Inter-organizational Integration among Public Sector Organizations of Oromia Regional State

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Abstract

Nowadays, giant forces such as resource scarcity, technological changes, population growth and increasing demand for quality services force organizations to collaborate. This study, thus, aims to assess the practice of inter-organizational integration among the public sectors of Oromia National Regional State. Mixed design and probabilistic and non-probabilistic sampling techniques were used. Employees at Oromia Regional State especially regional bureau level employees were the participants of the study. Data were collected from both primary and secondary sources. Based on some characteristics and important nature of public sectors about 8 bureaus were selected purposefully since they are expected to provide a more robust and reliable data. Questionnaires and interviews were used to gather first hand data. Descriptive and inferential statistics were used to analyze and discuss the findings. The finding of the study showed that there was moderate but inadequate practice of inter-organizational integration as the result of constraints such as poor resource sharing, failure to set significant goal and shared learning and so forth. A correlation analysis indicated that resource and setting significant goal have strong positive relationship with inter-organizational integration in the study area. The study implies that there was poor institutionalization of inter-organizational integration among the public sectors. Hence, institutionalizing inter-organizational integration would help to solve complex public problems.

Keywords: Inter-organizational, Integration, collaboration, public sectors, systems thinking

1. Introduction

Scholars such as Leary, Rosemary and Catherine Gerard (2012) proposed that the roots of integration and collaboration are buried deep in two competing political traditions. The first is classic liberalism view that emphasizes private interest, views collaboration as a process that aggregates private preferences into collective choices through self-interested bargaining in which organizations enter into collaborative agreements to achieve their own goals. The second is civic republicanism view that emphasizes a commitment to something larger than the individual organization in which collaboration is seen as an integrative process that treats differences as the basis for deliberation in order to arrive at mutual understanding (Perry and Thomson, 2004).

Frequently, public organizations sway between these two contending views. In line with this, Huxham and Vangen (2004) argue that a necessary requirement for successful inter-organizational integration is the self-interest motive that claims each organization must be able to justify its involvement in the way it furthers the organization's goals. Bardach (1998) also asserts that collaboration should be valued only if it produces better organizational performance or lower costs.

Scholars of inter-agency integration commonly believe that inter-organizational integration provides public organization to create capacity and solve complex public problems as well as to make vital public decisions that cannot be achieved without integration (Huxham and Vangen, 2004). However, it requires following some framework to institutionalize the issues of inter-organizational integration which this study addresses. This manuscript contains introduction, statement of the problem, objectives, methodology, results, discussions, conclusions, recommendations, acknowledgements and references.

Solving seemingly intractable public problems such as poverty, health care, poor quality education, aggregate public dissatisfaction and natural disasters, requires different mechanisms that are more flexible and contextual, more inclusive, and more adaptable and operate with greater speed (Hage and Alter, 1993) than those of conventional public organization. In line with this, Toole (1997) forwards that policies dealing with such complex public issues will increasingly require integrated public sector structures for execution. Apart from the importance of integration, the few existing studies and reports indicate that there was poor practice of inter-organizational integration (Awel, 2013; Desta, 2014; Ethiopian Civil service Commission annual report, 2018, Annual reports, 2019). However, Entwistle (2014) argue that shortage of resources that developing countries are facing can be resolved through collaboration. To implement inter-organizational integration in the public sector, there was very limited number of indigenous (within the context of the regions public organizations) literature that begs investigation. Therefore, this study was conducted to investigate and understand inter-organizational integration practice among public sector organizations of Oromia Regional State focusing on regional level public organizations. To achieve this purpose, the following research objectives were stated: a) to examine the status of implementation of inter-organizational integration approach among Oromia regional public service sectors; b) to describe to what extent the sectors are strategic and equipped with skills of establishing collaborative networks; c) to describe the manner of organizational processes of inter-organizational integration capability; d) to examine to what extent the sectors implement systems thinking principles; and e) to identify the challenges affecting implementation of effective inter-organizational Integration among Oromia regional public service Bureaus.

2. Review of Related Literature

2.1. Definitions and Concepts

Eriksson & Nordgren (2018) defined Inter-organizational integration or network as a set of interdependent organizations, having independent decision-making approach, which negotiate and mutually adjust to each other, where relationships between organizations are continual. Agranoff & McGuire (2007) define collaborative public management as a concept that describes the process of facilitating and operating in multi-organizational arrangements for solving problems that cannot be addressed by single public organizations. This definition has equivalent

meaning with the former definition of inter-organizational integration. Hence, the two concepts have been considered as same terminology and used interchangeably in this study.

