with managers. KPI: Number of joint initiatives; stakeholder awareness.	Problem: Low yield, inaccurate data. Tools: Statistical analysis, farmer surveys. KPI: Yield (centners/ha); profitability.
2. Design & engagement	Solution: Electronic archive and online appointment booking. Engagement: Co-design sessions with staff; citizen communication.	Solution: Format for an annual conference. Engagement: Establish an interagency organizing committee.	Solution: Digital monitoring plus new seed varieties. Engagement: Training workshops; demonstration plots.
3. Pilot implementation	Scale: One district registry office. Result: Efficiency +35–40%; errors reduced to zero.	Scale: Run the first conference. Result: 121 participants; resolutions adopted; secured government support.	Scale: Several farms. Result: Yield +25% vs. control group.

4. Scaling & institutionalization	Actions: Replicate the system across the region. Institutionalization: Adopt a new administrative regulation.	Actions: Include the conference in the annual planning cycle. Institutionalization: Resolutions become the basis for local programs.	Actions: Roll out the program across the district. Institutionalization: Digital recordkeeping becomes a standard for subsidy eligibility.
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As shown in the table, the logic of action at each stage was identical. In every case, reform commenced with deep, data-driven diagnosis to identify root causes rather than symptoms; it proceeded to the design of a human-centered solution with obligatory engagement of key stakeholders to secure support; its effectiveness was demonstrated via a pilot with measurement of specific, pre-defined KPIs; and, finally, successful experience was systematically scaled and institutionalized through formal regulations and standards.

It is precisely this sequence, Diagnose; Design and Engage; Pilot and Measure; Scale and Embed, that constitutes the essence of the authorial method. The cases demonstrate that the framework is not merely a theoretical construct but a working, reproducible, and universal instrument for executing successful local reforms in any social system.

ADAPTATION AND APPLICATION OF THE METHODOLOGY IN AN INTERNATIONAL CONTEXT (IN THE UNITED STATES)

Universality of Modernization Principles: From Local to Global

The effectiveness of the integrated modernization framework, proven across heterogeneous cases, stems from its grounding in fundamental, universal principles of contemporary management. These principles underpin successful public-sector reforms in most developed countries and are actively advanced by international organizations such as the Organisation for Economic Co-operation and Development (OECD, 2022). They include the following:

Data-Driven Decision-Making. The framework begins with a diagnostic audit stage, where data collection and analysis are obligatory prerequisites for problem identification. This approach aligns fully with the global trend toward analytics and evidence-based policy (DiMarket, 2025).

Value Co-creation. The design and engagement stage is guided by the principles of co-design, where the citizen (or client) plays a central role in the design and development of new service offerings. The co-design principle is central to contemporary public-sector innovation models promoted by the OECD and seeks to address real societal needs (Whicher & Crick, 2019).

Pilot operations may involve introducing a solution on a small scale, evaluating and refining it, and then scaling it up. Drawn from Agile project management, this iterative process reduces risk and improves the quality of the final product,

especially in the intrinsically unpredictable and complex public sector (Barata et al., 2018).

Systems Thinking. The framework treats any problem not as an isolated malfunction but as a manifestation of systemic dysfunction. Root Cause Analysis (RCA) and subsequent consolidation of changes at the regulatory level (institutionalization) are oriented toward transforming the system as a whole rather than fixing discrete parts (AHRQ, 2024).

These principles constitute the international gold standard for transforming public administration. Leading global consulting firms, Deloitte, McKinsey, EY, ground their work with the U.S. public sector in these ideas: digitalization, efficiency gains, client-centricity, and the deployment of analytical tools (DiMarket, 2025). Consequently, the proposed framework is not alien to the international context; on the contrary, it is a structured and practically applicable quintessence of best global practices. Its four-stage structure requires minimal adaptation when transferred to another country, since the logic problem, solution, test, and implementation is universal.

Potential Areas of Application in the United States: Hypothetical Scenarios

The conclusion of this chapter will extend and demonstrate the framework’s transferability to the United States through three hypothetical yet realistic scenarios based on existing conditions in the public and nonprofit sectors. These cases are analogous to the successful cases discussed in Chapter 2 and will show the framework’s transferability.

Scenario 1: Improving Department of Motor Vehicles (DMV) efficiency. In many U.S. states, DMVs are known for long queues, complex paperwork, and outdated IT systems, a classic instance of the gap between citizens’ expectations, shaped by digital services, and the reality of public services (Sutton et al., 2024). In this situation, the framework can be applied by analogy to the Civil Registry Office case.

Conduct Customer Journey Mapping to identify all touchpoints and bottlenecks as the diagnostic stage. Apply RCA to analyze causes of delays (e.g., repeated manual entry of the same data into different systems). KPIs: average wait time, application processing time, and number of visits per service. For the second stage, organize co-design sessions with vehicle owners and DMV employees to develop an intuitive online portal and mobile app that enable most operations to be performed remotely.

