ROLE OF NEW PUBLIC MANAGEMENT PRACTICES IN SERVICE DELIVERY IN THE PUBLIC SECTOR: CASE OF THE STATE DEPARTMENT OF PUBLIC WORKS - KENYA

Duncan Ndeda Endeki
Department of Public Policy and Administration, Kenyatta University, Kenya.

David Minja
Department of Public Policy and Administration, Kenyatta University, Kenya

Citation: Endeki, D. N., Minja, D. (2021). Role of new public management practices in service delivery in the public sector: case of the state department of public works - Kenya. *International Academic Journal of Arts and Humanities, 1*(2), 188-209

ABSTRACT

In democratic systems, citizens are becoming more conscious of their rights, and they are increasingly demanding public sector organizations to be more efficient in the delivery of services. As such, there is a demand for public organizations to be more agile and responsive to consumer needs. One of the doctrines that are pivotal in promoting the idea of increasing public sector efficiency is the New Public Management (NPM) theory as developed countries such as United Kingdom, New Zealand, and the United States have tested the model successfully in their civil service. The theory propounds that public sector organizations can improve their productivity if they adopted market and economic principles just like the private sector when it comes to offering public sector services. In that regard, the purpose of this study was to investigate whether the marketization of public services using the New Public Management model in the State Department of Public Works can increase public sector efficiency. Therefore, the researcher investigated whether decentralization of public services, demand for accountability, and citizen satisfaction, which are the central tenets of the NPM model, have a causal relationship with public sector efficiency. To attain this goal, the researcher used a descriptive research design to establish the causal relationship. Besides, the researcher utilized a sample of 242 respondents sampled purposively and non-probabilistically from a possible 643 employees of the State Department of Public Works. The findings of the study were palpable in demonstrating the intersectionality between public sector efficiency and the three predictor variables—demand for accountability, citizen satisfaction, and decentralization of services. The regression analysis yielded the following result: $R(240) = 0.786$, $p<0.05$, $R2$ 0.618. These results depict that the correlation between efficiency in public sector service delivery in the SDPW and the predictor variables was strong and positive, bearing a Pearson correlation coefficient of 0.786. More importantly, the causality between the predicted and predictor variables was 0.618, as illustrated by the coefficient of determination ($R2$). Notably, a coefficient of determination of 0.618 indicated that 61.8% of the variance could be explained by the three predictor variables. These results were statistically significant as the p-value for the ANOVA test was less than 0.05 for model fitness and predictive value. The researcher, therefore, concluded that demand for accountability, citizen satisfaction, and decentralization of services were strong constructs in explaining public sector efficiency as proposed by the New Public Management theory. As such, it is plausible to generalize the view that marketization of the public sector, especially in developing countries, can bolster the delivery of public services.

INTRODUCTION

Private businesses use business models that allow them to customize their services to meet the needs of the customers. In particular, they use market segmentation strategies to target specific customers and align their services to meet the specific needs of the different market niches. On the contrary, the public sector continues to face difficulties in improving their services and, most importantly, becoming customer-centric in the delivery of service. In retrospect, it is not easy for the public sector to target a specific market niche, neither is it possible to segment markets as the private sector does (Kalimullah, Alam & Nour, 2012). In this regard, it becomes prudent to question whether the public sector is justified to use a market-driven approach in the delivery of public sector services or continue treating citizens as consumers of public services as opposed to customers.

However, due to changing times and sophistication of citizens and the competition offered by the private sector, Mirandilla, (2008) notes that effective governments must become responsive to the changing times and demands of citizens. Nonetheless, the traditional public sector was modeled as a rigid institution wrought with imperious structures, bureaucracy, and stringent protocols and procedures. In the same vein, Mirandilla, (2008) argues that during the industrial era, the public sector organizations operated as a top-down, impersonal, and hierarchical organizations using bureaucrats to deliver standardized services to the citizens. During the time, the citizens, who were the principal clients of the public sector, depended entirely on the monopoly of government because of the absence of competition from the private sector (Walther, 2015). Nonetheless, as years went by, there has been consistent demand from scholars and policymakers to have the public sector implement reforms to make it behave like the private sector in the delivery of service (Mirandilla, 2008). Essentially, the sophistication of citizens is setting higher standards for public sector organizations to reform towards customer-centeredness and act as an agent of change.

The New Public Management theory, which emerged in the 90's, supports the view that the public sector organizations should transform from the traditionally rigid and bureaucratic mammoth institutions to agile organizations able to respond to customer needs and adapt the marketization of public services. In essence, the New Public Management embraces the premise that public sector organizations can be effective and efficient if they simulate or introduce incentives that exist in the private sector. Moreover, for a public organization to become more efficient, the management needs to introduce in the public sector quintessential features that are found in the market economy as a model for creating a conduit between administrative and political relationships.

In Africa, many governments continue to embrace NPM models to as a tool for transforming public sector efficiency and modernizing the state. Notably, Hope (2001) argued that NPM provides success initiatives that can help African states to analyze, transform and make public service nibbler. Mostly, the introduction of NPM is meant to overhaul inefficient government systems and replace with administrative systems that serve the interests of government and

those of the citizens better as a way of reducing poverty, improving livelihoods and sustaining good governance (Hope, 2001).

The public sector in Kenya and by extension world over is known to be rigid and unresponsive to the needs of the citizens due to bureaucratic practices of government and its agencies. Kalimullah, Alam & Nour, (2012) argues that before 1960's the role of government was regulatory, socioeconomic transformation, production, and provision of public goods. However, after 1960, as more public management theories emerged, government criticism became severe due to fiscal crises, haughty civil bureaucracies, lack of accountability, corruption, and poor performance. These issues continue to affect the public sector, especially in Kenya even as the public expectation for better services continues to take center stage. Based on this context, the new public management theory emerged in the 90's with the suggestion that public management needed to borrow a leaf from the private sector management, and secondly, separate policy formulation from the operationalization. The new model envisaged the creation of a lean government managed through decentralized units, customer satisfaction, the creation of better public accountability management, optimal utilization of resources, and marketization of public services. More importantly, the new public management is concerned with the ability of government agencies to become more efficient, economical, and professional in the delivery of services. Based on this context, this research investigated the role and applicability of the New Public Management theory in public sector service delivery in Kenya.

