

IMPACT OF INFORMATION SYSTEMS (IS) INFUSION ON OPEN GOVERNMENT DATA (OGD) ADOPTION

Ricardo Matheus, Charalampos Alexopoulos, Nina Rizun, Euripides Loukis and Stuti Saxena

Abstract:

Purpose: The study's objective is to underline the possible influence of the moderator, Information Systems (IS) Infusion, on Open Government Data (OGD) adoption and usage.

Design/methodology/approach: Using the Partial Least Squares-Structural Equation Modelling (PLS-SEM) methodological approach, the adapted Unified Theory of Acceptance and Use of Technology (UTAUT) model has been used for understanding the role of the moderating variable, viz. IS Infusion.

Findings: Findings show that the moderating impact of IS Infusion is positively significant with respect to the Performance Expectancy-Behavioral Intention relationship thereby bolstering the impact on users' perception of OGD vis-à-vis work/academics performance and negatively significant for Social Influence-Behavioral Intention, Information Quality-Behavioral Intention thereby clinching the fact that with the increased engagement and involvement of OGD in the everyday life of the user, the role of significant others and information quality gets least significant.

Originality: Extant OGD-focused research has underscored the impact of different variables as far as OGD adoption and usage is concerned; the present study seeks to add on to the extant literature by understanding the implications of IS Infusion on the adapted UTAUT model constructs and Behavioral Intention relationships.

Keywords: Open Government Data, OGD, Information Systems (IS) Infusion, Actual users, UTAUT, India

Introduction

Open Government Data (OGD) initiatives are regarded as the upshot of digital government innovations such that the contours of transparency and citizen participation are broadened (Davies, 2007; Deng, Karunasena and Xu, 2018; Grimmelikhuijsen and Feeney, 2017; Janssen et al., 2017; Kassen, 2019; Lourenco, Piotrowski and Ingrams, 2017; Svard, 2018). OGD implies the datasets pertaining to the structural and functional dimensions of the administrative entities via dedicated portals (Janssen, 2011; Maione, Sorrentino and Kruja, 2022). Inter alia, the datasets relate to the diverse domains such as agriculture, economy, society, education, energy, and the like. Such datasets are provisioned in machine processable formats for being amenable to statistical interpretation and analysis (Ham, Koo and Lee, 2022; Hitz-Gamper, Neumann, and

Sturmer, 2019; Jarke, 2019; Yang et al., 2022). The overarching motive of OGD initiatives is to further engagement from a cross-section of stakeholders including the citizens, professionals, entrepreneurs, academic community, and the like to engage in value derivation and innovation pursuits (Charalabidis, Alexopoulos and Loukis, 2016; Kassen, 2021; Mohamad, Sylvester and Campbell-Meier, 2023). Given the implied benefits of such value derivation and innovation pursuits by the myriad stakeholders, it is anticipated that the societal growth and development shall be furthered (Chen, 2022; De Blasio and Selva, 2016; Hossain et al., 2018; Lodato, French and Clark, 2021; Weerakkody et al., 2017; Wen and Hwang, 2019; Wirtz, Weyerer and Rosch, 2018; Wirtz et al., 2022; Wu et al., 2022; Zhang et al., 2022).

With this backdrop, the academic interest in understanding the implications and significance of OGD initiatives has been on the rise over a period of time (Bankuoru Egala and Afful-Dadzie, 2017; Ham, Koo and Lee, 2019). Thus, there has been a plethora of research regarding the usage and adoption of OGD across spatial-temporal axes such that the Information Systems (IS) theories have been invoked alongside the possible implications of a range of variables such as intrinsic motivation, ease of internet usage, internet efficacy, perceived security, risk, demographic characteristics, public officials' training and development, leadership, etc. Moreover, there are studies veering around the user experience in terms of IS engagement-OGD engagement, being one such case- in the developed and developing countries. Thus, the present study seeks to further our understanding of OGD engagement by drawing inferences from the research model edified on the adapted Unified Theory of Acceptance and Use of Technology (UTAUT) alongside the moderating influence of IS Infusion at the individual level. As such, IS Infusion is defined in terms of the adaptability and ease of managing, engaging and tackling the IS platforms (Fadel, 2006; Ng and Kim, 2009). With regard to the information retrieval platforms wherein the interaction of information behavior and information systems design happens, IS Infusion may be conceived as its intrinsic component.

Conceding that OGD is a technology within a wider ambit of IS, it falls in place to understand the implications of this moderating variable as far as user engagement is concerned. Furthermore, an understanding of IS Infusion vis-a-vis OGD adoption is also important on account of the inherent nature and scope of OGD engagement wherein technological robustness holds pertinence. For drawing inferences, the statistical analysis is done via Partial Least Squares-Structural Equation Modelling (PLS-SEM) approach via the Warp 8.0 software. Being the first study to understand the moderating impact of IS Infusion across adapted UTAUT model constructs-Behavioral Intention (BI) relationships, the study's contribution to the extant OGD literature stands clinched besides being an add-on to the OGD-focused research in the developing country where the OGD initiatives have been attested as emerging-yet-asymmetric (Saxena, 2018). Despite the fact that the coverage of IS Infusion dimensions assume importance

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



for the quality maintenance and furtherance of user engagement with OGD portals in a major way, the extant literature is silent on its role in OGD adoption-the present study seeks to plug this gap. OGD research alongside the need to contribute to the extant knowledge on IS Infusion and OGD has helped us arrive at the following research question (Sandberg and Alvesson, 2011; Starbuck, 2006): “*What is the moderating role of IS Infusion in OGD adoption and usage across the adapted UTAUT model and Behavioral Intention relationships?*”

The remainder of the paper is structured as follows: following a brief regarding the OGD-focused literature and IS Infusion, the research methodology is summarized and the tail-end of the paper is constituted by a discussion of the findings, research implications, future research directions for academicians, insights for practitioners and conclusive statements.

