IT Governance Practices of Local Government Units (LGUs) in Cavite

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***Abstract* -- The study involves governance in community space that includes activities at a local government unit (LGU) in Cavite. The research purpose is to align IT governance (ITG) practices to good governance principles (GGP) implementation of LGUs in Cavite for proper IT decision making process. The study used descriptive research design and utilized the entire population of sixty one (61) respondents for the twenty three (23) LGUs in Cavite. An adopted questionnaire was used to elicit answer from IT officer and IT staff in the LGUs-IT Department. The ITG practices and GGP implementation in the LGUs in Cavite is positively related and has a moderate to high coefficient. This means that an increase in ITG practices enhance GGP implementation in the LGUs IT Department in Cavite. However for proper IT decision making, the LGUs in Cavite in implementing the good governance principles should enhance and give more emphasis for those with low coefficient such as principles of effectiveness and efficiency, transparency, responsiveness, equity, and accountability.**

***Keywords* -- IT Governance Practices, Good Governance Principles Implementation, Strategic Alignment, IT Decision Making Process, LGUs in Cavite,**

I. INTRODUCTION

The study involves IT governance in the LGUs-IT Department in Cavite. This research supports the concept of IT governance (ITG) in the areas of strategic alignment. The ITG focuses on structures, processes, and relational mechanisms practices. The study aims to analyze the positive correlation of ITG practices to good governance principles (GGP). The idea is to strategically align GGP into ITG practices of LGUs in Cavite for the IT decision making process.

The mission of the provincial government of Cavite in the general public services stated that "***Good Governance is Good Politics".*** Thus, the province of Cavite would like to institute a new paradigm in governance on the basis of accountability, transparency, effectiveness, efficiency, leadership capability, sound judgment and congenial working environment, and implement Strategic Approach to Policy Governance (www.cavite.gov.ph) [1] .This study would initially help the government of Cavite in instituting a model paradigm in good governance.

The research adopted theory on Control Objectives for Information and Related Technology (COBIT) developed by*Information Systems Audit and Control Association* (ISACA) [2], and Good Governance Principles (GGP) developed by United Nations Development Programmed (UNDP) [3] as the variables of the study.

COBIT is the comprehensive IT governance framework that addresses every aspect of IT and integrates the entire main global IT standard (2012, ISACA/COBIT5) [4]. The goal of the COBIT framework is to provide a common language for business executives to communicate with each other about goals, objectives and results. The original version, published in 1996, focused largely on auditing. The latest version, published in 2013, emphasizes the value that IT governance can provide to a organizations' success (searchsecurity. techtarget.com/definition/COBIT) [5].

The United Nations Development Program (UNDP) ("Governance and Sustainable Human Development, 1997") [3] enunciates a set of principles. And these UNDP–based principles have a claim to universal recognition (Graham, 2003). And the following are the Five Good Governance Principles (GGP): (1) Legitimacy and Voice (Participation, Consensus orientation), (2) Direction (Strategic vision), (3) Performance(Responsiveness, Effectiveness and efficiency), (4) Accountability (Accountability, Transparency), (5) Fairness (Equity, Rule of Law) (http://unpan1.un.org /intra doc/groups/public/documents/UNPAN/UNPAN011842.pdf) [6].

However, as UNDP noted that the weak governance may lead to more government regulation but not always. And there are many government regulations. The main problem is not regulations but the ability or desire to enforce them. And this justifies the reason for conducting this research.

A. Conceptual Framework

The variables under investigation are based on the theory of Control Objectives for Information and Related Technology (COBIT) developed by Information Systems Audit and Control Association (ISACA) [2] , and Good Governance Principles (GGP) developed by United Nations Development Programmed (UNDP) [3] .COBIT supports IT Governance by creating a framework that covers the following five areas: strategic alignment, value delivery, resource management, risk management, and performance measurement. And one of the areas used in the study involves on strategic alignment. That is aligning ITG practices to GGP implementation of the LGUs in Cavite.

The concept of the study is anchored on the paper on Enhancing IT governance practices: A model and case study of an organization's efforts by Paul L. Bowena, May-Yin Decca Cheung b, Fiona H. Rohdeb, 2007 [7]. This employed the Peterson's IT Governance Model considered as the independent variables of the study. Peterson establishes a framework that establishes that IT Governance must be implemented according to a set of structures, processes and relational mechanisms.

