Decision-Making Transparency in Local Government

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Abstract

Democratic countries recognize transparency as a crucial component of governmental accountability. As such, members of the Organization for Economic Co-operation and Development (OECD) have adopted regulations or legislation to promote transparency. However, despite the popularity of transparency in public discourse, research on transparency in the municipal sector remains limited and incomplete.

This study evaluates local governments' multi-member decision-making transparency and creates a model that addresses the relationship between decision-making transparency and informed decisions. There is not a single decision-maker in local government authorities; rather, the entire team participates in the decision-making process. Therefore, in the current context, decision-making is multi-member decision-making. The research employs a mixed-methods approach, incorporating both quantitative and qualitative research elements. The method includes semi-structured, in-depth interviews, document analysis, and the administration of electronic surveys.

This study aims to evaluate decision-making transparency, informed decisions, the number of participants, and the need for technology during the decision-making process for major events. There are four decisions associated with two events: organizing a sports event and a household waste separation event in the local authority. These variables were evaluated using a sample of 33 to 69 officials from a population of 257 local authorities and their municipal corporations, obtained through electronic surveys.

Preliminary results suggest that decision-making transparency positively influences informed decisions. However, in terms of moderating effects, this research indicates that the moderators do not impact the relationship between decision-making transparency and informed decisions. Additionally, the findings suggest similarities and differences in the decision-making process for the decisions made during the main events.

Finally, the results and discussion sections are still in progress, as these are only initial findings.

Introduction - The Structure and Purpose of the Study

The significance of decision transparency is widely discussed in academic literature. When a decision is transparent, affected parties, specialists, and future decision-makers can reconstruct the decision-making processes and the intended outcomes (Drew, Nyerges, & Leschine, 2004). The ability to access information about local government public decision-making enables people to evaluate the organization based on their understanding of this process rather than on their general perception of government at the national level (Grimmelikhuijsen, 2010). Access to information brings citizens and stakeholders closer to authority, fosters trust, and encourages more informed and engaged decisions (Lodge, 1994). Transparent decisions are anticipated to be more effective (Florini, 1999) and lead to more informed decisions (Lodge, 1994; Brown, 1995; Buiter, 1999). The majority of researchers in the field concur that transparency leads to improved governmental performance and outcomes.

What does transparency in local government decision-making entail? Several researchers have addressed this question. For instance, Drew and Nyerges (2004) contend that: "…a transparent decision should be clear, accessible, integrated with other decisions, logical and rational, accountable, truthful, and accurate, and open to a wide variety of participants" (p.1646). Drew, Nyerges, and Leschine's (2004) research focuses on issues related to promoting transparency in environmental decisions. They maintain that "the decision process must be fully laid out and disclosed, meaning that no important pieces of information are withheld" (p.1647). Grimmelikhuijsen and Welch (2012) assert that "decision-making transparency concerns the degree of openness about the steps taken to reach a decision and the rationale behind the decision" (p.563).

Transparency pertains to the relationship between government administration and citizens. Two theories are often used to describe this relationship: the agency theory and the legitimacy theory (Eisenhardt, 1989; Suchman, 1995). The agency theory posits that agency relationships exist in public administration, meaning that elected officials are agents who should act in the best interest of citizens. However, a problem arises due to information asymmetry (Eisenhardt, 1989). Citizens and elected officials do not share identical interests and concerns. Elected officials must demonstrate that their actions align with their responsibilities and are accountable (Lane, 2005). Ultimately, transparency reduces asymmetries, thereby enhancing citizens' trust, democracy, and citizen involvement.

The legitimacy theory, originally adopted from the private sector (Dowling and Pfeffer, 1975), is another framework used to understand these dynamics. According to Suchman (1995), legitimacy is a concept that represents observers' reactions toward an organization. An

organization may deviate from social norms and maintain legitimacy if the deviation is not visible. Legitimacy is socially constructed, reflecting a match between the behaviors of the legitimate entity and the shared beliefs of a particular social group. This theory suggests that organizations use transparency to foster trust and enhance legitimacy.

There are two primary perspectives on public decision-making in the literature: the traditional perspective emphasizes the rationality of the decision-maker. In contrast, the second perspective views decision-makers as irrational. A more detailed description can be found in Turpin and Marais's (2004) article, which reviews various theories of decision-making. They identify nine different views known in the literature: the rational model, model of bounded rationality, logical incrementalist view, organizational procedures view, political view, garbage can model, individual differences perspective, naturalistic decision making, and multiple perspectives approach.

Prior to 2012, researchers largely overlooked transparency at the local government level, focusing instead on explaining transparency across countries or state governments (Grimmelikhuijsen and Welch, 2012). However, over the past decade, an increasing number of studies have shifted their focus to local government transparency. Grimmelikhuijsen and Welch's (2012) study acknowledges these limitations and aims to integrate and apply existing transparency research to the local government context. Furthermore, Drew and Nyerges's (2010) study emphasizes that merely implementing transparency policies is insufficient for success; there is a need to actively promote transparency within local communities.

Grimmelikhuijsen's study (2012) underscores the fact that it has been established that people are not entirely rational, and they simplify the decision-making process because they do not have access to all the information and alternatives available regarding the decisions (March, 1978). Grimmelikhuijsen notes that administrators and council members do not have complete information. Therefore, public decisions are not entirely rational. He cites Stone's work (1988), which argues that the public decision-making process is not rational but purely political.

Some researchers have attempted to measure decision-making transparency, but only partially. For instance, in Grimmelikhuijsen's (2010) study, the degree of transparency is determined by the amount of specific information regarding the decision available in the local council minutes. In contrast, in Grimmelikhuijsen and Welch's (2012) study, decision-making transparency is measured using a discrete (1/0) indicator for whether the principles or reasons for the decision-making were provided on the website. Grimmelikhuijsen's work over the past decade has fundamentally influenced governmental transparency and, consequently, this research.

Although Drew and Nyerges' (2004) study was not focused on local government authorities, their research provides a comprehensive view of the decision-making transparency process. In their perspective, the concept of transparency consists of seven objectives: clarity, accessibility, integration, logic/rationale, truth/accuracy, openness, and accountability. The researchers evaluated four objectives (clarity, accessibility, integration, logic/rationale) using a series of nominal (yes/no) questions to measure performance. However, they noted that "questions remain concerning the transparency measurement framework in terms of its completeness, validity, and accuracy" (p.58). Therefore, in this study, I measure five of these seven objectives of decision-making transparency (clarity, accessibility, logic/rationale, truth/accuracy, and openness). I believe these objectives are fundamental and contribute significantly to a comprehensive understanding of transparency.

There are theoretical and practical differences between local and central governments (Beetham, 1996; Mahalley et al., 2004). In addition to the domestic agendas of national policymakers, local policymakers have their own agendas that directly influence citizens' daily lives. Furthermore, citizens' attitudes toward local government transparency are unique, as will be discussed in the first chapter of this study. This research will focus on the local level of decision-making transparency for several reasons. First, the authority's council is responsible for significant decision-making in areas such as the environment, education, and planning (Grimmelikhuijsen, 2010). Second, local government authorities must maintain transparency both upwards toward the central government and downwards toward the citizens and stakeholders. Finally, the mayor is a part of the public; the authority's decisions affect him or her personally, as well as their friends and family. This level of government is the closest to direct democracy.

On April 1, 2012, the Israeli government joined the Open Government Partnership (Government Resolution No. 4515). Upon joining the Open Government Partnership, Israel's government established four fundamental principles of Open Government in Israel: transparency, accountability, civic participation, and the implementation of innovative technologies. While this study will not directly research open governments, which acknowledge citizens' right to access documents and proceedings for effective public oversight, it's important to note that open government is a significant part of modern governance. For instance, in the 35th session of the Congress of Local and Regional Authorities, "Transparency and Open Government" was a topic of discussion. In summary, the principles of "open government" - transparency, participation, and accountability - are integral to the concept of open government.[1]

[1] The principles of Open Government spelled out in Congress of Local and Regional Authorities, 35th session, p.6.

