The Role of Strategic Management in the Modernization of Public Administration in Ukraine

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Abstract

The current paper is aimed at researching the role and impact of strategic management in the public administration reforming process in Ukraine. Specifically, at how strategic planning proficiency, the effectiveness of decision-making, and the efficiency in resource allocation influence the success of modernization. Logistic regression employed on survey data from 230 public administration professionals shows that each of the strategic management practices in the sphere is positively significantly correlated with the success of modernization. Strategic planning proficiency registered an odds ratio of 1.86, which practically means a twofold level of the possibility of modernization success with each raising unit. Such indicators as the effectiveness of decision-making and efficiency of resource allocation are reflected by odds ratios of 1.63 and 1.73, which are quite speaking and point to the considerable importance of both these criteria in successful outcomes. The paper further explores the socio-demographic factors and their effect, which is positive for younger age and higher levels of education, while increase in professional experience do not influence the outcomes significantly. Of all the strategic management practices in this sphere, efficient strategic management in public administration is necessary for reforms to send a signal to some specific policy areas and to its professional development.

Keywords: Strategic Management, Public Administration, Logistic Regression, Digitalization in the Public Sector, Socio-Demographic Factors, Modernization of State Administration

JEL Codes: H83, M12, P30

Introduction

In the last years, a lot of development related to public administration took place in Ukraine: comprehensive reforms in the system of public administration and the civil service, improvement of the regulatory framework, broadening of rights and powers of local self-governments, approximation of the legislation to the level of the European Union, and transformation of civil service according to European benchmarks. An attempt by the Ukrainian state to go through the consequences of vague

public policy and unpredictable development over the decades is at hand.

Since 2014, landmark events have largely influenced public administration in Ukraine; specifically, the election of a new president, snap parliamentary elections, the creation of new civil and military administrations, and implementation of about 60 systemic reforms for nation modernization in compliance with world tendencies (Mendel, 2022; Zelinska, 2021). Particular importance belongs to public administration reform, which is a necessary precondition for the competitiveness of the country at the world level.

Public administration in a modern timeUkraine has passed through various challenges in the journey of reform and modernization. This transformation is most important, as it is expected to improve governance and bring the practices of administration in line with international standards, which is very important for Ukraine to be closer to the European Union and some other bodies of global significance (Mohilevskyi et al., 2021). In this regard, strategic management is going to be the backbone that will guide through the reforms efficiently and effectively. The Ukrainian government has to modernize public administration; otherwise, there really is no other option. This government has, for very long, been weak and untransparent, and prone to corruption (Rice et al., 2020). The public has lost its faith from such a traditional government, and, as a result, the economic growth and innovation are also inhibited.

Modernization, therefore, aims to address these legacies through the installation of governance mechanisms that are more effective, responsive, and transparent (Irani et al., 2023). Strategic management, when applied in the context of public administration, is the process of systemic problem diagnosis, decision-making, and action that leads to the greatest possible realization of a set of long-term goals (Alkhodary, 2023).

It is a process in continuous evolution. It requires flexible thinking, so it can adjust to the complex and ever-changing demand of people and environment. If and only if strategic management practices help mold the effectiveness, sustainability, and relevance of modernization in Ukraine to go beyond the concept of being a means toward its goals

and objectives but being crucial drivers in this process, more importantly, it should be noted that these practices must be devised so that the objectives are set, choices based on knowledge are made, and resources are used wisely in the successful implementation of these reforms.

Therefore, strategic planning in Ukraine has played a key role in identifying the priority areas: digital governance, simplification of regulation, and improvement of public service. Making decisions is the alternatives to pick among the feasible courses of action concerning the association to the welfare of the public and future perspectives. In conjunction with the situation in Ukraine, the framework of decision-making has been redefined and a component of stakeholder engagement included; hence creating rich decisions among the people with various perspectives. Strategic decisions include resource and process management and monitoring.

In the context of Ukraine, the problem is often related to the uniform implementation of decisions within different administrative layers and business levels, which is streamlined and maximized by strategic management. It is necessary to regularly evaluate the effectiveness of the decisions taken and to provide feedback in the subsequent planning cycles of the proposed strategies. This is done to identify successful and correction-requiring practices. The influence of strategic management on public administration modernization and its relationship with socio-demographic and organizational variables explained in our work. We have also analyzed awareness of the composition of the workforce in terms of basic education, age group, and workforce experience influences the implementation of strategic management and its success.

The variable of social components and labor force age, educational background, and professional experience impacts the performance and implementation of strategic management practices. In addition, organizational culture in public institutions greatly influences the acceptance and implementation of strategies. In Ukraine, only a culture that is ready for change and innovation can ensure the effective development of strategic management ideas.

