IDENTIFICATION OF PUBLIC SERVICE LOGIC (PSL) AND PUBLIC SERVICE MOTIVATION (PSM) ELEMENTS IN OPEN GOVERNMENT DATA (OGD) INITIATIVES

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Abstract

While previous research on Open Government Data (OGD) has primarily focused on reuse and adoption, this study aims to explore the implications of the Public Service Logic (PSL) and Public Service Motivation (PSM) dimensions in the context of OGD initiatives. This study is contextualized in Tanzania wherein the OGD initiatives are at an evolving stage. For the present study, the perspectives of the 15 public officials involved in the management of the OGD initiatives are being solicited. Findings underscore the need for furthering the marketing and refurbishing the OGD initiatives' quality alongside the increased involvement of the stakeholders to engage in value co-creation. Furthermore, as a study contextualized in a developing country to understand the involvement of the public personnel in the refurbishment of the OGD initiatives, the study contributes to the extant OGD literature while identifying the OGD publisher-side challenges and strengths in a still-evolving OGD initiative. Finally, with its societal implications in terms of the impact on societal stakeholders' engagement with OGD given the PSL-PSM of the public officials, the study's relevance is also clinched.

Keywords: Open Government Data (OGD), Tanzania, Public Service Logic, Public Service Motivation

Key points:

- Public Service Motivation (PSM) and Public Service Logic (PSL) are important considerations for pushing forth the Open Government Data (OGD) initiatives
- Balancing personal and professional goals is important for catering to the needs of the OGD users
- Value creation and innovation opportunities should be considered as the raison d'etre for bolstering OGD initiatives in a developing country like Tanzania

Introduction

Open Government Data (OGD) initiatives have become fundamental to digital government efforts. These initiatives consistently emphasize improving public service delivery and engaging stakeholders in co-creating value (De Blasio & Selva, 2016). As such, OGD pertains to the structural and functional datasets about the administrative entities cutting across horizontal and vertical hierarchies such that the domains of agriculture, climate, social service, environment, energy, education, industry and the like are being covered in the datasets (Ubaldi, 2013). OGD must be complete, accurate and amenable to statistical interpretation on account of the machine-processable formats of the same. OGD engagement by a range of stakeholders has been considered as a bulwark of the OGD ecosystem wherein the reuse of OGD has been considered as important for the value cocreation pursuits of the stakeholders which would eventually result in the refurbishment of the public services as also the socio-economic developmental landscape (Grimmelikhuijsen & Feeney, 2017; Jetzek, Avital & Bjorn-Andersen, 2014). In line with these assertions, it may be underlined that the themes of Public Service Motivation (PSM) (Caserta, Ferrante & Reiito, 2022; Perry et al., 2010; Waterhouse, French & Puchala, 2014) and Public Service Logic (PSL) (Alford, 2016; Ostrom, 1990) have assumed significance over a period of time given the impetus upon the empathy and altruism of the public service officials in the former case and the value cocreation dimensions in the latter case. Whilst the former is defined in terms of the broad concern for the progression and stakeholders' engagement with OGD, the latter is concerned with the efforts made by the public officials towards value derivation and innovation by the stakeholders concerned. Aligning these two dimensions across the OGD plane, the present study is contextualized in Tanzania-a developing country where the public officials and managers (n~15) directly engaged in the operationalization of OGD initiatives are solicited to lend their perspectives via a semi-structured interview protocol. The guiding research questions for the present study are: "How does Public Service Motivation affect the reuse and adoption of OGD initiatives?" and "How does Public Service Logic operate in OGD initiatives? Where does it fail and why/how?" As a study focused on understanding the challenges from the OGD publishers' side, viz. the public personnel involved in the OGD initiatives, the study broadens our understanding regarding the impediments and strengths in an evolving OGD initiative in Tanzania.

The rest of the paper is structured as follows: following a brief on Tanzania's OGD initiative, the paper scans the related research on PSL and PSM and moves on to expand on the research methodology; thereafter, the findings are discussed in light of the results and Discussion follows next with a round-up of the paper in the Conclusion Section alongside implications for further research and practitioners.

Tanzania's OGD initiative

Tanzania launched the OGD initiative in 2011 (URT 2014, 2015) with the further institutional backup of the National Bureau of Statistics (NBS) and the E-government agency of Tanzania. OGD initiative was spearheaded with the objectives of provisioning government datasets across diverse domains, viz., energy, water sources, health, tourism, etc. for furthering the societal engagement with OGD as well as to further the economic prosperity of the country with the

value derivation initiatives of the stakeholders concerned. It is critical to note that Tanzania was a part of the Open Government Partnership (OGP) between 2012 and 2017 (OGP Support Unit, 2017). User engagement with OGD in Tanzania is influenced by the extent of her perception of performance expectancy, effort expectancy, social influence and facilitating conditions (Shao, 2022). However, Shao and Saxena (2019) underscored the political, social, legal, economic and technological impediments being encountered by public sector officials in implementing the OGD initiatives at their heightened pace.

Related research

Public Service Logic (PSL)

Public Service Logic (PSL) is defined in terms of the value co-creation pursuits by the stakeholders of the ecosystem (Alford, 2016; Ostrom, 1990) with the overarching purpose of "solving an increasing number of severe problems" (Jenhaug, 2021: 729). It has been underlined that PSL ought to consider the social context for providing optimal opportunities for value co-creation by the stakeholders (Eriksson, 2019). Furthermore, five components of PSL have been underlined: "value-in-use is the source of value creation in public services; value in PSL is created not only in-use but also value-in-context, value-in-production, value-in-society; use-value is collectively created including by some non-participant labor, akin to audience labor; PSL as a managerial strategy seeks to transfer control of service processes (service judgments, resource use decisions and costs) from providers to service users; cocreation, like coproduction, arguably erodes equal rights to services" (Kinder & Stenvall, 2023: 7). Furthermore, in an empirical study based in municipal government level in London, it was attested that PSL was made feasible in the case of environmental, educational and to an extent, business development spheres such that such engagement was multi-directional with a focus on the highly engaged residents (Dudau et al., 2023). Furthermore, PSL is emphatic upon value derivation with the involvement of the users wherein their resources, skills and experiences are being factored into consideration (Gronroos, 2019) and this eventually results in improvisation of the services of the public services (Sonderskov & Ronning, 2021). Concomitantly, there is a possibility wherein on account of issues such as lack of transparency, errors, lack of bureaucratic competence and the inability of the public management to serve, there might result in value co-destruction by the stakeholders as well (Engen et al., 2021).

