ISSN 2411-7323

www.sagepublishers.com

© Sage Global Publishers

PROCESS INNOVATION AND SERVICE DELIVERY IN REGULATORY AGENCIES IN KENYA

¹ Vincent Kipng'etich Cheruiyot, ² Dr. Josephat Kwasira, PhD., ³Dr. Dennis Juma, PhD & ⁴Dr. Millicent Mboya, PhD

¹ PhD Student – Jomo Kenyatta University of Agriculture & Technology,

^{2,3,4} Lecturers of Jomo Kenyatta University of Agriculture & Technology

Abstract

Globally, most regulators rely on key strategic adaptations and innovations to deliver exemplary service to their populations. The management of regulators strives to incorporate process innovation to enhance service delivery. The objective of the study was to determine the influence of process innovation and service delivery of regulatory agencies in Kenya. To strengthen the conceptual framework, the study used dynamic capability theory. Most of the studies have been done on process innovation practices innovation is a key element of strategic adaptation, the variable needs to be regressed with the service delivery in regulatory agencies in Kenya. This study adopted descriptive research design. The sample size was 369 participants. The quantitative data collected were analyzed using the Statistical Package for the Social Sciences (SPSS 24), where descriptive statistics were computed to help describe and interpret the data in line with the study objectives. For variable relationships, correlation and regression analysis was also examined. The analyzed data was presented by use of tables and in prose form. The overall results provided statistical evidence of a positive correlation of process innovation and service delivery of regulatory agencies in Kenya. In terms of impact, process innovation had a significant effect on service delivery of regulatory agencies in Kenya. It was recommended that regulator agencies in Kenya need to enhance, foster and vary their dynamic capabilities to process innovations since it leads to the improvement of service delivery. The study recommended further research on the variables using other methods and companies from other sectors.

Key Words: Process Innovation, Service Delivery, Regulatory Agencies in Kenya

Background of Study

Process innovation practice in the modern economy is critical because of the rapidly changing preferences and the emergence of multiple customer/clients segments with different tastes, values and patterns. Hence regulatory agencies use process innovation because they seek to deliver services and products in a cost-effective fashion, deliver greater value to customers/clients, and improve service delivery methods to increase profitability and decrease costs. When regulatory agencies services become more homogeneous or cannot be sustained, process innovation becomes an effective way for an organization to accelerate its service delivery (Chen, Tsou & Huang, 2009).

Process innovation is the application of a novel or considerably better production or delivery technique. Significant changes in techniques are equipment or software updating or installation, better technology for manufacturing e.g. automation, or sensor installation that improves processes. This type of innovation can advance the superiority of the product or decrease unit price of production (OECD Manual Oslo, 2005). Product innovation on the other hand is rolling out of a service, good that is significantly novel or enhanced as per its anticipated usage. This contains technical specification improvement materials, components or the software it come with e.g. plastics that are environmentally friendly or recyclable, detachable for replacement parts. (OECD Manual Oslo, 2005).

According to Chen, Tsou and Huang (2009), process innovation in service delivery orientation refers to an organization's openness to new ideas and propensity to change through adopting new technologies, resources, skills and administrative systems. Service delivery innovation is also described as an overall process of developing new service offerings in the organization (Johnston & Clark, 2001). Process innovation drivers are similar in product and service contexts, at most differing in relative importance between the two environments.

Process innovation is for organizational success. Regulatory agencies design critical new service offerings from either the customer's viewpoint or the organization's delivery viewpoint (Goldstein et al., 2002). Process innovation is mainly reactive and proactive. In the United States of America, Europe, and Asia to offer excellent services regulators, the process alignment aims to produce a measurable advantage. Therefore, process creation and optimization transcend tools and practices. Process custodians apply differentiation logic perspectives to understanding how individuals interact within a process, complete tasks, and specify benefits and outcomes. They also consider where and how value occurs, potential roadblocks and hazards, and how the process ultimately generates and maintains a sustainable value for a competitive advantage (Rose, 2017). Best-in-class companies that have adopted an operational excellence culture share certain success factors. These consist of the following: credibility within the company, business unit cooperation, initiatives integrated into the strategy of the organization, top-level support, and the capacity to track outcomes. An organization's formal and informal organizational designs, the processes and methods of operation, as well as management's perspective on work process change and all forms of communication are all impacted by operations competency (Longstaff & Rajan, 2018).