Statement of the Problem

Studies conducted in developed countries such as Netherlands and United Kingdom by Kalimullah, Alam, & Nour (2012) and Walther (2015) show that the application of new public management has succeeded in transforming service delivery in the public sector. Nonetheless, there exists a huge research gap on the applicability of the new public management in developing countries considering that various state agencies have internal processes that have supported the re-election of different politicians and caused economic benefits to the elite (Mirandilla, 2008). This research, therefore, aims at investigating how accountability, citizen-satisfaction, decentralization of services, and improved resource management influences service delivery in public sector in the context of the new public management theory.

Objectives of the Study

a. To determine the extent to which demand for accountability influences the way the State Department of Public Works delivers services
b. To determine the extent to which citizen satisfaction affects the delivery of public services in the State Department of Public Works
c. To determine the extent to which decentralization of services in the State Department of Public Works influences how the organization delivers public services

LITERATURE REVIEW

Demand for Accountability

According to Adejuwon (2014), public accountability requires public officers and civil bureaucrats to be accountable and open to the public when offering services. In this regard, the author avers that the records governments hold in trust for the citizens ought to be open unless they involve national security matters. Everything else, including federal programs, financial management, reports, and findings of public inquiries, has to be made available to the citizens to increase public sector accountability. Based on this argument, public accountability is two-pronged. Public officers need to provide accounts of their decisions and discretions and be held accountable by the citizens. Therkildsen (2001), argued that public accountability involves political justifications for actions and decisions made by public officers but also embodies managerial answerability regarding the implementation of government programs based on the agreed performance criteria. In a democratic society such as Kenya, accountability means the answerability of the state to its citizens so that those in authority answer directly or indirectly to the subjects. Based on this proposition, the New Public Management provides institutionalized mechanisms that allow the masses to exercise control over their political leaders by using channels and mechanisms provided in law. However, Therkildsen (2001) argues that it is essential to distinguish between managerial and political accountability. As such, managerial accountability ensures that those with delegated authority answer to the shareholders or management by carrying out their duties based on agreed performance criteria. Nonetheless, the author emphasizes that despite there being extensive empirical evidence regarding the importance of accountability in public sector organizations, there is a severe deficit regarding the accountability of public officers.

Almqvist, Grossi, van Helden & Reichard (2013) contended that public sector accountability was not just about efficiency in service delivery. Instead, it also embodies cost-effectiveness, quality of services, and the influence of policies and programs in communities. Therefore, one can best understand the meaning of accountability by evaluating it in the context of governance. In this case, accountability involves giving and demanding specific outcomes. In extension, it may also require some form of control, sanctions, and a reward system to ensure that public officers are transparent and answerable. Similarly, Manzoor (2014) argued that public sector service delivery efficiency depended on two schools of thought. Firstly, the ideal type or the Weberian model of bureaucracy, which explained that public organizations were structured as bureaucracies. It is the bureaucracy in public sector organizations that makes them efficient and rational.

On the contrary, the other school of thought avers that public organizations pursue different value-based objectives in a democracy, which becomes the basis for lack of efficiency. In this regard, efficiency in public organizations is a technical conduit between the use of resources and the expected outcome. In essence, Manzoor (2014) proposed that the three primary pillars of public sector administration were equity, economy, and efficiency. Based on equity, the public sector must have qualities such as justice, fairness, and equality. On the contrary, efficiency refers to implementing policies or systems that are preferable or doing the best.

Neshkova & Guo (2011) conducted a survey to determine whether citizen participation in demanding accountability had real value in increasing public sector efficiency. The findings of the study indicated that higher participation of citizens in demanding accountability increased the efficiency and effectiveness of public sector organizations. Notably, the scholars established that the inclusion of citizens in public affairs helped to increase trust and understanding between public officers and the citizenry and had an extensive social value in raising the performance of public organizations. Nonetheless, the findings emphasized that citizens' demand for accountability was both process and outcome related. Stumbraitė-Vilkišienė (2012) conducted a similar study and established the same conclusions.

Citizen Satisfaction

The New Public Management theory considers citizens as customers of public services away from the traditional view that they were just consumers of services. As such, the marketization of public services requires public officers to consider citizen satisfaction in public administration. Van de Walle (2018) noted that citizen satisfaction was two-pronged: subjective satisfaction and objective performance satisfaction. The author describes subjective satisfaction as the aggregate perception of the service outcome based on expectations and their experience during the service provision.

On the other hand, objective performance goes beyond the service quality to other aspects such as the personality of the service giver, the conduct of public officers, and time spent. Today, the introduction of service charters in public sector organizations signals that citizen satisfaction is becoming an essential component in service delivery. Usually, service charters outline the standards of services, the time one spends to acquire service, and, in many instances, they act as formal contracts between government agencies and the citizens.

Alizadeh and Kianfar (2013) conducted a survey in Tehran Municipality, which is a large Iranian public sector system, to determine the best model for increasing citizen satisfaction when acquiring public sector services. The scholars used the SERVQUAL model to examine the factors that influenced the citizen's satisfaction. Those features included identifying the characteristics of services offered to citizens, establishing processes to execute the services, identifying features that increase satisfaction, and creating opportunities for assessing public officers such as suggestion boxes. The scholars concluded that it was essential to develop a unique model for measuring citizen's satisfaction in different government agencies to increase citizen satisfaction. Interestingly, Abdullah and Kalianan (2009) criticized the producer-consumer paradigm suggested by Alizadeh and Kianfar (2013), noting that citizen satisfaction does not necessarily mean customer satisfaction as an idea propagated by most proponents of the NPM theory. The scholars suggested a need for a government-citizen model, which creates a balance between polity and policy implementation. Using the model, the author proposed that indicators such as accountability, public consultation, transparency, and participation were equally as important as the quality of services, which the NPM model fails to recognize as it puts more emphasis on the marketization of public organization.