This research systematically investigates the influence of strategic management on public administration

modernization in Ukraine. We have employed sociodemographic and organizational variables in the research to form a full understanding of the factors affecting or assisting effective change. This is not only useful in identifying strengths or weaknesses in the ongoing practices but also gives an outlook on how strategic management can be optimized to support ongoing reforms in Ukraine's public sector.

Literature Review

The review represents various academic sources regarding the role of strategic management in the modernization of public administration, specifically in transitional countries such as Ukraine. The general tendencies of public administration modernization will be considered along with world practice, which allow revealing convergence and divergence and hence shedding light on the specifics of challenges and opportunities for Ukraine.

In addition, it investigates into the influence of sociodemographic factors on the implementation and outcomes of these management practices. Such an all-encompassing approach does not just highlight the critical nature of strategic management in administrative development but also forms a platform for understanding how these practices can be situated to promote good governance in contexts mired in acute historical and bureaucratic complexities.

Strategic Management in Public Administration

Strategic management in public administration is defined as the science of elaborating an effective course of action for the government in the face of governmental complexity (Ongaro& Ferlie, 2020; Shah and Shah, 2023). Strategic management is one way to make the works of the government better. The theoretical premise of strategic management in this sphere is based on the corporate approach but has been modified to the specific and different needs and challenges of public administration (Ongaro et al., 2021). The adaptation was to identify public value as the core focus in public sector strategy, in lieu of the profit-related motives of private organizations. This has crystallized in various theoretical frames, each underlining planning, decision-making, and resource allocation tailor-

made to public interest.

Strategic planning in public administration requires that objectives be long-term ones, derived from an analysis of internal potentials, and an analysis of available opportunities (Brunetti et al., 2020). The ultimate aim is to place public organizations in a state of being able to respond to socio-economic changes. The best example would be the reform of the Estonian government after the collapse of the Soviet Union (Vakulenko& Mattei, 2023). The Estonian government carried out a vast range of strategic plans, including e-government that achieved high levels of transparency and public access to services (Espinosa& Pino, 2024).

This reform has made Estonia one of the most digitally advanced societies in the world which once again clearly shows that strategic planning with the use of technology will help in the provision of public services (Shah and Shah, 2024). The following examples can also be considered positive practices. For example, Malachynska et al. (2022) studies the influence of public administration in the field of perinatal care and health care and its effect on demographic dynamics. Applying the mixed-method approach, it additionally proves negative dynamics of demography and thus reasonably supports the need for more and better regionalization and decentralization of perinatal care. It promotes the establishment of III-level perinatal centers, state-guaranteed standards of medical care, and certain models of regional care as a reason for better maternal and child health indicators.

Public administration is complicated because it optimizes contradicting interests of a plethora of stakeholders; therefore, the process of decision-making becomes particularly challenging. The best decision-making process in public administration in this case should be inclusive, transparent, and evidence-based. For example, the city of Calgary in Canada used the participatory budget process as part of its strategic management. This strategy allowed citizens to actively participate in the spending of the municipality and increased accountability and satisfaction of the public in relation to local governance (Levenda et al., 2020).

Other aspects of public administration strategic management include resource allocation. It is simply the prudent distribution of scarce resources to realize the best possible results or outcomes in the provision of services (Roberts& Hamilton Edwards, 2023). In the health sector, this has been witnessed in the implementation of the 1990 health reforms in New Zealand, where performance-based models of resource allocation bring about resource allocation based on the actual delivery of a specified set of health outcomes; therefore, efficiency and innovation in public health institutions are fostered (Malmmose, 2024).

Furthermore Volodymyrovych et al. (2021) studies the salient managerial issues in the pharmaceutical healthcare industry in Ukraine. Through double-dimensional behavioral and non-behavioral factor analysis using the records of organizations like WHO and FDA, the research points out giant problems in pricing, medical expenses, and diseasing consumer/physician behavior. It points out the cost for better managerial practices in the industry for increasing the efficiency of the industry and, in the end, the healthcare of the general public.

The meaning of the modern strategic management of public administration in its role for the modernization process in Ukraine is given special importance by authors such as Matyjas-Lysakowska and Kyselova (2023). Among other things, such transformation toward remote work and the changed hierarchical dynamic support the realization of this great importance in the course of these transformations. This is going to make strategic management important toward the balancing of flexibility and control, ensuring that modernization adds effectiveness and efficiency but does not create structures unsuitable for the new model of public administration.

Each of the elements—strategic planning, decision-making, and resource allocation—plays a role in the modernization of public administration (Sari, 2023). Viewed across the spectrum of the concrete international experience of the case studies included in this edition, it is undoubtedly evident that, even if the contexts are not uniform, the main elements of strategic management will be nonetheless determinant in quality, responsive, and responsible public administration. These not only act as

yardsticks but also are excellent learning experiences for countries like Ukraine, which are in the process of reforming their public sector to meet contemporary and modern challenges and practices.