Statement of the Problem

Regulatory agencies like private sector organizations are compelled to engage in service delivery through process innovation because they are accountable to the public or citizens of a nation. Therefore, to achieve an excellent service position, regulatory agencies as service organizations must deliver services in new and creative ways applying their specialized process innovative competences in the form of knowledge and skills to the public (Vargo & Lusch, 2004).

Gati and Namusonge (2023) study was on strategic innovation and service delivery in public universities in Kenya while Amuti (2024) study was on the influence of strategic innovation on service delivery of Sarova Whitesands hotel in Mombasa County, Kenya. Dalila, Wanjau and Maguta (2025) examined the effect of strategic innovation on service delivery of selected private schools in Kajiado county. The aforementioned studies focused on innovation and strategic innovation and service delivery/performance in the public sector, telecommunication industry, public universities, hotels and private schools. Even regional studies like that by Ndlangamandla (2016) in Swaziland only focused on the country's and region's sugar sector's comparative performance. The study on process innovation on organization performance has been carried out by a few researchers and more so not zeroing on sugar industry especially in western Kenya. There are thus contextual, conceptual and methodological research gaps hence this study's specific assessment of the appropriate thematic strategic innovation and service delivery thus examined, process innovation on service delivery of regulatory agencies in Kenya.

Research Objective

To examine the influence process innovation on service delivery of regulatory agencies in Kenya

Research Hypothesis

H₁O: Process innovation has no significant influence on service delivery of regulatory agencies in Kenya

Theoretical Framework

Dynamic Capability Theory

The ability of the company to combine, develop, and reorganize internal and external resources and competencies in order to respond to and mold quickly evolving business environments is known as its "dynamic capabilities" (Teece et al., 1997, 1990). To produce abnormal returns is the aim. Certain routines of change (like product development following a predetermined path) and analysis (like investment choice analysis) can occasionally serve as the foundation for dynamic capabilities. However, more often than not, they have their roots in innovative management and entrepreneurial activities (like creating new markets). The firm's unique resources and competencies can be quickly and fully realigned to meet the demands of the business environment and to correspond with the opportunities that arise. Because markets do not price an organization at its value to the buyer if the buyer possesses complementary and, in particular, specialized assets, an organization with strong dynamic capabilities can achieve abnormal returns.

Resources, competencies, and dynamic capabilities are fundamentally different in that they are typically not purchasable; instead, they need to be developed. As previously mentioned, resources and competencies are integrated and reintegrated to ensure that they are tuned to the business environment. Dynamic capabilities measure the capacity to align and realign. Firms that are able to adapt and change in tandem with the business environment are those that possess specific qualities like sensing, seizing, and transforming. Long-term profitability depends on these kinds of skills (Teece, 2007b).

The management literature has discussed exploration and exploitation as two activities that may not be compatible within a single organization. Sensing and seizing are similar to these activities (March, 1991). Exploration involves more uncertainty and a longer time horizon than exploitation, such as selling mature products. An example of exploration would be research on a potentially disruptive technology. An "ambidextrous organization," which links two distinct

subunits with different cultures through shared company-wide values, senior managers with a broad perspective, and suitable incentives, is one way to address the two types of activities, which require different management styles (O'Reilly and Tushman; 2004).

As previously mentioned, a company can effectively carry out the tasks it sets out to complete when its core competencies are well-developed. Its dynamic capabilities, however, will dictate whether the company is currently producing the right goods and catering to the right market segment, or whether its future plans are suitably aligned with consumer demands and technological and competitive opportunities. Therefore, in order to leverage dynamic capabilities, the organization—and particularly its top management—must generate speculations, test them, and realign resources and competencies to meet evolving needs. As stated by O'Reilly and Tushman (2004), they allow the business to strategically allocate its resources, expertise, and other assets in a way that maximizes profit.