For piloting, launch a new online service (e.g., driver's license renewal) in one or several counties, followed by KPI data collection and user feedback. Phase in statewide deployment of the successful service with corresponding amendments to the regulatory acts governing DMV activities, an exemplary realization of the fourth stage.

Scenario 2: Homeless services for NPOs. Many NPOs and government entities provide homeless services in large U.S. metropolitan areas, including shelter, food, medical care, and employment assistance. Their efforts are often uncoordinated, leading to duplication for some clients and a complete lack of aid to others (Crawford & Campbell, 2025). This situation can be used to apply the framework by analogy in the conference case.

Diagnose the problem. Conduct a stakeholder analysis of all NPOs, city agencies, hospitals, and police departments. Interview representatives to identify overlaps and white spots in service provision. KPIs: percentage of the target population receiving comprehensive assistance; number of duplicative services. Next, design a unified coordination platform, either an IT solution (a shared client database with privacy safeguards) or an organizational structure (a regular interagency forum or council). After that, launch the platform in a single district to refine interaction and data-exchange mechanisms. Conclude with scaling and institutionalization: extend the successful coordination model citywide and cement data-sharing practices through Memoranda of Understanding (MoUs) among key organizations.

Scenario 3: Introducing sustainable agriculture practices in farmer cooperatives (e.g., California). California's agricultural sector, along with those of other western states, faces acute water scarcity and the need to adapt to climate change. There is strong demand for water-saving technologies and precision agriculture practices (DiMarket, 2025). By analogy with the agricultural case, the framework can be applied as follows.

Stage 1, Diagnosis: audit water use in cooperatives; collect data on yields and water use per hectare. KPIs: water use per unit of output; yields; net farm profit.

Stage 2, Design: package subsidies for installation of drip irrigation, digital soil-moisture sensors, and agronomic advisory services for use of sustainable practices on the irrigated area.

Stage 3, Piloting: implement the program on a small scale in a few cooperatives, and compare the cooperatives' KPIs with a control group's for economic and environmental impact.

Stage 4, Scaling: disseminate the program at the state level via grants and subsidies administered by the Department of Agriculture.

These three scenarios make it evident that the proposed four-stage framework is not merely a remedy for narrowly circumscribed local problems but a powerful and flexible

methodological instrument capable of structuring and steering modernization processes across diverse social and economic systems in any international context.

CONCLUSION

The integrated methodology for modernizing social systems presented herein addresses a central challenge of contemporary public administration, the gap between the need for systemic transformation and the lack of universal implementation instruments at the local level. The conducted study permits several fundamental conclusions.

The four-stage framework (Diagnosis, Design, Piloting, Scaling) is a universal and reproducible algorithm for managing local reforms. Its strength lies not in the novelty of individual components but in their systemic integration. It unites analytical rigor (RCA), creativity and human-centeredness (PSILabs methods), a scientific approach to testing (the pilot as experiment), and strategic vision (scaling and institutionalization) into a single, logically coherent process.

The framework's effectiveness has been empirically demonstrated via three heterogeneous cases. The successful modernization of a public service (Civil Registry Office), the construction of interagency collaboration (social policy), and the introduction of technological innovations (agricultural sector) through a single managerial approach confirm its universality. This proves that successful reforms are grounded not in narrowly specialized sectoral talent but in universal managerial competence in the systemic organization of change.

The methodology is internationally relevant and easily adaptable. It is based on fundamental management principles (data-driven approach, co-creation, iterativeness) that constitute the global standard for public-sector reform. Hypothetical scenarios in the U.S. context demonstrate that the framework can be successfully applied to address typical problems in any developed administrative system.

The practical significance of the developed methodology is that it furnishes leaders, project managers, and reformers at municipal, regional, and departmental levels with a ready, practically applicable, and intelligible algorithm for executing transformations. Instead of intuitive and risky attempts to reform from a blank slate, they gain a structured tool that enables: risk reduction, since data and solutions define problems are tested at small scale before full deployment; stakeholder support, since their engagement is a mandatory element of the second stage; proof of reform effectiveness via concrete, measurable indicators (KPIs), which is critical for cost justification and securing further support; and the sustainability of changes through the final stage of institutionalization, which embeds new practices in official regulations and organizational culture. Thus, the methodology is a practical action guide that can elevate the

quality and results of managerial activity in the public and social sectors.

The presented framework is a robust foundation that nonetheless has potential for further development and enrichment. Promising avenues include integrating behavioral economics instruments (behavioral insights). At the design stage, nudges can be used more purposefully to stimulate desired behavior among citizens and employees. One option is to use more advanced impact evaluation methods. More accurate estimates of the net effect of an intervention can be obtained with quasi-experimental methods (difference-in-differences) during the piloting and scale-up phase of a large reform. In addition, the framework could be used to study other major social systems, such as education (e.g., school curricula) and healthcare (e.g., outpatient clinics), to assess the generalizability of the methodology and, hopefully, demonstrate the framework's effectiveness across other social systems. The future development and dissemination of this methodology could benefit the flexibility and efficiency of social systems in meeting the social needs and challenges of the twenty-first century.

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