Public Service Motivation (PSM)

Public service motivation (PSM) has been identified in terms of the altruistic and prosocial propensities of public servants which are engrained in them by virtue of their institutional affiliations and overarching objectives (Caserta, Ferrante & Reiito, 2022; Klatt & Flairholm, 2023; Perry et al., 2010). Thus, it has been attested that public officials are motivated by public service even if it entails personal sacrifices (Bozeman & Su, 2015; Perry &Vandenabeele, 2015) and the public well-being of society (Piatak & Holt, 2020). Inter alia, PSM indicates the officials' personal goals are less important than the community aspirations and goals and public service is important for their overall satisfaction with their professional occupation (Bao & Zhong, 2023; O'Leary, 2019; Perry & Wise, 1990). For instance, it was shown how the Chinese

public officials upheld their professional values to evince transformational leadership for bringing about the desired administrative churn affecting society (Bao & Ge, 2019). That said, PSM is associated with the extent to which an employee is engaged in her work and the same is reflected in her work commitment (Mussagulova, 2021) but non-congruent results were attested in another research wherein PSM was not found to have any bearing on job satisfaction (Rayner, Reimera & Chao, 2018). It has been attested that PSM is prevalent in private as well as public sector employees (Pedersen, 2013; Steen, 2008). Two of the key elements of PSM are compassion and self-sacrifice (Campbell & Im, 2016; Sudha & Azam, 2023). There is a debate on the exact nature of PSM in whether it is a trait or a state and unidimensional or multidimensional (Christensen et al., 2021; Florczak et al., 2022; Kim et al., 2012; Wright et al., 2013). It has been argued that PSM may have a stable or a variable stance among public officials and situations unique to the individual or external to her may call for adjustments accordingly (Florezak et al., 2022; Kim, Ki & Yoon, 2023). Apart from this, the association across PSM, public service value and public service ethos has been attested in empirical research wherein the role of PSM has been found to be maximal in influencing the actual decision-making processes with respect to the servicing of the people (Witesman, Walters & Christensen, 2023). As such, PSM has been delineated into 4 categories, i.e. self-sacrifice, commitment to public values, attraction to public service and compassion (Vandenabeele & Schott, 2020). It has been empirically validated that organizational goals' clarity is instrumental in fomenting the PSM of the employees with a concomitant increment of their overarching performance at work (Jung, 2014; Jung & Rainey, 2011). Empirical research has also validated the impact of PSM on work performance especially in the public sector (Kim, 2011).

Research methodology

Grounded in a positivist epistemological perspective given the need for unraveling an unresearched phenomenon and deriving inferences from an exploratory inquiry, this study seeks to present inferences based on the qualitative analysis wherein the data collection and analysis procedures employed to establish the qualitative nature of the research were primarily rooted in the content analysis of semi-structured interviews.

Data collection was facilitated through a semi-structured instrument comprising 25 semi-structured interview questions that were cross-validated by two of the lead authors in agreement with the other authors. Furthermore, the interview protocol aimed to ascertain the operational intricacies of Open Government Data (OGD) initiatives implemented by the Tanzanian government in Africa. Individual interviews were conducted in person, ensuring optimal flexibility and accessibility for participants. On average, each interview session lasted approximately 45-50 minutes. A cohort of 15 public officials actively engaged in activities about OGD, IT strategy, Government Technology Infrastructure (GTI), public corporate governance, public corporate strategy, and citizen engagement, participated in the semi-structured interviews. Specifically, the interviewees were approached following purposive, judgemental and snowball sampling procedures and all the interviewees were directly/indirectly connected with the OGD initiatives in the country. Interviews were conducted by two of the researchers themselves between February 2023 and June 2023. The selection of these public officials was meticulously aligned with the overarching theme of governmental open data, predicated on their involvement with OGD either individually or as leaders of their respective

teams. Table 1 presents a comprehensive overview of the interviewees' professional designations within their respective public organizations, alongside their areas of operation within the Tanzanian government sector. The semi-structured list of interview questions can be found in Appendix A.

Affiliation of the Interviewee	Designation level of the Interviewee
ICT Commission (ICTC)[1]: Focuses on the digital innovations in the country with a view to create a knowledge society	ICT Officer (1)
	ICT Officer (2)
	ICT Director
Ministry of ICT[2]: Focuses on the digital transformation of the country to result in the corruption-free administration alongside a digital transformation of the society	ICT Manager
	Policy Maker (1)
	Policy Maker (2)
National Bureau of Statistics (NBS)[3]: Hinges upon the provision of statistical information to the government, citizens, private sector, and others.	Statistician (1)
	Statistician (2)
e-Government Authority (eGA)[4]: Oversees and promotes the digital government initiatives apart from provisioning the stipulations and laws regarding the same.	ICT Officer (1)
	ICT Officer (2)
	ICT Officer (3)
	ICT Director
Local Government Authority (TAMISEMI: Tawala za Mikoa na Serikali za Mitaa)[5]: Furthers democratic decentralization	ICT Officer
	ICT Manager

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1   Information and Commission Technologies Commission (ICTC): https://www.ictc.go.tz/
2   Ministry of Information, Communication & Information Technology:
https://www.mawasiliano.go.tz/pages/introduction-about-ministry#:~:text=The%20Ministry%20of%20Information%2C%20Communication,United%20of%20Republic%20of%20Tanzania.
3   National Bureau of Statistics: https://www.nbs.go.tz/index.php/en/about-us/general-information
4   e-Government Authority: https://www.ega.go.tz/who-are-we
5   TAMISEMI: https://www.tamisemi.go.tz/

Affiliation of the Interviewee	Designation level of the Interviewee
across local administrative levels for furthering citizen participation in administration	Policy Maker

Table 1: Interviewees for the study

To facilitate rigorous data analysis, the research adhered to the seminal content analysis technique established by Bardin (1977), which encompasses three integral phases: 1) pre-analysis; 2) material exploration; and 3) results processing, inference, and interpretation. In practice, the interviews were recorded and transcribed into written textual documents. These transcripts were subsequently imported into Atlas.TI[6] which is a renowned software tool specifically designed for qualitative data analysis. Consequently, an exhaustive segment-by-segment coding process was conducted, effectively isolating and categorizing each relevant data point obtained from the interviews. Finally, the assigned codes were integrated into corresponding thematic categories, thereby facilitating comprehensive analysis, inference, and interpretation.