Modernization of Public Administration

Modernization of public administration is one of the most prominent issues in governance studies, demonstrating a worldwide tendency in government structures that are more flexible, transparent, and accountable (Meuleman, 2021). This is especially true for such young governments as post-Soviet ones: their changing of governance style, originally highly centralized bureaucratic, to decentralized and people-oriented processes is quite important (Kuldosheva, 2022). It is in this light that the processes are important, according to the improvement in service delivery, and closer integration of such countries into the global community by international standards of governance.

Public administration modernization has been a real challenge for Ukraine since gaining independence in 1991 (Khadzhyradieva et al., 2020a; Vavreniuk et al., 2021). Implementation of a great number of reforms, aimed at dismantling omnipresent impervious administrative practices inherited from the Soviet period and switching to new mechanisms that will foster efficiency and trust in the public domain, was the matter of necessity.

One of such flagship projects was the introduction of the 'Prozorro' system—for the first time, an e-procurement system that makes all public procurement transparent, and all contracts and transactions are open for public control on the Internet (Khadzhyradieva et al., 2020b; Mavidis& Folinas, 2022). On the basis of experience from this system, Ukraine was recognized by some international organizations as a country with the lowest level of corruption in the public procurement area, and it influenced other reforms in the sector (Baumane-Vitolina& Osypenko, 2020).

In comparative terms, the Baltic states, including Estonia, Latvia, and Lithuania, have also moved fast in terms of public administration. Estonia, especially, is often cited as the success story in e-governance (Himma-Kadakas& Kõuts-Klemm, 2023). After gaining its independence, the

government of Estonia launched immense reforms for building a digital government. The e-Estonia project, including such services as e-voting, e-records of health, and e-residence, has increased the speed of government operations to a significant level and improved the quality of citizen services delivered by the state (Bharosa et al., 2020). For sure, this digital leap has enhanced not only service delivery but also the image of Estonia in the world.

Georgia put into place radical reforms in public administration after the Rose Revolution in 2003 to tame corruption in the country, enhance efficiency and effectiveness in the public sector and, in general, to enhance service delivery (Burkadze, 2022). The administrative procedures in Georgia were radically simplified, and the numbers in the public service reduced while at the systems to ensure transparency through which the public could monitor the activities of the government were put in place. In this regard, the world recognized Georgia with the reforms in this country being regarded as one of the fastest in the arena of public administration (Muhhina, 2020).

These case countries bring out a critical element of public administration modernization the fact that reform strategies have to be context-specific. That is, the goals of attaining higher transparency, efficiency, and accountability in the public service may be generalizable, but the roads that lead to them greatly differ depending on historical, cultural, and political contexts. The progress made by Estonia and Georgia has excellent lessons on technological investments and administrative simplicity, while ongoing woes of Ukraine only serve to remind how difficult it is to unravel the threads of a deeply entrenched system.

Socio-Demographic Factors in Governance

Socio-demographic factors are so critical to the successful adaptation and translation implacability of strategic management practices in the public sector. These include age, educational level, and professional experience, which will affect the people's perspectives and capacities in governance, to affect in turn how reform initiatives are to be perceived and implemented (Warde, 2022; Shah & Asghar, 2023). Age is one socio-demographic variable that has a great impact on adaptability to new governance practices

(Bocciardi et al., 2017). The newness of young public officials and workers, who belong to the digital age, will definitely be inclined to open and welcome the induction and adjustment to new technologies in various innovative administrative practice (Visvizi et al., 2022).

This is a generational effect that can be observed, for example, from the government sector's ongoing digitalization agenda. In regard to the impact of age on implementation, such as e-government and other types of digital delivery systems, generally the younger staff will be the champions of such implementations. It's not easy for old employees to participate in new, untested procedures, such as those driven by changes in governance. The generational aspect of this gap in adaptability and acceptance of technologies is a variable that must be managed well, from both practices, to ensure smooth transitions in governance (Budhwar et al., 2023).

According to Irfan et al. (2021) critical variable that ensures the success of using strategic management in implementing its workforce in the public sector is the level of education. Basically, it provides latitude for analytical skills obtainable from such higher-level education systems, exposure to the wielders of the contemporary management and governance models, among others. These countries consistently register high on global governance indices in part because they have an educated and trained public workforce that can use advanced management strategies to improve public sector performance and accountability.

Kryvoshein et al. (2022) strongly argue that innovations in the educational process should be implemented effectively, considering these elements vital for continuous communication between the student and teacher beyond the classroom. It feels like multimedia technologies have changed the opportunities for foreign students in a positive direction, which helps to stimulate better understanding and secure retention of the learning material. Orhani (2023) established that, as presented in the previous studies, elearning opens the door to great prospects for research and in-depth learning processes through electronic resources, while m-learning creates a favor for an active learning process and personalization through mobile technology.