Literature review

OGD adoption and usage variables

Given the main emphasis of OGD research on value derivation and innovation by a range of stakeholders, extant research has underscored the implications for OGD adoption and usage covering the influence of myriad variables. Invoking a range of variables such as individual skills, perceived sense of urgency, ease of OGD availability and accessibility and the integration of integration of OGD platforms via the social media platforms (Purwanto, Zuiderwijk and Janssen, 2020), perceived risk linked with the technological, financial, competitive climate, etc. that influence the value derivation and innovation pursuits of the stakeholders (Yang et al., 2022), computer self-efficacy and government support provided to the users in the case of Taiwan (Wang, 2020), degree of accessibility, discoverability and accuracy of OGD (Gebre and Morales, 2020), intrinsic motivation, competency, perceived ease of use and perceived usefulness (Wirtz, Weyerer and Rosch, 2018), OGD adoption and usage propensities have been scanned. Furthermore, the role of variables such as political satisfaction, government trust and internet usage intensity have been empirically investigated to ascertain OGD adoption and usage (de Souza, d’Angelo and Filho, 2022). Furthermore, invoking the Diffusion of Innovations (DOI) theory, variables such as user perception of functional value, compatibility, security concerns and stereotypes were also empirically investigated (Weerakkody et al., 2017). Contextually, the adapted UTAUT framework was used in Latvian, Czech Republic and Indian contexts (Lnenicka et al., 2022) as also the Bangladesh context (Islam et al., 2021) for drawing inferences regarding OGD adoption and usage propensities. Finally, there are studies on the OGD quality dimensions that determine the OGD engagement propensities of the concerned user groups (Alexopoulos & Saxena, 2023; Matheus, Ribeiro and Vaz, 2012; Parung et al., 2018).

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



IS Infusion

IS Infusion has been defined in terms of the maximum extent to which usage levels are facilitated with the interplay of tasks, IS characteristics and innovative manner of applications (Sage and Zmud, 1994)-case in point the impact of user commitment on IS Infusion (Kim, Chan and Lee, 2012). IS Infusion research has considered the impact on individual usage propensities apart from role embeddedness as well as integrative mechanisms via other technologies. Dimensions linked with individual usage relate to the traits of the individuals that are linked with the user's engagement with the technology (Winston and Dologite, 1999). For an overview of the individual-centric IS Infusion research based on the Technology Acceptance Model (TAM), Diffusion of Innovation (DOI) Theory, Technology, Organization and Environment (TOE) and Unified Theory of Acceptance and Use of Technology (UTAUT) models, the work of Hassandoust and his colleagues may be perused (Hassandoust, Techatassanasoontorn and Tan, 2016). IS Infusion in the case of individuals has been found to be a factor of user and usage profiling in terms of the user competence, usage impact, etc. (Ng and Kim, 2009). Furthermore, IS Infusion has been considered as a determinant of the technology, user and task (O'Connor, O'Rahailigh and O'Donoghue, 2012). It has been underlined that there is a need for understanding the role of psychological factors as far as IS Infusion among the users is concerned (de Guinea and Markus, 2009) and the present study is a step forward in this direction with the specific context of OGD research.

Research question

It is clear from the aforesaid that the implications of IS Infusion for OGD adoption and usage merit a revisit and this is especially expected to further our understanding of the OGD engagement propensities among the concerned stakeholder groups. Considering the aforesaid, the present study seeks to further the contours of OGD-focused research by addressing the research question:

“What is the moderating role of IS Infusion in OGD adoption and usage across the adapted UTAUT model and Behavioral Intention relationships?”

Research methodology

Research model and hypotheses

Figure 1 presents the research model for the present study. Specifically, the present study seeks to drive home the arguments via the adapted UTAUT model (Venkatesh et al., 2003; Lnenicka et al., 2022) wherein the moderating influence of IS Infusion (Figure 1) is captured in the research hypotheses derived for the purpose below.

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



Performance Expectancy (PE) is defined in terms of the extent to which an individual believes that using OGD will help in realizing benefits related to her/his performance in the job/work (Talukder et al., 2019; Venkatesh et al., 2003; Zuiderwijk, Janssen and Dwivedi, 2015). Given the possible implications of OGD engagement for a user to affirmatively impact her job/work performance, it may be hypothesised that:

H1: Performance Expectancy has a positive effect on Behavioral Intention to use and adopt OGD.

Effort Expectancy (EE) is defined in terms of the extent to which an individual perceives the easiness linked with the implementation/use of OGD (Talukder et al., 2019; Venkatesh et al., 2003; Zuiderwijk, Janssen and Dwivedi, 2015). OGD adoption and usage propensities were found to be positively determined by the extent of hassle-free engagement with the technology (Saxena and Janssen, 2017; Zuiderwijk, Janssen and Dwivedi, 2015), and, it follows that:

H2: Effort Expectancy has a positive effect on Behavioral Intention to use and adopt OGD.

Social Influence (SI) has been defined in terms of the extent to which an individual realizes the importance of others' perceptions regarding her to use OGD (Lnenicka et al., 2022; Talukder et al., 2019; Venkatesh et al., 2003; Zuiderwijk, Janssen and Dwivedi, 2015). As in the case of other IS interfaces, it is likely that OGD engagement is a factor of the views and attitudinal disposition of the significant others (Lnenicka et al., 2022), and, it is hypothesised that:

H3: Social Influence has a positive effect on Behavioral Intention to use and adopt OGD.

Facilitating Conditions (FC) imply the extent to which an individual believes that an organizational and technical infrastructure is in place to support the use of OGD (Talukder et al., 2019; Venkatesh et al., 2003; Zuiderwijk, Janssen and Dwivedi, 2015). Extant OGD-focused research shows mixed results pertaining to the significant and insignificant relationships of FC on the behavioral intention to adopt and use OGD (Lnenicka et al., 2022; Saxena and Janssen, 2017; Zuiderwijk and Cligge, 2016). Given the fact that conducive environment in terms of the requisite IT climate is required for OGD engagement, it follows that:

H4: Facilitating Conditions has a positive effect on Behavioral Intention to use and adopt OGD.