On another perspective, Salim, Peng, Almaktary, and Karmoshi (2017) conducted a study in Yemen to establish the conduit between citizen satisfaction and performance of government agencies by using public trust as the intervening variable. The scholars found that there was a positive association between citizen satisfaction, the performance of government agencies, and public trust. In this case, government institutions that enjoy a higher level of public trust can perform seamlessly because citizens hope to get satisfactory services. In this regard, the study established that citizen's levels of trust in public institutions influenced the level of performance and, consequently, satisfaction levels. The regression analysis of citizen satisfaction and its effect on public services indicated a positive association of R=O.697, p <0.100. Equally, Kampen, De Walle, and Bouckaert (2006) conducted an empirical study to determine the relationship between citizen satisfaction against government trust and public service delivery. Just like Salim et al. (2017), the researcher found a strong correlation between public trust and citizen satisfaction. According to the researcher,

Satisfaction= perception – expectation.

The researcher recognizes that both perception and expectations are influenced by exogenous factors other than service quality, thereby rendering the model ineffective in measuring satisfaction. However, the scholar notes that satisfaction gets influenced by different factors such as the frequency of using the service, directness, and heterogeneity. In this case, increased heterogeneity and frequency of using a service leads to reduced satisfaction. The statement means that services that citizens are not familiar with or those that do not know the government agencies that provide them receive favorable ratings. For instance, different studies show that Americans rate highly fire emergency services compared to road repair services just because of the frequency of services rendered by road repairs. Besides, the directness of public services and frequency allow citizens an opportunity to differentiate between poor and high-quality experiences (Kampen, De Walle, & Bouckaert, 2006).

Further, Alemán, Gutiérrez-Sánchez & Liébana-Cabanillas, (2018) noted that there is a continuing adoption of market techniques in public administration and provides opportunities for investigating the different factors that contribute to citizen satisfaction because the public sector operates differently based on market forces used by private organizations. The researchers conducted a study in Spain to establish determinants of citizen satisfaction. They confirmed that, on the one hand, customer satisfaction depends on the commitment to providing efficient services, and on the other, the convenience of the user. Besides, based on the SERVQUAL Scales used by the researchers, the findings show that the quality of services was also a great driver of citizen satisfaction.

Decentralization of Services

Azfar, Kahkonen, Lanyi, Meagher, and Rutherford (1999) propounded that many countries in the world were continuing to decentralize governance systems to lower-administrative tiers. Decentralization, typically, denotes bringing services to the consumers. In theory, the authors note that decentralization of public sector functions improves governance in three domains: increasing efficiency in allocating resources, bolstering accountability, and leveraging cost

recovery. Regarding allocation efficiency, since the decentralized units are closer to the service consumers, the citizens are perceived to have useful information concerning their needs and ways of satisfying those needs. Besides, concerning accountability, the author argues that it makes public officers accountable and reduces instances of corruption in government agencies. Notably, corruption represents a form of breakdown in collaborative behavior, in which case, a few individuals conspire to destroy all. As such, in theory, there is a general belief that decentralizing services closer to the consumers raises levels of consensus and legitimacy of public service delivery. Finally, regarding cost recovery, making public services demand-responsive through decentralized units increases the willingness of citizens to pay for the services. In essence, the author notes that citizens have a greater willingness when it comes to paying for services that are in tandem with the demands.

Similarly, Kurnia (2012) conducted a study in Indonesia to investigate the implication of decentralization on increasing public sector efficiency. The findings indicated that underdeveloped regions experienced relatively inefficient governments. Also, the decentralization of local governments improved the level of revenue generation and increased public sector efficiency. Notably, the scholar cautions that the inherent benefits of decentralization are primarily dependent on governance because, quite often, local governments suffer elite capture challenges. Nonetheless, there is a strong emphasis that government services are best delivered when closer to the people. The argument is that as the government comes closer to the people, the easier it becomes to evaluate the costs and benefits of providing certain services. In this line of thought, relative benefits of decentralization over centralization largely depend on the levels of accountability of public officials and government agencies.

Khaleghian (2003), just like Kurnia (2012), found that decentralized units performed poorly in an environment of elite capture, especially in local units. The author brings the perspective that elite capture introduces inter-jurisdictional externalities and lack of information in local units, thereby rendering public service delivery inefficient. However, the scholar established that decentralization functioned excellently in an environment of inter-jurisdictional heterogeneities and worse in localized units that allowed spillovers such as corruption, information asymmetries, legal barriers, and monopolistic provision of services. The scholar refers to a study conducted in the Philippines and Uganda, which found that the perceived benefits of decentralization failed to materialize in instances where local governments exercised limited authority or were unable to adjust their services. Besides, citizens' level of understanding of public policy, sometimes hampered by limited access to information, also affected the benefits of decentralization. Nonetheless, it is critical to point out that the scholar does not undervalue the potential of decentralization but supports proper institutional designs to reduce the pitfalls of decentralization.

Moreover, Adam, Delis & Kammas (2014) conducted a cross-sectional study between 1970 and 2000 to determine the interrelationship between fiscal decentralization of local governments and public sector efficiency involving 21 countries. The findings of the study established that decentralization and public sector efficiency were highly correlated, though

in an inverted U-shaped model. The U-shaped relationship meant that increased fiscal decentralization was beneficial in the provision of public sector services such as health and education; however, if the levels of decentralization went too high, it could become disastrous to public sector efficiency. Therefore, based on policy, countries with lower levels of decentralization could benefit significantly by transferring part of their functions or powers to local units of administration. On the contrary, countries that enjoy high levels of decentralization may need to consider removing or reducing the level of power and authority exercised by local governments, mainly if there are instances of diseconomies of scale or high levels of pressure from interest groups opposing decentralization.