Structures are the formation of committees and their responsibilities; processes refer to planning and control functions for IT decision making process; finally, relational mechanisms make clear the need for the IT functions such as leadership, job design and communication. Moreover, UNDP enumerated the Good Governance Principles such as accountability, transparency, responsiveness, effectiveness and efficiency, equity, rule of law, participation, consensus orientation, and strategic vision are considered dependent variables of the study.

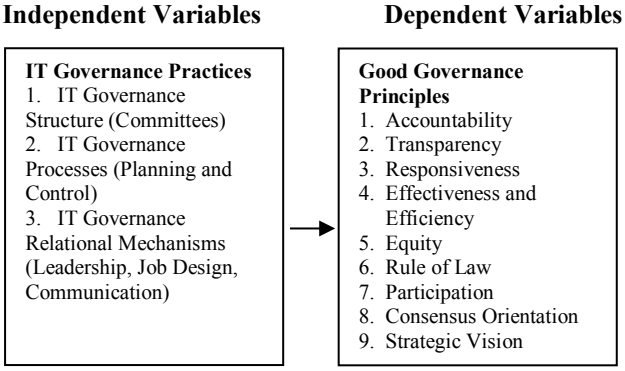

FIG. 1. THE RESEARCH PARADIGM SHOWING THE RELATIONSHIP OF IT GOVERNANCE AND GOOD GOVERNANCE PRINCIPLE

Moreover, the conceptual paradigm on ITG practices of LGUs in Cavite shows the relationship where in ITG structures, processes, and relational mechanisms are positive correlated to GGP implementation. Thus, the output of the study could be a valuable tool for developing new paradigm in governance on the basis of implementing Strategic Approach to Policy Governance in the LGUs in Cavite.

B. Statement of the Problem

This study analyzed the coefficient of correlation of ITG practices to GGP implementation of LGUs in Cavite.

Specifically, the study sought to answer the following questions:

1. What are the IT governance practices of the LGUs in Cavite in terms of IT governance structures, IT governance processes, and IT governance relational mechanisms?
2. What are the good governance principles implementations in the IT department of LGUs in Cavite?
3. Is there a significant relationship between IT governance practices to good governance principles implementation of the LGUs in Cavite?

C. Hypothesis

Ho: There is no significant relationship between IT governance practices (IT governance structures, IT governance processes, IT governance relational mechanisms) to good governance principles implementation (accountability, transparency, responsiveness, effectiveness efficiency, equity, rule of law, participation, consensus orientation, strategic vision) of the LGUs in Cavite.

II. LITERATURE REVIEW

As explained from the study of Bowena, Cheung, and Rohdeb (2007) [7] (and included cited authors from his study), IT governance has a direct impact on how IT is managed within an organization (Sohal and Fitzpatrick, 2002). Although numerous authors discuss IT governance, developing a clear and commonly accepted definition has presented a challenge to the information systems control and audit community (Broadbent, 2003; Van Grembergen et al., 2004). IT governance definitions cover a spectrum from an emphasis on structure through to a focus on process. Accordingly, their paper views IT governance as the IT related decision making structure and methodologies implemented to plan, organize, and control IT activities. IT governance structure involves the existence of responsible functions for making IT decisions, such as steering committees (Van Grembergen et al., 2004). Staffed by both business and IT executives, the IT steering committee should be the primary governing body for ongoing IT operations and initiatives of the organization, including IT investment projects (Maizlish andHandler, 2005). The IT steering committee is responsible for translating business and strategic goals into actionable plans (Standards Australia, 2005). Successful IT governance requires effective communication among all parties based on constructive relationships (Johnson and Lederer,2005), a common language, and a shared commitment to IT policies and Procedures (ITGI,2002a). IT governance processes involve the implementation of IT management techniques and procedures in compliance with established IT strategies and policies. In particular, IT investment processes involve the identification, acquisition, implementation, and ongoing operation and maintenance activities of IT applications. As a continuous process, effective IT governance provides transparent IT decision making, clear accountabilities, and acceptable and actionable IT measurements. That is, effective IT governance enables business and IT executives to integrate business and IT decisions, implement IT solutions, and monitor IT effectiveness (Ribbers et al., 2002; Broadbent, 2003; Weill and Ross, 2004; Kearns and Sabherwal, 2006/07).