The framework of local authorities in Israel has its roots in the British Mandate in Palestine, as amended in the 1948 Law and Administration Ordinance. After the establishment of the State of Israel, the Ministry of Interior assumed responsibility for local government, citizenship, residency, identity cards, and entry visas.

Israel has three types of local authorities: (1) municipal councils, which are cities. (2) local councils, which are smaller than cities, and (3) regional councils, which combine several localities. Israel has 257 local authorities – 77 municipal councils, 126 local councils, and 54 regional councils. The municipal and local councils in Israel are incorporated within the framework of the "Center for Local Government in Israel," established in 1938. The regional councils are separately incorporated in the center of the regional councils. There are four sectors in Israel: The Jewish sector (74%), the Arab-Muslim sector (21%), and the Arab-Christian sector (5%). As to local authorities, there are Ultra-Orthodox Jewish authorities, other Jewish authorities, Bedouin authorities, and Druse authorities.

In Israel, local authorities have several departments responsible for a specific topic. For instance, the Education Department is tasked with developing the city's education system and promoting the city's policies regarding education. A review of the existing departments in local authorities reveals that the Department of City Improvement is most closely related to citizens' everyday lives. This department is responsible for environmental issues such as cleaning, waste disposal, recycling, environmental enforcement, landscaping, and more. Therefore, this research focuses on decision-making transparency in the Departments of City Improvement within Israeli authorities.

The primary goal of this research is to evaluate multi-member decision-making transparency in local governments and develop a model that explores the relationship between decision-making transparency and informed decisions.

The main research questions are: Does decision making transparency contribute to obtaining informed decisions? What moderating factors influence the effect of decision-making transparency on informed decisions? Based on these questions, the following hypotheses are proposed:

H1: There is a positive relationship between the degree of decision-making transparency and informed decisions.

H2: There are trade-offs between the objectives of decision-making transparency: clarity, accessibility, logic/rationale, truth/accuracy, and openness.

Two potential moderating factors in this model are the number of participants involved in the decision-making process and the degree of technology required during the decision-making

process. The literature on decision-making processes presents an ambiguous picture regarding whether an increased number of participants positively contributes to informed decisions. Some researchers suggest that a larger number of participants can lead to longer decision times and increased costs. In this study, I hypothesize that a higher number of participants correlates with more informed decisions, diminishing the impact of decision-making transparency on informed decisions.

The role of technology in the decision-making process within local governments is a compelling topic. On the one hand, technology can facilitate and enhance accessibility to information. On the other hand, the implementation of technology can be costly and necessitate resources, leading to disparities among local authorities in terms of their technological capabilities. I hypothesize that a greater need for technology correlates with more informed decisions, which in turn, reduces the impact of decision-making transparency on informed decisions. Consequently, I propose the following hypotheses:

H3: The number of participants involved in the decision-making process moderates the relationship between decision-making transparency and informed decisions. The positive impact of decision-making transparency on informed decisions is less pronounced when the number of participants is higher.

H4: The degree of technology required during the decision-making process moderates the relationship between decision-making transparency and informed decisions. The positive impact of decision-making transparency on informed decisions is less pronounced when the need for technology is higher.

While this research is still ongoing, and not all data has been fully analyzed, there are already some intriguing results and preliminary findings. Part 2 of this draft details the Methodology and Research Design. Subsequently, in Part 3, I present some of the results and discuss the initial findings. Lastly, in Part 4, I delve into one of the most compelling outcomes, exploring the relationship between decision-making transparency and informed decisions.

Part 2 – Methodology and Research Design

The research employs a mixed methodology, with elements of both quantitative and qualitative research. Different data collection methods were triangulated: semi-structured, in-depth interviews, document analysis, and electronic surveys. The methodology of this research includes two consecutive phases:

Phase 1:

The first phase aimed to conceptualize and clarify the decision-making process transparency through exploratory research of one local authority in Israel, focusing on the Department of City Improvement. The local authority selected for this exploratory research was the Bear Sheva local authority, chosen based on specific criteria (see Appendix A).

I mapped the main events in the Department of City Improvement over a five-year period (see Appendix B) and identified the decisions related to these main events (Drew, Nyerges, and Leschine, 2004). These decisions were phrased in general terms to develop scales to evaluate the variables of the decision-making process during the main events. The variables are clarity, accessibility, logic/rationale, truth/accuracy, and openness (Drew and Nyerges, 2004), the number of participants, the need for technology, and informed decisions (see Appendix C).

Phase 2:

The second phase involved evaluating the variables (decision-making transparency, the number of participants, the need for technology, and informed decisions) using a sample of 69 to 33 officials from the population of 257 local authorities and their municipal corporations by conducting electronic surveys. I preliminarily examined the hypotheses and formulated conceptual models to provide a high-level understanding of the research topic.

Officials Interviews

The first portion of data collection consisted of semi-structured, in-depth interviews with four officials from the Department of City Improvement in the Bear Sheva local authority. These interviews, conducted between 2022 and 2023, lasted 60 to 90 minutes each and were recorded and transcribed. There were also two follow-up open conversations. The officials were first asked to map the main events during the last five years that involved a series of decisions regarding these events. They then described the events' components and objectives via personal experience.

Documents

The second portion of data collection involved analyzing documents from the local government, the central government, and the municipal corporation. These documents related to the main events described in the interviews (see Appendix D).

Sample (Electronic Surveys)

The last portion of data collection involved electronic surveys. There were two separate but matching surveys regarding four decisions for two events: carrying out a sports event and a

household waste separation event in the local authority. These events were selected based on data collected via interviews and documents. The main objective of selecting these events was that they were relevant to other local authorities and had occurred in most local authorities in Israel in the past.

The first event included questions regarding decisions about carrying out a sports event in the local authority, such as night races events and cycling races events. The survey asked the participants to relate the answers to one of the sports events that occurred in the local authority. The second event referred to the household waste separation project. In the previous decade, the Ministry of Environment initiated a household waste separation project (the brown bin) and budgeted financial grants to local authorities that participated in the project. Thus, the survey asked questions about decision-making processes in this regard.

The first and second surveys regarding a sports event and the household waste separation event were electronically sent to officials in the Department of City Improvement and the Department of Environment and Sustainability in all 257 local authorities. The first survey regarding the sports event was also sent to officials in the Department of Sports. Additionally, the two surveys were sent to municipality corporations that deal with environmental issues and sports events.

All surveys were held in Hebrew from December 2022 to March 2023. The surveys were constructed and sent to the respondents via the Qualtrics software. The surveys first asked basic demographic questions about respondents' gender, age, education, and form of employment (whether they were employed by the local authority, a municipality's corporation, or an outsourcing company). Second, the surveys asked questions regarding the four decisions based on their professional knowledge and experience during the events. The questions are listed next by the variables definitions in the Appendices.

This study aims to evaluate the decision-making transparency, the informed decisions, the number of participants, and the need for technology during the decision-making process regarding the main events. These events and decisions must be relevant to the researched local authorities. Thus, the number of relevant officials who responded varies; between 69 to 33 responded fully to the survey. In this research, the responders know of the events and the decisions made during these events.