Theoretical Framework

New Public Management Theory

The New Public Management (NPM) theory emerged in the early 1980s, inspired by objects of the public choice theory and managerialism. Those who had the first chance of practicing NPM were Margaret Thatcher, municipal governments in the United States, and later local governments in New Zealand. The proponents of NPM wanted a framework that would reform public sector service delivery and remove it from the traditional model full of bureaucracies (Simonet, 2011). The most significant assumption of the NPM theory is that government and public sector agencies can be made efficient and effective if a sense of performance incentives and a sense of the discipline that exists in the private sector gets introduced in the public sector. In this regard, the public management theory introduces aspects of economic market models in political and public sector administration. There are five central axioms of the New Public Management theory (Jidwin & Mail, 2015). Firstly, the theory emphasizes the importance of increased efficiency so that public sector agencies improve the input-output ratio to address the substantial levels of expenditure in the public sector as a way of removing inefficiencies in processes. The second aspect propounded by the NPM theory is the decentralization of resources and functions. In essence, decentralization involves the transfer of decision-making processes from the central organization to the localized levels of the government/ government agencies as a way of reducing expenses incurred by the centralized system. The essence of decentralizing decision-making is to create efficiency, flexibility, and responsiveness of public sector organizations to address the needs of their customers.
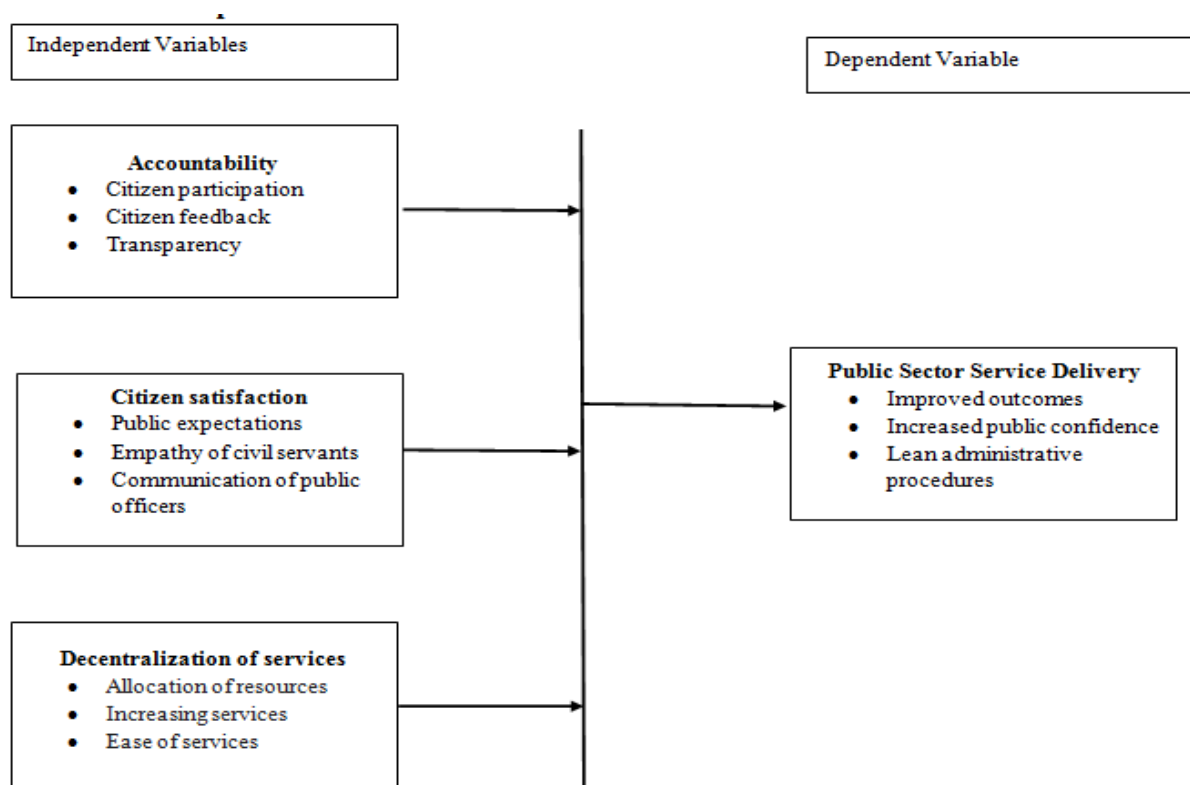
Further, the other maxim of the theory involves increasing levels of accountability. Ideally, making the providers of services in the public sector more accountable regarding their decisions and actions is an essential step for pressurizing staffers to perform well. Besides, accountability makes public sector workers responsive to the needs of their customers as a way of reducing inefficient processes and corrupt processes.

Moreover, improved resource management is another assumption of the theory. In this case, public sector organizations need to refocus the way they use financial, human, and other resources by ensuring there is proper planning, management, and measurement of results.

Finally, public sector organizations need to adopt the marketization of their services. Notably, integrating market forces in the delivery of public sector services can improve the relationship that the organizations share with the citizens, drive costs down, and improve efficiency levels (Mirandilla, 2008).

It is essential to point out that the goal of the NPM model is to reform public sector organizations, particularly by removing rigid hierarchical structures and replacing them with dynamic systems. The removal of rigid structures is done by increasing the levels of accountability and autonomy among public managers together with entrenching an entrepreneurial culture when it comes to the utilization of public resources to increase productivity. The other element of reforming public sector organizations embodies a deliberate effort to replace the authoritarian and top-down way of making decisions with a model that promotes a bottom-up and consensual approach. The essence of this reformation is to ensure sufficient participation of consumers of public sector services and bringing together all stakeholders. Also, a bottom-up and consensual approach promotes decentralization of control and providing a wide range of opportunities for citizens to get services. More importantly, this works in public organizations adopt quasi-marketization of services. In this regard, the application of market principles increases the productivity and efficiency of public organizations. Besides, it promotes a results-driven culture and targeting transparency, which is a rarity in most public sector organizations (Mirandilla, 2008).