Voluntariness of Use (VU) is defined in terms of the extent to which an individual engages with OGD of her/his own volition (Lnenicka et al., 2022). Whilst voluntary engagement with OGD has been clinched in some contexts, it was found inconsequential in others (Khurshid et al., 2022; Purwanto, Janssen and Zuiderwijk, 2021; Saxena and Janssen, 2017). It is hypothesized that:

H5: Voluntariness of Use has a positive effect on Behavioral Intention to use and adopt OGD.

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



Among the quality dimensions pertinent for OGD engagement may be counted System Quality (SQ), Data Quality (DQ) and Information Quality (IQ). SQ is defined in terms of the extent to which the performance of the information system in terms of reliability, convenience, ease of use, functionality and other system metrics impacts an individual's willingness to adopt and use OGD (DeLone and McLean, 2003; Purwanto, Zuiderwijk and Janssen, 2020; Talukder et al., 2019). Information Quality (IQ) has been defined as the extent to which the characteristics of the output offered by the information system, such as accuracy, timeliness and completeness impact an individual's willingness to adopt and use OGD. Finally, Data Quality (DQ) refers to the extent to which OGD is free from errors apart from being complete, accurate, appropriately formatted as per acknowledged standards and is ready for reuse. Extant OGD-hinged research has shown mixed findings vis-a-vis the aforesaid quality dimensions (Khurshid et al., 2022; Lnenicka et al., 2022). It is hypothesized that:

H6: System Quality has a positive effect on Behavioral Intention to use and adopt OGD.

H7: Information Quality has a positive effect on Behavioral Intention to use and adopt OGD.

H8: Data Quality has a positive effect on Behavioral Intention to use and adopt OGD.

Trust (TR) is an important variable determining the reliability of the OGD from the perspectives of the user. Thus, it is defined as the extent to which OGD is considered to be trustworthy, credible and reliable by the users (Lnenicka et al., 2022).

H9: Trust has a positive effect on Behavioral Intention to use and adopt OGD.

Frequency of Usage (FREQ) is defined in terms of the extent to which OGD is being used, i.e. daily, weekly, monthly, yearly, or very rarely (Lnenicka et al., 2022). Similarly, Purposefulness (PURP) is defined in terms of the degree to which OGD is considered as purposeful by the users, viz., being very important, important, balanced/neutral, unimportant and very unimportant (Lnenicka et al., 2022). Both these variables have been attested having significant bearing on OGD adoption and usage (Alexopoulos and Saxena, 2023).

H10: Frequency of Usage has a positive effect on Behavioral Intention to use and adopt OGD

H11: Purposefulness has a positive effect on Behavioral Intention to use and adopt OGD.

IS Infusion is defined as the extent to which the IS usage goes beyond routine such that technology is experimented with new frontiers of usage (Kim, Chan and Gupta, 2016). As cited in the literature scan, its relevance for technology adoption has been attested (Hassandoust, Techatassanasoontorn and Tan, 2016; Ng and Kim, 2009; O'Connor, O'Rahalligh and O'Donoghue, 2012) and an analogical understanding is anticipated in the OGD adoption too:

H12-H22: IS Infusion has a moderating effect on the relationship between adapted UTAUT

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



model constructs and Behavioral Intention to use and adopt OGD. Thus, the positive relationship between the adapted UTAUT model constructs and Behavioral Intention to use and adopt OGD would be higher for users with high IS Infusion.

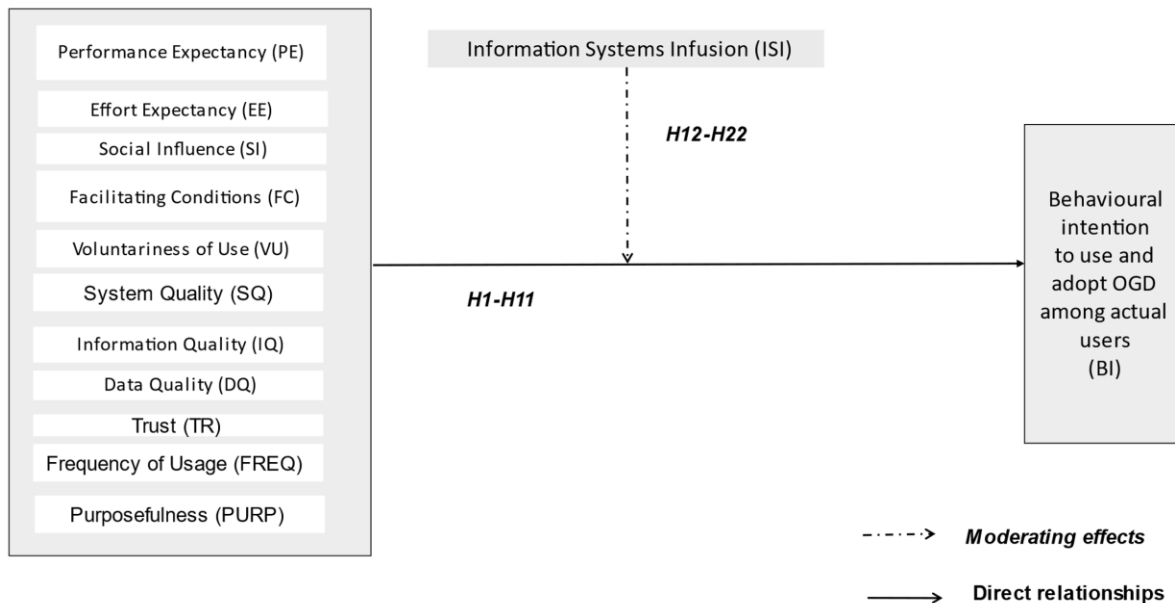


Figure 1: Research model with hypotheses

Data collection

The respondents comprised of the students pursuing their undergraduate and postgraduate courses in a prime university in India who were ascertained to be the actual OGD users. Academic community-especially the faculty members and students- have been considered as important constituents of the OGD ecosystem who engage with OGD on a regular basis (Charalabidis, Alexopoulos and Loukis, 2016; Safarov, Meijer and Grimmelikhuijsen, 2017). Given one of the authors' affiliation with the leading private university, students were contacted following a purposive and snowball sampling procedures. A Google Form with structured questionnaire was circulated via WhatsApp, email or SMS among the actual OGD users to get their responses. Three reminders were sent to the contacted respondents in 2 days' span. Except for a few demographic questions, the rest of them were patterned across a Likert Scale (1- "Strongly Agree" to 5- "Strongly Disagree"). The entire process of data collection was done between December, 2022 and March, 2023. In all, 397 responses were garnered. The sample size is adequate in line with the standard PLS-SEM procedures given the number of variables involved and the datapoints in hand (Hair et al., 2022). For drawing inferences, statistical analyses was performed via Partial Least Squares-Structural Equation Modeling (PLS-SEM)

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



(Wold, 1985) through Warp PLS 7.0 software (Kock, 2021).