The decisions are described here:

	Sports Event	Household Waste Separation Event
Decision 1 (N=69)	Determining whether the event be held	
Decision 2 (N=41)	Determining the location and number of participants in the event	

Decision 3 (N=44)		Determining the distribution of the brown bins in the local authority
Decision 4 (N=33)		Determining the number of removals of bins per week and treatment of hazards in the household waste separation project

I would like to highlight two issues concerning the surveys for full transparency. A nonresponse bias was observed; some respondents opted not to participate. The surveys were distributed to officials within the relevant departments of the authorities. However, not all these officials were acquainted with the two events under discussion. As a result, the number of individuals who initiated the surveys was significantly higher. Similarly, many officials responded to the background questions but discontinued the surveys due to their unfamiliarity with the events. The table below provides a breakdown of the number of officials who commenced the surveys, the number of respondents to the background questions, and the number of respondents who completed all the questions:

	Number of Officials Who Entered the Survey	**Number of Respondents to Background Questions**	**Number of Participants Who Responded to All the Questions in the Survey**	**Percentage of Nonresponse Bias**
Decision 1+2	223	160	69/41	56%/74%
Decision 3+4	172	125	44/33	64%/74%

Secondly, the identity of the researcher may have influenced the survey responses. I serve as the Deputy Commissioner of the Southern District at the Ministry of the Interior in Israel. Given that the Ministry of the Interior regulates local authorities in Israel, it's plausible that respondents' answers were swayed by this fact, despite the anonymity of the survey responses. I believe it's important to disclose this potential influence.

Next are the sample compositions:

Sample Participants Composition

	% Male	**Average Age**	**% Highly Educated**	**% Officials Employed by Municipality**
Decision 1+2	71%	54	84%	78%
Decision 3+4	75%	51	64%	93%

Sample Local Authorities Composition

	Local Authorities	**Regional Authorities**	**Not Known (anonymous)**	**South (South District)**	**Central (Tel-Aviv, Yehuda-Shomron,**	**North (Haifa District and North**

					Jerusalem and Central District)	District)
Decision 1+2	71%	19%	10%	16%	33%	41%
Decision 3+4	59%	30%	11%	29%	30%	30%

The Decision-Making Transparency Variable

The independent variable in models 1 and 2 (referenced below) is decision-making transparency. This latent variable encapsulates five objectives: clarity, accessibility, logic/rationale, truth/accuracy, and openness, as defined by Drew and Nyerges (2004). The placement of respondents on these five objectives was evaluated based on their responses to questionnaire items, which were rated on a Likert scale ranging from 0 (not at all) to 10 (to a very great extent). The following section provides the descriptive statistics:

Decision Making Transparency	Number of observations	Mean	St. dev.	Min	Max
Decision 1	69	5.86	2.91	1	10
Decision 2	41	6.02	2.98	1	10
Decision 3	44	5.49	3.03	1	10
Decision 4	34	5.98	3.02	1	9.80

The Informed Decisions Variable

The dependent variable in models 1 and 2 (referenced below) is informed decisions. This latent variable gauges whether the decisions made during the main events were informed and to what extent. The survey respondents were asked about the level of information and the substantiveness of the decisions. Their placement was assessed based on their responses to questionnaire items, which were rated on a Likert scale ranging from 0 (not at all) to 10 (to a very great extent). Please refer to Appendix E for more details. The following section provides the descriptive statistics:

The Informed Decisions Variable	Number of observations	Mean	St. dev.	Min	Max
Decision 1	69	5.41	2.73	1	10
Decision 2	41	5.67	2.75	1	9.67
Decision 3	44	4.76	2.75	1	10
Decision 4	33	5.61	2.57	1	10

Independent Variables: Clarity, Accessibility, Logic/Rationale, Truth/Accuracy, and Openness

These independent variables represent the five objectives of the decision-making transparency variable, considered separately. The assessment of these objectives was based on respondents' answers to questionnaire items, rated on a Likert scale from 1 (not at all) to 10 (to a very great extent). This separation facilitates the analysis of the impact of each objective on the informed decisions variable. For more details, please refer to Appendix F. The following section provides the descriptive statistics:

Item Question		Number of observations	Mean	St. dev.	Min	Max
Decision 1	Clarity	69	6.70	3.24	1	10
	Accessibility	69	5.87	3.24	1	10
	Logic/Rationale	69	5.48	3.09	1	10
	Truth/Accuracy	69	5.64	3.45	1	10
	Openness	69	5.65	3.20	1	10
Decision 2	Clarity	41	6.46	3.39	1	10
	Accessibility	41	6.24	3.32	1	10
	Logic/Rationale	41	6.12	3.195	1	10
	Truth/Accuracy	41	5.95	3.41	1	10
	Openness	41	5.37	3.13	1	10
Decision 3	Clarity	44	6.50	3.54	1	10
	Accessibility	44	5.52	3.35	1	10
	Logic/Rationale	44	5.20	3.18	1	10
	Truth/Accuracy	44	5.50	3.51	1	10
	Openness	44	4.75	3.19	1	10
Decision 4	Clarity	34	6.32	3.29	1	10
	Accessibility	33	6.09	3.19	1	10
	Logic/Rationale	33	5.79	3.24	1	10
	Truth/Accuracy	33	6.18	3.27	1	10
	Openness	33	5.30	3.10	1	10

The First Moderator: Number of Participants

The first moderator in this study is the number of participants involved in the decision-making process, represented as a cardinal number. I asked respondents about the number of citizen and business representatives participating in the decision-making process compared to the number of internal participants. Their responses were assessed using a Likert scale ranging from 0 (indicating no participants) to 10 (indicating up to 10 participants). For more details, please refer to Appendix G. The following section provides the descriptive statistics:

Item Question		Number of observations	Mean	St. dev.	Min	Max
Decision 1	Total Number of Participants	69	13.97	7.28	3	30
	Number of Internal Participants	69	5.94	3.06	1	10
	Number of External Participants (Business)	69	3.71	2.59	1	10
	Number of External Participants (Citizens)	69	4.32	2.84	1	10
Decision 2	Total Number of Participants	41	14.60	6.87	3	30
	Number of Internal Participants	41	5.83	2.77	1	10
	Number of External Participants (Business)	41	4.15	2.57	1	10
	Number of External Participants (Citizens)	41	4.63	2.49	1	10
Decision 3	Total Number of Participants	44	11.36	7.73	3	30
	Number of Internal Participants	44	4.82	3.09	1	10
	Number of External Participants (Business)	44	3.07	2.58	1	10
	Number of External Participants (Citizens)	44	3.48	2.86	1	10
Decision 4	Total Number of Participants	33	12.84	7.46	3	30
	Number of Internal Participants	33	5.27	2.74	1	10
	Number of External Participants (Business)	33	3.79	2.69	1	10
	Number of External Participants (Citizens)	33	3.79	2.74	1	10

Second Moderator: The Need for Technology

The second moderator in this study is the need for technology, which captures the use of technology within the local authority during the decision-making processes. Consequently, I asked respondents about the technological aspects of the local authority and how these technologies were utilized in the decision-making process. Their responses were assessed using a Likert scale ranging from 0 (not at all) to 10 (to a very great extent). For more details, please refer to Appendix H. The following section provides the descriptive statistics:

The Need for Technology	Number of Observations	Mean	St. dev.	Min	Max
Decision 1	69	4.35	2.81	1	10
Decision 2	41	5.06	2.72	1	10
Decision 3	44	3.94	2.65	1	9
Decision 4	33	3.90	2.77	1	10

Control Variables

To ensure adequate internal validity, I incorporated several control variables that could potentially offer alternative explanations. These include (1) the size of the authority, as indicated by the number of residents according to the last data published by the Central Bureau of Statistics in 2020, (2) the budget of the authority in Shekels, as per the last data published by the Central