Data analysis

During the analysis process, a total of 141 evidence excerpts were extracted from the interview respondents' text-based responses regarding the Tanzanian government's open government data (OGD) initiatives in Africa. Subsequently, with the support of existing literature, these evidence excerpts were coded into 42 terms encompassing semantically similar expressions within the interview context, all of which were associated with OGD initiatives. Finally, the 37 identified terms were grouped into six categories, four of which related to Public Service Motivation (PSM) and two of which related to Public Service Logic (PSL).

The four categories associated with PSM were based on the four dimensions defined by Perry (1996) for PSM, namely, attraction to policy-making (APM), commitment to the public interest (CPI), compassion (COM), and self-sacrifice (SS). According to Perry and Hondeghem (2008), the academic community has reached a consensus on the concept of PSM, although it entails profound connotations, being inherently linked to the idea of motivation and action aimed at benefiting others and shaping social well-being. In essence, it represents an individual's inclination to serve society. Thus, the intention behind associating the codes related to OGD initiatives with the dimensions of PSM as defined by Perry (1996) is to address one of the research questions of this study, namely, "*How does Public Service Motivation affect the reuse and adoption of OGD initiatives?*"

The other two categories, value co-creation (VCC) and value co-destruction (VCD), are related to Public Service Logic (PSL). PSL has been proposed as an alternative to New Public Management (NPM). While NPM emphasizes value creation within the public sector with minimal or no user involvement, PSL posits that value is co-created among the public sector, users, and third parties (Engen et al., 2021; Alford, 2016; Osborne, 2010, 2018; Osborne, Radnor, Nasi, 2012). PSL is thus associated with value co-creation, signifying the collaborative

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6   ATLAS.ti: https://atlasti.com/

efforts of users, third parties, and the public sector to generate value in public services for the betterment of society. However, this co-creation of value can fail, leading to value co-destruction. According to Echeverri and Skalen (2011), value is co-created when stakeholders adopt congruent practices, but incongruence in these practices results in value co-destruction. It is within this framework that the association of the identified codes in the interviews with these two categories aims to address the second research question of this study, namely, "*How does Public Service Logic operate in OGD initiatives? Where does it fail and why/how?*"

The 42 terms were identified within the responses of the 15 interview participants, with some terms associated with one category and others associated with multiple categories. The 25 questions of the present research questionnaire served as the basis for assigning the terms to the respective categories. Questions 1 to 14 and 20 were related to the "value construction" and "value deconstruction" categories, questions 15, 16, and 24 to the "APM" category, questions 17 and 22 to the "CPI" category, questions 18, 21, and 25 to the "COM" category, and finally, questions 19 and 23 to the "SS" category.

In the following sections, we will delve into the six categories and the codes that were most frequently identified within each category, whether positively or negatively. Furthermore, the categories and codes will be presented in tables that provide information on the absolute frequency of code mentions in the interview responses and the percentage based on the total sum of all code mentions across all categories.

PSM

Attraction to Public Policy Making (APM)

APM is defined in terms of the intent to be a part of the policy-making processes apart from a voluntary disposition towards societal development (Rafique et al., 2021). Table 2 demonstrates the identified codes related to the APM category.

Approach	Categories	Vision	Code	Absolute Citation Frequency	Percentage (%)
PUBLIC SERVICE MOTIVATION (PSM)	Attraction to Public Policy Making (APM)	Positive	Partnerships	5	1,16
			Involving the user in co-creation	5	1,16
			Supporting data usage	1	0,23
			Data sharing	1	0,23
			OGD policy formulation	1	0,23
		Negative	Resource Restrictions	5	1,16
			Lack of Incentives	4	0,93
			Usability of data	4	0,93
			Governance gaps	3	0,70
			Training Needed	3	0,70
			Data Privacy	2	0,47
			Lack of data sharing	2	0,47
			Competing Priorities	2	0,47
			Bureaucracy	1	0,23
			Conflict of interest	1	0,23
			Benefits not immediately visible	1	0,23
			Resistance to change	1	0,23

Table 2: Distribution of Codes Associated with the APM Category (Developed by the author)

As depicted in Table 2, partnerships and user involvement in co-creation emerge as positive aspects of APM. For instance, in response to question 24, participant E2 expressed, "*Partnerships with the private sector and academia can bring diverse knowledge and resources that can support the development and implementation of innovative and evidence-based policies that cater to the needs of Tanzanian citizens.*" Similarly, participant E9, in response to question

24, stated, "*Engaging users in the process of co-creation and value innovation will enable us to better understand their needs and preferences, which can inform the collection, processing, and dissemination of statistical data.*"

On the other hand, resource constraints were the most frequently mentioned negative aspect of APM in the interview responses. As articulated by E2 in response to question 15, "*Although we strive to create a positive work environment and provide ongoing support to our team, challenges such as limited resources and conflicting priorities can impact motivation.*"

Consequently, it is comprehensible that partnerships with the private sector and academia, as well as government policies aimed at involving data users in co-creation, serve as motivators and attract public servants to policy formulation. Conversely, resource constraints can diminish their motivation levels.