2.2 Collaborative Public Management Skills for effective Inter-organizational Integration

For Leary, Rosemary and Gerard (2012), the skills involve ability to work with other professionals whose perspectives differs from their own, demonstrating fairness, practicing active listening, sharing resource, flexibility related ability to envision new ways of operating, capacity to build strong professional relationships, ability to communicate openly and ability to take calculated risk.

Working with different professionals having multiple views and skills assist to solve complex problems that emerge because of different factors over a period of time. The essence of collaboration of multiple professionals is, here, to deal with a range of complex public problems that cannot be solved otherwise. Practicing active listening is so critical to understand each other and to contribute for the common goal of the collaboration. Sharing resource is inevitable in collaboration, but the degree of sharing needs attention. Some organization might be willing to share their resources, for instance, knowledge, skills, technology and so forth than other collaborating party (parties). Understanding such imbalances in collaboration may help to find remedial action in advance. Each party in collaboration is also expected to contribute new technique, approach and thinking. Capacity to build strong sustainable professional relationships such as teamwork and community of practice assist to nourish the progress of the collaboration. Open communication assists collaborating parties to share all important resources and clarifies all possible procedures with all possible opportunities and challenges. In addition, open communication may create opportunity to understand each other's potential.

2.3 Organizational Processes Enhancing Inter-organizational Integration Capability

2.3.1 Setting Significant Goals

Transparency in publishing goals informs the public and puts pressure on agencies to focus performance on priorities (Agranoff, 2007; Ordonez et al., 2009). The level of significance of goal can be reflected in terms of urgency, relevancy, sound and achievability.

2.3.2 Specifying Roles and Responsibilities

Successful inter-organizational integration is built through effective development and management of a variety of governance and organizing groups. These groups should work within clear framework of activities (Radin & Beryl (2012). By doing so, the parties are able to prepare and contribute proactively to their agreement in the integration. In this case, their (of collaborating parties) contribution could be dependent of their respective resource potential.

2.3.3 Formalizing Agreements

In some cases, collaborating parties should develop formalized agreements that specify the objectives, roles, and reporting relationships at the outset of the project (Isett, et al., 2005; Metzenbaum, 2006). In order to increase commitment of each party in the collaboration, formal agreement can be established as instrument. This helps the collaborating parties to recognize

pros and cons of respecting and disrespecting the formal agreement regarding contribution to the common goal of the collaboration.

2.3.4 Developing Shared Operations

In this regard, it is required to know what is their plan, how to build a plan of action that accommodate all relevant agencies and programs, recognizing, identifying what do customers need, determining the milestones and deadlines, and deciding how shared resources and budgets work (Fountain, 2013). Formalizing the agreements alone cannot guarantee the success of the objective of coming together of the parties rather it is constrained by the degree to which shared operations are developed among the collaborating parties. Therefore, enhancing how the parties should reach their goal is critical of all other points.

2.3.5. Obtaining Adequate Resources

Managers of cross-agency propose resourcefulness and perseverance to find and share funding across agency budgets (Fountain, 2013). It is important to ensure sufficient resources to carry out goals. In order to get this budget, the involving parties are expected to first understand that the collaboration enables them to gain a return in the form of capacity built.

2.3.6 Creating Effective Communication Channels

Creating a culture of open communication helps to ensure that promising ideas, emergent problems, and varying perspectives receive open, frank discussion in an environment where differences are respected and conflicting views can be reconciled to produce workable solutions (Johnson et al., 2003; Cohen and Mankin, 2002).To keep smooth flow of information and other resources, organizations need to have relevant communication channels. This further provides the collaborating parties with opportunity to stay informed.

2.3.7 Adapting through Shared Learning

In this case, public managers are expected to involve in developing a consultative partnership strategy meant to leverage differences across partner sectors (Doz, 1986). In this case, understanding an organizational context can helps much to learn continuously. Learning within the context enables to address context specific reality that makes the organization more efficient.

2.4 Dimensions of Collaborative Public Management

Huxham & Vangen (2005) describe five fundamental characteristics of collaborative situations, each of which implies a messy, contradictory, dynamic process that is defined by multiple view points and unintended outcomes.