From the study on IT Governance Structures, Processes and Relational Mechanisms Achieving IT/Business Alignment in a Major Belgian Financial Group by Steven De Haes and Grembergen [8], explains **IT** governance is one of these concepts that suddenly emerged and became an important issue inthe information technology area. This paper wants to contribute to that part of the IT governance body of knowledge, by describing how an organization can implement IT governance, using a mixture of processes, structures and relational mechanisms, and by analyzing how these practices are used at a major Belgian financial group.

From the study on COBIT as a Tool for IT Governance: between Auditing and IT Governance by *Juan-Ignacio Rouyet-Ruiz* [9] states that Cobit is establishing itself as an effective tool to set up IT Governance that will help IT departments convert themselves into technological

partners of businesses. When analyzing the suitability of Cobit for IT Governance we must be aware of its origins in auditing, and of its strengths and weaknesses resulting from such an origin. In this article we analyze Cobit's strengths and weaknesses as a framework for IT Governance, using as a reference another IT Governance model, that of Peterson. The three Peterson's IT Governance Model establishes a framework that indicates what aspects must be taken into account to implement IT Governance, leaving to the choice of each company exactly how to implement it. In search of a performance framework, this author establishes that IT Governance must be implemented according to a set of structures, processes and relational mechanisms.

Cobit was developed by the *Information Systems Audit and Control Association* (ISACA), through the *IT Governance Institute* (ITGI), as a management auditing mechanism for IT departments, and over time has become a standard for IT Governance. The Cobit acronym stands for *Control Objectives for Information and Related Technology*, which indicates the way Cobit should be considered: as a system that facilitates IT management controls. According to ITGI, Cobit supports IT Governance by creating a framework that covers the following five areas: strategic alignment, value delivery, resource management, and risk management and performance measurement. To that end, it establishes four courses of action: focused on the business, directed towards processes, based on controls and guided by metrics. The main idea of Cobit is to make available a series of processes that will help manage and control the IT function resources, and make sure the business receives the information it needs to achieve its objectives.

With regards to IT governance implementation on principle of good governance, the purpose of the study is to contribute to new theory building in the IT governance domain of knowledge by means of providing guidance on how IT governance can be effectively implemented. It is defined that **Good Governance** is a process whereby societies or organizations make their important decisions, determine whom they involve in the process and how they render account.

Defining the principles of good governance is difficult and controversial. The United Nations Development Program (UNDP "Governance and Sustainable Human Development, 1997") [3] enunciates a set of principles that, with slight variations, appear in much of the literature. There is strong evidence that these UNDP – based principles have a claim to universal recognition. In grouping them under five broad themes, we recognize that these principles often overlap or are conflicting at some point that they play out in practice according to the actual social context, that applying such principles is complex, and that they are all about not only the results of power but how well it is exercised.

The Five Good Governance Principles developed by United Nations Development Programmed (UNDP) [3] are the following:

1. Legitimacy and Voice

Participation – all men and women should have a voice in decision-making, either directly or through legitimate intermediate institutions that represent their intention. Such broad participation is built on freedom of association and speech, as well as capacities to participate constructively.

Consensus orientation – good governance mediates differing interests to reach a broad consensus on what is in the best interest of the group and, where possible, on policies and procedures.

2. Direction

Strategic vision – leaders and the public have a broad and long-term perspective on good governance and human development, along with a sense of what is needed for such development. There is also an understanding of the historical, cultural and social complexities in which that perspective is grounded.

3. Performance

Responsiveness – institutions and processes try to serve all stakeholders.

Effectiveness and efficiency – processes and institutions produce results that meet needs while making the best use of resources.

4. Accountability

Accountability – decision-makers in government, the private sector and civil society organizations are accountable to the public, as well as to institutional stakeholders. This accountability differs depending on the organizations and whether the decision is internal or external.

Transparency – transparency is built on the free flow of information. Processes, institutions and information are directly accessible to those concerned with them, and enough information is provided to understand and monitor them.

5. Fairness

Equity – all men and women have opportunities to improve or maintain their wellbeing.

Rule of Law – legal frameworks should be fair and enforced impartially, particularly the laws on human rights.

"Governance" opens new intellectual space. It provides a concept that allows us to discuss the role of government in coping with public issues and the contribution that other players may make. It opens one's mind to the possibility that groups in society other than government (e.g. 'communities' or the 'voluntary sector') may have to play a stronger role in addressing problems.