Conceptual Framework

Independent Variables		Dependent Variable

Accountability
- Citizen participation
- Citizen feedback
- Transparency

Citizen satisfaction
- Public expectations
- Empathy of civil servants
- Communication of public officers

Public Sector Service Delivery
- Improved outcomes
- Increased public confidence
- Lean administrative procedures

Decentralization of services
- Allocation of resources
- Increasing services
- Ease of services

METHODOLOGY

The researcher used descriptive research design to examine the causal relationship between public sector service delivery and citizen satisfaction, decentralization of services, and demand for accountability. Dulock, (1993) proposed that descriptive research design helps a researcher to methodically and accurately describe features and facts regarding a particular area of research or interest. The dependent variable for this study was public sector service delivery. The category of analysis for this variable involved whether demand for accountability, citizen satisfaction, and decentralization increased public sector service delivery.

The researcher used three independent variables: decentralization of services, demand for accountability, and citizen satisfaction. In essence, the category of analysis for measuring the effect of decentralization of services on public sector efficiency involved the allocation of resources, increasing accountability, cost recovery. When it came to citizen satisfaction and its effect on public sector service delivery, the researcher used public trust, time spent, and the conduct of public officers. Finally, concerning accountability, the category of analysis involved citizen participation, citizen feedback, and transparency. The site of this study was the headquarters of the SDPW, located in Nairobi. SDPW is one of the state agencies that have experienced a dramatic shift and agility in management and response to the needs of the consumers. The target population for this study was employees of the SDPW. The department had 643 employees at the time distributed across the country (SDPW, 2018).

The computation using the Krejcie Morgan formula shows that a representative sample of a population of 643 employees is 242 respondents. The data collection for this study involved two methods: a literature review and a survey. Notably, the survey included the issuance of questionnaires to the sampled respondents. The researcher aimed to get a response rate of at least 50%. Therefore, the issuance of surveys involved a face-to-face method and electronic means such as email to increase participation. The survey had both open and closed-ended questions to improve the quality of the data. Besides, the literature review documented in chapter two supported the primary data and increased its credibility.

Once the researcher received all the data from the field, it was fed in a Microsoft Excel Package for storage and ease of analysis. Besides, during data entry, the researcher also coded the attitudinal data contained in the Likert scales for seamless analysis. In this regard, the researcher used Statistical Package for Social Sciences (SPSS) for smooth analysis of descriptive and inferential statistics such as t-test, ANOVA, and regression analysis. Moreover, the researcher populated the analyzed data in charts, tables, and graphs to simplify the illustration and interpretation. The regression analysis model for the study was as follows:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \ldots b_nX_n$$

where y is the dependent variable

X_1, X_2, X_3, and X_n are independent variables

X1 is accountability, X2 customer satisfaction, while X3 is the decentralization of services

B0 is a constant

And b1, b2, b3, and bn are correlation coefficients

RESEARCH FINDINGS AND DISCUSSIONS

The researcher used purposive sampling to recruit 242 respondents as participants in the mixed-method research. Different methods were employed to increase the response rate, such as the issuance of questionnaires via email, and social media platforms, especially for respondents who could not participate in a face to face interview. As a result of these arrangements, the researcher managed to interview all the 242 respondents. The response rate was, therefore, 100%.

On gender distribution, 64% of the respondents were males, while females were 36%. Hence, male participants constituted a larger portion of the sample compared to females. age analysis revealed that the majority of the participants who took this survey were between the ages of 30-50 years old, with 53 percent. Moreover, participants between 18-30 years were 31 percent, while those with 50 years and above were 16 percent. Most of the survey participants came from the technical department, representing 62 percent. Others included 11 percent from the finance department, 12 percent from the procurement department, as well as 15 percent from the administration department, respectively. The majority of the respondents in this study had not stayed at SDPW for long. In particular, 37% had worked in their respective departments for less than one year, 29% had a duration of 1 to 5 years, 17% indicated a period of 5 to 10 years, and 17% stayed more than ten years.

Public Sector Efficiency

Before investigating the causal relationship between independent variables and the public sector service delivery, the researcher first asked respondents if they believed that a market-driven approach would make the State Department of Public Works more efficient. The chart below (figure 5) shows the distribution of responses from a set of five possible options from which the respondents made a selection that best explained their opinions or beliefs.
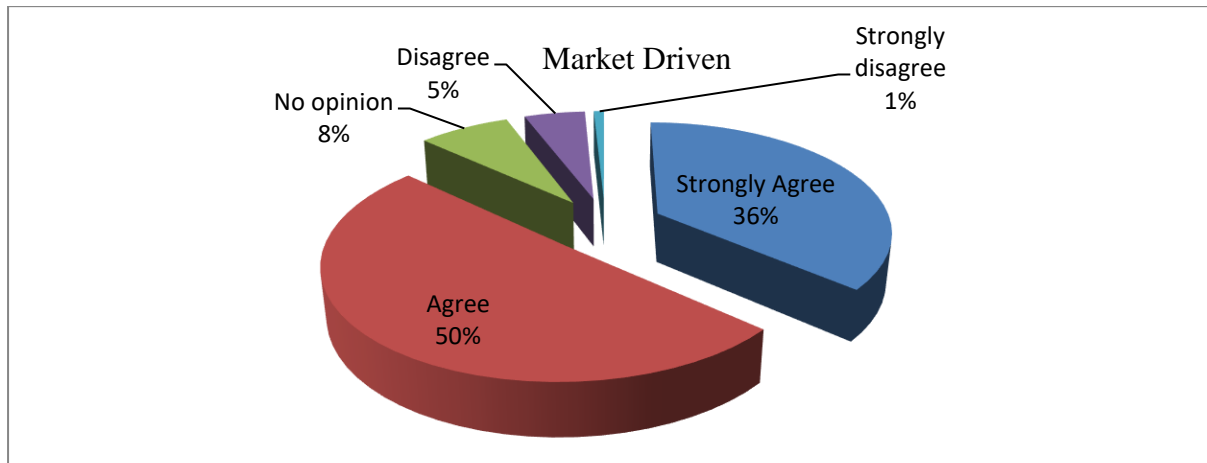
Figure 1: Public Sector Efficiency Pie Chart

From figure 5 above, 50% of the respondents agreed that market-driven approaches had the potential to make SDPW more efficient, while 36% strongly agreed with the assertion. However, 8% had no opinion on the question while 5% and 1% disagreed and strongly disagreed, respectively. These responses provided an essential perspective regarding the respondents' opinion concerning the marketization of public agencies. However, the scientificness and strength of causality needed to be tested against the independent variables to validate the claim. The tests are contained in the successive sections of this chapter.