Assessing when and how an enterprise should form an alliance with another enterprise is another use for dynamic capabilities. Global specialization has become more necessary and feasible as trade has expanded. Firms must develop and align assets and combine the various components of the global value chain in order to develop and deliver a joint "solution" that customer's value. This is necessary for the global system of vertical specialization and specialization (bilateral dependence) to function. In fact, this requirement has increased. When a completely new product is offered to customers or when new intermediate products need to be traded, the innovative firm or firms will frequently need to establish a market. The processes of creating and correlating markets require the input of dynamic capabilities, especially the more entrepreneurial competences (O'Reilly and Tushman, 2004).

Conceptual Framework

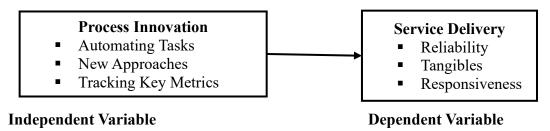


Figure1: Conceptual Framework

Process Innovation

Implementing a new or vastly enhanced production or delivery technique is known as process innovation. According to Davenport (1992), process innovation is process improvement that is business-oriented and continuously centered on quantifiable results. Using continuous improvement (kaizen) techniques, the first wave of process improvement gave people the tools they needed to solve problems. This strategy proved to be quite effective, and now we have the lean movement, which is founded on this way of thinking. It uses tools like quality awards, the 6-sigma methodology (George, Maxey, & Rowlands, 2005), and maturity models like the Capability Maturity Models (Chrissis, Konrad, & Shrum, 2019). The focus on business processes and their potential as sources of innovation has increased significantly since the early 1990s. It was recognized that organizational and cultural barriers were impeding business processes, and this represents the second wave. As a result, fresh IT was implemented as a magic bullet and business process re-engineering (BPR) emerged as a clean slate technique (Hammer & Champy, 2021). The company may be able to lower unit costs through improved production routines, giving it a price advantage over competitors. Enhancing production

flexibility, cutting lead times, enhancing working conditions, or cutting labour expenses are some of the goals that can be included in a production strategy.

Service Delivery

Delivering services to the public in accordance with their expectations is known as service delivery (Mbecke, 2018). Additionally, it is a way to provide timely and effective services in response to public demands (Oronsaye, 2019). This is due to the expectation that services will be provided in a welcoming environment free from barriers, annoyances, or disruptions; rather, services will be provided through open communication, transparency, accountability, accessibility, availability, timeliness, and convenience, as well as consultation and openness (OECD, 2019). But like many other nations, Kenya's public sector is underperforming, largely due to a lack of transparency, accountability, dedication, and trust as well as a growing sense of hopelessness among individuals. According to Hope (2020), the performance has not been at its best.

Kenya launched the Huduma Kenya Programme as a flagship project for transforming the public service through an Integrated Service Delivery (ISD) known as Huduma Centers to provide access to various services. Kenya also introduced e-government as a strategy to improve service delivery, enhance communication and information within government, within the citizenry, and within the business community GoK (2020). According to Mutuku (2019), the program was started with the intention of providing the general public with a variety of services from a single location by using a one-stop shop.

Effectiveness: measures how well the project's goals were or are likely to be accomplished and aims to control the variables that affect goal accomplishment or non-attainment (Ngacho, 2018). According to Mihaiu (2020), the indicator of effectiveness is the ratio between the actual result and the planned outcome. According to Peter Drucker (Drucker, 2001), effectiveness is the foundation of efficiency because achieving success in what you have proposed is more important than achieving success in something else that may not be directly related. Efficiency and effectiveness have the relationship of a part to the whole, with effectiveness being a prerequisite for achieving efficiency. The efficiency and effectiveness analysis is predicated on the relationship between the inputs (entries), outputs (results), and outcomes (effects), according to Breuer and Ludeke-Freund's (2021) paper, "The Effectiveness and Efficiency of Public Spending."

Because efficiency is unaffected by external circumstances, Gelders (2019) claims that effectiveness, which measures how successfully resources were used to accomplish goals, is more difficult to attain than efficiency. Environmental factors, outputs, and outcomes all have an impact on effectiveness. In the latter case, the effectiveness is significantly influenced by environmental factors (such as lifestyle choices and different socioeconomic factors). According to Mihaiu (2020), the effectiveness and efficiency with which public funds are utilized are both influenced by the quality of public administration. According to Hope (2020), efficiency refers to the degree to which intended outcomes are realized at a reasonable cost, or the maximization of output for a given level of input or resources. Based on a comparison of the outcomes of their efforts, efficiency can be generally attained by optimizing the actions' results relative to the resources used (Mihaiu, 2020).