2.4.1 The Process of Collaborative Governing: The Governance Dimension

Public sectors which demand to collaborate should understand how to jointly make decisions about the grounds that govern their behavior and relationships. They also need to create structures for reaching agreement on collaborative activities and goals through shared power arrangements, negotiation and commitment, and problem solving (Crosby & Bryson, 2005 Wood

& Gray 1991). Establishing a common governance framework for collective decision-making and guidelines assist the collaborating parties to have similar expectation and contribution. Therefore, the governance dimension should be enhanced so as to support the inter-organizational integration process. The scope of the governance involves how each sector governs its members and how the collective decision-makers devote themselves.

2.4.2 The Process of Collaborative Administration: The Administration Dimension

Organizations like public sector integrate and act in collaboration because they intend to achieve a particular purpose. To achieve the purpose that brought the organizations to the table in the first place, some kind of administrative structure must exist that moves from governance to action (Stoker, 2006 and Eewntwistle, 2014). This administration dimension stresses for the importance of description of roles, responsibilities, rules and regulations in collaborative endeavors. Therefore, degree to which the collaborating parties are aware of their roles, responsibilities, rules and regulations affects the collaboration.

2.4.3 The Process of Reconciling Individual and Collective Interests: The Autonomy Dimension

A defining dimension of collaboration that captures both the potential dynamism and the frustration that is implicit in collaborative endeavors is the reality that partners share a dual identity. They maintain their own distinct identities and organizational authority separate from the collaborative identity (Johnson et al., 2003). This reality creates an intrinsic tension between self-interest which is achieving individual organizational missions and maintaining an identity. Therefore, keeping the balance between the individual organizational and the common interest is so critical especially you reduce conflict of these interests, and this supports the sustainability of the collaboration.

2.4.4 The Process of Forging Mutually Beneficial Relationships: The Mutuality Dimension

Mutuality has its roots in interdependence. Public organizations that collaborate must experience mutuality. Beneficial interdependencies based either on differing interests, i.e., what Powell (1990) calls complementarities or on shared interests. The underlying philosophy in this dimension is that for organizations to collaborate the resource of at least one of the collaborating parties should reinforce or fill the gap of the other parties so that a new capacity is developed to benefit the whole. The mutual benefit, beyond the other is the new capacity that is created to benefit the whole. However, the new capacity should be contextualized so as to address organization specific reality or issues.

2.4.5 The Process of Building Social Capital Norms: The Trust and Reciprocity Dimension

Reciprocity and trust is a central component of collaboration because they reduce complexity and transaction costs more quickly than other forms of organization Powell (1990). Reciprocity refers to the exchange that takes place among the collaborating organizations (parties) in the form of complementarity of resources such as knowledge, technology and work techniques. Trust is also an insulating behavior that creates strong collaborative atmosphere. It may determine the depth and scope (degree) to which the collaborating parties devote themselves for

the collective benefit. The devotion could be proactively and voluntarily sharing one's independent resources with the other collaborating parties.

2.5. Challenges of Inter-organizational Integration

Public managers effective at cross-sector collaboration need to use both their relationship skills and organizational structures strategically, working within their institutional constraints. Fountain, (2013) argues that at least four institutional processes serve as constraints to effective collaboration: Stovepipes, legislative process that sends mixed messages, possible blurred lines of accountability and budget process that inhibits shared resources (Agranoff, 2006; McGuire, 2006). Stovepipes refer to the vertical structure of bureaucracy which is the fundamental organizational form. The inflexibility and the non-innovation oriented character of the vertical structure may hinder communication and information sharing. However, currently public managers need flexible, innovative and dynamic structure that allows collaboration both horizontally and vertically. Most of the time, law and legitimacy are closely related, so cross-agency collaborative performance requires new arrangements of institutional legality which is typically encoded in law or regulation. In many efforts of collaboration, informal negotiations, planning, and actual collaborative practices proceed before formal authority and arrangements change to accommodate them. This facilitates the suitability of the collaboration. Cross-agency collaboration blurs lines of authority and accountability. Nowadays, public managers are criticized when asked to maintain vertical accountability in their agency activities while supporting horizontal or networked initiatives for which lines of accountability are less direct and clear. The risk in interagency arrangements or collaboration is not the same as the risk resulted in contracting out to private organizations as a contract sharply and clearly defines the requirements that force the contractor and the negative consequences for failure to achieve the imposed duties. For this reason, the developing stages of interagency collaboration significantly force public managers to engage in experimentation, trial and error, and provisional systems as a group of decision-makers negotiates and learns what works in their respective context. Regarding constraints related to budget, the organizational budget system traditionally restricts the use of funds in ways that constrain interagency collaboration. Public management innovations often struggle with deep-rooted institutions, and eventually, innovators are expected to address and resolve these tensions or find their activities prohibited by formal rules. When such tensions resolved, new institutional processes may be created and developed. Once the new institutions gain legitimacy and form the basis for new legislation they become new constraints for decision-makers. The logics and timing by which institutions change differ from changes in practice in more fluid professional networks and more flexible operating procedures and routines. For this reason, if public managers ignore the institutional and political context of their organization and the external environment, or fail to manage effectively within it, they miss key dimensions that influence cross-agency collaboration.