Results

Demographic profiles of the respondents

Table 1 summarizes the demographic characteristics of the respondents. There is a roughly equal proportion of male (49.62%) and female (50.37%) respondents. As far as the academic qualifications are concerned, a sizeable number of respondents are in their Bachelor's courses (92.69%) and as far as the age brackets are concerned, most of them are in the 16-20 years' age bracket. Furthermore, the maximum number of respondents hail from the Engineering or Humanities and Social Sciences disciplines. Finally, there are different purposes for OGD adoption and usage.

	Total	Percentage
Gender		
Males	197	49.62
Females	200	50.37
Age		
16-20 years	265	66.75
21-25 years	122	30.73
26-30 years	3	0.007
Above 30 years	7	0.017
Level of study		
Bachelor's	368	92.69
Master's/PhD's/PostDoc's	29	0.073
Year of study		
1st year	121	30.47
2nd year	108	27.20
3rd year	135	34.00

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>

	Total	Percentage
4th year	24	0.060
5th year	1	0.002
Other	8	0.020
<i>Academic background</i>		
Engineering	146	36.77
Humanities and Social Sciences	149	37.53
Management/Commerce	35	8.81
Hospitality/Hotel Management	24	6.62
Nursing/Medical	10	2.51
Law	12	3.02
Other	41	10.57
<i>To what extent are OGD purposeful for you?</i>		
Very important	80	20.15
Important	189	47.60
Neutral	122	30.73
Unimportant	3	0.007
Very unimportant	3	0.007
<i>How often do you use OGD?</i>		
Daily or multiple times a day	46	11.58
Weekly or a few times in a week	134	33.75
Monthly or a few times in a month	99	24.93
Yearly or a few times in a year	43	10.83
Do not know	75	18.89

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



	Total	Percentage
<i>For what purposes do you use OGD? (Tick all those applicable)</i>		
To perform statistical analysis	142	35.76
For data linking (combining and integrating different datasets)	111	27.95
To write academic publications	39	9.82
To perform policy research	25	6.29
To perform investigations (non-scientific and non-policy)	35	8.81
For information purposes (e.g., COVID-19, etc.)	169	42.56
For political and policy-making decisions	140	35.26
For curiosity and/or recreation	94	23.67
For daily operation in work	85	21.41
For news reporting	16	4.03
Other	21	5.28
No use	1	0.25
<i>Which of the following types of OGD have you used? (Tick all those applicable)</i>		
National/Regional/Local Government Open Data Portal	241	60.70
European Data Portal	153	38.53
OECD (Organization for Economic-Cooperation and Development)	24	6.04
United Nations Open Portal (UNData)	42	10.57

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



	Total	Percentage
World Bank	38	9.57
Agriculture and Food	46	11.58
Culture	58	14.60
Business and Economy	162	40.80
Crime and Justice	47	11.83
Education	114	28.71
Environment	102	25.69
Government spending	93	23.42
Health	152	38.28
Mapping	49	12.34
Society	94	23.67
Regions and Cities	84	21.25
Transport	79	19.89
Other	68	17.12

Table 1: Demographic profiles of respondents and their responses to selected questions

Measurement model

The estimation of the model showed an R-squared of 79.6%. Furthermore, reliability assessment was done on the basis of the values of Cronbach's alpha (α) and Composite Reliability (CR) to ascertain the internal consistency of the constructs' items (Table 2). Given that the Cronbach's alpha (α) values should lie between 0.60 and 0.90 and the CR values should be above 0.7 (Hair et al., 2021) for ensuring the constructs' reliability, Table 2 results are in conformity with these thresholds. Furthermore, the constructs' convergent validity was assessed with the Average Variance Extracted (AVE) values and the same was clinched in line with the threshold values of being above 0.5 (Hair et al., 2021). Finally, regarding the multicollinearity diagnostics, it may be inferred that given the VIFs (Variance Inflation Factors) being less than 5, therefore, multicollinearity is not an issue (Hair et al., 2021).

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



	Alpha (Cronbach's alpha)	rhoC (Composite reliability)	AVE (Average Variance Extracted)	Full collinearity VIFs
Performance Expectancy (PE)	0.858	0.904	0.702	3.187
Effort Expectancy (EE)	0.854	0.902	0.696	3.064
Social Influence (SI)	0.878	0.925	0.804	2.442
Facilitating Conditions (FC)	0.757	0.861	0.674	3.322
Voluntariness of Use (VU)	0.831	0.899	0.747	2.063
System Quality (SQ)	0.873	0.908	0.666	3.648
Information Quality (IQ)	0.826	0.896	0.742	3.512
Data Quality (DQ)	0.861	0.906	0.706	4.265
Trust (TR)	0.899	0.937	0.833	3.277
Frequency of Usage (FREQ)	1.000	1.000	1.000	1.330
Purposefulness (PURP)	1.000	1.000	1.000	1.506
IS Infusion (Moderator) (UL)	0.961	0.924	0.753	2.177
Behavioral Intention (BI)	0.875	0.923	0.800	3.768

Table 2: Reliability and validity scores

Structural model

Path coefficients, p-values and effect sizes for the hypothesized relationships (Figure 1) are summarized in Table 3. Use of a two-stage approach for interactions was done for parameter recovery and attainment of statistical power (Becker, Ringle & Sarstedt, 2018; Chin, Marcolin & Newsted, 2003; Henseler & Chin, 2010; Kenny and Judd, 2019).