Correlation and Regression of Independent Variables against the Dependent Variable

In this section, the researcher conducted a linear regression analysis on the independent variables against the dependent variable to determine the significance and the strength of the relationship between the variables.

Demand for Accountability

The research question concerning accountability, in this case, was "How does the demand for accountability influence the way the State Department of Public Works delivers public services?" The researcher conducted a regression analysis on the data to examine the extent of correlation and strength of the association between accountability and public sector service delivery. The findings are contained in table 1 below:

Table 1: Demand for Accountability

Model	R	R Square	Adjusted R Square	Sig. F Change
1	.576[a]	.332	.329	.000

    a.   Predictor: (Constant), Accountability

Based on the results above, the correlation model was as follows R (240) = 0.576, p<0.05. Therefore, Pearson's coefficient between the demand for accountability and efficiency in public sector service delivery was 0.576, indicating a strong positive correlation between demand for accountability in public sector service delivery. The R-square is a measure of variance between the dependent and the independent variable. In other words, it denotes the strength of association between variables. In this regard, the R-Square was 0.332 or 33.2%, indicating that demand for accountability could singly explain the 33.2% of the variance in public sector service delivery. Therefore, it is plausible to conclude that demand for accountability causes a 33.2% variance in public sector service delivery. Further, the results were significant in predicting the variance as the p-value was less than 0.05. A survey by Neshkova & Guo (2011) validates this finding. The researchers conducted a survey to examine whether participation of citizens in demanding accountability had a tangible influence in increasing public sector efficiency. The two scholars found that sustained demand for accountability strongly correlated with efficiency and effectiveness in public sector organizations. In this regard, the inclusion of citizens in administration processes in such activities as public participation and social audit exercises increased public trust and made government agencies more agile to their clients' needs. Further, Stumbraitė-Vilkišienė (2012) and Grossi, van Helden and Reichard (2013) made similar findings in two other separate studies regarding the association between the demand for accountability and public sector efficiency.

Citizen satisfaction

The second objective of this study was to investigate "How does citizen satisfaction affect the way the State Department of Public Works delivers public services?" The correlation between citizen satisfaction and public sector service delivery shows a strong correlation, as tabulated in Table 2 below.

Table 2: Citizen Satisfaction

Model	R	R Square	Adjusted R Square	Sig. F Change
1	.562[a]	.316	.313	.000

    a.   Predictor: (Constant), Citizen Satisfaction

The correlation results for citizen satisfaction against public sector delivery were as follows: R(240) =0.562, p<0.05. The results show a strong positive correlation between citizen satisfaction and efficiency in public sector service delivery. But more importantly, an R-Square of 0.316 or 31.6% indicates that citizen satisfaction can explain 31.6% variance in public sector delivery. In retrospect, 31.6% of efficiency in public sector service delivery could result from citizen satisfaction in the services offered in the SDPW. Further, a p-value of less than 0.05 indicates that the results were significant in predicting the variance. Notably, Salim, Peng, Almaktary & Karmoshi (2017) carried out a study in Yemen to determine the influence of citizen satisfaction in the performance of government agencies using public trust as the intervening variable. The findings were R=O.697, p<0.05, indicating a strong positive correlation between citizen satisfaction and the performance of government agencies. A similar study by Kampen, De Walle, & Bouckaert (2006) also established a strong correlation between citizen satisfaction and public sector service delivery. The author confirmed that public expectations and perceptions were essential intervening variables whenever conducting public sector service delivery studies. A SERVQUAL model developed by Alemán, Gutiérrez Sánchez & Liébana-Cabanillas, (2018) postulated that emerging trends in adoption of marketization principles in public administrations meant that the quality of service was a significant determinant of citizen satisfaction, especially in the public sector. Based on the survey findings and the empirical justification drawn from the literature review, it is plausible to conclude that citizen satisfaction is an essential determinant of public sector efficiency as proposed in the New Public Management theory.

Decentralization of Services

The third measure of public sector service delivery in this study was the decentralization of services. The researcher's objective was to determine "How does the decentralization of public services in the State Department of Public Works influence how the organization delivered services? The researcher regressed decentralization of public services against public service delivery, and the results were as tabulated in Table 3 below.

Table 3: Decentralization of Public Services

Model	R	R Square	Adjusted R Square	Sig. F Change
1	.679[a]	.461	.458	.000

a. Predictor: (Constant), Decentralization of Public Services

Notably, the correlation coefficient was 0.679 based on R (240) =0.679, p<0.05, which shows a strong positive correlation between the decentralization of public services and improved public sector service delivery. Besides, the R-square was 0.461, indicating that decentralization could explain 46.1% of the variance in public sector service delivery. The results of the variance were significant as the p-value was less than 0.05. Kurnia (2012) carried out a study in Indonesia to investigate the extent of influence on public sector efficiency due to the decentralization of local government services. The scholar established

that decentralization of local government services improved public sector efficiency and increased revenue generation. The direct and strong correlation between decentralization and improved service delivery resulted from bringing services closer to the people, making it less costly and efficient. Adam, Delis & Kammas (2014), in a longitudinal study spanning from 1970 to 2000, found that fiscal decentralization of local government services improved public sector efficiency in all the 21 countries involved in the study. The survey established a high positive correlation between decentralization and public sector efficiency. Nonetheless, Kurnia (2012) and Khaleghian (2003) caution public administrators that elite capture can override decentralization gains in improving public sector efficiency. Based on this study's results concerning decentralization, the researcher concludes that the decentralization of public services is a strong predictor in improving public sector efficiency.