Commitment to Public Interest (CPI)

CPI is related with the invidividual intention of catering to the public interest while performing one's official duties (Rafique et al., 2021). Table 3 displays the identified codes associated with the CPI category.

Approach	Categories	Vision	Code	Absolute Citation Frequency	Percentage (%)
PUBLIC SERVICE MOTIVATION (PSM)	Commitment to public interest (CPI)	Positive	Commitment	9	2,09
			OGD portal features and design	3	0,70
			Inter-agency collaboration	2	0,47
			Partnerships	1	0,23
			User feedback	1	0,23
			Innovation	1	0,23
		Negative	Governance gaps	3	0,70
			Data usability	3	0,70
			Resource constraints	2	0,47
			Bureaucracy	2	0,47
			Conflict of interests	2	0,47
			Competing priorities	1	0,23
			Lack of data sharing	1	0,23
			Training needs	1	0,23
			External pressures	1	0,23
			Resistance to change	1	0,23

Table 3: Distribution of codes associated with the CPI category (Developed by the author)

According to the above table, commitment is the most frequently mentioned positive aspect for the CPI category, as stated by E3 in response to question 17: "*We strive to prioritize the public interest, but sometimes a lack of direction or clear communication can create confusion.*"

Regarding negative aspects, governance failures and data usability are the most cited. According to E12's response to question 17: "*Although most of us are committed to the public interest, issues such as corruption and lack of transparency can sometimes undermine our efforts.*" E8 also mentioned in response to question 17: "*We are focused on providing accurate and timely data, but data overload and reluctance to share information can undermine our commitment.*"

Thus, the interviewed employees are committed and making efforts to uphold the public interest. However, issues such as government direction, including corruption and lack of transparency, as well as data usability, where data accumulation may interfere with their accuracy and integrity, are negative points that can discourage employees in their commitment to the public interest.

Compassion (COM)

COM relates to the extent to which a public personnel is inclined towards forging emotional ties with the public at large conceding that public personnel deal with the latter in their professional capacities (Rafique et al., 2021). Table 4 displays the identified codes associated with the COM category.

Approach	Categories	Vision	Code	Absolute Citation Frequency	Percentage (%)
PUBLIC SERVICE MOTIVATION (PSM)	Compassion (COM)	Positive	Empathy	11	2,56
			User feedback	5	1,16
			Usability of data	4	0,93
			Partnerships	3	0,70
			Features and design of the DAG portal	3	0,70
			Commitment	2	0,47
			Inter-agency collaboration	2	0,47
			Data privacy	1	0,23
			Data usage support	1	0,23
			Involving the user in co-creation	1	0,23
			Marketing	1	0,23
			Innovation	1	0,23
		Negative	Resource Restrictions	3	0,70
			Competing priorities	2	0,47
			Training needs	2	0,47
			Workload	2	0,47
			Lack of channels for user feedback	1	0,23
			Lack of knowledge/interest in DAG	1	0,23
			Lack of data sharing	1	0,23
			Usability of data	1	0,23
			Conflict of interests	1	0,23
			Lack of broad access to DAG	1	0,23

Table 4: Distribution of codes associated with the COM category (Developed by the author)

Empathy was the most frequently mentioned positive aspect for the COM category, while resource constraints were the most cited negative aspect. E8's response to question 18 demonstrates both points mentioned: "*We are compassionate and attentive to the users' needs, but sometimes technical limitations make it difficult to address all their concerns.*"

In other words, employees strive to be empathetic and sensitive to the users' needs. However, technical limitations, which may be related to a lack of tools and specialized personnel, hinder empathy and emotional connection with the users.

Self-Sacrifice (SS)

SS is an altruistic trait characterized by the public personnel to cater to the needs of the public first prior to the self-serving intent (Rafique et al., 2021). Table 5 displays the identified codes associated with the SS category.

Approach	Categories	Vision	Code	Absolute Citation Frequency	Percentage (%)
PUBLIC SERVICE MOTIVATION (PSM)	Self-sacrifice (SS)	Positive	Efforts	6	1,40
			Inter-agency collaboration	2	0,47
			Innovation	2	0,47
			Empowering the team	1	0,23
			Partnerships	1	0,23
			Data usability	1	0,23
			Functionality and design of the DAG portal	1	0,23
			Broad data access	1	0,23
			Involve the user in co-creation	1	0,23
			Data sharing	1	0,23
		Negative	Resource Restrictions	4	0,93
			Workload	2	0,47
			Difficulty in maintaining sacrifice	1	0,23
			Need for training	1	0,23
			External pressures	1	0,23
			Competing priorities	1	0,23

Table 5: Distribution of codes associated with the SS category (Compiled by the author)

Sacrifice was the most frequently mentioned positive aspect of the SS category. According to E6, in response to question 19: "*We strive to provide accurate data, but we need more support in terms of resources and training.*" In the response to question 23, he also stated: "*In the coming years, we intend to expand the scope of our data collection efforts and enhance data quality by leveraging new data sources and emerging technologies such as IoT and remote sensing.*"

On the other hand, resource constraints were mentioned as a negative aspect, as reflected in E6's response to question 19 mentioned above. E5 also cited resource constraints, stating: "*There is a willingness to make sacrifices, but better resource allocation is needed to avoid overburdening employees.*" Therefore, the willingness to make sacrifices exists, but the lack of resources is a discouragement.

PSL

VCC occurs when users assume an active and collaborative role and co-create value with creators/suppliers throughout relational exchanges, engaging in the entire service value chain (Wiedenhöft et al., 2023; Prahalad & Ramaswamy, 2004; Yi & Gong, 2013). Table 6 presents the identified codes associated with the VCC category.