2.6. Some Empirical Literature Related to the Study

Study indicated by Girma & Suominen (2013) found that there has been little inter-organizational integration tradition among public service sectors. As can easily be understood here, this may cause failure of sustainability and ineffectiveness of many public projects and change initiatives.
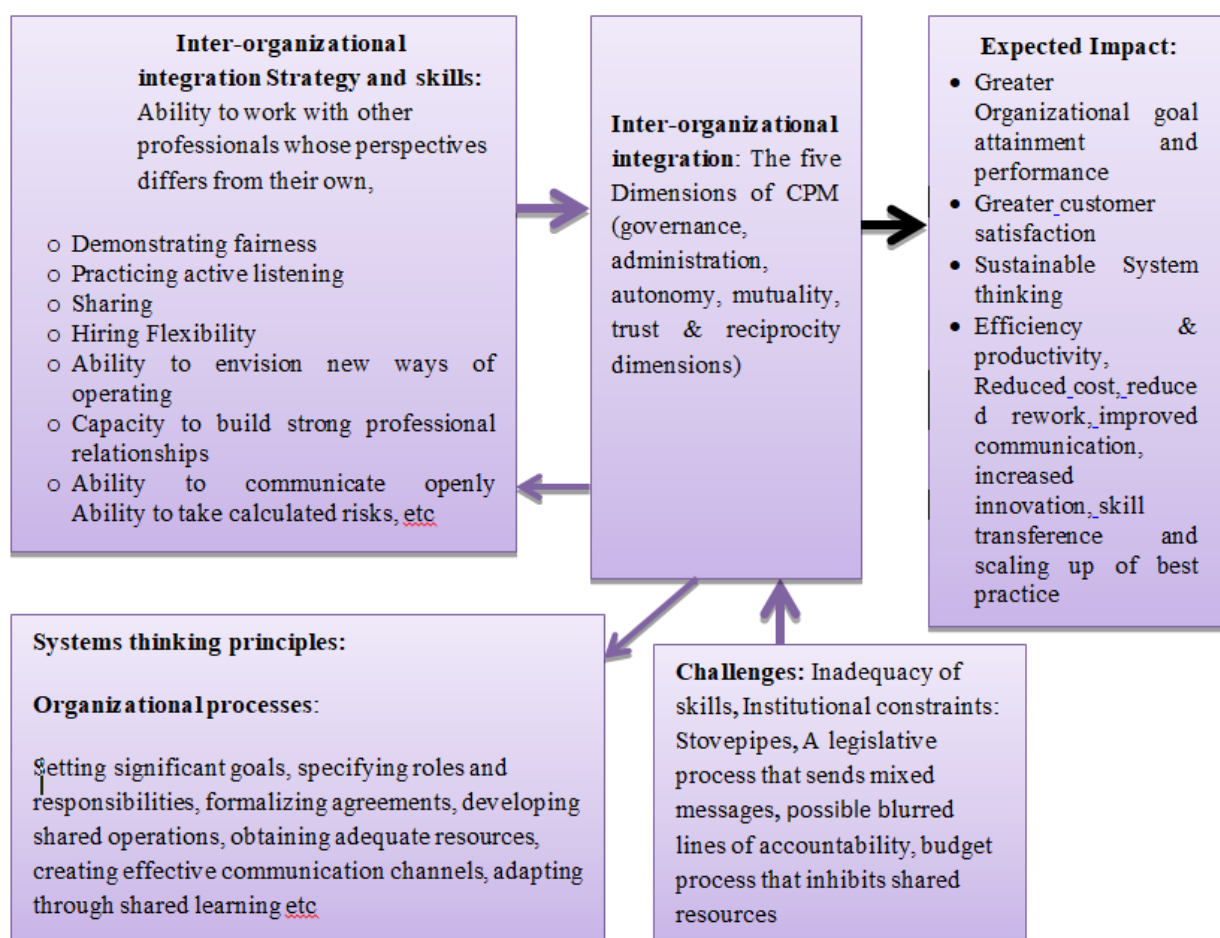
Fountain (2013) also found that implementation of public projects such as water projects, roads, construction and other public installations were significantly affected by loose