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



	Path coefficient	p-value	Effect size	Result	Inference
H1: PE→BI	0.191	<0.001	0.121	Supported	OGD adoption and usage facilitates performance at work/job/academics.
H2: EE→BI	0.056	0.132	0.036	Not supported	x
H3: SI→BI	0.052	0.147	0.032	Not supported	x
H4: FC→BI	0.080	0.054	0.052	Not supported	x
H5: VU→BI	0.009	0.426	0.005	Not supported	x
H6: SQ→BI	0.133	0.004	0.095	Supported	Users seek the appropriate reliable and easy to use information systems for bolstering their OGD adoption and usage.
H7: IQ→BI	0.049	0.164	0.032	Not supported	x
H8: DQ→BI	0.098	0.024	0.069	Supported	Users seek the requisite OGD quality for furthering their engagement with OGD.
H9: TR→BI	0.461	<0.001	0.354	Supported	Trustworthy and reliable OGD is sought after by the users which drives further their OGD adoption and usage propensities.
H10: FREQ→BI	0.054	0.140	0.017	Not supported	x
H11: PURP→BI	0.025	0.308	0.008	Not supported	x
H12: ISF*PE→BI	0.317	<0.001	0.092	Supported	Users' considering OGD engagement as important for their academics/job is bolstered by the increased impact of ISF, i.e. the increased penetration of OGD in the everyday life of an individual user.
H13: ISF*EE→BI	-0.086	0.042	0.026	Supported	Users' propensity for seeking ease of use with OGD gets lessened as the ISF's increased impact is perceived, i.e. the increased penetration of OGD in the everyday life of an individual user.
H14:	-0.211	<0.001	0.065	Supported	Users' considering the influence of significant others gets lessened as the role

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



	Path coefficient	p-value	Effect size	Result	Inference
$ISF*SI \rightarrow BI$					of IS Infusion vis-à-vis OGD increases.
H15: $ISF*FC \rightarrow BI$	0.057	0.126	0.019	Not supported	x
H16: $ISF*VU \rightarrow BI$	0.011	0.410	0.004	Not supported	x
H17: $ISF*SQ \rightarrow BI$	-0.025	0.306	0.008	Not supported	x
H18: $ISF*IQ \rightarrow BI$	-0.132	0.004	0.028	Supported	Users' seeking information quality gets pertinent to them as the importance of IS Infusion gets increased.
H19: $ISF*DQ \rightarrow BI$	-0.082	0.051	0.020	Not supported	x
H20: $ISF*TR \rightarrow BI$	-0.021	0.334	0.006	Not supported	x
H21: $ISF*FREQ \rightarrow BI$	-0.086	0.042	0.011	Supported	Users' frequently searching behavior for OGD gets less significant as the IS Infusion of OGD gets enhanced in their everyday lives beyond the normal usage.
H22: $ISF*PURP \rightarrow BI$	-0.010	0.420	0.002	Not supported	x

Table 3: Summary of hypotheses

Discussion

Among the direct findings may be attested the positively significant implications for PE-BI, SQ-BI, DQ-BI and TR-BI. Thus, findings from the present study are in sync with the previous research (Husin, Zakaria and Dahlan, 2019; Islam et al., 2021; Lnenicka et al., 2022; Talukder et al., 2019; Wirtz, Weyerer and Rosch, 2019; Zwiderwijk, Janssen and Dwivedi, 2015). For instance, the positively significant relationship for Performance Expectancy-Behavioral Intention is implicit in the users' perceiving OGD to be important for their academic/work performance. Users also seek optimum System Quality for furthering their propensity to adopt and use OGD.

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



This is true because the consistency and accuracy of OGD is important for ensuring the furtherance of OGD re-use by the stakeholders concerned (Chorley, 2017; Shepherd et al., 2019). Furthermore, findings for DQ-BI are in line with previous research wherein the positively significant results have been attested (Khurshid et al., 2020; Lnenicka et al., 2022; Talukder et al., 2019). Finally, vis-a-vis Trust-Behavioral Intention relationship, it is clear that the users seek reliable and trustworthy OGD. Regarding the non-significant findings, it may be possible that users do not use OGD voluntarily or seek Data Quality or Information Quality on account of being at a nascent stage of their academic trajectory, i.e. pursuing their Bachelor's courses, where the rigorous OGD is not required.

Regarding the positively significant influence of OGD engagement for work performance furtherance amidst the presence of IS Infusion, this finding may be corroborated by the positively significant impact on job fit and technology competence on user commitment which, in turn, results in IS Infusion (Kim, Chan and Lee, 2012). Users are less prone towards seeking robust Information Quality for OGD, given the increased influence of IS Infusion and this concurs with previous research as well wherein IQ has been found to have negative impact on the behavioral intention to adopt and use a technology (Ahuja and Thatcher, 2005). Furthermore, in the case of Social Influence (SI), given the impact of social structure for determining the user empowerment across the technology, IS Infusion is enhanced (Kim and Gupta, 2014).

Regarding the non-supported hypotheses (ISF*FC-BI; ISF*VU-BI; ISF*SQ-BI; ISF*DQ-BI; ISF*TR-BI; ISF*PURP-BI), it is possible that these findings are a resultant of the robust ICT infrastructure coupled with the fact that the OGD engagement is not required for a sophisticated level leading to value derivation and innovation pursuits.