Bureau of Statistics in 2020, the socio-economic index of the authority (1- the lowest socio-economic index to the highest socio-economic index - 255, last published by the Central Bureau of Statistics in 2019), (4) the geographical location of the authority, represented by the peripherality index. This index measures the accessibility potential and proximity to Tel Aviv, with 1 indicating the most peripheral and 255 indicating the least peripheral, based on the last data published by the Central Bureau of Statistics in 2020. The following section provides the descriptive statistics:

		Number of observations	Mean	St. dev.	Min	Max
Decision 1+2	Number of Residents	62	57,409.22	95,090.94	1556	463,808
	Budget	59	583,377.31	1,263,436.91	37,559	6,603,316
	Socio-Economic Index	62	141.32	71.95	10	253
	Peripherality Index	62	125.64	77.66	8	255
Decision 3+4	Number of Residents	39	56,993.66	75,979.30	1556	256,053
	Budget	37	509,076.57	660,716.08	40,912	2,116,752
	Socio-Economic Index	39	154.69	58.48	5	247
	Peripherality Index	39	116.67	79.08	2	246

Sample Composition and Descriptive Statistics

Upon reviewing the sample compositions and descriptive statistics provided above, it is clear that men predominantly occupy roles within these departments of local authorities. As a result, I will examine the potential influence of gender on the variables by introducing a dummy variable for males.

Moreover, there are noticeable differences in the means of variables related to Decision 2; the means for Decision 2 are generally higher than those for other decisions. For example, the two events have a significant difference in the means of the need for technology. Similarly, the means of objective clarity are higher in each decision compared to other objectives. The number of internal participants during the decision-making process also tends to be higher in each decision compared to the number of external participants.

It is worth noting that there are differences between the two events due to varying approaches in the surveys. The questions about the sports event were generally about a single event in the local authority, with the specific sports event varying by the local authority. On the other hand, the questions about the household waste separation event pertained to the same project across all local authorities, which should result in more precise and accurate responses.

Pearson's Correlations

Appendix I presents Pearson's correlations. The correlation matrix reveals that half of the variables have a correlation coefficient of less than 0.5. However, certain variables exhibit a higher

degree of correlation. For instance, the budget and the size of the authority are correlated at 0.973 and 0.989, respectively. Similarly, decision-making transparency and informed decisions show correlation coefficients of 0.814, 0.827, 0.905, and 0.923. Clarity and accessibility also demonstrate strong correlations, with coefficients of 0.838, 0.871, 0.817, and 0.850. These variables are associated with each other, meaning the values of one variable are associated with the values of the other in some way.

Models Estimated

Model 1: *The model explains the relationship between the informed decisions and other variables described above.*

$$INFORMED_i = \alpha + \beta1*DMTRANSPARENCYE_i + \beta2*PARTICIPANTS_i + \beta3*TECHNOLOGY_i + \beta4* PERIPHERIES_i + \beta5*GENDER_i + V_i$$
$$i=1, 2, \ldots.N$$

$$INFORMED_i = \alpha + + \beta1*PARTICIPANTS_i + \beta2*TECHNOLOGY_i + \beta3* PERIPHERIES_i + \beta4*GENDER_i + V_i$$
$$i=1, 2, \ldots.N$$

Model 2: *The models explain the relationship between the informed decisions and the decision-making transparency. The independent variable contains all the objectives of decision-making transparency. Second, the moderate variables are included in the model.*

$$INFORMED_i = \alpha + \beta1*DMTRANSPARENCYE_i + V_i$$
$$i=1, 2, \ldots.N$$

$$INFORMD_i = \alpha + \beta1* DMTRANSPARENCYE_i + \beta2* PARTICIPANTS_i + \beta5*TECHNOLOGY_i + V_i$$

$$i=1, 2, \ldots.N$$

Variables	Variable Full Name
DMTRANSPARENCY	Decision Making Transparency
INFORMED	Informed Decisions
PARTICIPANTS	Total Number of Participants
InternalP	Number of Internal Participants
ExBusinessP	Number of External Participants (Business)
ExCitizensP	Number of External Participants (Citizens)
TECHNOLOGY	The Need for Technology
SIZE	Size of the Authority
BUDGET	Budget of the Authority in Shekels*
SOCIO	Socio-Economic Index
PERIPHERIES	Peripherality Index
CLARITY	Clarity
ACCESSIBILITY	Accessibility
LOGIC	Logic/Rationale
TRUTH	Truth/Accuracy

OPENNESS	Openness
GENDER	Dummy variable for male (1 if male, otherwise 0)

*Not included in the models due to high correlation with SIZE.

Statistical Analysis

Statistical analyses were conducted using the SPSS 23.0 software. Initially, I carried out reliability and validity tests for the research variables. Next, the data were described and analyzed. Subsequently, the data were described and analyzed. A bivariate analysis was then performed using Pearson's test to examine correlations between the continuous variables. In addition, I performed the Cronbach's alpha test to ensure that the various items component of the dependent variable belongs to the same content world (the Cronbach's alpha above 0.8 in every item). Multivariate analyses were then performed using a linear regression model (via OLS) to test hypotheses H1, H2, H3, and H4 for each decision.

Due to the high correlations between some of the variables, as indicated above, collinearity statistics were performed for all estimated models. I utilized the Variance Inflation Factor (VIF) to detect multicollinearity in the estimated regressions. A VIF of 1 indicates no correlation between variables. A VIF between 1 and 5 suggests a moderate correlation between the variables, while a VIF greater than 5 indicates a high correlation between the variables, which can pose problems for regression models. In models 1 and 2, all VIF values range from 1 to 5, so there should not be any issues with estimator inaccuracies.

Next, I will conduct path analyses using AMOS software to understand the dependencies among the variables. As stated in a research review concerning the use and interpretations of path analyses: "The aim of path analysis is to provide estimates of the magnitude and significance of hypothesized causal connections among sets of variables displayed through the use of path diagrams" (Stage, Carter, & Nora, 2004). The results of these analyses are still pending.

Part 3- Preliminary Results and Interpretation

The following section outlines the preliminary results and provides an interpretation of these findings.

Model 1 (1) Coefficients (Standard Deviations)	**Constant**	**DMTRANSPARENCY**	**PARTICIPANTS**	**TECHNOLOGY**	**PERIPHERIES**	**GENDER**	**Observations**	**R^2**
Decision 1	-0.186 (0.428)	0.668*** (0.088)	0.079* (0.031)	0.039 (0.085)	0.002 (0.002)	0.037 (0.408)	69	**0.831**

Decision 2	-0.078 (0.643)	0.469*** (0.106)	0.026 (0.056)	0.380* (0.143)	0.006 (0.003)	-0.156 (0.578)	41	**0.810**
Decision 3	0.025 (0.537)	0.541*** (0.079)	0.057 (0.029)	0.303** (0.100)	-0.001 (0.002)	-0.003 (0.372)	44	**0.901**
Decision 4	1.029 (0.699)	0.684*** (0.068)	0.076* (0.028)	0.010 (0.077)	-0.002 (0.003)	-0.131 (0.373)	33	**0.920**

*p < 0.05, **p < 0.01, ***p<0.001

Model 1 (2) Coefficients (Standard Deviations)	**Constant**	**PARTICIPANTS**	**TECHNOLOGY**	**PERIPHERIES**	**GENDER**	**Observations**	**R²**
Decision 1	0.256 (0.598)	0.150*** (0.041)	0.338** (0.106)	0.006* (0.003)	1.108* (0.540)	69	**0.658**
Decision 2	0.197 (0.809)	0.064 (0.070)	0.552** (0.174)	0.009* (0.004)	0.873 (0.668)	41	**0.687**
Decision 3	0.725 (0.809)	0.094* (0.044)	0.709*** (0.123)	0.000 (0.003)	0.234 (0.568)	44	**0.760**
Decision 4	0.662 (1.620)	0.163* (0.063)	0.438** (0.148)	0.006 (0.006)	0.973 (0.828)	33	**0.549**