To compare the effectiveness of each sector, a problem relates to the two sectors' complete comparability. These two sectors are not interchangeable, even upon a cursory analysis. The public sector seeks not only economic but also social benefits, with the stated primary goal being to ensure the welfare of the general public. In contrast, the private sector pursues profit. The relationship between efforts or inputs and effects or outputs, as documented in the literature, provides efficiency (Shava & Shikha-Vyas, 2022). In order to ensure that government

initiatives meet their stated objectives and address the needs of the community they are intended to benefit, accountability makes sure actions and decisions made by public officials are subject to oversight. This helps to improve governance and reduce poverty (Reddy, Nanda Kishore, Ajmera, Santosh, 2015). According to Mamduh and Pratikto (2021), accountability is generally defined as a relationship in which one person or body is subject to the supervision, guidance, or demand of another that they give details or an explanation for their actions.

Process Innovation and Service Delivery

Deploying quality functions and reengineering business processes are two aspects of process innovation, according to Cumming (2016). Productivity gains made by an efficient supplier should eventually lead to the development of lower-cost products that provide the same performance. According to Gaynor (2014), there is no guarantee that cost reductions will be transferred to customers in the form of reduced prices. The supply of the primary product and the support component of any offer both benefit from process innovation. A quality standard must be met and upheld for both parts of the offer. The management of process innovation is a particularly difficult task in the case of services, which by definition depend on interpersonal interactions to produce results (Johne & Storey, 2016). Deploying quality functions and reengineering business processes are two aspects of process innovation, according to Cumming (2016). Productivity gains made by an efficient supplier should eventually lead to the development of lower-cost products that provide the same performance. According to Gaynor (2014), there is no guarantee that cost reductions will be transferred to customers in the form of reduced prices. The supply of the primary product and the support component of any offer both benefit from process innovation. A quality standard must be met and upheld for both parts of the offer. The management of process innovation is a particularly difficult task in the case of services, which by definition depend on interpersonal interactions to produce results (Johne & Storey, 2016).

In order to surpass and surpass competitors, the process alignment aims to produce a measurable advantage. Therefore, process creation and optimization transcend tools and practices. Process custodians apply differentiation logic perspectives to understanding how individuals interact within a process, complete tasks, and specify benefits and outcomes. They also consider where and how value occurs, potential roadblocks and hazards, and how the process ultimately generates and maintains a sustainable value for a competitive advantage (Rose, 2017). Best-in-class companies that have adopted an operational excellence culture share certain success factors. These consist of the following: credibility within the company, business unit cooperation, initiatives integrated into the strategy of the organization, top-level support, and the capacity to track outcomes. An organization's formal and informal organizational designs, the processes and methods of operation, as well as management's perspective on work process change and all forms of communication are all impacted by operations competency (Longstaff & Rajan, 2018).

Businesses that prioritize innovation especially cultivate operational competencies that support ongoing learning, change, and enhancement of work and administrative procedures. They also promote the collection and sharing of data from various sources to enhance internal mechanisms and procedures. Quality and ongoing process and production improvement have been highlighted by numerous writers when discussing this facet of innovative businesses (e.g., Damanpour, 2015; Troy, Szymanski & Varadarajan, 2015). A normative framework; process innovation, was created to help identify effective service strategies for various institutional settings, particularly those made possible by modern ICTs.

According to Cumming (2016), process innovation includes business process reengineering and the deployment of quality functions. Although it's a challenging form of innovation, its goal is now clear. Productivity gains made by an efficient supplier should eventually lead to

the development of lower-cost products that provide the same performance. Customers may or may not see lower prices as a result of these cost savings. The supply of the primary product and the support component of any offer both benefit from process innovation. A quality standard must be met and upheld for both parts of the offer. The management of process innovation is a particularly difficult task in the case of services, which by definition depend on interpersonal interactions to produce results (Johne & Storey, 2014).