Conclusion

The purport of this study was to underline the moderating influence of IS Infusion across the adapted UTAUT-Behavioral Intention relationships. Contextualized across a developing country, i.e. India, the study sought to estimate the empirical validation of the study by drawing perspectives from the university students, i.e. the undergraduate and postgraduate students of a leading private university. Findings from the empirical investigation unravel the affirmative influence of IS Infusion on the users' perception regarding the impact of OGD usage on their work/academics and weakened impact of IS Infusion on the users' perception of the societal influence and penchant for information quality for furthering OGD usage. The study contributes to the OGD literature apart from the technology adoption (Lv and Ma, 2019) with specific impetus upon the implications of technology adoption for the developing country. Furthermore, the study also underlines the implications of a digital government innovation for furthering a collaborative and participative design involving the relevant stakeholder entities of the OGD ecosystem-as in the present case. However, the study limitations may be counted as the inclusion of a single moderator in the ascertainment of the relationships' frames, and, the slightly skewed coverage of the students across the age groups and levels of degree courses. Furthermore, a triangulation of the study could be attempted wherein the perspectives of the IT experts from the

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



government as also the experts in the OGD domain could be solicited to ascertain the likely influence of IS Infusion in terms of OGD engagement propensities.

Research implications

The research shows that OGD ecosystem needs to take into consideration the role of IS Infusion for furtherance of the user engagement. Ipso facto, the quality of the OGD portals shall also be improvised to suit the requirements of the users thereby furthering the value derivation and innovation pursuits of the different stakeholder groups. Furthermore, the impact of engaging with such OGD portals is likely to result in further propelling the other user groups to understand the means of value derivation via the reuse of OGD. Furthermore, the study shows the importance of requisite IT infrastructure for ensuring a sustained OGD engagement among the users which would go a long way in building up the economic and social potential of the country as a whole.

Academic and practitioner insights

The study leaves ample scope for further academic inquiry: first, further research is warranted for ascertaining the manner in which IS Infusion in terms of OGD adoption is valid as far as the demographic factors are concerned; second, a comparative perspective may be drawn vis-à-vis the RQ in the developed countries; third, a mixed methodology may be adopted wherein the interviews of the relevant stakeholders including the users and the policy-makers may bolster the findings from the present study; fourth, the behavioral dimensions, i.e. motivation, personality traits, self-efficacy, etc. may be factored into consideration-both from the OGD providers and OGD users-to understand the confluence of IS Infusion; and, finally, stakeholders' perspectives may be drawn vis-à-vis the role and implications for the public managers, senior management, etc. to draw a triangulation-based conclusion in line with the RQ.

The study has practitioner insights as well: OGD policy-makers need to underline the significance of quality improvisation of the OGD portals for further user engagement; and, second, OGD initiatives ought to be refurbished for bettering the chances of knowledge management and value derivation by the range of stakeholders concerned. Finally, given the engagement of stakeholders hailing from myriad societal pockets, the study implications for the societal perspectives and engagement with OGD are also implied. For instance, the implications of IS Infusion in OGD engagement are likely to differ across businessmen and academic community, etc.

References

Ahuja, M.K., and Thatcher, J.B. (2005), "Moving beyond intentions and toward the theory of trying: Effects of work environment and gender on post-adoption information technology use", *MIS Quarterly*, Vol. 29 No. 3, pp. 427-459.

Alexopoulos, C., and Saxena, S. (2023), "Moderating effects of gender, perceived importance

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



and usage experience towards Open Government Data (OGD) adoption and usage", *24th Annual International Conference on Digital Government Research*, pp. 205-213. <https://doi.org/10.1145/3598469.3598492>.

Bankuoru Egala, S. and Afful-Dadzie, E. (2022), "Performance of open government data in a developing economy: a multi-stakeholder case analysis of Ghana", *Transforming Government: People, Process and Policy*, Vol. 16 No. 3, pp. 318-333.

Charalabidis, Y., Alexopoulos, C., and Loukis, E. (2016), "A taxonomy of open government data research areas and topics", *Journal of Organizational Computing and Electronic Commerce*, 26(1-2), 41-63. <https://doi.org/10.1080/10919392.2015.1124720>.

Chen, T.T.Y. (2022), "The developmental state and its discontent: The evolution of the open government data policy in Taiwan", *Third World Quarterly*, Vol. 43 No. 5, pp. 1056-1073.

Chorley, K.M. (2017), "The challenges presented to records management by open government data in the public sector in England: A case study", *Records Management Journal*, Vol. 27 No. 2, pp. 149-158. <https://doi.org/10.1108/RMJ-09-2016-0034>.

Davies, R. (2007), "Opening up information for better public value", *New Library World*, Vol. 108 No. 11/12, pp. 490-503. <https://doi.org/10.1108/03074800710838245>.

De Blasio, E., and Selva, D. (2016), "Why choose open government? Motivations for the adoption of open government policies in four European countries", *Policy & Internet*, Vol. 8 No. 3, pp. 225-247.

De Guinea, O., and Markus, M.L. (2009), "Why break the habit of a lifetime? Rethinking the roles of intention, habit, and emotion in continuing information technology use", *MIS Quarterly*, Vol. 33 No. 3, pp. 433-444.

de Souza, A.A., d'Angelo, M.J., and Filho, R.N.L. (2022), "Effects of predictors of citizens' attitudes and intention to use open government data and government 2.0", *Government Information Quarterly*, Vol. 39 No. 2, 101663.

DeLone, W. H. and McLean, E. R. (2003), "The DeLone and McLean model of information systems success: A ten-year update", *Journal of Management Information Systems*, Vol. 19 No. 4, pp. 9-30. <https://doi.org/10.1080/07421222.2003.11045748>.

Deng, H., Karunasena, K. and Xu, W. (2018), "Evaluating the performance of e-government in developing countries: A public value perspective", *Internet Research*, Vol. 28 No. 1, pp. 169-190. <https://doi.org/10.1108/IntR-10-2016-0296>.

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



Gebre, E.H. and Morales, E. (2020), "How "accessible" is open data? Analysis of context-related information and users' comments in open datasets", *Information and Learning Sciences*, Vol. 121 No. 1/2, pp. 19-36.

Grimmelikhuijsen, S.G., and Feeney, M.K. (2017), "Developing and testing an integrative framework for open government adoption in local governments", *Public Administration Review*, Vol. 77 No. 4, pp. 579-590.

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P. and Ray, S. (2021), "Evaluation of the structural model", *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Classroom Companion, Business*, Springer, Cham. https://doi.org/10.1007/978-3-030-80519-7_6.