*p < 0.05, **p < 0.01, ***p<0.001

Model 2 (1) Coefficients (Standard Deviations)	**Constant**	**DMTRANSPARENCY**	**Observations**	**R²**
Decision 1	0.940* (0.435)	0.763*** (0.066)	69	**0.663**
Decision 2	1.072 (0.557)	0.763*** (0.083)	41	**0.685**
Decision 3	0.249 (0.374)	0.821*** (0.060)	44	**0.818**
Decision 4	0.985* (0.389)	0.781*** (0.059)	33	**0.851**

*p < 0.05, **p < 0.01, ***p<0.001

Model 2 (2) Coefficients (Standard Deviations)	**Constant**	**DMTRANSPARENCY**	**PARTICIPANTS**	**TECHNOLOGY**	**Observations**	**R²**
Decision 1	0.251 (0.411)	0.536*** (0.087)	0.132*** (0.032)	0.040 (0.095)	69	**0.749**
Decision 2	0.232 (0.521)	0.493*** (0.092)	0.057 (0.050)	0.323* (0.136)	41	**0.794**
Decision 3	-0.45 (0.297)	0.529*** (0.073)	0.073** (0.025)	0.272** (0.091)	44	**0.897**
Decision 4	0.367 (0344)	0.669*** (0.058)	0.086*** (0.023)	0.043 (0.066)	33	**0.910**

*p < 0.05, **p < 0.01, ***p<0.001

These results help address the research questions: Does decision-making transparency contribute to the attainment of informed decisions? What moderating factors influence the effect of decision-making transparency on informed decisions? Multiple linear regression analyses were utilized to construct a model for predicting the level of informed decisions. This was based on the level of decision-making transparency, the number of participants in the decision-making process, the need for technology in the decision-making process, the peripheries index of the local government, and the gender of the officials who responded to the surveys (Model 1(1)).

The five-predictor model accounted for 83% to 92% of the variance in informed decisions. Decision-making transparency significantly positively affected informed decisions ($p < 0.001$) across decisions 1-4. The number of participants also significantly positively affected informed decisions ($p < 0.01$) in decisions 1 and 4. The need for technology had a significant positive effect on informed decisions ($p < 0.05$) in decisions 2 and 3. However, the peripheries index and gender did not significantly impact informed decisions.

Due to the high correlation between the independent variable and decision-making transparency in model 1 (2), this independent variable was omitted. These two variables are also highly homogeneous. The four-predictor model accounted for 54% to 76% of the variance in informed decisions. The number of participants significantly positively affected informed decisions ($p < 0.05$) in decisions 1, 3, and 4. The peripheries index significantly positively affected informed decisions ($p < 0.05$) in decisions 1-2. Lastly, gender significantly positively affected informed decisions ($p < 0.05$) only in decision 1.

Model 2(1), with a single predictor, accounted for 66% to 85% of the variance in informed decisions. Decision-making transparency significantly positively affected informed decisions ($p < 0.001$) in decisions 1-4.

The three-predictor model (Model 2(2)) accounted for 74% to 91% of the variance in informed decisions. Decision-making transparency significantly positively affected informed decisions ($p < 0.001$) in decisions 1-4. The number of participants significantly positively affected informed decisions ($p < 0.01$) in decisions 1, 3, and 4. Finally, the need for technology significantly positively affected informed decisions ($p < 0.05$) in decisions 2 and 3.

Regarding the moderating effect of the two variables, the number of participants and the need for technology, it was concluded that in decisions 1-4, the moderators do not impact the relationship between decision-making transparency and informed decisions. However, the signs of the corresponding coefficients with the interaction term are mostly negative, indicating that the

moderators lead to a lower effect from the independent variables to the dependent variable. Specifically, the interaction term (of the moderator: the need for technology) in decision 2 is significant at $P < 0.05$. Due to high collinearity, I used standardized versions of these variables. The results are detailed in the following tables:

Coefficients (Standard Deviations)	Constant	ZDMTRANSPARENCY	ZTECHNOLOGY	ZDMTRANSPARENCY*ZTECHNOLOGY	Observations	R^2
Decision 1	5.501*** (0.260)	1.770*** (0.310)	0.608 (0.315)	-0.116 (0.249)	69	**0.683**
Decision 2	6.009*** (0.240)	1.181*** (0.294)	1.276*** (0.263)	-0.521* (0.224)	41	**0.814**
Decision 3	4.744*** (0.236)	1.722*** (0.297)	1.003** (0.294)	0.023 (0.240)	44	**0.874**
Decision 4	5.883*** (0.233)	1.890*** (0.280)	0.731** (0.333)	-0.430 (0.304)	33	**0.874**

*p < 0.05, **p < 0.01, ***p<0.001

Coefficients (Standard Deviations)	Constant	ZDMTRANSPARENCY	ZPARTICIPANTS	ZDMTRANSPARENCY*ZPARTICIPANTS	Observations	R^2
Decision 1	5.566*** (0.190)	1.573*** (0.211)	1.026*** (0.209)	-0.249 (0.157)	69	**0.758**
Decision 2	5.768*** (0.251)	1.651*** (0.289)	0.936** (0.269)	-0.166 (0.227)	41	**0.766**
Decision 3	4.715*** (0.198)	2.066*** (0.233)	0.763** (0.217)	0.081 (0.220)	44	**0.874**
Decision 4	5.755*** (0.150)	1.985*** (0.161)	0.721*** (0.155)	-0.249 (0.154)	33	**0.916**

*p < 0.05, **p < 0.01, ***p<0.001

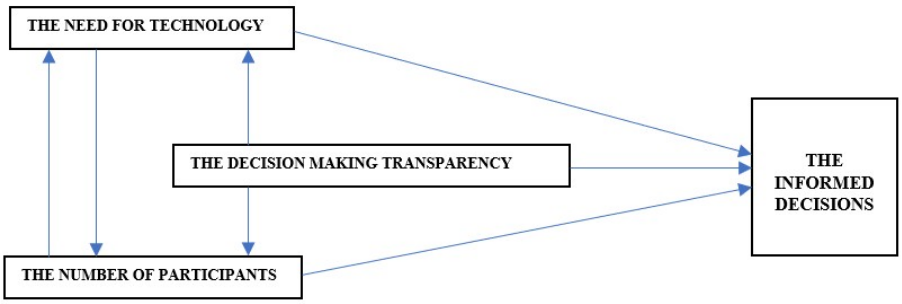
Part 4 – Discussion: The relationship between Decision-Making Transparency and Informed Decisions

Delving deeper into the results, which are still preliminary, I aim to discuss the relationship between decision-making transparency and informed decisions. The results above suggest that decision-making transparency positively influences informed decisions. However, the need for technology or the number of participants does not moderate this influence. As noted, decision-making transparency and informed decisions are highly correlated. Yet, causality cannot be

determined solely based on these models. Does decision-making transparency contribute to obtaining informed decisions? After performing path analyses, I plan to triangulate all data collected in this research to propose an answer to this question.

Additionally, the findings indicate similarities and differences between the decision-making processes in the two events under consideration: the organization of a sports event and a household waste separation event in local authorities. For instance, in Model 1(1), the influence of decision-making transparency varies between decisions 1-4. The sports event was less supervised and more open regarding the decision-making process. Conversely, the Ministry of Environment managed and controlled the waste separation event, and the decision-making process was more restricted.

The following diagram encapsulates four variables: informed decisions, decision-making transparency, participants, and the need for technology in the decision-making process. Based on previous research and the results above, that is the model specification I propose.