connections and fragmented communication among public sector organizations. Moreover, problems encountered in implementing a number of reform tools have been traced to poor nature of inter-organizational integration among different public organizations. However, these studies did not consider dimensions of public management and principles of systems thinking to examine inter-organizational integration.

2.7. Conceptual Framework of the Study

The present study investigates the practice of inter-organizational integration among the public sectors of Oromia National Regional State with special focus on skills required, organizational process enhancing collaborative approach and systems thinking perspectives.

Diagram 2.1: Conceptual Framework of the Study

Inter-organizational integration Strategy and skills:
Ability to work with other professionals whose perspectives differs from their own,

- o Demonstrating fairness
- o Practicing active listening
- o Sharing
- o Hiring Flexibility
- o Ability to envision new ways of operating
- o Capacity to build strong professional relationships
- o Ability to communicate openly
  Ability to take calculated risks, etc

Inter-organizational integration: The five Dimensions of CPM (governance, administration, autonomy, mutuality, trust & reciprocity dimensions)

Expected Impact:
- Greater Organizational goal attainment and performance
- Greater customer satisfaction
- Sustainable System thinking
- Efficiency & productivity, Reduced cost, reduced rework, improved communication, increased innovation, skill transference and scaling up of best practice

Systems thinking principles:

Organizational processes:

Setting significant goals, specifying roles and responsibilities, formalizing agreements, developing shared operations, obtaining adequate resources, creating effective communication channels, adapting through shared learning etc

Challenges: Inadequacy of skills, Institutional constraints: Stovepipes, A legislative process that sends mixed messages, possible blurred lines of accountability, budget process that inhibits shared resources

Source: Developed by the author (2020)

3. Research Methodology

3.1. Study Area

This study is about inter-organizational integration from perspectives of collaborative public management and systems thinking. The data were collected from employees of Oromia National Regional State particularly from Trade; Water, Women, Children and Couth; Urban Development; Labour and Social Affairs; Education; and Civil Service and Human Resource Development Bureaus. These sectors were expected to provide relevant data on the issue under the study.

3.2. Study Design

This study employed mixed study design based on the type of data and the nature of research objectives because this method helps make analysis from qualitative and quantitative perspectives. Triangulation (data and method) method was also considered to synthesis qualitative data with quantitative data.

3.3 Study Approach

The present study employed mixed research approach, because this approach assists to deal with quantitative and qualitative data. For the reason that the present study used both qualitative and quantitative data, the mixed approach was used.

3.4. Data Sources

In this study, both primary and secondary data sources were used. Data obtained from the primary sources were dominantly used for this study. The primary sources were public employees including experts, managers or leaders.

3.5. Population

The population for the present study was employees of Oromia National Regional State who were working at regional bureau level. At the study period, the total number of employees was about 12,000 as information provided by Oromia Civil Service Bureau.

3.6. Sampling Technique

Both probabilistic and non-probabilistic sampling techniques were used to select respondents from Oromia Regional Public Service bureaus especially region level bureaus. Representative public organizations were considered purposefully based on their organizational variables, behaviors and nature of their relation in the way that it reflects data that help analyze issues of integration. Accordingly, based on the context, eight public sectors were selected purposively. Thus, probabilistic and non-probabilistic sampling techniques were used to select respondents for the study.

In the quantitative part, all the civil servants who are expected to be able to think and perform at expert level (level of independence in decision making) were considered using purposive then random sampling. These respondents were allowed to fill in structured questionnaires. Purposive sampling technique was used to select respondents (top managers, middle managers, frontline

mangers, and experienced experts) for interview as these groups were more exposed to the issue under study.