Research Methodology

Research Design

This study adopted descriptive research design. The choice of descriptive study was informed by the fact that it is not only restricted to fact findings but often result in the formulation of important principles of knowledge and solution to significant problems (Bryman & Bell, 2022). Sekaran and Bougie, 2022) observe that descriptive approach is designed to obtain information concerning the current phenomenon and wherever possible to draw valid general conclusions from facts discussed. Innovative organizations and existing innovation knowledge base which was used as reference points so that the findings are measured against best practices in innovation.

Population

According to Gall and Borg (2017), the accessible population is made up of all the people who could actually be included in the sample, whereas the target population is made up of all the members of a real or hypothetical set of people, events, or objects from which a researcher wishes to generalize the results of their research. As of May 2024, the State Advisory Committee of Kenya reported that there were 78 industry regulators across different sectors, employing 2238 top and middle level managers. The study targets executives, line managers and heads of departments involved in the strategic innovation practice in all the 78 industry regulators. Therefore, the target population for this study was 4,660 as indicated in Table 1.

Table 1: Population

Management Level	Target Population
Executives (CEOs, Directors and MDs)	540
Line Managers (Assistant Directors)	1,080
Heads of Department	3,040
TOTAL	4,660

Sample Size

The sample size for the study was determined using the Yamane (1967) formula. A simplified version of the formula proposed by Saunder, Lewis and Thornhill (2022) was used in the inquiry, replacing the one put forth by Cochran.

As per the Yamane formula, at a confidence level of 95% and 0.05 significance level (p), the sample size is:

$n = N/1 + N(e^2)$

Whereby;

- n represents the size of the sample.
- N represents the population's size.

e represents the error of 5% points.

When the formula is used, a sample size of 341 is yielded as shown below.

$$n=4,660/1, +4,660(0.05^2)$$

 $n=369$

The study then applied a proportionate sampling technique in selecting the 369 respondents.

Table 2: Sample Size

Management Level	Target Population	Proportionate Sample Size
Executives (CEOs, Directors and MDs)	540	43
Line Managers (Assistant Directors)	1,080	85
Heads of Department	3,040	241
TOTAL	4,660	369

Data Processing and Analysis

The quantitative data collected were analyzed using the Statistical Package for the Social Sciences (SPSS 24), where descriptive statistics were computed to help describe and interpret the data in line with the study objectives. For variable relationships, correlation and regression analysis was also examined. Analyzed data was presented by use of tables and in prose form. The Analytical model for the study took form of:

$$Y = \alpha + \beta 1X1 + \epsilon$$

Where; Y= Service Delivery

α= Constant Term

 β = Beta Coefficient –This measures how many standard deviations a dependent variable was change, per standard deviation increase in the independent variable.

 X_1 = Process Innovation.

e = Error term

Research Findings

The study distributed 369 questionnaires to 78 regulatory agencies in Kenya, of which 288 were returned, giving a strong response rate of 78%. This aligns with prior research (Matuga et al., 2022) that considers such rates very good for analysis. To complement primary data, secondary data was collected using prepared sheets on independent, moderating, and dependent variables. Out of 78 sheets, 70 were fully completed and used, achieving an 89.7% success rate, well above the 70% benchmark considered very good (Bryman & Bell, 2022). The high response rates were attributed to persistent follow-ups via calls, emails, and reminders, as well as the relevance of the research topic, which coincided with ongoing parastatal reform debates in Kenya.

Descriptive Findings

Process innovation practice was assessed by three measures, namely: online payment, registration services and licensing process. Table 3 shows descriptive data presented on a scale of 1 to 5(1-Strongly Disagree, 2-Disagree, 3-Neither Agree, 4-Agree, 5-Strongly Agree).

Table 3: Descriptive Results of Process Innovation

Process Innovation	N	Mean	Std.	Cronbach's	
			Deviation	Alpha	
Automating Tasks	288	3.45	0.921	.801	
New Approaches	288	4.22	0.673	.888	
Tracking Key Metrics	288	3.92	0.981	.808	
Process Innovation Practice	288	3.863	0.8583	.832	

Key: 1-Strongly Disagree, 2-Disagreee, 3-Neither Agree, 4-Agree, 5-Strongly Agree Overall Cronbach's Alpha = 0.832

Cronbach's alpha was used to test the reliability of the proposed constructs (Mbugua *et al.*, 2024). From the study findings, it was noted that online payments had a coefficient of 0.801, registration services had a coefficient of 0.888 while coordination of automating tasks had a coefficient of 0.808. The overall Cronbach's alpha process innovation (automating tasks, new approaches and tracking key metrics) was 0.832. The findings showed that all the three scales of process innovation practice measures were reliable as their reliability values exceeded the prescribed threshold of 0.7 (Bryman & Bell, 2022).