The central conclusion is that a universal set of principles for defining good governance can be fashioned and that the strength of their universality rests to a large extent on the body of international human rights and laws. In addition, these principles can be usefully applied to help deal with current governance challenges. When they *are* applied it becomes apparent that there are no absolutes; that principles often conflict; that the 'devil is in the detail'; that context matters. Finally, the nature of governance – both the means and the ends – needs to be understood. Only then does it make sense to elaborate the principles in order to create a meaningful analytical tool.

However, as UNDP noted that the weak governance may lead to more government regulation but not always. And there are many government regulations. The main problem is not regulations but the ability or desire to

enforce them. And this justifies the reason for conducting this research.

III. METHODOLOGY

The study used descriptive research design. Research study utilized the total/entire population of 61 respondents for the 23 LGUs in Cavite. The respondents include nineteen (19) IT officer and forty-two (42) IT staff from the LGUs-IT Department (with an average of 4 personnel per department).To get accurate information, judgment sampling method is employed. That means, respondents are most knowledgeable in conceptual and technical skills in the field of information technology. Through the help of the DILG Provincial Director, Allan V. Benitez, the Provincial IT Officer, Camille Lauren V. Del Rosario, and together with my students in Business Ethics, Social responsibility and Good Governance, the questionnaires were distributed and retrieved.

LIST OF LGUs in the PROVINCE OF CAVITE [1]

(6-Cities and 17-Municipalities = 23 LGUs in Cavite)

District I	**District V**	**District VII**
1. Cavite City	8. Carmona	15. Tagaytay City
2. Noveleta	9. Silang	16. Alfonso
3. Kawit	10. Gen. Mariano Alvarez	17. Gen. Emilio Aguinaldo
4. Rosario		
District II	**District VI**	18. Indang
5. Bacoor City	11. Amadeo	19. Magallanes
District III	12. Gen. Trias	20. Maragondon
6. City of Imus	13. Tanza	21. Mendez
District IV	14. Trece Martirez City	22. Naic
7. City of Dasmariñas		23. Ternate

The study adopted the contents on IT Governance Practices-Questionnaire from the on-line published ISI journal on An Exploratory Study into IT Governance Implementation and its Impact on IT Alignment by De Haes and Van Grembergen [8]. Also, content on good governance principles-questionnaire was also adopted through UNDP [3]. For statistical report, descriptive statistics were used such as weighted mean, frequency counts, and percentage in analyzing the IT governance and good governance principles in the LGUs in Cavite. However, inferential statistics include Pearson correlation was used to determine the relationship among the variables of the study.

IV. RESULTS AND DISCUSSIONS

The presentation of data is organized following the sequence of stated of the problems:

Category of Respondents

Out of 23 LGUs in Cavite, the actual LGUs participated consist of 18 because the other 5 LGUs do not have IT department. Majority of the respondents are the IT staff consisting of 42 or about 68.85 percent. However, there are 19 IT officer or about 31.15 percent. They are all knowledgeable in IT governance practices.

1. Analysis of IT Governance Practices

The IT governance practices of the LGUs in Cavite are measured in terms of IT governance structures, IT governance processes, and IT governance relational mechanisms. These are the independent variables of the study that are rated by the respondents using a five point scale from one being the lowest to five being the highest. Such category uses "always", "often", "occasionally", "seldom", and "never" labels.

TABLE 1. IT GOVERNANCE STRUCTURE

Description	**N**	**Mean**	**Interpretation**	**Rank**
1. IT strategy committee	61	3.8033	Often	5
2. IT expertise	61	3.7541	Often	7
3. (IT) audit committee	60	3.7000	Often	9
4. CIO reporting to CEO	60	3.9667	Often	2
5. IT steering committee	60	3.4500	Occasionally	10
6. IT governance function / officer.	60	3.8167	Often	4
7. IT project steering committee.	60	3.8000	Often	6
8. IT security steering committee.	59	3.8814	Often	3
9. Architecture steering committee.	60	3.7333	Often	8
10. Integration of governance/ alignment tasks	61	4.2787	Often	1
IT GOVERNANCE STRUCTURES	61	3.8373	Often	
Valid N (list wise)	59			

Table 1 shows the IT governance practices in terms of structure. The summary of IT governance structure is rated as "often" with an average mean of 3.8373. The table reveals the results and ranking of IT governance practices in terms of structures as follows: 1. (ITGS-10) Integration of governance/alignment tasks in roles & responsibilities; 2. (ITGS-4) CIO reporting to CEO and/or COO; 3. (ITGS-8) IT security steering committee; 4. (ITGS-6) IT governance function / officer; 5. (ITGS-1) IT strategy committee at level of board of directors; 6. (ITGS-7) IT project steering committee; 7. (ITGS-2) IT expertise at level of board of directors; 8. (ITGS-9) Architecture steering committee; 9. (ITGS-3) (IT) audit committee at level of board of director, and 10. (ITGS-5) IT steering committee.