3.7. Sample Size Determination

According to Kothari (2004), if the number of total population is known, n=N/1+N e2 formula is used to determine total samples which are used for the study and precision (e) level is estimated to be 5% and 95% level of confidence. Using the formula and rounding off to 5% sample size was 406. Where the notations are: n= is the sample size; e= is precision (or margin of error). N= Population of the study (12,000 for this study).

Table: 3.1. Selection of respondents for filling in questionnaires per sector

Bureaus/Sectors	Samples
Public service and G/governance	64
Women, Children and youth	51
Education	52
Urban Development	47
Trade & Market development	50
Labor and Social Affairs	47
Revenue bureau	65
Water	30
Total	406

Source: Bureau of civil service and human resource (2020)

3.8. Data Collection Tools

Semi-structured questionnaires were developed and used to collect data on all objectives of the study. In this regard, specific variables for each objective were identified and used to develop questions. To do so, the five degrees rating system were developed based on the nature of the objectives of the study. The questionnaires were designed as open ended and close ended questions as it helps to capture important, sufficient amount and also objective data. In addition, interview questions were developed on all objectives of the study. The respondents included all the representatives of the selected public sectors including core-process owners and experienced civil servants.

3.9. Method of Data analysis

Depending on the type of research design, both qualitative and quantitative data analysis techniques were used. In doing so, the analysis of the data collected was done in line with the data type (qualitative or quantitative) and types of research questions (whether descriptive or explanatory designs). That means, data obtained through the close-ended questionnaire have been analyzed quantitatively while those obtained through open-ended questionnaire, interviews and document review were analyzed qualitatively. The data collected were entered into SPSS version 25. In the quantitative analysis, descriptive statistics were employed so as to describe the state of inter-organizational integration among the public sectors. The results have been

displayed in tabular form while mean, and standard deviations were used to describe the issue under consideration as per the objective of the study. To analyze qualitative data, the researcher considered themes and summarizing techniques based on the objectives of the study. Triangulation was used to synthesize qualitative data with quantitative one.

3.10 Reliability and Validity Tests

The researcher conducted pilot testing and used Cronbach alpha to determine whether or not the instrument was reliable. Based on the result of Cronbach alpha coefficient, minor adjustments were made and after the improvement, instruments gained values greater than .65 were considered for data collection. Content and context validity were checked to ensure the overall competency of the instruments.

4. Data Analysis and Discussions

In the first part of this section, analysis of the data has been made followed by discussion of the major findings.

4.1 Respondents' Background

Table 4.1 Demographic Information of Respondents

Characteristics	Categories	Frequencies	Percentages (%)
Sex	Male	222	56.2
	Female	173	43.8
	Total	**395**	**100.0**
Position	Leaders/heads	2	.5
	Process owner	47	11.9
	Experts	346	87.6
	Total	**395**	**100.0**
Educational status	Diploma	28	7.1
	Frist Degree	307	77.7
	Masters and Above	60	15.2
	Total	**395**	**100.0**
Experience	Below 5yrs	30	7.6
	6-10yrs	97	24.6
	11-15yrs	133	33.7
	16-20yrs	82	20.8
	Above20yrs	53	13.4
	Total	**395**	**100.0**

Source: Survey data, 2020

The above Table shows that both sexes participated in the study which implies that the study considered the views of both males and females. The Table shows that employees of different positions in the organizations ranging from heads of the sectors to operational experts participated in the study. The operational experts were the majority in number. The respondents

had also diversified educational level and work experiences. This helped the researcher to entertain views of these diversified groups.

4.2. Descriptive Results on implementation of Inter-organizational Integration approaches

Table 4.2 shows that the mean score obtained on governance dimension was 3.64 whereas the mean regarding administrative dimension was 2.97. Regarding autonomy dimension, the mean is 3.41 indicating that the level of practice was average.