From the research study, it was noted that automating tasks was key to regulatory agencies long-term relationship with the people and process innovation practice had enabled regulatory agencies to venture into the addressing citizens issues hence enhancing process innovation practice as indicated by a mean score of 3.45 and a standard deviation of 0.921. These findings were consistent with Wambugu, *et al.*, (2022) who did a study on the effect of innovation on service delivery in the public sector in Kenya and strongly indicated that process innovation practice enhanced performance since it was key to great new approaches had a mean score of 4.22 and a standard deviation of 0.673. These findings were consistent with Matuga *et al.*, (2022) who did a study on the effect of strategic management practices on export value addition in the tea subsector industry and asserted that digital innovation practice were key in service delivery in order to propel export value addition and hence foreign exchange earnings performance.

From the research study, it was noted that tracking key metrics was necessary in process innovation practice through more flexible and reliable, increased performance and efficiency and helping in reducing IT related costs at regulatory agencies in Kenya, as indicated by a mean score of 3.92 and a standard deviation of 0.982. These findings were consistent with Wambugu *et al.*, (2022) who did a study on the on the effect of innovation on service delivery in the public sector in Kenya and strongly indicated that cloud computing enhanced performance of citizens self-serving and accessing government function through platforms that are easily accessed.

Inferential Findings

The objective of the study was to examine the influence of process innovation on the service delivery of regulatory agencies in Kenya. The corresponding hypothesis was that process innovation has no significant influence on service delivery of regulatory agencies in Kenya.

A univariate analysis was therefore conducted to test the null hypothesis. From the model summary findings in Table 3, the r-squared for the relationship between process innovation and service delivery of regulatory agencies in Kenya was 0.223; this is an indication that at 95% confidence interval, 22.3% variation in service delivery of regulatory agencies in Kenya can be attributed to changes in process innovation. Therefore, process innovation practice can be used to explain 22.3% change in service delivery of regulatory agencies in Kenya. However, the remaining 77.7% variation in service delivery of regulatory agencies in Kenya suggests that

there are other factors other than process innovation that explain service delivery of regulatory agencies in Kenya

Table 4: Model Summary for Process Innovation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.472ª	.223	.224	.75632

a. Predictors: (Constant), process innovation

The analysis of variance was used to determine whether the regression model is a good fit for the data. From the analysis of variance (ANOVA) findings in Table 4, the study found out that that $Prob > F_{1,286} = 0.000$ was less than the selected 0.05 level of significance. This suggests that the model as constituted was fit to predict service delivery of regulatory agencies in Kenya. Further, the F-calculated, from the table (431.49) was greater than the F-critical, from f-distribution tables (3.874) supporting the findings that process innovation practice can be used to predict to service delivery of regulatory agencies in Kenya.

Table 5: ANOVA for Process Innovation

M	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.738	1	45.738	431.49	.000b
	Residual	30.417	286	0.106		
	Total	76.155	287			

a. Dependent Variable: service delivery of regulatory agencies in Kenya

From the results in table 4, the following regression model was fitted.

$$Y = 0.273 + 0.363 X_3$$

(X_3 is Process Innovation)

The coefficient results showed that the constant had a coefficient of 0.273 suggesting that if process innovation was held constant at zero, service delivery of regulatory agencies in Kenya would be at 0.273 units. In addition, results showed that process innovation practice coefficient was 0.363 indicating that a unit increase in process innovation practice would result in a 0.363 unit improvement in service delivery of regulatory agencies in Kenya. It was also noted that the P-value for process innovation practice was 0.000 which is less than the set 0.05 significance level indicating that process innovation practice was significant. Based on these results, the study rejected the null hypothesis and accepted the alternative that process innovation practice has positive significant influence on service delivery of regulatory agencies in Kenya.