Limitations of the Study

This study is primarily centered on local government authorities within Israel. However, the scope of our understanding could be significantly expanded through future research conducted in various other countries. Furthermore, there is a noticeable scarcity of prior research that utilizes the methodology described in this study to examine local governmental transparency. As a result, this study pioneers relatively novel evaluations for the variables, which brings its own set of implications.

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Appendix

Appendix A - Criteria for Choosing the Local Authority for Exploratory Research

To obtain a comprehensive understanding of decision-making transparency within local authorities, it is essential to first conceptualize and clarify this concept by conducting research on a single local authority. Out of 77 cities, one was selected based on the following criteria:

1. The city is financially robust and demonstrates good conduct (referred to in Hebrew as "Reshut Eitana"). It is crucial to research a city that is not plagued by poor management or resource scarcity and adheres to laws and procedures. According to the Ministry of Interior, there are 17 such strong cities in Israel: 3 cities are administratively part of the South district; 9 cities belong to the Central district; 3 cities are within the Tel-Aviv district, and 2 cities are in the Haifa district.
2. The city has a population exceeding 200,000 citizens. This criterion ensures that the selected city is bustling with numerous events and activities. Based on data from the Population and Immigration Authority in Israel, the cities that meet both the first and second criteria are: Ashdod, Beer-Sheva, Holon, Haifa, Petah-Tikvah, Rishon-lezion, and Tel-Aviv.
3. The city is geographically accessible and administratively approachable.
4. The city has given its consent to participate in the research.

Appendix B - Chronological Mapping of Key Events Over a Five-Year Period

A timeline map was created to chronologically arrange significant events, activities, and achievements within the Department of City Improvement from 2016 to 2021. This map provides insights into their interrelationships and crucial contextual factors.

External events were also categorized, including the enactment of new policies or significant changes to existing policies, shifts in organizational or political leadership, alterations in economic conditions, demographic changes, and the occurrence of global crises.

The following guiding questions were used to frame the timeline map:

1. What are some particularly significant events, activities, or achievements, and why are they significant?
2. What questions or implications do these events raise?

3. What elements are missing that should be included? Conversely, what is included that should not be?

Appendix C - Scale Development

The scales were developed based on the steps outlined in scale development guides (Clark and Watson, 1995; Clark and Watson, 2016). The process was as follows:

1. Initial scale construction was based on a comprehensive literature review.
2. An item pool was created to demonstrate content validity.
3. The construct validity of the evaluations was examined using a sample from 3 authorities.
4. The internal consistency was assessed using Cronbach's alpha, and the discriminant validity was determined through confirmatory factor analysis (CFA).

To mitigate the risk of common methods bias, I adhered to the recommendations of MacKenzie and Podsakoff's (2012) study, which emphasizes adjusting the survey to match the responders' capabilities in order to reduce common method bias. Consequently, I selected officials who are currently working and have the necessary experience to answer the survey questions.

Appendix D - Document Analysis

Document analysis, a qualitative research method, refers to a systematic procedure for reviewing or evaluating documents. This process involves skimming, reading, and interpreting documents, combining elements of content analysis and thematic analysis in an iterative process (Bowen, 2009).

This research employs document analysis in conjunction with other qualitative research methods to triangulate data. The objective is to validate and corroborate findings across different data sets obtained during the study.

The protocol by Drew and Nyerges (2004) was partially utilized to extract and code public record values. A statement was selected for inclusion in the analysis if it pertained to (a) one of several predefined value categories (Value: an event a person deeply cares about), (b) a reasoning process for undertaking a certain activity or approach, or (c) the justification for a specific activity.

Analyzing the protocols of meetings before, during, and after relevant events can reveal additional data and meanings pertinent to the research problems. The documentary data will be analyzed alongside data from interviews, allowing themes to emerge across all three data sets.

The following are the guiding questions for the analysis of meeting protocols:

When the meeting took place? (Before the event took place, during and after the event).

1.When did the meeting take place? (Before, during, or after the event).

2. Who initiated the meeting? (For example, was it a regular meeting, a non-regular meeting, initiated by a councilor, etc.)

3. What type of meeting was it? (Finance committee, council meeting, board meeting, etc.)

4. What was the purpose of the meeting? (Which decisions were made; what topics were discussed, etc.)

Appendix E - The Informed Decisions Variable

Decision 1	Decision 2	Decision 3	Decision 4
1. To what extent were the potential outcomes of the decision to hold the event taken into account? 2. To what degree were alternative actions considered in relation to holding the event? 3. How much consideration was given to the residents' preferences regarding whether to hold the event? 4. To what extent were elected officials involved in the decision-making process about whether to hold the event? 5. How thoroughly was the decision-making process documented regarding whether to hold the event? 6. To what extent were previous events or decisions considered in the decision to hold the event?	1. To what extent were potential outcomes considered in the decision-making process regarding the location and number of participants? 2. How much consideration was given to alternative actions when deciding on the location and number of participants? 3. To what degree were the residents' preferences taken into account in decisions about the location and the number of participants? 4. How involved were elected officials in the decision-making process regarding the location and the number of participants? 5. To what extent was the decision-making process documented concerning the location and the number of participants? 6. How much were previous events or decisions considered when making decisions about the location and the number of participants?	1. To what extent did the local authority consider potential outcomes in the decision-making process regarding the distribution of brown bins? 2. How much consideration was given to alternative actions when deciding on the distribution of brown bins within the local authority? 3. To what degree were the residents' preferences taken into account in the decision about the distribution of brown bins within the local authority? 4. How involved were elected officials in the decision-making process regarding the distribution of brown bins within the local authority? 5. To what extent was the decision-making process documented concerning the distribution of brown bins within the local authority? 6. How much were previous events or decisions considered when making the decision about the distribution of brown bins within the local authority?	1. To what extent were potential outcomes considered in the decision-making process regarding the frequency of bin emptying per week and the treatment of hazards in household waste separation? 2. How much consideration was given to alternative actions when deciding on the frequency of bin emptying per week and the treatment of hazards in household waste separation? 3. To what degree were the residents' preferences taken into account in the decision about the frequency of bin emptying per week and the treatment of hazards in household waste separation? 4. How involved were elected officials in the decision-making process regarding the frequency of bin emptying per week and the treatment of hazards in household waste separation? 5. To what extent was the decision-making process documented concerning

			the frequency of bin emptying per week and the treatment of hazards in household waste separation? 6. How much were previous events or decisions considered when making the decision about the frequency of bin emptying per week and the treatment of hazards in household waste separation?

Appendix F - Independent Variables: Clarity, Accessibility, Logic/Rationale, Truth/Accuracy, and Openness

	Decision 1	**Decision 2**	**Decision 3**	**Decision 4**
Clarity	To what extent was the decision to hold the event clear and understandable to you?	To what extent was the decision regarding the location and the number of participants clear and understandable to you?	To what extent was the decision regarding the distribution of brown bins within the local authority clear and understandable to you?	To what extent was the decision regarding the frequency of bin emptying per week and the treatment of hazards in household waste separation clear and understandable to you?
Accessibility	How accessible was the information about the decision-making process regarding whether to hold the event? (via the Internet, archives, or any other means)	How accessible was the information about the decision-making process on the location and number of participants to you? (via the Internet, archives, or any other means)	How accessible was the information about the decision to distribute the brown bins within the local authority to you? (via the Internet, archives, or any other means)	How accessible was the information about the decision-making process on the frequency of bin emptying per week and the treatment of hazards in household waste separation to you? (via the Internet, archives, or any other means)
Logic/Rationale	To what degree is the logic behind the decision to hold the event detailed in official documents?	To what degree is the rationale behind the decision on the location and the number of participants detailed in official documents?	To what degree is the rationale behind the decision to distribute the brown bins within the local authority detailed in official documents?	To what degree is the rationale behind the decision on the frequency of bin emptying per week and the treatment of hazards in household waste separation detailed in official documents?
Truth/Accuracy	How fully was all the necessary information for deciding whether to hold the event disclosed to you?	How completely was all the necessary information for making a decision on the location and the number	How completely was all the necessary information for making a decision on the distribution of brown	How completely was all the necessary information for making a decision on the frequency of bin

		of participants disclosed to you?	bins within the local authority disclosed to you?	emptying per week and the treatment of hazards in household waste separation disclosed to you?
Openness	To what extent was the decision to hold the event openly communicated and publicized to the general public and various stakeholders?	To what extent was the decision on the location and the number of participants openly communicated and publicized to the general public and various stakeholders?	To what extent was the decision to distribute the brown bins within the local authority openly communicated and publicized to the general public and various stakeholders?	To what extent was the decision on the frequency of bin emptying per week and the treatment of hazards in household waste separation openly communicated and publicized to the general public and various stakeholders?