It is also seen that strategic management works well to the extent that people have professional experience. People with professional experience have a good grasp of the subtleties of governance, which can only be acquired through service over a period of years and is in the highest sense invaluable to enhance strategic changes of a very complex nature, which requires a very fine understanding of the system of bureaucracy.

Sayed (2023) further elaborates those cultural influences may inculcate different approaches in managing projects in global business development, therefore, there is a need to come up with effective ways of integrating culturally diverse teams. He has put a team of 27 experts across 14 companies to evolve 11 key project management approaches to cultural diversity. They include cultural awareness assessment, adaptive leadership, and inclusive decision-making. This research depicts greater creativity, inclusivity, and cultural sensitivity in the field of project management. Use of the competency framework in the name of elementary, middle, and advanced classifications. The time a project manager needs when he or she gets an opportunity to manage a multicultural project will be required—it is a structured approach. The results that it provides will be critical to integration when coming up with and managing an effective and culturally diverse team. Realizing the cultural differences and its leverage points is the key to its necessity.

However, it is also implied that this experience should be made up with training and exposure to new ways so that there is no stagnation. For example, the formula in Singapore, by which its highest public servants are rotated occasionally in different functions, yields great knowledge about the role of different sectors, which has strengthened their strategic thinking and planning capabilities (Wynen et al., 2022). This also enriches the professional experience of its bureaucrats, while each department is also assured of new thinking, with consequences spilling over for innovative practices in the entire government.

Hypotheses

H1: The level of strategic management implementational level is positively high related to the successful

modernization of public administration.

H2: Socio-demographic variables, like age, level of education, and professional experience, matter in the way strategic management practices is perceived and manifested within the public administration domain.

Methodology

We have used a structured methodology focused on data collection from a broad set of professionals involved in public administration. We selected 230 respondents purposefully so that the sample is wide and representative of all levels of the public administration system. This is done to cater to the front-line staff, mid-level managers, and senior executives, and therefore should reflect a large degree of experience and opinions with regard to the modernization currently underway.

The major tool for primary data collection was a questionnaire developed with high thoroughness in order to capture elaborative insights on the basis of the broad literature review carried out. The format and content of the questionnaire have been developed to measure some key aspects: the current practices of strategic management within the respondents' respective departments or agencies, the envisioned outcomes of these modernization efforts, and a number of sociodemographic characteristics that might influence these perceptions and practices. The questions are designed to bring forth both the quantitative and qualitative aspects of strategic management practices in relation to the efficiency of planning and implementation processes, the effectiveness of the decisions made, and the efficiency of resource allocation.

Each section of the questionnaire will pay attention to the hypothesized effects of strategic management on modernization in order not to leave the data collected meaningless for the purposes of testing our research hypotheses in a comprehensive manner. For example, the sociodemographic section may contain such questions as age, educational background, professional experience, and position within the organization, so that a comprehensive outlook can be achieved as to how these factors can be related to different strategic management outcomes. Our research analyzed, based on a structured and detailed

methodological approach, the availability of substantial empirical insights toward the effectiveness of strategic management in creating modernization of public administration in the country, which is a transitional context, like Ukraine.

Variables

We have considered the explanatory value of the successful modernization of public administration in Ukraine within a set of variables by analyzing a set of strategic management practices. These set of variables are then divided into dependent and independent variables that will serve the purposes of the logistic regression in a defined manner. The dependent variables include a Successful Modernization, which is the outcome variable of this study with a binary definition: '0' shows failing situation in modernization, while '1' shows successful modernization. Success, in this context, is based on the level to which the implementation of strategic management practices has generated efficiency, transparency, and service delivery in public administration. Independent variables include Strategic Planning Proficiency, which is the ability and effectiveness in the performance of strategic planning processes by the public administration body. This comprises goal clarity, goal linkage with long-term public sector goals, and adaptability to changes in plans. High proficiency in the public administration body is expected to impact positive success in the modernization effort.

Decision Effectiveness reviews how effectively decisions are made by the administration. It particularly looks at the timeliness of making decisions, the inclusiveness of different perspectives in the decisions, and the use of data and evidence in making these decisions. Effective decision-making is posited as being a critical success factor in modernization because it will enable the adoption of strategic initiatives that are best placed to address the needs and challenges of the public sector.

Resource Allocation Efficiency looks at how efficiently resources, particularly people and finances, are effectively managed and allocated towards the achievement of strategic goals. Efficiency in this context stands for doing the right things with minimal waste of resources to attain

the best possible outcomes, hence ensuring that all scarce resources are used to capacity in areas that mean the most for modernization. The age of the respondent as part of the socio-demographic variable is used to test how differences in different age brackets are perceived in terms of modernization. Age come in as a factor that affects their attitudes toward change and accepting new practices since younger people may be more open to new approaches against their counterparts.