Positive (VCC)			Negative (VCD)		
Code	*Absolute citation frequency*	*Percentage (%)*	*Code*	*Absolute citation frequency*	*Percentage (%)*
Marketing	37	8.60	Data privacy	22	5.12
Partnerships	22	5.12	Resource restrictions	20	4.65
Data usability	18	4.19	Lack of broad access to OGD	11	2.56
OGD portal features and design	14	3.26	Failures to support data usage	11	2.56
Data usage support	11	2.56	Resistance to change	9	2.09
User training	8	1.86	Confusing information	9	2.09
Data privacy	8	1.86	Usability of data	8	1.86
Governance	7	1.63	Limited data literacy	7	1.63
User feedback	5	1.16	Need for training	5	1.16
Cross-agency collaboration	5	1.16	Lack of knowledge/interest in OGD	4	0.93
Involving the user in co-creation	4	0.93	Lack of channels for user feedback	4	0.93
Data sharing	4	0.93	Competing priorities	3	0.70

Positive (VCC)			Negative (VCD)		
Code	Absolute citation frequency	Percentage (%)	Code	Absolute citation frequency	Percentage (%)
Empowering the team	3	0.70	OGD portal features and design	3	0.70
Innovation	1	0.23	Limited internet access	2	0.47
OGD oriented policy formulation	1	0.23	Lack of data sharing	2	0.47
Careful data handling	1	0.23	Careful data handling	1	0.23
Reach of data at local level	1	0.23	Involve the user in co-creation	1	0.23
			OGD-oriented policy formulation	1	0.23

Table 6: Key indices measuring PSL

Table 6 presents the points identified in the interviews that contribute to VCC. The two most cited points are marketing and partnerships. E6 addresses marketing when answering question 10: "*We need to engage stakeholders through various channels, including workshops, conferences, and targeted marketing campaigns.*"

Regarding partnerships, E8 responded to question 14, stating: "*We should partner with NGOs and civil society organizations that have a strong presence in the community. They can help promote OGD initiatives and engage users at the grassroots level.*"

Therefore, engaging data users through campaigns, conferences, and workshops, as well as developing partnerships, are of utmost importance for the success of OGD initiatives.

Value co-destruction (VCD)

VCD is related to the failure of VCC. It occurs due to insufficient resources, malfunctioning technologies, behavioral conflicts, among others (Wiedenhöft et al., 2023; Surachartkumtonkun, McColl-Kennedy & Patterson, 2015). Table 6 demonstrated the codes identified and related to the VCD category.

According to the table above, data privacy and resource constraints are the factors that contribute the most to VCD. For E13, in response to question 08: "*We believe that OGD initiatives have great potential to improve public services, but their popularity is hindered by factors such as limited digital literacy, concerns about data privacy, and the need for more user-friendly resources on the portal.*"

Regarding resource constraints, E8, when answering question 16, stated: "*We maintain the OGD portal and ensure its usability, but we face challenges such as insufficient training, lack of standardized data formats, and limited budget.*"

Therefore, concerns about data privacy and the lack or limited amount of resources can negatively influence VCC among the stakeholders, leading to VCD. These were the most mentioned points in the interviews as generators of VCD.

Findings

The analysis of the interview texts addressed categories related to values and behaviors in Open Government Data (OGD) initiatives. The main findings revealed a range of positive and negative points in each category, providing valuable insights into the challenges and opportunities in these initiatives.

In the category of Personal Inclination to Fight for Public Values (CPI), a commitment was identified as a positive point, demonstrating the employees' dedication to prioritizing the public interest. However, governance and communication failures were mentioned, which can lead to confusion and compromise efforts.

The category of Sympathy and Emotional Connection with the Community (COM) highlighted empathy as a positive point, emphasizing the importance of employees being sensitive to user needs. On the other hand, resource constraints were identified as a negative point, hindering emotional connection and the provision of adequate services.

In the category of Willingness to Sacrifice Interests to Help Others (SS), sacrifice was mentioned as a positive point, indicating employees' willingness to give up their interests for the sake of others. However, the lack of resources was identified as a negative point, representing a barrier to realizing this willingness.

The Value Co-Creation (VCC) category highlighted marketing and partnerships as the main points mentioned. User engagement through campaigns, conferences, and workshops was emphasized as a crucial element for the success of OGD initiatives. Additionally, partnerships with civil society organizations were considered essential for promoting initiatives and involving users at broader levels.

Finally, the Value Co-Destruction (VCD) category revealed that concerns about data privacy and the lack or scarcity of resources can negatively influence value co-creation among stakeholders, leading to value co-destruction. The lack of resources, malfunctioning technologies, and behavioral conflicts were identified as factors contributing to this situation.

These findings can provide a comprehensive understanding of perceptions and challenges faced in OGD initiatives. They highlight the importance of values such as commitment, empathy, and sacrifice, as well as the need to overcome obstacles related to resources, data privacy, and inadequate governance. This information is relevant for promoting the success and effectiveness of Open Government Data initiatives, and providing guidance for improved decision-making and policy implementation in an academic context.

Discussion

Findings from this study are in line with the assertion that VCC assumes significance from the end of the public sector organization (Trischler et al., 2023). In line with our study findings, it was shown in the municipal service organization in the UK that value generation was a factor of collaborative initiatives of the public sector and the citizens themselves (Dudau et al., 2023). This is suggestive of the importance of the actors in the OGD ecosystem wherein their

collaborative stance results in knowledge exchange for further value derivation and innovation pursuits. Furthermore, challenges associated with the Tanzanian context underline the need to consider the implications of moral economy as well as a cultural-specific orientation to lead to VCC (Kinder & Stenvall, 2023). Thus, our findings also are a reflection of the need for taking into consideration the role of context while factoring into account the pursuits favoring OGD VCC.

Similarly, as far as the PSM findings are concerned, they are in line with the case of China (Tao & Wen, 2023) but not Pakistan (Azhar & Steen, 2023) where the role of empathy and compassion follows the Confucian lines in the former but not so in the latter case where the attitudinal disposition is more aligned towards status and ivory tower bureaucratic stance. That is, in the present case, the collectiveness trait is reflected in the OGD VCC pursuits by the stakeholders concerned. Furthermore, findings from the present study are also reflective of the need to understand that individual identity is reflected in the PSM stipulations wherein ethicality and empathy go hand-in-hand (Ripoll & Schott, 2023) which was found true in the Tanzanian case. This is suggestive of the public officials' considerations of their intrinsic motives for showing concern and empathy for the needs of those involved in the OGD VCC pursuits. Also, the study findings are in line with the assertion that public service values, ethos and motivation of the public service personnel operate together (Witesman, Walters & Christensen, 2022). Thus, the Tanzanian public officials undertake their responsibilities of furthering OGD VCC pursuits among the key stakeholders with due consideration of their merit and service ethics.