Appendix G - Moderator 1: The Number of Participants

	Decision 1	**Decision 2**	**Decision 3**	**Decision 4**
Internal Participants	Please select a number (1-10) representing the officials within the local authority and the municipal corporation who participated in the decision on whether to hold the event.	Please select a number (1-10) representing the officials within the local authority and the municipal corporation who participated in the decision regarding the location and number of participants.	Please select a number (1-10) representing the officials within the local authority and the municipal corporation who participated in the decision regarding the distribution of brown bins within the local authority.	Please select a number (1-10) representing the officials within the local authority and the municipal corporation who participated in the decision regarding the frequency of bin emptying per week and the treatment of hazards in household waste separation.
External Business Participants	Please select a number (1-10) representing the officials outside the local authority, such as those in the business sector and/or the third sector, who participated in the decision on whether to hold the event.	Please select a number (1-10) representing the officials outside the local authority, such as those in the business sector and/or the third sector, who participated in the decision regarding the location and number of participants.	Please select a number (1-10) representing the officials outside the local authority, such as those in the business sector and/or the third sector, who participated in the decision regarding the distribution of brown bins within the local authority.	Please select a number (1-10) representing the officials outside the local authority, such as those in the business sector and/or the third sector, who participated in the decision regarding the frequency of bin emptying per week and the treatment of hazards in household waste separation.
External Citizens Participants	Please select a number (1-10) representing the public representatives and stakeholders who participated in the decision on whether to	Please select a number (1-10) representing the public representatives and stakeholders who participated in the decision regarding the	Please select a number (1-10) representing the public representatives and stakeholders who participated in the decision regarding the	Please select a number (1-10) representing the public representatives and stakeholders who participated in the decision regarding the

	hold the event.	location and number of participants.	distribution of brown bins within the local authority.	frequency of bin emptying per week and the treatment of hazards in household waste separation.

Appendix H - Moderator 2: The Need for Technology

Decision 1	Decision 2	Decision 3	Decision 4
1. To what extent are there technological tools available that could be utilized in the decision-making process regarding whether to hold the event? 2. How extensively were these technological tools used in the process of deciding whether to hold the event?	1. To what extent can technological tools be utilized in the decision-making process regarding the location and number of participants? 2. How extensively were these technological tools used in the process of deciding on the location and the number of participants?	1. To what extent are there technological tools available that could be utilized in the decision-making process regarding the distribution of brown bins within the local authority? 2. How extensively were these technological tools used in the process of deciding to distribute the brown bins within the local authority?	1. To what extent are there technological tools available that could be utilized in the decision-making process regarding the frequency of bin emptying per week and the treatment of hazards in household waste separation? 2. How extensively were these technological tools used in the decision-making process regarding the frequency of bin emptying per week and the treatment of hazards in household waste separation?

Appendix I - Pearson's Correlations

Decision 1	Decision Making Transparency	Informed Decisions	Clarity	Accessibility	Logic/ Rationale	Truth/ Accuracy	Openness	Total Number of Participants	Number of Internal Participants	Number of External Participants (Business)	Number of External Participants (Citizens)	The Need for Technology	Size of Authority	Budget	Socio-Economic Index	Peripherality Index
Decision Making Transparency	1															
Informed Decisions	0.814 (**)	1														
Clarity	0.892 (**)	0655 (**)	1													

Accessibility	0.936 (**)	0.768 (**)	0.838 (**)	1												
Logic/ Rationale	0.877 (**)	0.730 (**)	0.690 (**)	0.818 (**)	1											
Truth/ Accuracy	0.930 (**)	0.809 (**)	0.797 (**)	0.834 (**)	0.770 (**)	1										
Openness	0.848 (**)	0.693 (**)	0.669 (**)	0.706 (**)	0.667 (**)	0.79 (**)	1									
Total Number of Participants	0.603 (**)	0.724 (**)	0.452 (**)	0.582 (**)	0.613 (**)	0.522 (**)	0.539 (**)	1								
Number of Internal Participants	0.650 (**)	0.695 (**)	0.521 (**)	0.614 (**)	0.627 (**)	0.600 (**)	0.537 (**)	0.872 (**)	1							
Number of External Participants (Business)	0.403 (**)	0.542 (**)	0.297 (*)	0.447 (**)	0.401 (**)	0.325 (**)	0.340 (**)	0.823 (**)	0.564 (**)	1						
Number of External Participants (Citizens)	0.475 (**)	0.611 (**)	0.326 (**)	0.422 (**)	0.528 (**)	0.394 (**)	0.470 (**)	0.870 (**)	0.640 (**)	0.589 (**)	1					
The Need for Technology	0.725 (**)	0.684 (**)	0.582 (**)	0.663 (**)	0.745 (**)	0.624 (**)	0.646 (**)	0.647 (**)	0.595 (**)	0.514 (**)	0.548 (**)	1				
Size of authority	-0.060	0.081	0.50	-0.97	-0.32	-0.102	-0.84	0.097	0.037	0.122	0.098	0.58	1			
Budget	-0.46	0.057	0.081	-0.083	-0.043	-0.77	-0.80	0.88	0.015	0.138	0.086	0.066	0.973 (**)	1		
Socio-Economic Index	0.123	0.142	0.242	0.236	0.025	0.088	0.044	0.98	0.55	0.33	0.159	0.117	0.216	0.252	1	
Peripherality Index	0.299 (*)	0.330 (**)	0.336 (**)	0.295 (*)	0.213	0.214	0.288 (*)	0.217	0.163	0.108	0.280 (*)	0.242	0.532 (**)	0.475 (**)	0.388 (**)	1

(**) Correlation is significant at the 0.01 level.

(*) Correlation is significant at the 0.05 level.