Table 4.2: Status of inter-organizational integration dimensions (approaches)

	Descriptive Statistics				
	N	Min	Max	Mea	Std. Dev
Governance Dimension	395	1.00	5.00	3.64	.76
Administration Dimension	395	1.00	5.00	2.97	.72
Autonomy Dimension	395	1.00	5.00	3.41	.90
Mutuality Dimension	395	1.00	5.00	3.09	.92
Trust and Reciprocity Dimension	395	1.00	5.00	3.41	.75
Valid N (list-wise)	395				

Source: survey data, 2020

The mean score for mutuality dimension was 3.09 while it 3.41 for trust and reciprocity dimensions. As one can understand from the above results, all the means obtained for all the dimensions are almost moderate or on average indicating that the level of effectiveness of the practice was moderate. The standard deviation for each dimension indicates that the distribution of response across items was less than one unit from the mean. This implies that the response of respondents concentrated around the mean with less variation.

4.3. Descriptive results of Strategy and Skills for Inter-organizational Integration

Table 4.3 Descriptive results of Strategy and skills for Inter-organizational integration

	Descriptive Statistics				
	N	Min	Max	Mean	Std. Dev
Strategy Aspect	395	1.00	5.00	3.38	.66
Ability(Skills) aspects	395	1.00	5.00	3.18	.76
Valid N (list-wise)	395				

Source: survey data, 2020

As results in Table 4.3 show, the mean score obtained on the strategy aspects of the sectors was 3.38. It indicates that the organizations were at moderate level in setting strategy and its practice to collaborate. In this study, the researcher tried to assess the specific trends, rules and regulations the organizations were following in their collaboration. The finding shows that regarding the specific decisions they made, the level of practice was moderate indicating the demand for improvement. The interview subjects responded that the sectors were not strategic in that they did not follow long term, clear and consistent procedures in their pursuit of collaboration. As the interviews further reflected, the sectors did not have strategic agreement

(either psychologically or explicitly) rather greater focus was on immediate benefit and not for creating strategic capacity. The same Table above shows that the sectors' status of use of skills of inter-organizational integration/collaboration was moderate level as could be understood from the mean score obtained 3.18. This indicates that the public managers of the sectors had moderate level of ability to envision new ways of operating (new skills) in integration/collaboration process.

4.4. Organizational Processes enhancing Inter-organizational Integration

4.4.1 Descriptive Results of the Organizational Processes

The result in Table 4.4 shows that except 'adapting through shared learning' specifying roles and responsibilities, the mean score obtained for other variables used to assess the status of the implementation of the inter-organizational integration is 3.0 with standard deviation less than one unit from the mean. This reveals that there was poor level of adapting collaborative behavior through shared learning which is understood from the mean score earned as 2.59.

Similarly, the mean score obtained for the dimension of defining roles and responsibilities (2.72) indicates that the practice of defining the roles and responsibilities of each collaborating sector was not at the level expected. The result of the study also shows that, even though there was moderate level of goal setting practice among the public sectors, because of inadequate level of defining roles and responsibilities the expected level of integration was not achieved.

Table 4.4 Organizational Processes enhancing inter-organizational integration

	Descriptive Statistics				
	N	Min	Max	Mean	Std. Dev
Setting Significant Goal	395	1.00	5.00	3.06	.88
Specifying Roles and Responsibilities	395	1.00	5.00	2.72	.84
Formalizing Agreements	395	1.00	5.00	3.06	.76
Developing Shared Operation	395	1.00	5.00	3.16	.83
Obtaining adequate Resource	395	1.00	5.00	3.26	.90
Creating Effective Communication	395	1.00	5.00	2.90	.91
Adapting through Shared Learning	395	1.00	5.00	2.59	.94
Valid N (list-wise)	395				

Source: survey data, 2020

4.5.2. Correlation Measures between Organizational Processes and Inter-organizational Integration

The correlation matrix in Table 4.5 shows that setting significant goal and obtaining adequate resources have strong positive relationship with inter-organizational integration (Cr.0.711, Sig.=0.004 (2-tailed). Also the correlation matrix indicates that formalizing agreements (cr.0.427, Sig. = 0.00 (2-tailed), creating effective communication (Cr.0.504, Sig.=0.00 (2-tailed), specifying roles and responsibilities(Cr 0.466, Sig.=001 (2-tailed and developing a shared operation (Cr.0.538, Sig.=0.00 (2-tailed) have moderate positive correlation with inter-organizational integration. The contribution of these variables is significant as it has been

evidenced by the significance value (i.e. less than 0.05). Nevertheless, adapting through shared learning has weak positive relationship (Cr.0.350, Sig. =.00 (2-tailed) with inter-organizational integration.