Conclusion

The overall purpose of the present study was to identify the elements of PSL and PSM via the OGD initiatives in Tanzania, a developing country. Conceding that the OGD research has not deliberated upon the two dimensions, the present study is a major contribution to the OGD literature as well as to that of the two dimensions. For drawing home the inferences regarding the two research questions, i.e. "How does Public Service Motivation affect the reuse and adoption of OGD initiatives?" "How does Public Service Logic operate in OGD initiatives? Where does it fail and why/how?", interviews of 15 public managers dealing directly or indirectly with the OGD initiatives in Tanzania were solicited to lend their perspectives. The research methodology entailed the analysis of the interview transcripts via rigorous text analysis procedures via Atlas.ti software. Findings from the study are indicative of the whilst in the case of PSM, aspects such as personal inclination to fight for public values, commitment, sympathy, emotional connection with the community and willingness to sacrifice interests to help others were identified as positive dimensions, aspects such as governance, communication failures and resource constraints, were identified as the negative ones. Furthermore, in the case of PSL, it was inferred that OGD VCC was furthered by marketing and partnerships and OGD VCD was propelled by concerns for data privacy and the lack of resources or improperly running technologies.

As a first study contextualized across a developing country along the two dimensions, it is anticipated that the study shall lend practitioner insights for refurbishing the OGD initiatives in the country apart from the academic and social implications. For instance, practitioners and policymakers need to streamline the OGD initiatives in line with the provisioning of quality

OGD such that user engagement is furthered for furthering the value co-creation pursuits of the stakeholders concerned. Likewise, the refurbishment of the public services by the co-participation of the stakeholders concerned is helpful in societal development and the same is possible by the efficacious usage of OGD provisioned by the government. Given the Tanzanian opting out of OGP, findings from the study underscore the need for furthering the local efforts at spearheading the OGD initiatives with the involvement of public sector officials. Finally, the study may be furthered by an empirical investigation involving the standalone or contrasting cases of developed and developing contexts such that the lessons drawn from the same may further the proliferation and advancement of OGD initiatives across the globe.

Also, the study is relevant in terms of the societal implications given the role of stakeholders in OGD engagement especially given the PSL-PSM of the public officials in Tanzania. To the extent that the public officials are proactive and motivated in the OGD initiatives' progression, the societal stakeholders' engagement with OGD for value derivation is likely to be positively impacted as well.

References

Alford, John. (2016), "Co-production, interdependence and publicness: Extending public service-dominant logic", *Public Management Review*, Vol. 18 No. 5: 673-691. https://doi.org/10.1080/14719037.2015.1111659.

Azhar, A., & Steen, T. (2023). Underlying assumptions of public service motivation: A view from the developing world. *Asia Pacific Journal of Public Administration*, 45(3), 248-273. https://www.tandfonline.com/doi/full/10.1080/23276665.2022.2121294.

Bardin, Laurence (1977), "*Análise de Conteúdo*", São Paulo, Brasil, Editora Edições.

Bao, Y., & Zhong, W. (2023). Public service motivation helps: Understanding the influence of public employees' perceived overqualification on turnover intentions. *Australian Journal of Public Administration*, In press. https://doi.org/10.1111/1467-8500.12588.

Bao, Y., & Ge, L. (2019). Linking transformational leadership and value congruence among Chinese police force: The mediating role of goal clarity and the moderating role of public service motivation. *Australian Journal of Public Administration*, 78(3), 373-395. https://doi.org/10.1111/1467-8500.12389.

Bozeman, Barry, & Su, Xuhong. (2015), "Public service motivation concepts and theory: A critique", *Public Administration Review*, Vol. 75 No. 5: pp. 700-710. https://doi.org/10.1111/puar.12248.

Campbell, J. W., & Im, T. (2016). Perceived public participation efficacy: the differential influence of public service motivation across organizational strata. *Public Personnel Management*, 45(3), 308–330. https://doi.org/10.1177/0091026016664899.

Caserta, Maurizio, Ferrante, Livio, & Reito, Francesco. (2022), "Bribes and bureaucracy size: The strategy of watering down corruption", *Economica*, Vol. 89 No. 353: 191-213.

Christensen, Robert Kuk-Kyoung, Moon, K., & Whitford, Andrew B. (2021), "Genetics and sector of employment", *International Public Management Journal*, Vol. 24 No. 5: 585-595. https://doi.org/10.1080/10967494.2020.1802631.

Dudau, A., Stirbu, D., Petrescu, M., & Bocioaga, A. (2023). Enabling PSL and value co-creation through public engagement: a study of municipal service regeneration. *Public Management Review*. https://doi.org/10.1080/14719037.2023.2203148. Echeverri, Per, & Skalen, Per. (2011), "Co-creation and co-destruction: A practice-theory based study of interactive value formation", *Marketing Theory*, Vol. 11 No. 3: 351-373. https://doi.org/10.1177/1470593111408181.

Engen, Marit, Fransson, Martin, Quist, Johan, & Skalen, Per. (2021), "Continuing the development of the public service logic: A study of value co-destruction in public services", *Public Management Review*, Vol. 23 No. 6: 886-905. https://doi.org/10.1080/14719037.2020.1720354.

Eriksson, Erik M. (2019), "Representative co-production: Broadening the scope of the public service logic", *Public Management Review*, Vol. 21 No. 2: 291-314. https://doi.org/10.1080/14719037.2018.1487575.

Florczak, Christoffer, Rasmussen, Stig Hebbelstrup Rye, Jensen, Ulthrich Thy, Stritch, Justin M., Christensen, Kaare, Nørgaard, Asbjorn Sonne, & Klemmensen, Robert (2022), "Exploring the foundational origins of public service motivation through the lens of behavioral genetics", *Public Administration*, Vol. 1-2. https://doi.org/10.1111/padm.12837.