The variable Education Level identifies the maximum educational level reached by the respondent. Education level is another important variable in that it basically defines the respondent's potential to understand and possibly implement most or all of the highly sophisticated and context-responsive strategic management blueprints. A correspondingly higher education level would probably be associated with a deeper and more skillful application of strategic management principles. Years of Professional Experience records the period of time respondents have been in the public management profession. Professional experience is an important variable in that, in most cases, it conditions attitudes toward modernization and strategic management: experienced people may have deeper views on systemic change and modernization, or they may be more resistant to the shift from traditional practices.

Statistical Analysis

To rigorously analyze the ways in which strategic management practices and socio-demographic variables influence the odds of successful modernization in public administration in Ukraine, our study utilizes logistic regression. This technique is most appropriate for accomplishing the objectives of our research since it makes it possible to test the probability of a binary result—success or failure of modernization—based on a set of predictor variables. Logistic regression model estimates coefficients given for each of these independent variables to tell us how the log-odds of the outcome variable change for a one-unit increase in the predictor variable, controlling for all other variables. Each variable was selected based on theoretical considerations of how they might affect the modernization process. The logistic regression model helps quantify the

magnitude and direction of these influences.

We specified the logistic regression model by including the dependent variable (successful modernization) and all the independent variables listed. This model helps identify which factors are statistically significant predictors of successful modernization. Using statistical software, we fit the logistic regression model to our data of 230 respondents. The software estimates coefficients of the independent variables, which are used to determine how the odds of successful modernization are affected by each predictor. These coefficients are interpreted in terms of odds ratios.

An odds ratio greater than 1 indicates that as the predictor increases, the odds of successful modernization increase. If the odds ratio is less than 1, it means that the likelihood of a successful modernization decreases as the predictor increases. For the purpose of post-model evaluation, we have examined the model's fit to the data using any one of

several goodness-of-fit tests. The goal of this logistic regression analysis is to shed light on the relationship between demographics, strategic management practices, and the effectiveness of modernization efforts in Ukraine's public administration. This method not only makes our analysis more scientifically sound, but it also produces useful suggestions for lawmakers seeking to execute fruitful reforms.

Results

A comprehensive analysis was conducted using descriptive statistics in relation to all of the variables that were collected in table 1. This analysis shed light on the distribution and main trends of the data that was collected from 230 respondents employed in Ukraine's public administration sector. The following table provides a summary of the means, standard deviations, and ranges of continuous and categorical variables considered in this study.

Table 1: Descriptive Statistics

Variable	Mean (or Proportion)	Standard Deviation	Range	
Successful Modernization	0.48	-	0 (No), 1 (Yes)	
Strategic Planning Proficiency	3.8	0.89	1 (Low) - 5 (High)	
Decision-Making Effectiveness	3.5	0.75	1 (Low) - 5 (High)	
Resource Allocation Efficiency	3.3	0.68	1 (Low) - 5 (High)	
Age	42	10	25 - 65	
Education Level	2.4	0.49	1 (High School) - 3 (Postgraduate)	
Years of Professional Experience	17	8	1 - 40	

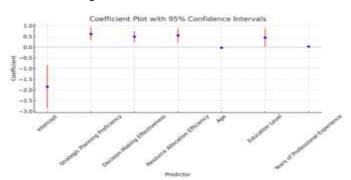
Source: authors' calculations

The logistic regression model has helped us to probe whether strategic management practices along with sociodemographic variables can influence the likelihood of successful modernization. The obtained results are being presented in the table 2, which includes the Wald test statistics alongside the odds ratio regarding each predictor. Important predictors among described success factors of modernization are identified after running regression analysis. With the odds ratio for Strategic Planning Proficiency standing at 1.86, it can be interpreted that whenever a single unit is added to proficiency, the rate of success is enhanced by nearly two times. Similarly,

Decision-Making Effectiveness and Resource Allocation Efficiency are also very important in the sense of a contribution to success, with odds ratios of 1.63 and 1.73, respectively. Interestingly, Age has a negative impact on the likelihood of successful modernization, with the odds decreasing by 2% for each additional year. This suggests that younger employees may be more adaptable or responsive to modernization efforts. Another contributing factor is Education Level, where for each higher level of education achieved, the odds of success are enhanced by 57%.

Nonetheless, since it had a positive coefficient, the variable of years of professional experience did not demonstrate statistical significance: the longer the duration of service did not provide higher chances for modernization. The findings can be considered highly statistically significant, and therefore they can be used to help strongly substantiate eligibility for strategic areas of training and development in public administration in Ukraine, which could boost success rates in modernization initiatives.