Table 6: Beta Coefficients for Process Innovation Practice

Model		andardized efficients	Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	0.273	.075		3.640	.002
process innovation	0.363	0.093	0.364	3.903	0.000

a. Dependent Variable: service delivery of regulatory agencies in Kenya

b. Predictors: (Constant), process innovation

Summary of the Findings

The study sought to establish the effect of process innovation on service delivery of regulatory agencies in Kenya. The indicators of process innovation were automating tasks, new approaches and tracking key metrics while measures of service delivery of regulatory agencies in Kenya were reliability, tangibles and responsiveness. Both descriptive and inferential statistical methods were used to arrive at the results.

From the research findings, automating tasks, new approaches and tracking key metrics had a statistically significant effect on service delivery of regulatory agencies in Kenya linked to reliability, tangibles and responsiveness. Findings on correlation and regression analysis indicated that there was a statistically significant and strong positive correlation effect between measures of process innovation (automating tasks, new approaches and tracking key metrics) and service delivery of regulatory agencies in Kenya linked to reliability, tangibles and responsiveness. Generally, the process innovation practice indicators (automating tasks, new approaches and tracking key metrics) were found to be statistically significant in explaining the effect of process innovation on service delivery of regulatory agencies in Kenya.

Conclusions of the Study

The study's findings indicated a positive relationship between process innovation and the service delivery of regulatory agencies in Kenya. It can therefore be concluded that process innovation practice positively influences the service delivery of regulatory agencies in Kenya. The relationships were statistically significant, given that the p-value was less than 0.05. Improved methodologies and procedures of innovation practices in any organization will highly influence the service delivery of regulatory agencies in Kenya. Given the foregoing, it can be concluded that an improvement in process innovation practice will lead to improved service delivery of regulatory agencies in Kenya.

Recommendations of the Study

Regulatory agencies should adopt process innovation, such as significant changes in techniques, or ways of doing things in order to reduce the time taken to produce a service or use lesser resources to produce value.

Regulatory agencies can also eliminate waste in their program implementation if they adopt process innovation. Lastly, regulatory agencies have a chance to be lean and agile if process innovation is adopted: this allows regulatory agencies to offer exemplary services.

There is also to invest in process innovation strategies that would optimize the online payments, registration services, and licensing process to ensure efficiency in the innovation practices. These recommendations are aimed at improving the level of process innovation practices in regulatory agencies in Kenya.

References

- Aas, T. H., & Pedersen, P. E. (2020). The impact of service innovation on firm-level financial performance. *The service Industries Journal*, 31 (13) 2071 2090.
- Abdelnour-Nocera, J. L. (2018). The social construction of usefulness. *Doctoral DissertationOpen University, Milton Keynes*, 12 (4) 89 93.
- Ajibade, O., Ibieten, J., & Ayelabola, O. (2017). E-Governance Implementation and Public Service Delivery in Nigeria: The Technology Acceptance Model (TAM) Application. *Journal of Public Administration and Governance*, 7(4), 165 174.