Ham, J., Koo, Y. and Lee, J.N. (2022), "Government data openness and knowledge management: configurational patterns for national competitiveness", *Industrial Management & Data Systems*, Vol. 122 No. 12, pp. 2710-2736.

Ham, J., Koo, Y. and Lee, J.N. (2019), "Provision and usage of open government data: strategic transformation paths", *Industrial Management & Data Systems*, Vol. 119 No. 8, pp. 1841-1858.

Hassandoust, F., Techatassanasoontorn, A.A., and Tan, F.B. (2016), "Factors influencing the infusion of information systems: A literature review", *Pacific Asia Journal of the Association for Information Systems*, Vol. 1, No. 1, pp. 1-31.

Hitz-Gamper, B.S., Neumann, O. and Sturmer, M. (2019), "Balancing control, usability and visibility of linked open government data to create public value", *International Journal of Public Sector Management*, Vol. 32 No. 5, pp. 451-466.

Hossain, M.N., Talukder, M.S., Hoque, M.R. and Bao, Y. (2018), "The use of open government data to citizen empowerment: an empirical validation of a proposed model", *Foresight*, Vol. 20 No. 6, pp. 665-680.

Husin, N.N.F.A., Zakaria, N.H., and Dahlan, H.M. (2019), "Factors influencing open data adoption in Malaysia based on users perspective", *6th International Conference on Research and Innovation in Information Systems (ICRIIS)*, Malaysia, pp. 1-5.

Hoyer, W.D., and Brown, S.P. (1990), "Effects of awareness on choice for a common repeat-purchase product", *The Journal of Consumer Research*, Vol. 17, pp. 141-148.

Janssen, K. (2011), "The role of public sector information in the European market for online content: a never-ending story or a new beginning?", *info*, Vol. 13 No. 6, pp. 20-29. <https://doi.org/10.1108/14636691111174234>.

Janssen, M., Matheus, R., Longo, J. and Weerakkody, V. (2017), "Transparency-by-design as a foundation for open government", *Transforming Government: People, Process and Policy*, Vol.

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



11 No. 1, pp. 2-8.

Jarke, J. (2019), "Open government for all? Co-creating digital public services for older adults through data walks", *Online Information Review*, Vol. 43 No. 6, pp. 1003-1020.

Islam, M.T., Talukder, M.S., Khayer, A. and Islam, A.K.M.N. (2021), "Exploring continuance usage intention toward open government data technologies: an integrated approach", *VINE Journal of Information and Knowledge Management Systems*, In press.

Kassen, M. (2019), "Open data and e-government-related or competing ecosystems: A paradox of open government and promise of civic engagement in Estonia", *Information Technology for Development*, Vol. 25 No. 3, pp. 552-578.

Kassen, M. (2021), "Understanding motivations of citizens to reuse open data: Open government data as a philanthropic movement", *Innovation*, Vol. 23 No. 1, pp. 44-70.

Khurshid, M.M., Zakaria, N.H., Arfeen, M.I., Rashid, A., Shehzad, H.M.F. and Ahmad, M.N. (2020), "An intention-adoption behavioral model for open government data in pakistan's public sector organizations—an exploratory study", In: Sharma, S.K., Dwivedi, Y.K., Metri, B., Rana, N.P. (eds.) *Re-imagining Diffusion and Adoption of Information Technology and Systems: A Continuing Conversation*, TDIT 2020, IFIP Advances in Information and Communication Technology, Vol. 617. Springer, Cham. https://doi.org/10.1007/978-3-030-64849-7_34.

Kim, H.W., Chan, H.C., and Lee, S.H. (2012), "A user commitment approach to information systems infusion", *PACIS*, No. 101. <http://aisel.aisnet.org/pacis2012/101>.

Kim, H.W., Chan, H.C., and Gupta, S. (2016), "Examining information systems infusion from a user commitment perspective", *Information Technology & People*, Vol. 29 No. 1, pp. 173-199. <https://doi.org/10.1108/ITP-09-2014-0197>.

Kim, H.W., and Gupta, S. (2014), "A user empowerment approach to information systems infusion", *IEEE Transactions on Engineering Management*, Vol. 61 No. 4. <https://doi.org/10.1109/TEM.2014.2354693>.

Lnenicka, M., Nikiforova, A., Saxena, S. and Singh, P. (2022), "Investigation into the adoption of open government data among students: the behavioural intention-based comparative analysis of three countries", *Aslib Journal of Information Management*, Vol. 74 No. 3, pp. 549-567.

Lodato, T., French, E., and Clark, J. (2021), "Open government data in the smart city: Interoperability, urban knowledge, and linking legacy systems", *Journal of Urban Affairs*, Vol. 43 No. 4, pp. 586-600.

Lourenco, R.P., Piotrowski, S. and Ingrams, A. (2017), "Open data driven public accountability", *Transforming Government: People, Process and Policy*, Vol. 11 No. 1, pp. 42-57.

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



Lv, H. and Ma, H. (2019), "Performance assessment and major trends in open government data research based on Web of Science data", *Data Technologies and Applications*, Vol. 53 No. 3, pp. 286-303. <https://doi.org/10.1108/DTA-10-2017-0078>.

Maione, G., Sorrentino, D. and Kruja, A.D. (2022), "Open data for accountability at times of exception: an exploratory analysis during the COVID-19 pandemic", *Transforming Government: People, Process and Policy*, Vol. 16 No. 2, pp. 231-243.

Matheus, R., Ribiero, M.M., and Vaz, J.C. (2012), "New perspectives for electronic government in Brazil: The adoption of open government data in national and subnational governments of Brazil", *6th International Conference on Theory and Practice of Electronic Governance*, pp. 22-29. <https://doi.org/10.1145/2463728.2463734>.

Mohamad, A.N., Sylvester, A. and Campbell-Meier, J. (2023), "Towards a taxonomy of research areas in open government data", *Online Information Review*, In press.

Ng, E.H., and Kim, H.W. (2009), "Investigating information systems infusion and the moderating role of habit: A user empowerment perspective", *ICIS Proceedings*, Vol. 137.