Multiple Regression Analysis

The researcher applied multiple regression analysis to determine the strength of the association between the dependent and independent variables and develop the model's coefficients. The results in table 4 below show a summary of the multiple regression analysis:

Table 4: Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
1	.786[a]	.618	.613	.618	128.461	3	238	.000

 a. Predictors: (Constant), Citizen_Satisfaction, Decentralization, Accountability

The findings indicate that R(240) = 0.786, p<0.05, R2 0.618 such that the Pearson's correlation coefficient was 0.786. In this regard, the extent of correlation between the predictor and the predicted variables was strong and positive. Moreover, the R-Square of 0.618 shows that the independent variables combined could explain 61.8% of the variance in predicting public sector service delivery. In contrast, other exogenous variables outside the model could explain the remaining variance. Ostensibly, the researcher can conclude that the three independent variables — decentralization, demand for accountability, and citizen satisfaction — had strong explanatory value in the model, especially in explaining how best public sector organizations can become agile and improve their service delivery. The finding was statistically significant in predicting efficiency in public sector service as the model had a p-value of less than 0.05. Studies conducted by Kampen, De Walle and Bouckaert (2006); Aleman et al. (2018); Adam et al., (20140; Kurnia (2012) and Neshkova and Guo (2011) made similar findings concerning the intersectionality between decentralization, demand for accountability and citizen satisfaction in predicting public sector efficiency.

Model Fitness

Even more critical is that the ANOVA Test validated the statistical significance of the findings as the F-test yielded $F(3, 238) = 128.461$, $p<0.05$. Notably, the F-test is a measure of whether the model fits the statistical significance of the findings. In this case, a p-value of less than 0.05 indicated the model fitness. Therefore, based on the results, the researcher concluded that the model fits the data. Below is a summary of the f-test contained in the ANOVA table 5 below.

Table 5: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.723	3	18.241	128.461	.000[b]
	Residual	33.795	238	.142		
	Total	88.519	241			

a. Dependent Variable: Public_Service_Delivery

b. Predictors: (Constant), Citizen_Satisfaction, Decentralization, Accountability

Multiple Regression Analysis Coefficients

The researcher developed a multiple regression model to guide the data analysis and determine the association between the variables. The regression model was as follows:

$Y=b0 +b1 X1 +b2 X 2 +b3 X 3 +.......bn Xn$

Where y is the dependent variable

X1, X2, X3, and Xn are independent variables

X1 is accountability, X2 customer satisfaction, while X3 is the decentralization of services

B0 is a constant

And b1, b2, b3, and bn are correlation coefficients

From the data analysis, multiple regression analysis coefficients are contained in table 6 below.

Table 6: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.457	.077		5.913	.000
	Decentralization	.319	.034	.447	9.367	.000
	Accountability	.169	.035	.230	4.789	.000
	Citizen Satisfaction	.249	.034	.325	7.413	.000

The results in the coefficients matrix above demonstrate two essential aspects of the data. First, the three variables —decentralization, accountability and citizen satisfaction — were statistically significant in predicting public service delivery as they had a p-value of less than 0.05. These findings are validated by the works of Kampen, De Walle and Bouckaert (2006); Aleman et al. (2018); Adam et al., (20140; Kurnia (2012) and Neshkova and Guo (2011). Secondly, the coefficients indicate positive and strong collinearity between the predictors and the predicted variable. Ostensibly, the multiple regression equation would, therefore, be as follows:

$Y = 0.457 + 0.319X1 + 0.169X2 + 0.249X3 + e$

Where e accounts for exogenous variables outside this model

CONCLUSION AND RECOMMENDATIONS

Conclusion

The research findings validated the New Public Management theory regarding the centrality of marketization of the public sector to make it more responsive and efficient. More importantly, the results were consistent with other empirical studies conducted in the past on the subject. In particular, the results indicated a strong correlation between demand for accountability, citizen satisfaction, and decentralization of services and efficiency in public sector service delivery. Notably, decentralization of services had the most substantial predictive value, followed by the demand for accountability and citizen satisfaction. Even more critical, the regression analysis $R(240) = 0.786$, $p<0.05$, R2 0.618 indicated that the three variables —demand for accountability, citizen satisfaction, and decentralization of services —could account for 61.8% of the variance when predicting efficiency in public

sector service delivery. Finally, the results were statistically significant in predicting efficiency in the public sector as propounded by the New Public Management theory.

The findings validated the New Public Management theory. In essence, the New Public Management theory indicates that public organization can become agile if they adopted marketization models as private entities do. In this regard, this study added to literature the view that decentralizing public services, improving accountability and citizen satisfaction were essential in making public organizations more agile and effective.

Recommendations for Practice and Policy

The list below provides elaborate recommendations drawn from the results to enhance policy and practice:

a. The findings of this study established a strong predictive value of demand for accountability and efficiency in public sector service delivery. Based on this result, the researcher recommends strong grass-root mobilization and empowerment of local citizens by state and non-state actors to enable them to pursue social audits, and prudent public resources use. Quiescence and lack of involvement by citizens robustly cause civil servants to entrench unaccountability and, as a result, deliver poor services.

b. Regarding citizen satisfaction, the researcher recommends public agencies to consider citizens as clients as opposed to consumers of public services. If public officers perceive citizens as clients, they would offer services as they would in a market economy, in which case, the client is the king. As a result, public organizations must implement service charters and improve service quality in terms of time spent, cycle times, and availing information concerning public services and processes. These principles, as applied in the private sector, improve customer satisfaction, public trust, and efficiency.

c. Finally, decentralization of departmental services emerged as the strongest predictor of efficiency in public sector service delivery. In this regard, the researcher recommends state agencies, including SDPW to expend resources in decentralizing departmental services to devolved governments to bolster governance, accountability, and optimize costs involved in access to services. Even as decentralization is essential, caution is necessary to ensure decentralized services do not encounter elite capture and devolved corruption as that would negate the expected outcomes of the process.