- Akhgar, B., Siddiqi, J., Foster, M., Siddiqi, H., & Akhgar, A. (2019). Applying customer relationship management (CRM) in the mobile commerce market. *Proceedings of the International Conference on Mobile Computing.*, 18 (8) 90 108.
- Ali, O., & Soar, J. (2018). Technology Innovation Adoption Theories. In Technology Adoption and Social Issues: Concepts, Methodologies, Tools and Applications. New York: IGI Global.
- Ali, S. A. (2017). The Role of Good Governance Practices in Enhancing Service Delivery in Public Institutions in Tanzania: The Case Study of the Tanzania Electric Supply Compnay Limited. *International Journal of Business*, 23 (7) 85 96.
- Munyi, C. W., Namusonge, G. S., & Simiyu, A. (2024). Strategic Sourcing as a Tool for Improving Firm's Performance. *International Journal of Innovation and Economic Development*, DOI: 10.18775/ijied.1849-7551-7020.2015.65.2024.
- Mutuku, D. (2019, January 15). How Huduma is Transforming the Public Service. *Standard Newspaper*, p. 13.
- Mwanza, M. W., & Bitange, N. (2021). Digitalization, Strategy and Public Service Delivery in the Ministry of Lands in Kenya. *International Journal of Project Management*, 145 (12) 1 7.
- Myers, J. (2019). What new jobs will exist in 2035? World Economic Forum, Davos, February 29; https://www.weforum.org/agenda/2016/02/these-scientists-have-predicted-which-jobs-will-be-human-only-in-2035/. Denver: World Economic Forum.
- Narajo-Valencia, J. C., Jimenez-Jimenez, D., & Sanz-Valle, R. (2020). Studying the links between organizational culture, innovation, and performance in Spanish companies. *Revista Latinoamericana de Psicología*, 48 (1), 30 41.
- Nyongesa, G. I., Mbugua, D., & Boit, R. (2024). Strategic Leadership, Innovation and Service Quality of Accredited Universities in Kenya. *Unpublished Doctoral Thesis, Jomo Kenyatta University of Agriculture and Technology*, Retrieved from: http://www.jkuat.ac.ke.
- OECD. (2019). *Public Management Service, Public Management Committee. (5th ed.)* . New Delhi: Prentice- Hall of India Private Limited.
- Ojiako, U., AlRaeesi, E. J., Chipulu, M., Marshall, A., & Bashir, H. (2023). Innovation readiness in public sector service delivery: An exploration. *edinburg Napier University*, https://doi.org/10.1080/09537287.2022.2089266.
- Oronsaye, S. (2019). Creating the Service Delivery of Our Dreams. Office of the Head of the Civil Service on the Federation, Federal Government of Nigeria. *International Journal of Social Sciences Research*, 25 (8) 128 139.
- Patano, E. (2021). Innovation drivers in retail industry. *International Journal of Information Management*, 34 (3): 344 350.
- Peter, M. N., Munga, J., & Nzili, J. M. (2021). Effect of process innovation strategies on performance of tier one commercial banks in Kenya. *International Academic Journal of Innovation, Leadership and Entrepreneurship*, 2(2), 142-162.
- Pryczak, F., & Deborah, M. O. (2024). *Making Sense of Statistics- A Conceptual Overview*. Kuwaits: Sage Publishers.
- Reddick, C. G. (2021). Citizen interaction and e-government: Evidence for the managerial, consultative, and participatory models Transforming Government. *People, Process and Policy*, 5(2), 167–184. https://doi.org/10.1108/17506161111131195.

- Tseng, M., Wu, K., Chiu, A., & Lim, M. K. (2019). Service innovation in sustainable product service systems: Improving performance under linguistic preferences. *International Journal of Production Economics*, DOI:10.1016/j.ijpe.2019.09.013.
- Tushman, M. L., & O'Reilly III, C. A. (2016). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, 38(4), 8-9.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2019). Unified theory of acceptance and use of technology: A synthesis and the road ahead. *Journal of the Association for Information Systems*, 17 (5), 328 376.
- Vignieri, V. (2020). Public Service delivery in the context of governance: is it co-production or co-creation of value? *The American Review of Public Administration*, 43 (2): 135 158.
- Wadho, W., & Chaudrhy, A. (2018). Innovation and firm performance in developing countries: The case of Pakistani
- Witjara, E., Herwany, A., & Santosa, S. P. (2019). The Influence of Industry Environment and Company Asset On Strategic Innovation and The Implication On Business Valuation Of Digital Industry In Indonesia. *Sustainable Collaboration in Business, Technology, Information and Innovation*, (Scbtii).
- World Economic Forum. (2019). *The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution.* Denver: Available at: https://www.weforum.org/reports/the-future-of-jobs.
- Yi, J., Lee, Y., & Kim, S. H. (2020). Determinants of growth and decline in mobile game diffusion. *Journal of Business Research*, 128 (4) 29 39.
- Zackoff, M. W., Real, F. J., Klein, M. D., Abramson, E. L., Li, S. T., & Gusic, M. E. (2022). Enhancing Educational Scholarship Through Conceptual Framework: A Challenge and Roadmap for Medical Educators. *Academic Pediatrics*, 19 (2), 135 141.
- Zikmund, G. W., Babin, B. J., Carr, C. J., & Griffin, M. (2022). Business Research Methods (9th Ed.). South Western: Cengage Learning.