Florczak, Christoffer, Rasmussen, Stig Hebbelstrup R., Jensen, Uhlrich Thy, Stritch, Justin M., Christensen, Kaare, Norgaard, Asbjorn Sonne, & Klemenson, Robert (2022), "Exploring the foundational origins of public service motivation through the lens of behavioral genetics", *Public Administration*. https://doi.org/10.1111/padm.12837.

Gronroos, Christian (2019), "Reforming public services: Does service logic have anything to offer?", *Public Management Review*, Vol. 21: 775-788.

Jenhaug, Lina Margrethe (2021), "Suggestions for developing public service logic through a study of interactive value formation", *International Journal of Public Administration*, Vol. 44 No. 9: 728-740. https://doi.org/10.1080/01900692.2021.1900244.

Jetzek, Thorhildur, Avital, Michel, & Bjorn-Andersen, Niels. (2014), "Data-driven innovation through open government data", *Journal of Theoretical and Applied Electronic Commerce Research*, Vol. 9 No. 2: 100-120. https://doi.org/10.4067/S0718-18762014000200008.

Jung, Chan Su (2014), "Extending the theory of goal ambiguity to programs: Examining the relationship between goal ambiguity and performance", *Public Administration Review*, Vol. 74 No. 2: 205-219. https://doi.org/10.1111/puar.12176.

Jung, Chan Su, & Rainey, Hal G. (2011), "Organizational goal characteristics and public duty motivation in US federal agencies", *Review of Public Personnel Administration*, Vol. 31 No. 1: 28-47. https://doi.org/10.1177/0734371X10394404.

Kim, Gook Jin, Ki, Namhoon, & Yoon, Taewon (2023), "Untangling the association between goal clarity and public service motivation with the moderating role of value congruence", *American Review of Public Administration*, Vol. 53 No. 4: 1-14. https://doi.org/10.1177/02750740231170013.

Kim, Sangmook, Vandenabeele, Wouter, Wright, Bradley E., Andersen, Lotte Boghe, Cerase, Francesco Paulo, Christensen, Robert K., et al. (2012), "Investigating the structure and meaning of public service motivation across populations: Developing an international instrument and

addressing issues of measurement invariance", *Journal of Public Administration Research and Theory*, Vol. 23 No. 1: 79-102. https://doi.org/10.1093/jopart/mus027.

Kinder, T., & Stenvall, J. (2023). A critique of public service logic. Public Management Review. https://doi.org/10.1080/14719037.2023.2182904.

Klatt, T., & Fairholm, M. (2023). Promote or deter: how organizations influence public service motivation. *Public Personnel Management*, 52(1), 48–69. https://doi.org/10.1177/00910260221121101.

Mayring, Philipp (2015), "Qualitative content analysis: Theoretical background and procedures", In: Bikner - Ahsbahs, A., Knipping, C., Presmeg, N. (eds) Approaches to qualitative research in mathematics education. *Advances in Mathematics Education, Springer*, Dordrecht. https://doi.org/10.1007/978-94-017-9181-6_13.

Mungai, P.W. (2018). Causal mechanisms and institutionalisation of open government data in Kenya. *Electronic Journal of Information Systems in Developing Countries*, 84(6), e12056. https://doi.org/10.1002/isd2.12056.

Mussagulova, A. (2021). Predictors of work engagement: Drawing on job demands-resources theory and public service motivation. *Australian Journal of Public Administration*, 80(2), 217-238. https://doi.org/10.1111/1467-8500.12449.

O'Leary, C. (2019). Public Service Motivation: A Rationalist Critique. *Public Personnel Management*, 48(1), 82–96. https://doi.org/10.1177/0091026018791962.

Ostrom, Elinor (1990), "Governing the commons: The evolution of institutions for collective action", *Cambridge University Press*.

OGP Support Unit. 2017. Tanzania Withdraws from the OGP | Open Government Partnership. https://www.opengovpartnership.org/about/news-and-events/tanzania-withdraws-ogp (June 27, 2018).

Perry, James L. (1996), "Measuring public service motivation: An assessment of construct reliability and validity", *Journal of Public Administration Research and Theory*, Vol. 6: 5-22. https://doi.org/10.1093/oxfordjournals.jpart.a024303.

Perry, James L., Hondeghem, Annie, & Wise, Lois Recascino (2010), "Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future", *Public Administration Review*, Vol. 70 No. 5: 681-690. https://doi.org/10.1111/j.1540-6210.2010.02196.x.

Perry, James L., & Hondeghem, Annie (2008), "Building theory and empirical evidence about public service motivation", *International Public Management Journal*, Vol. 11 No. 1: 3-12. https://doi.org/10.1080/10967490801887673.

Perry, James L., & Vandenabeele, Wouter (2015), "Public service motivation research: Achievements, challenges, and future directions", *Public Administration Review*, Vol. 75 No. 5: 692-699. https://doi.org/10.1111/puar.12430.

Perry, James L., & Wise, Lois Recascino (1990), "The motivational bases of public service", *Public Administration Review*, Vol. 50 No. 3: 367-373.

Prahalad, C.K., & Ramaswamy, Venkat (2004), "Co-creation experiences: The next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3: 5-14. https://doi.org/10.1002/dir.20015.

Rafique, Muhammad Asim, Hou, Yumei, Chudhery, Muhammed Adnan Zahid, Gull, Nida, & Ahmed, Syed Jameel (2021), "The dimensional linkage between public service motivation and innovative behavior in public sector institutions: The mediating role of psychological empowerment", *European Journal of Innovation Management*, Vol. 26 No. 1: 207-229. https://doi.org/10.1108/EJIM-02-2021-0098.

Rayner, J., Reimera, V., & Chao, C.W. (2018). Testing an international measure of public service motivation: Is there really a bright or dark side? *Australian Journal of Public Administration*, 77(1), 87-101. https://doi.org/10.1111/1467-8500.12247.