O'Connor, Y., O'Rahailigh, P.J., and O'Donoghue, J. (2012), "Individual infusion of m-health technologies: Determinants and outcomes", *ECIS Proceedings*, No. 164. <http://aisel.aisnet.org/ecis2012/164>.

Parung, G.A., Hidayanto, A.N., Sandhyaduhita, P.I., Ulo, K.L.M. and Phusavat, K. (2018), "Barriers and strategies of open government data adoption using fuzzy AHP-TOPSIS: A case of Indonesia", *Transforming Government: People, Process and Policy*, Vol. 12 No. 3/4, pp. 210-243. <https://doi.org/10.1108/TG-09-2017-0055>.

Purwanto, A., Zuiderwijk, A. and Janssen, M. (2020), "Citizen engagement with open government data: Lessons learned from Indonesia's presidential election", *Transforming Government: People, Process and Policy*, Vol. 14 No. 1, pp. 1-30.

Safarov, I., Meijer, A., and Grimmelikhuijsen, S. (2017), "Utilization of open government data: A systematic literature review of types, conditions, effects and users". *Information Polity*, Vol. 22 No. 1, pp. 1-24. <https://doi.org/10.3233/IP-160012>.

Sage, V., and Zmud, R. W. (1994), "The nature and determinants of IT acceptance, routinization and infusion," In L. Levine (ed.), *Diffusion, Transfer, and Implementation of Information Technology*, North Holland, New York, pp. 67-86.

Sandberg, J., and Alvesson, M. (2011), "Ways of constructing research questions: gap-spotting or problematization?", *Organization*, Vol. 18 No. 1, pp. 23-44. <https://doi.org/10.1177/1350508410372151>.

Saxena, S. (2018), "Asymmetric Open Government Data (OGD) framework in India", *Digital*

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



Policy, Regulation and Governance, Vol. 20 No. 5, pp. 434-448. <https://doi.org/10.1108/DPRG-11-2017-0059>.

Shepherd, E., Bunn, J., Flinn, A., Lomas, E., Sexton, A., Brimble, S., Chorley, K., Harrison, E., Lowry, J. and Page, J. (2019), "Open government data: critical information management perspectives", *Records Management Journal*, Vol. 29 No. 1/2, pp. 152-167. <https://doi.org/10.1108/RMJ-08-2018-0023>.

Starbuck, W.H. ((2006). *The production of knowledge: The challenge of social science research*. Oxford University Press, USA.

Svard, P. (2018), "Public Information Directive (PSI) implementation in two Swedish municipalities", *Records Management Journal*, Vol. 28 No. 1, pp. 2-17.

Szopinski, T. and Staniewski, M.W. (2017), "Manifestations of e-government usage in post-communist European countries", *Internet Research*, Vol. 27 No. 2, pp. 199-210. <https://doi.org/10.1108/IntR-01-2015-0011>.

Talukder, M.S., Shen, L., Talukder, M.F.H., and Bao, Y. (2019), "Determinants of user acceptance and use of open government data (OGD): An empirical investigation in Bangladesh", *Technology in Society*, Vol. 56, pp. 147-156. <https://doi.org/10.1016/j.techsoc.2018.09.013>.

Venkatesh, V., Morris, M.G., Davis, G.B., and Davis, F.D. (2003), "User acceptance of information technology: Toward a unified view", *MIS Quarterly*, Vol. 27 No. 3, pp. 425-478. <https://doi.org/10.2307/30036540>.

Wang, H.J. (2020), "Adoption of open government data: Perspectives of user innovators", *Information Research*, Vol. 25 No. 1.

Wen, Y.-F. and Hwang, Y.-T. (2019), "The associativity evaluation between open data and country characteristics", *The Electronic Library*, Vol. 37 No. 2, pp. 337-364.

Weerakkody, V., Irani, Z., Kapoor, K., and Dwivedi, Y.K. (2017), "Open data and its usability: An empirical view from the citizen's perspective", *Information Systems Frontiers*, Vol. 19, pp. 285-300.

Winston, E. R. and Dologite, D. G. (1999), "Achieving IT Infusion: A conceptual model for small businesses," *Information Resources Management Journal*, Vol. 12 No. 1, pp. 26-38.

Wirtz, B.W., Weyerer, J.C., and Rosch, M. (2018), "Citizen and open government: An empirical analysis of antecedents of open government data", *International Journal of Public Administration*, Vol. 41 No. 4, pp. 308-320.

Wirtz, B. W., Weyerer, J. C., and Rosch, M. (2019), "Open government and citizen participation: An empirical analysis of citizen expectancy towards open government data", *International*

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>



Review of Administrative Sciences, Vol. 85 No. 3, pp. 566-586.

Wirtz, B.W., Weyerer, J.C., Becker, M. and Muller, W.M. (2022), "Open government data: A systematic literature review of empirical research", *Electronic Markets*, Vol. 32, pp. 2381-2404.

Yang, Z., Ha, S., Kankanhalli, A. and Um, S. (2022), "Understanding the determinants of the intention to innovate with open government data among potential commercial innovators: a risk perspective", *Internet Research*, In press.

Zhang, H., Bi, Y., Kang, F. and Wang, Z. (2022), "Incentive mechanisms for government officials' implementing open government data in China", *Online Information Review*, Vol. 46 No. 2, pp. 224-243.

Zuiderwijk, A., and Cligge, M. (2016), "The acceptance and use of open data infrastructures-Drawing upon UTAUT and ECT", *Electronic Government and Electronic Participation*, pp. 91-96. <https://doi.org/10.3233/978-1-61499-670-5-91>.

Zuiderwijk, A., Janssen, M., and Dwivedi, Y.K. (2015), "Acceptance and use predictors of open data technologies: Drawing upon the unified theory of acceptance and use of technology", *Government Information Quarterly*, Vol. 32 No. 4, pp. 429-440.

Matheus, R., Alexopoulos, C., Rizun, N., Loukis, E. and Saxena, S. (2024), "Impact of information systems (IS) infusion on Open Government Data (OGD) adoption", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-07-2023-0107>