Recommendations for Future Research and Research Gaps

One of the inherent research gaps established in this study was the influence of citizen's competence in demanding accountability from government agents and state departments. There were scanty or no studies, especially in developing countries, examining whether citizens had the competencies to hold their leaders to account as they operate in a climate of patronage, clientelism, and elite capture. Therefore, the researcher suggests that other scholars must investigate the effect of these extraneous or intervening variables in measuring the applicability of the New Public Management theory, primarily in developing countries. This perspective is validated by the fact that this study established that decentralization of

services, demand for accountability, and citizen satisfaction could only account for 61.8% of the variance in explaining efficiency in the public sector. As a result, researchers may want to investigate the other variables that account for the remaining variance in the future.

REFERENCES

Abdullah, H. S., & Kalianan, M. (2009). From customer satisfaction to citizen satisfaction: rethinking local government service delivery in Malaysia. *Asian Social Science*, *4*(11), 87.

Adam, A., Delis, M. D., & Kammas, P. (2014). Fiscal decentralization and public sector efficiency: evidence from OECD countries. *Economics of Governance*, *15*(1), 17-49.

Adejuwon, D. K. (2014). Enhancing Public Accountability and Performance in Nigeria: Periscoping the Impediments and Exploring Imperative Measures. *Africa's Public Service Delivery & Performance Review*, *2*(2), 102-125.

Alemán, R., Gutiérrez-Sánchez, R., & Liébana-Cabanillas, F. (2018). Determinant Factors of Satisfaction with Public Services in Spain. *Australian Journal of Public Administration*, *77*(1), 102-113.

Alizadeh, A., & Kianfar, F. (2013). Developing a model for citizens'satisfaction with public sector services based on rough sets theory: a case study of Tehran Municipality. *Tehnicki vjesnik/Technical Gazette*, *20*(5).

Almqvist, R., Grossi, G., van Helden, J., & Reichard, C. (2013). Public sector governance and accountability. *Critical Perspectives on Accounting*, *24*(7-8), 479-487.

Azfar, O., Kahkonen, S., Lanyi, A., Meagher, P., & Rutherford, D. (1999). Decentralization, governance and public services: the impact of institutional arrangements. *Centre for Institutional Reform and the Informal Sector*, 1-37.

Chen, C. K., Yu, C. H., & Chang, H. C. (2005). An empirical analysis of customer-oriented service activities in the Taiwanese public sector. *Total quality management & business excellence*, *16*(7), 887-901.

Chuan, C. L., & Penyelidikan, J. (2006). Sample size estimation using Krejcie and Morgan and Cohen statistical power analysis: A comparison. *Jurnal Penyelidikan IPBL*, *7*(1), 78-86.

Dulock, H. L. (1993). Research design: Descriptive research. *Journal of Pediatric Oncology Nursing*, *10*(4), 154-157.

Fincham, J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. *American journal of pharmaceutical education*, *72*(2): 1-3.

Golafshani, N. (2011). Understanding validity and reliability in Qualitative Research. *The Qualitative Report*, 8(4): 597-607

Hope Sr, K. R. (2001). The new public management: context and practice in Africa. *International Public Management Journal*, *4*(2), 119-134.

Jidwin, A. P., & Mail, R. (2015). The Concept of New Public Management: The Adoption Case in the Malaysian Public Sector. In *Proceedings of 4th European Business Research Conference* (pp. 9-10).

Kalimullah, N. A., Alam, K. M. A., & Nour, M. A. (2012). New public management: Emergence and principles. *Bup Journal*, *1*(1), 1-22.

Kampen, J. K., De Walle, S. V., & Bouckaert, G. (2006). Assessing the relationship between satisfaction with public service delivery and trust in Government. The impact of the predisposition of citizens toward Government on evaluations of its performance. *Public Performance & Management Review*, *29*(4), 387-404.

Khaleghian, P. (2003). *Decentralization and public services: the case of immunization*. The World Bank.

Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-System Pharmacy*, *65*(23), 2276-2284.

Kurnia, A. S. (2012). *Public sector efficiency of decentralized local government in Indonesia: A political and institutional analysis* (Doctoral dissertation, Curtin University).

Manzoor, A. (2014). A look at efficiency in public administration: past and future. *Sage Open*, *4*(4), 1-5

Mirandilla, M. G. P. (2008). Promoting e-government in the context of new public management: The case of the local government of Cebu, Philippines.

Mugenda, O. M., & Mugenda, A. G. (1999). *Research methods: Quantitative and qualitative approaches*. Acts press.

Neshkova, M. I., & Guo, H. (2011). Public participation and organizational performance: Evidence from state agencies. *Journal of Public Administration Research and Theory*, *22*(2), 267-288.

Salim, M., Peng, X., Almaktary, S., & Karmoshi, S. (2017). The impact of citizen satisfaction with government performance on public trust in the government: empirical evidence from urban Yemen. *Open Journal of Business and Management*, *5*(02), 348.

Shahin, A. (2006). SERVQUAL and model of service quality gaps: A framework for determining and prioritizing critical factors in delivering quality services. *Service quality–An introduction*, 117-131.

Simonet, D. (2011). The new public management theory and the reform of European health care systems: An international comparative perspective. *International Journal of Public Administration*, *34*(12), 815-826.

Stumbraitė-Vilkišienė, E. (2012). Citizen Participation in the Local Public Service Provision and Quality Improvement. *Moscow: UMDCIPE.*

Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management, 5(3):* 28-36.

Therkildsen, O. (2001). *Efficiency, accountability, and implementation: public sector reform in East and Southern Africa*. Geneva: United Nations Research Institute for Social Development.

Van de Walle, S. (2018). Explaining citizen satisfaction and dissatisfaction with public services. In *The Palgrave Handbook of Public Administration and Management in Europe* (pp. 227-241). Palgrave Macmillan, London.

Walther, F. (2015). New public management: the right way to modernize and improve public services?. *International Journal of Business & Public Administration*, *12*(2).