Sonderskov, Mette, & Ronning, Rolf (2021), "Public service logic: An appropriate recipe for improving serviceness in the public sector?", *Administrative Sciences*, Vol. 11, No. 3: 64. https://doi.org/10.3390/admsci11030064.

Ripoll, G., & Schott, C. (2023). Responding to unethical demands by one's leader: The role of public service motivation. *International Journal of Public Administration*. https://doi.org/10.1080/01900692.2023.2233118.

Shao, D. (2023). Empirical analysis of open government data usage in Tanzania. Information Discovery and Delivery, In press. https://doi.org/10.1108/IDD-10-2022-0098.

Shao, D. D., & Saxena, S. (2019). Barriers to open government data (OGD) initiative in Tanzania: Stakeholders' perspectives. Growth and Change, 50(1), 470-485.

Steen, Trui (2008), "Not a government monopoly: The private, nonprofit, and voluntary sectors. Motivation in public management", In JL Perry & A Hondegham (Eds.) *Motivation in public management*, The call of public service, Oxford University Press.

Straub, Detmar, Boudreau, Marie-Claude, & Gefen, David (2004), "Validation guidelines for IS positivist research", *Communications of the Association for Information Systems*, Vol. 13. https://doi.org/10.17705/1CAIS.01324.

Sudha, Aminath, Ferdous, Azam, S.M. & Tham, Jacquiline (2023), "The interaction effect of job design and public service motivation on the job performance of Maldives civil service employees", *Russian Law Journal*, Vol. 30 No. 6: 155-167. https://doi.org/10.52783/rlj.v11i6s.912.

Surachartkumtonkun, Jiraporn, McColl-Kennedy, Janet R., & Patterson, Paul G. (2015), "Unpacking customer rage elicitation: A dynamic model", *Journal of Service Research*, Vol. 18 No. 2: 177-192. https://doi.org/10.1177/1094670514556275.

Tao, L., & Wen, B. (2023). Demystifying the components of public service motivation among young public servants in China: A qualitative inquiry. *Asia Pacific Journal of Public Administration*, 45(3), 248-273. https://www.tandfonline.com/doi/full/10.1080/23276665.2022.2131587.

Trischler, J., Røhnebæk, M., Edvardsson, B. & Tronvoll, B. (2023). Advancing Public Service Logic: moving towards an ecosystemic framework for value creation in the public service context. *Public Management Review*. https://doi.org/10.1080/14719037.2023.2229836.

Ubaldi, Barbara (2013), "Open government data: Towards empirical analysis of open government data initiatives", *OECD Working Papers on Public Governance*, Vol. 22. https://doi.org/10.1787/5k46bj4f03s7-en.

United Republic of Tanzania (2014). Tanzania Open Government Partnership (OGP) Second National Action Plan 2014/15 - 2015/16, 1-16.

United Republic of Tanzania (2015). Statistics Act of 2015, 1-32. http://parliament.go.tz/polis/uploads/bills/acts/1452062087-ActNo-9-2015-Book-1-10.pdf.

Vandenabeele, Wouter, & Schott, Carina (2020), "*Public service motivation in public administration*", Oxford Research Encyclopedia of Politics. https://doi.org/10.1093/acrefore/9780190228637.013.1401.

Waterhouse, J., French, E., & Puchala, N. (2014). The impact of socialisation on graduates' public service motivation-A mixed method study. *Australian Journal of Public Administration*, 73(2), 247-259. https://doi.org/10.1111/1467-8500.12079.

Wiedenhoft, G.C., Matheus, R., Saxena, S., & Alexopoulos, C. (2023). Barriers towards open government data value co-creation: An empirical investigation. *Electronic Journal of Information Systems in Developing Countries*, In press. https://doi.org/10.1002/isd2.12270.

Witesman, E.M., Walters, L., & Christensen, R.K. (2023). Creating a public service topology: Mapping public service motivation, public service ethos, and public service values. *Public Administration*. https://doi.org/10.1111/padm.12939.

Wright, Bradley E., Christensen, Robert K., & Pandey, Sanjay K. (2013), "Measuring public service motivation: Exploring the equivalency of existing global measures", *International Public Management Journal*, Vol. 16 No. 2: 197-223. https://doi.org/10.1080/10967494.2013.817242.

Yi, Youjae, & Gong, Taeshik (2013), "Customer value co-creation behavior: Scale development and validation", *Journal of Business Research*, Vol. 66 No. 9: 1279-1284. https://doi.org/10.1016/j.jbusres.2012.02.026.

APPENDIX:

OGD initiatives (Interview questions)

How does Public Service Motivation (PSM) impact OGD re-use and adoption

- Are the OGD officials/personnel motivated enough for the implementation and success of OGD initiative? If yes/no, how and why?

- What are the ways in which the OGD personnel/officials are contributing towards the success of the OGD initiative? What are the hindrances/bottlenecks in ensuring this?

- How do you perceive that the OGD officials/personnel are committed to public interest? Are there any deviances? Give examples.

- Are the OGD personnel/officials compassionate/empathetic towards the users and their needs? Are there any deviances? Give examples.

- Are the OGD personnel/officials showing self-sacrifice? Are there any deviances? Give examples.

How does Public Service Logic (PSL) work in OGD initiatives? Where does it fail and why/how?

- In what ways are the steps being taken by you to increase the overall well-being (satisfaction, contentment and grievance redressal) of the users who are using OGD? What more can be done?

- How far are you open to ideas and suggestions of the users for improving the OGD portal/website? What are the precautions? What are the possibilities?

- How are you engaged in creating value for the users by providing "best" and "advanced" services to the OGD users?

- What are your efforts regarding furthering value creation and innovation by the users while they use OGD? What are the possibilities? What are the hindrances?

- Do you welcome value co-creation and innovation (by involving or partnering with the OGD users)? If yes/no, how and why?

- What are the steps that you have taken to be more reponsive to the needs of the OGD users? What are the precautions? What are the hindrances? What are the possibilities?