Decision 2	Decision Making Transparency	Informed Decisions	Clarity	Accessibility	Logic/ Rationale	Truth/ Accuracy	Openness	Total Number of Participants	Number of Internal Participants	Number of External Participants (Business)	Number of External Participants (Citizens)	The Need for Technology	Size of Authority	Budget	Socio-Economic Index	Peripherality Index
Decision Making Transparency	1															
Informed Decisions	0.827 (**)	1														
Clarity	0.937 (**)	0.737 (**)	1													
Accessibility	0.944 (**)	0.724 (**)	0.871 (**)	1												
Logic/ Rationale	0.884 (**)	0.846 (**)	0.754 (**)	0.819 (**)												
Truth/ Accuracy	0.902 (**)	0.681 (**)	0.838 (**)	0.823 (**)	0.739 (**)	1										
Openness	0.854 (**)	0.764 (**)	0.765 (**)	0.754 (**)	0.694 (**)	0.667 (**)	1									
Total Number of Participants	0.579 (**)	0.707 (**)	0.518 (**)	0.492 (**)	0.601 (**)	0.435 (**)	0.585 (**)	1								
Number of Internal Participants	0.610 (**)	0.629 (**)	0.531 (**)	0.580 (**)	0.620 (**)	0.546 (**)	0.484 (**)	0.865 (**)	1							
Number of External Participants (Business)	0.436 (**)	0.549 (**)	0.392 (*)	0.338 (*)	0.493 (**)	0.263	0.501 (**)	0.891 (**)	0.644 (**)	1						
Number of External Partici	0.468 (**)	0.682 (**)	0.433 (**)	0.364 (**)	0.457 (**)	0.320 (*)	0.557 (**)	0.874 (**)	0.608 (**)	0.708 (**)	1					

pants (Citizens)																
The Need for Technology	0.657 (**)	0.785 (**)	0.556 (**)	0. 552 (**)	0.684 (**)	0.529 (**)	0.662 (**)	0.796 (**)	0.658 (**)	0.705 (**)	0.735 (**)	1				
Size of authority	-0.072	0.227	-0.115	-0.162	-0.189	-0.175	-0.048	0.089	0.087	0.016	0.128	-0.033	1			
Budget	-0.118	0.219	-0.169	-0.210	0.191	-0.211	-0.116	0.063	0.064	0.013	0.087	-0.052	0.973 (**)	1		
Socio-Economic Index	0.114	0.133	0.110	0.169	0.085	0.068	0.086	-0.047	0.012	-0.068	-0.072	-0.001	0.216	0.252	1	
Peripherality Index	0.286	0.387 (*)	0.306	0.246	0.286	0.162	0.304	0.150	0.116	0.089	0.187	0.167	0.532 (**)	0.475 (**)	0.388 (**)	1

(**) Correlation is significant at the 0.01 level.

(*) Correlation is significant at the 0.05 level.

Decision 3	**Decision Making Transparency**	**Informed Decisions**	**Clarity**	**Accessibility**	**Logic/ Rationale**	**Truth/ Accuracy**	**Openness**	**Total Number of Participants**	**Number of Internal Participants**	**Number of External Participants (Business)**	**Number of External Participants (Citizens)**	**The Need for Technology**	**Size of Authority**	**Budget**	**Socio-Economic Index**	**Peripherality Index**
Decision Making Transparency	1															
Informed Decisions	0.905 (**)	1														
Clarity	0.913 (**)	0.763 (**)	1													
Accessibility	0.913 (**)	0.812 (**)	0.817 (**)	1												
Logic/ Rationale	0.923 (**)	0.856 (**)	0.769 (**)	0.895 (**)	1											

Truth/ Accuracy	0.938 (**)	0.849 (**)	0.824 (**)	0.821 (**)	0.819 (**)	1										
Openness	0.820 (**)	0.803 (**)	0.688 (**)	0.579 (**)	0.688 (**)	0.756 (**)	1									
Total Number of Participants	0.589 (**)	0.723 (**)	0.525 (**)	0.420 (**)	0.458 (**)	0.601 (**)	0.653 (**)	1								
Number of Internal Participants	0.703 (**)	0.805 (**)	0.659 (**)	0.505 (**)	0.556 (**)	0.700 (**)	0.747 (**)	0.874 (**)	1							
Number of External Participants (Business)	0.438 (**)	0.582 (**)	0.350 (*)	0.328 (*)	0.365 (*)	0.457 (**)	0.476 (**)	0.923 (**)	0.678 (**)	1						
Number of External Participants (Citizens)	0.437 (**)	0.558 (**)	0.391 (**)	0.293	0.307 (*)	0.454 (**)	0.527 (**)	0.925 (**)	0.669 (**)	0.860 (**)	1					
The Need for Technology	0.769 (**)	0.847 (**)	0.619 (**)	0.660 (**)	0.711 (**)	0.772 (**)	0.707 (**)	0.669 (**)	0.693 (**)	0.631 (**)	0.491 (**)	1				
Size of authority	0.326 (*)	0.221	0.308	0.330 (*)	0.247	0.409 (**)	0.165	0.116	0.315	-0.013	-0.014	0.292	1			
Budget	0.331 (*)	0.230	0.326 (*)	0.310	0.244	0.423 (**)	0.182	0.156	0.369 (*)	0.021	0.016	0.276	0.989 (**)	1		
Socio-Economic Index	-0.098	-0.061	-0.160	-0.065	-0.067	-0.174	0.036	-0.136	-0.102	-0.174	-0.099	-0.189	-0.163	-0.145	1	
Peripherality Index	-0.169	-0.248	-0.176	-0.025	-0.132	-0.186	-0.294	-0.387 (*)	-0.306	-0.401 (*)	-0.352 (*)	-0.235	0.425 (**)	0.342 (*)	0.314	1

(**) Correlation is significant at the 0.01 level.

(*) Correlation is significant at the 0.05 level.

Decision 4	Decision Making Transp	Informed Decisions	Clarity	Accessibility	Logic/ Rationale	Truth/ Accuracy	Openness	Total Number of Partici	Number of Internal	Number of External	Number of External	The Need for Techno	Size of Authority	Budget	Socio-Economic Index	Peripherality Index

	arency							**pants**	**Partici pants**	**Partici pants (Busine ss)**	**Partici pants (Citize ns)**	**logy**				
Decisio n Making Transp	1															
Inform ed Decisio ns	0.923 (**)	1														
Clarity	0.941 (**)	0.905 (**)	1													
Accessi bility	0.937 (**)	0.813 (**)	0.850 (**)	1												
Logic/ Ration ale	0.953 (**)	0.889 (**)	0.870 (**)	0.878 (**)	1											
Truth/ Accura cy	0.969 (**)	0.862 (**)	0.893 (**)	0.916 (**)	0.886 (**)	1										
Openne ss	0.918 (**)	0.884 (**)	0.820 (**)	0.775 (**)	0.864 (**)	0.879 (**)	1									
Total Numbe r of Partici	0.424 (*)	0.608 (**)	0.469 (**)	0.306	0.384 (*)	0.366 (*)	0.476 (**)	1								
Numbe r of Interna l	0.610 (**)	0.752 (**)	0.656 (**)	0.461 (**)	0.544 (**)	0.579 (**)	0.639 (**)	0.834 (**)	1							
Numbe r of Extern al	0.270	0.466 (**)	0.303	0.177	0.259	0.203	0.333	0.954 (**)	0.644 (**)	1						
Numbe r of Extern al	0.279	0.446 (**)	0.324	0.198	0.247	0.216	0.330	0.952 (**)	0.639 (**)	0.971 (**)	1					
The Need for Techno	0.554 (**)	0.608 (**)	0.513 (**)	0.516 (**)	0.548 (**)	0.498 (**)	0.540 (**)	0.493 (**)	0.532 (**)	0.414 (*)	0.404 (*)	1				
Size of authori ty	-0.041	-0.090	-0.058	-0.068	-0.132	0.081	0.011	-0.248	-0.058	-0.309	-0.311	-0.308	1			
Budget	-0.070	-0.102	-0.060	-0.097	-0.164	-0.050	-0.021	-0.225	-0.075	-0.263	-0.276	-0.282	0.989 (**)	1		
Socio- Econo mic Index	0.099	0.089	0.059	0.112	0.131	0.162	0.164	-0.094	0.007	-0.103	-0.160	-0.073	-0.163	-0.145	1	

Peripherality Index	-0.143	-0.326	-0.295	-0.117	-0.150	-0.038	-0.046	-0.617 (**)	-0.427 (*)	-0.632 (**)	-0.632 (**)	-0.444 (*)	0.425 (**)	0.342 (*)	0.314	1

(**) Correlation is significant at the 0.01 level.

(*) Correlation is significant at the 0.05 level.