TABLE 2. IT GOVERNANCE PROCESSES

Description	N	Mean	Interpretation	Rank
11. Strategic information systems planning.	60	3.9000	Often	5
12. IT performance measurement	60	3.8833	Often	6
13. Portfolio management	59	3.9492	Often	2
14. Charge back arrangements	60	3.7500	Often	8
15. Service level agreements.	60	3.7333	Often	9
16. IT governance framework COBIT.	60	3.7000	Often	10
17. IT governance assurance	59	3.7797	Often	7
18. Project governance / management	60	4.0500	Often	1
19. IT budget control and reporting.	61	3.9016	Often	3.5
20. Benefits management and reporting.	61	3.9016	Often	3.5
IT GOVERNANCE PROCESSES	61	3.8632	Often	
Valid N (list wise)	58			

Table 2illustrates the IT governance practices in terms of processes. The summary of IT governance processes is rated as "often" with an average mean of 3.8632.The table reveals the results and ranking of IT governance practices in terms of structures as follows: 1. (ITGP-18) Project governance / management methodologies ;2. (ITGP-13) Portfolio management; 3.5 (ITGP-19) IT budget control and reporting; 3.5 (ITGP-20) Benefits management and reporting; 5. (ITGP-11) Strategic information systems planning; 6. (ITGP-12) IT performance measurement; 7. (ITGP-17) IT governance assurance and self-assessment; 8. (ITGP-14) Charge back arrangements; 9. (ITGP-15) Service level agreements and 10. (ITGP-16) IT governance framework COBIT.

TABLE 3. IT GOVERNANCE RELATIONAL MECHANISM

	N	Mean	Interpretation	Rank
21. Job-rotation.	60	3.5500	Often	8.5
22. Co-location.	61	3.7377	Often	6
23. Cross-training.	60	3.5500	Often	8.5
24. Knowledge management Systems	60	3.7833	Often	5
25. Business/IT account management.	59	3.5085	Often	10
26. Executive giving the good example.	60	3.8833	Often	3.5
27. Informal meetings	60	3.6167	Often	7
28. IT leadership.	60	3.9500	Often	1
29. Corporate internal communication	60	3.9167	Often	2
30. IT governance awareness	60	3.8833	Often	3.5
IT GOVERNANCE RELATIONAL MECHANISMS	61	3.7484	Often	
Valid N (list wise)	59			

Table 3 describes the IT governance practices in terms of relational mechanisms. The summary of IT governance relational mechanisms is rated as "often" with an average mean of 3.7484. The table reveals the results and ranking of IT governance structures as follows: 1. (ITGRM-28) IT leadership; 2. (ITGRM-29) Corporate internal communication addressing IT on a regular basis; 3.5 (ITGRM-30) IT governance awareness campaigns; 5. (ITGRM-24) Knowledge management (on IT governance); 6. (ITGRM-22) Co-location; 7. (ITGRM-27) Informal meetings between business and IT executive/ senior management; 8.5 (ITGRM-21) Job-rotation; 8.5 (ITGRM-23) Cross-training, and 10. (ITGRM-25) Business/IT account management.

TABLE 4. SUMMARY OF IT GOVERNANCE PRACTICES

Description	N	Mean	Interpretation	Rank
IT Governance Structures	61	3.8373	Often	2
IT Governance Processes	61	3.8632	Often	1
IT Governance Relational mechanisms	61	3.7484	Often	3
IT Governance Practices (Ave. Mean)	61	3.8373	Often	

Table 4 affirms the summary of IT governance practices rated as "often" with an average mean of 3.8163. The table reveals the highest IT governance practices, which is IT governance processes rated as "often" with a mean score of 3.8632. It is followed by IT governance structures rated as "often" with a mean score of 3.8373, and IT governance relational mechanisms rated as "often" with a mean score of 3.7484.