Figure 1: Coefficient Plot with 95 percent confidence Intervals



The Coefficient Plot in figure 1 summarizes the estimated coefficients of the logistic regression model in relation to the predictors and their 95% confidence intervals. For variables Strategic Planning Proficiency, Decision-Making Effectiveness, and Resource Allocation Efficiency: plot shows that these variables have significant positive coefficients, as their confidence intervals do not include zero. This visual confirmation highlights the importance of these strategic management practices in increasing the likelihood of successful modernization. The coefficient for age is negative, with the confidence interval slightly below zero, indicating that older employees are less likely to contribute to successful modernization. This aligns with our findings that younger employees might be more adaptable to modernization efforts. The positive coefficient for education level, with its confidence interval not including zero, signifies that higher education levels significantly increase the odds of successful modernization.

Table 2: Logistic Regression Analysis

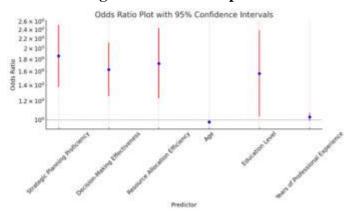
Predictor	Coefficient	Std. Error	Wald Statistic	p-value	Odds Ratio	95% Confidence Interval
Intercept	-1.85	0.52	12.67	0.0004	-	(-2.87, -0.83)
Strategic Planning Proficiency	0.62	0.15	16.89	< 0.0001	1.86	(0.32, 0.92)
Decision-Making Effectiveness	0.49	0.13	14.22	0.0002	1.63	(0.23, 0.75)
Resource Allocation Efficiency	0.55	0.17	10.54	0.0012	1.73	(0.21, 0.89)
Age	-0.02	0.01	4.57	0.0325	0.98	(-0.04, 0.00)
Education Level	0.45	0.21	4.59	0.0321	1.57	(0.03, 0.87)
Years of Professional Experience	0.03	0.02	2.25	0.133	1.03	(-0.01, 0.07)

Source: authors'calculation

This large negative intercept means that the baseline probability of successful modernization is very low with all predictors at their reference levels, which in the case of continuous variables are often zero. The chances of this success in modernization with a p-value of less than 0.0001 are significantly increased, having a coefficient of 0.32. Similarly, 0.92 is away from zero as its confidence interval is considered away from zero.

The impact of both of the variables, that is, Decision-Making Effectiveness and Resource Allocation Efficiency, is positive on the success of modernization; the confidence intervals are well above zero and the p-values are high, which means the positive impact is rather confirmed to be strong. Age had a small but statistically significant negative effect, which means that an increase in age reduces the chance of successful modernization. The level of Education was positively related to the level of significance, which is very close to a borderline value, so to say, higher education levels have a more beneficial impact on the chances for successful modernization.

Figure 2: Odds ratio plot



The Odds Ratio Plot Figure 2 shows the odds ratios of all predictors, excluding the intercept, providing an intuitive understanding of the effect size of each variable. With an odds ratio of 1.86 and a confidence interval well above one, this plot highlights that high proficiency in strategic planning almost doubles the odds of successful modernization. Decision-Making Effectiveness and Resource Allocation Efficiency show significant positive odds ratios (1.63 and 1.73, respectively), reinforcing their critical roles in modernization efforts. The odds ratio of

0.98, with a confidence interval below one, suggests a slight decrease in the likelihood of successful modernization with increasing age.

The odds ratio of 1.57 indicates that higher education levels substantially enhance the likelihood of successful modernization, with a confidence interval clearly above one. The odds ratio close to one, with a confidence interval crossing one, visualizes the non-significance of this variable, supporting the conclusion that the quantity of experience alone does not significantly impact modernization success.

Our work quantitatively show that high strategic planning proficiency significantly increases the likelihood of successful reform. This sets a quantitative benchmark at an odds ratio, implying a clear benchmark for improvement around planning processes to inform policy makers in Ukraine. Effective decision-making also contributes significantly to successful reform. This is in some accordance with the work focusing on Georgia, where post-Rose Revolution reforms in the decision-making arena increased efficiency in public administration tremendously (Jibladze, 2017). Our study developed a step further to provide a specific quantification of the impact of decision-making effectiveness within the Ukrainian context in order to enable an understanding to inform the design of precise training and development programs.

Efficient resource allocation was indicated to have a significant relationship to the success of reform outcomes. This finding is in line with global studies that find a relationship between resource allocation efficiency and enjoyment of higher performance from the public sector, especially in resource-constrained settings (Ali & Anwar, 2021; Shah et al., 2023). More conclusively, in our context, this makes a specific linkage of post-Soviet resource efficiency to success in modernization and suggests even marginal improvements in the allocation of resources could lead to a significant impact on the outcomes from reform.