2. Analysis of Implementation of Good Governance Principles

The good governance principles employed in the IT department of LGUs in Caviteis measured in terms of accountability, transparency, responsiveness, effectiveness & efficiency, equity, rule of law, participation, consensus orientation, and strategic vision. The dependent variables are rated using a five point scale from one being the lowest to five being the highest. Such

category makes use of exceptional, very satisfactory, adequate, improvement needed, not yet implemented labels.

TABLE 5. PRINCIPLES OF GOOD GOVERNANCE

	N	Mean	Interpretation	Rank
1. Being Accountable	60	4.1333	Often	1
2. Transparency:	60	3.9167	Often	4
3. Responsive:	60	4.0667	Often	2
4. Effective and Efficient:	59	4.0339	Often	3
5. Equitable and Inclusive:	60	3.7500	Often	8
6. Following the Rules:	60	3.8667	Often	6
7. Participatory:	60	3.7667	Often	7
8. Consensus Oriented:	60	3.7000	Often	9
9. Strategic Vision:	60	3.9000	Often	5
PRINCIPLES OF GOOD GOVERNANCE	60	3.9039	Often	
Valid N (list wise)	59			

Table 5 describes the implementation of good governance principles. The summary of good governance principles is rated as "often" with an average mean of 3.9039. The table reveals the results and ranking of good governance principles as follows: 1. (GGP-1) Being Accountable; 2. (GGP-3) Responsive; 3. (GGP-4) Effective and Efficient; 4. (GGP-2) Transparency; 5. (GGP-9) Strategic vision; 6. (GGP-6) Following the Rules; 7. (GGP-7)Participatory; 8. (GGP-5) Equitable and Inclusive, and 9. (GGP-8) Consensus Oriented.

3.Significant Relationship between IT Governance Practices to Good Governance Principles of the LGUs in Cavite

Using the Pearson correlation, the IT governance practices are compared against good governance principles to determine the significant relationship among the variables of the study.

TABLE 6. PEARSON CORRELATION OF IT GOVERNANCE TO GOOD GOVERNANCE PRINCIPLES

Principles of Good Governance	Pearson Correlation	Sig. (2-tailed)	N	Findings
IT Gov. Structures	0.661	0	60	Sig.
IT Gov. Processes	0.700	0	60	Sig.
IT Gov. Related Mechanisms	0.674	0	60	Sig.

The table 6 explains the Pearson correlation of IT governance practices (ITGP) to good governance practices (GGP). The test statistics from all items in the table on the GGP, the computed P-value is less than to the 0.050 significance level. This means that the test statistics falls in the critical region, so we conclude that there is sufficient evidence to support the claim of linear correlation between ITGP and GGP.

However, only the GGP on effective and efficient does not conclude that there is a linear correlation because the P-value of 0.097 is greater than the 0.050 significance level. And all the rest of the variables are significant.

Moreover, ITGP and GGP implementation in the LGUs in Cavite is positively related and have a moderate to high coefficient. This means that as ITGP increases, the GGP implementation also increases. Any positive change and increase in ITGP is positively related to GGP implementation in the LGUs in Cavite. Which means as one increases (IT governance practices), the other also increases (good governance principles). This reveals that the magnitude and direction of relationship of the values corresponds a positive relationship.

TABLE 7. RANKING OF PEARSON CORRELATION OF IT GOVERNANCE TO GOOD GOV. PRINCIPLES

GGV	ITGS	ITGP	ITGRM	Rank
1. Accountability	6	3.5	6	5
2. Transparency	8	7	8	8
3. Responsiveness	7	8	7	7
4. Effectiveness& Efficiency	9	9	9	9
5. Equity	5	6	5	6
6. Rule of Law	2	5	4	4
7. Participation	3.5	2	3	2.5
8. Consensus Orientation	3.5	3.5	2	2.5
9. Strategic Vision	1	1	1	1

Table 7 reveals the ranking of relationship of ITGP to GGP from highest to lowest: **(1)Strategic Vision**-Leaders and the public have a broad and long-term perspective on good governance and human development; (**2.5)Consensus Orientation**-Different interests and viewpoints need to be mediated to reach a broad consensus on what is the best interest of the whole organization; **(2.5)Participation**-All the member of the organization, both men and women need to be involved in the development process; **(4)Rule of Law**- There must be a fair legal framework that is enforced impartially protecting human rights and rights of minorities;**(5)Accountability**-Everyone in the organization must be answerable to every actions, decisions and behavior; **(6)Equity-** A society's well being depends on ensuring that all its members feel that they have a stake in it and do not feel excluded from the mainstream of society; **(7)Responsiveness**- Members of the organization must try to serve stakeholders within a reasonable timeframe; **(8)Transparency**- Information must be made available to the organization for clarity on decision making, **(9)Effective and Efficient**- Processes need to produce result that meets the need of the organization and company while making the best use of resources

V. CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn:

1. The analysis of respondents on IT governance structures rated high on practices such as (ITGS-10) Integration of governance tasks of IT people in roles & responsibilities, followed by (ITGS-4) Chief Information Officer has a direct reporting line to the Chief Executive Officer, and (ITGS-8) IT security steering committee focusing on IT related risks and security Issues.

2. The analysis of respondents on IT governance processes rated high on practices such as (ITGP-18) management processes and methodologies to govern and manage IT projects, followed by (ITGP-13) prioritization process for IT investments and projects, (ITGP-19) processes to control and report upon budgets of IT, and (ITGP-20) processes to monitor the planned business benefits during and after implementation of the IT investments/projects.

3. The analysis of respondents on IT governance relational mechanisms rated high on practices such as (ITGRM-28) IT leadership to articulate a vision for IT role in the company and ensure that this vision is clearly understood by managers throughout the organization; followed by (ITGRM-29) corporate internal communication addressing IT issues on a regular basis, (ITGRM-26) executive / senior management giving the good example and IT management acting as "partners", and (ITGRM-30) IT governance awareness campaigns to explain to business and IT people the need for IT governance.

4. The analysis of respondents on implementation of good governance principles rated high on (GGP-1) Accountability that everyone in the organization must be answerable to every actions, decisions and behavior, followed by (GGP-3) responsiveness that members of the organization must try to serve stakeholders within a reasonable timeframe, (GGP-4) effective and efficient to produce result that meets the need of the organization and company while making the best use of resources, (GGP-2) transparency of information must be made available to the organization for clarity on decision making, and (GGP-9) strategic vision that leaders and the public have a broad and long-term perspective on good governance and human development, along with a sense of what is needed for such development.

5. The test statistics of Pearson correlation of IT governance structures (ITGS) and IT governance related mechanisms (ITGRM) to good governance principles (GGP) falls in the critical region, so we conclude that there is sufficient evidence to support the claim of linear correlation between ITGS and ITGRM to GGP. However the ITGS and ITGRM to effective and efficiency-GGP, we do not conclude that there is a linear correlation because the P-value of 0.097 is greater than the 0.050 significance level.

6. Only the test statistics of Pearson correlation of IT governance processes (ITGP) to GGP concludes that there is sufficient evidence to support the claim of linear correlation.

RECOMMENDATIONS

In light of the foregoing summary of findings and conclusions, the following recommendations are offered:

1. IT governance structures needs to improve practices on (ITGS-5) IT steering committee at executive or senior management level responsible for determining priorities in IT investments, (ITGS-3) audit committee at level of board of directors over viewing (IT) assurance activities, and (ITGS-9) architecture steering committee to provide architectural guidelines and advises on the use of IT applications.

2. IT governance processes needs to progress practices on (ITGP-16) COBIT based on IT governance and control framework, (ITGP-15) formal agreements between business and IT about IT development projects or IT operations, and (ITGP-14) methodology to charge back IT costs to business units, to enable an understanding of the total cost of ownership.

3. IT governance relational mechanisms needs to develop practices on (ITGRM-25) bridging the gap between business and IT by means of account managers who act as in-between, (ITGRM-21) Job-rotation that IT staff working in the business units and business people working in IT, and (ITGRM-23) cross-training business people about IT and/or training IT people about business.

4. The LGUs in Cavite in implementing the good governance principles should enhance and give more emphasis for those with low coefficient such effectiveness and efficiency (processes need to produce while making the best use of resources), transparency (information must be made available to the organization for clarity on decision making), Responsiveness (members of the organization must try to serve stakeholders within a reasonable timeframe), equity (ensuring that all its members feel that they have a stake in it and do not feel excluded from the mainstream of society), and accountability (everyone in the organization must be answerable to every actions, decisions, and behavior).

5. Similar investigation on the use of information technology governance and good governance principle in public and private organizations is recommended.

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