Finally, we find that younger age negatively influences the likelihood of successful modernization. This runs contrary to other studies that have suggested that a mix of young and experienced staff would lead to better adaptation to new reforms, but it is more in line with previous research that

has found that younger public servants may be more open, on the whole, to new technologies and the new reforms (Behie et al., 2023). This places a particularly interesting negative influence in our study, pointing out a potential improved generational gap in attitudes toward modernization in Ukraine—unique historical or cultural influences. It has been proven that the probability of the successful modernization of countries rises with higher levels of education (Inkeles, 2022).

This goes for both developed and for developing countries—the more highly educated a person is, the more innovative and adapted the performance of public service roles becomes. Our analysis makes concrete the impact of education on modernizing efforts in Ukraine, specifying insights into strategies of recruitment and continuous professional development. The number of years of experience variable had an insignificant effect on the likelihood of being successful in modernization. This is somewhat contrary to most of the literature, which very often has extensive professional experience as a driver of reform or strategic change. However, it was in line with the recent studies to suggest that experience alone may not be effective without continuous learning. Non-significance in the Ukrainian context may hint at the necessity of caring about the quality rather than quantity of experience, especially in fast and comprehensive reform environments.

Figure 3: Strategic Planning Proficiency

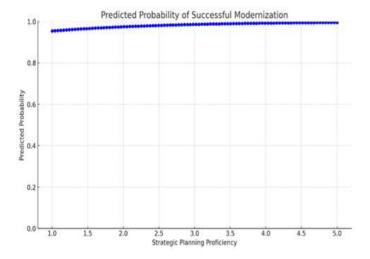


Figure 3 illustrates the change in the predicted probability of the success of modernization for different levels of Strategic Planning Proficiency, with all other predictor variables set at their means. This plot reveals a distinctly increasing trend and, consequently, high Strategic Planning Proficiency is associated with high levels of the predicted probability of success in modernization. This practical implication illustrates that improvements in strategic planning can significantly improve results in modernization.

Discussion

It is understood that strategic management practice, which is strategic planning proficiency, effective decisionmaking, and efficient allocation of resources within an organization, has a key role to play in the effective modernization of public administration. Strong support for the research hypotheses was given by the results of the logistic regression analysis, showing a significant positive relationship between the effectiveness of strategic planning and modernization outputs. This confirms our first hypothesis and underlines the pivotal role of wellarticulated and flexible strategic plans in public administration reforms. The goals and roadmaps laid out through strategic planning underpin all activities of the reform; in turn, they guide not only the current activities of the reform but also adaptivity measures that must be utilized for response to changing challenges and opportunities. Practically, having such high capacity in strategic planning means that public agencies are better.

Significant, effective decision-making should thus be timely, informed, and inclusive — data-informed input and insight about a host of stakeholders, thus ensuring decisions are empiric-based and, at the same time, are able to display diverse interests and needs within the community. This is an essential finding not only because it places additional value on modernization as a way to proceed from performance improvement to reform legitimacy. Comprehensive, well-analyzed, and widely-consulted decisions are more likely to lead to successful results, as they will have a better fit with the prevailing conditions in reality and will be accepted by those who are to implement them. This is the

exact finding corresponding to the aforesaid results in the contemporary governance literature in which participatory and evidence-based processes of decision-making have been identified as being of paramount importance while considering the levers of change associated with the modernization efforts within the public sector (Otia& Bracci, 2022; Di Giulio& Vecchi, 2021).

The positive association found between the efficiency of resource allocation and success in modernization supports our third hypothesis. Efficient resource utilization will ensure effective use of the limited funds of the public agency, other resources, and personnel (Alavi& Aghakhani, 2023). And it is the most important in environments of Ukraine, which has public resources overstrained because of fiscal constraints with high accountability and result demands characterizing the public sector. When resource allocation is efficient, a great deal of the desired reforms can be affected without wastage or redundancy, ensuring that the impact of each unit of expenditure of resources is maximized. The fact that this hypothesis emerged as statistically significant confirms the general theory in the literature that strategic resource management is at the core of best practice in public administration, making sure that reforms are not only well designed but also practically feasible.

Our results are consistent with a larger literature on the reform of public administration in post-Soviet states, where numerous similar studies have confirmed the positive role of strategic management. For example, the reforms in the Baltic states revealed that strategic management can indeed help lead to much better governance, similar to that observed in the Ukrainian case in our study (Miskimmon& O'loughlin, 2021; Wrange et al., 2024).

However, our study goes one step further and quantifies the specific impacts of different dimensions of strategic management, generating results of immediate policy relevance. Moreover, the critical importance of strategic management for successful modernization of public administration has been noted in many more countries around the world, starting from developing countries undergoing rapid administrative change and ending with mature developed countries willing to optimize their

governance models. Our results add to this literature by confirming that these practices are of universal nature and by identifying the unique application of such practices to the challenges facing Ukraine.

We have further explored the influence of sociodemographic factors on the effectiveness of strategic management practices. Particularly, the interesting influence of age and education among public administration employees—the negative effect of age on the success of modernization. This proves there is a generational gap in the receptiveness of the new reforms, where perhaps the youngest generation of employees is more adaptable to changes. This is in consistency with the view revealed in literature that, in general, younger generations at work are better in adopting and using modern innovations, which is essential in the case of modernizing reforms that quite often deal with new technologies and new methodologies. This means the strategic focus has to be on how to harness the younger public employees and possibly how change management practices ought to be adapted across the generational divide.

Modernization was more successful where the educational level was higher, suggesting that well-trained employees are, on the whole, better prepared to handle the complexity of the strategic management process in public administration. This further affirms earlier studies advocating for continuous professional development and higher educational standards in the public sector. These findings support other studies from around the world, emphasizing that continuous professional development equips public servants with the necessary skills to navigate complex strategic landscapes (Parinasan et al., 2024).

One such potential means of enhancing the ability of the public sector to engage in strategic management in Ukraine is through the development of educational programs and through professional development opportunities. It is of interest to note that success in modernization was not significantly related to the number of years of professional experience in this study. This could point to the fact that experience without a more trained approach to new methods of strategy would not be sufficient. This would then echo a growing body of research that shows how

important it is to keep on learning and adapting. This is contrary to conventional wisdom, which suggests that such new learning becomes less important later in life. It also points to the need for further and future continuing education to assist experienced professionals to bring their skills up to date, within newer frameworks for strategic management.

The role and importance of strategic management in modernizing public administration have been well documented in a variety of political and geographic contexts. Our findings contribute to this rich literature by providing empirical evidence from Ukraine, a post-Soviet state with its own transitional challenges. All the Baltic countries, such as Latvia, Lithuania, and Estonia, have considerably enhanced the responsiveness and effectiveness of their public administrations through the reforms made in areas which relate to strategic management (Profiroiu et al., 2023).

Estonia's digital transformation, for instance, is often cited as a benchmark in public sector modernization. Our findings mirror these positive impacts in Ukraine, demonstrating similar benefits from strategic management practices. The quantification of impacts in our study, such as the significant coefficients in logistic regression analysis for strategic planning proficiency and decision-making effectiveness, provides specific metrics that policymakers can target for similar reforms.

Globally, strategic management has been integral to successful administrative reforms in both developing and developed countries. In countries like Singapore and South Korea, strategic management initiatives have led to significant improvements in public service delivery. By aligning our findings with these global examples, the study underscores the universal applicability of strategic management principles while highlighting specific adaptations in the Ukrainian context, such as the need for tailored strategic planning and resource allocation models to address local fiscal and bureaucratic challenges.

Conclusion

The data provided sufficient evidence for the role of strategic management in the modernization of public administration in Ukraine and led to several clear inferences that confirm and expand understanding in the given direction. The results clearly underline that the level of strategic planning skills, efficiency in resource allocation, and the level of effectiveness in decision-making are the crucial success determinants of the modernization process. This implies that it is important to reform the overall spectrum and well-coordinated strategic management practices. That should be followed to overcome the complexities involved in public administration. Socio-demographic factors like age and education are also found to modify the outcomes such as these.

The implication again is that younger and higher-educated employees are more proactive in their modernization efforts, with the implications here that the policies targeted at them prove especially effective. The unexpected, though, rather small influence of professional experience on the success of modernization implies that it might be needed to revise the value and exploitation of experience within the public sector.

Given these findings, there is an urgent need to develop strategic management capabilities for policymakers and practitioners in public administration in Ukraine, as well as in similar domains. This might take the form of tailored training interventions to build strategic planning, decision-making, and resource managers at different tiers of government. The creation of a learning and adaptive culture will even contribute further to the end result of strategic management practices.

It is important that future research in this area takes cognizance of other variables apart from these taken into consideration in this research that could be influencing the success of modernizing public administration. This includes technological skills, organizational culture, and the external political and economic environment. Comparative research with other post-Soviet states or with very different administrative systems may indeed shed more light on the universality and transferability of strategic management approaches identified within this research.

Limitations

While our study highlights the above, it is certainly not without limitations on its own. The cross-sectional nature of the data, drawn upon questionnaires, is inherently likely to carry the biases attached to the perceptions of respondents and their willingness to report accurately sensitive issues, such as organizational effectiveness. In addition, given the cross-sectional design, it is not possible to observe changes over time; some changes in strategic management practices may be critical to the understanding of long-term effects. A longitudinal design or the inclusion of more objective measures of the success of modernization in future studies may overcome this to build on the findings presented here.

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