Table 4.5.Correlation between Organizational Processes and Inter-organizational Integration

Spearman Correlation **Coefficient, *N=395***

Setting significant goal	Coefficient	$.711^{**}$
	Sig. (2-tailed)	.004
Formalizing agreements	Coefficient	$.427^{**}$
	Sig. (2-tailed)	.000
Developing a shared operation	Coefficient	$.583^{**}$
	Sig. (2-tailed)	.000
Obtaining adequate resource	Coefficient	$.735^{**}$
	Sig. (2-tailed)	.000
Creating effective communication	Coefficient	$.504^{**}$
	Sig. (2-tailed)	.000
Specifying roles and responsibilities	Coefficient	$.466^{**}$
	Sig. (2-tailed)	.001
Adapting through shared learning	Coefficient	$.350^{**}$
	Sig. (2-tailed)	.000
Overall inter-organizational integration	Coefficient	1.000
	Sig. (2-tailed)	.

** Significant at 0.05 level at 2-tailed.
Source: survey data, 2020

4.6. Descriptive Results on Systems Thinking of the Public sectors

Table 4.6: Descriptive Results on Systems Thinking

	Descriptive Statistics				
	N	Min	Max	Mean	Std. Deviations
Systems thinking Principles	395	1.50	3.50	2.44	.40
Application of required skills	395	2.50	4.75	3.21	.87
Valid N (list-wise)	395				

Source: survey data, 2020

As the result in the Table above shows, the mean score obtained pertaining to the overall application of systems thinking principles is 2.44 with standard deviation of 4.0 which is far less than the expected mean score. The result also shows that the public sectors had medium level skills required for collaboration or for forming integration among them-selves. From the results, one can understand that the of the public sectors under the study, even though their

employees had medium level of the skills required, demonstrated poor level of implementing systems thinking principles.

4.7. Challenges of Inter-organizational Integration

Table 4.7 Challenges of inter-organizational integration among the public sectors

Descriptive Statistics

	N	Min	Max	Mean	Std. Dev
Organizational constraints	395	1.00	5.00	3.19	.49
Leadership constraints	395	1.00	5.00	3.51	.58
Attitudinal constraints	395	1.00	5.00	3.08	.92
Resource constraints	395	1.00	5.00	3.28	.68
Valid N (list-wise)	395				

Source: survey data, 2020

The result shows that both leadership and resources constraints followed by organizational constraints significantly and adversely contributed for the inadequate level of implementation of the inter-organizational integration and systems thinking in the study area. In supporting this finding, the results of the interviews revealed that individual public sectors gave much of their efforts for individual assignments regardless of the need for the collaboration. The interview results also indicated that the leaders did not show tendency to work for strategic collaboration issues and rather emphasized short term activities and thinking which blurs the sight of the employees to see the potential in integration.

Organizational attributes such as culture and structure, communication, nature of leadership, attitudes, and level of availability and utilization of resource were also found to significantly affect the status of collaboration.

4.8. Discussions

The result of this study implies that there was moderate level of inter-organizational integration among the public sector organizations of Oromia National Regional State. This moderate level could not enable to achieve the greater expected goal.

Governance dimension. The result indicates that, on average, the governing aspects were not to the level expected. In relation to this, interviews revealed that, even though there were some meetings and communication because of some compulsory, complimentary and supplementary activities, there was no significant integration among the public sectors. This, thus, implies that participation of stakeholders and their contribution for the common goal was not to expected level. The interviewees expressed that the low level of stakeholders' participation adversely affected the level of their pro-activeness to play their respective roles. This further indicates that the level of collective decision making, problem-solving and pursuit of common good was not at the intended level of effectiveness. In this regard, Huxham and Vangen (2005) found that such weak participation of stakeholders adversely affect the foundation and sustainability of inter-organizational integration.

Administration dimension: The roles and responsibilities of each party or stakeholders were not clearly defined. Even though collaboration and integration needs also informal agreements and psychological contracts, formality is also very important in order to psychologically enforce participating parties. The absence of defined roles and responsibility might have confused participating parties to enter into the collaboration in the study area. As the results of the study indicated, there was no or unclear structure to work collaboratively. Scholars such as Crosby, Hart, and Torfing (2017) mentioned that stakeholders should be guided by a clear framework that help the trace their respective roles and responsibilities so that the evaluation is easily possible.

Autonomy Dimension: This dimension was used to assess the level to which collaborating/integrating sectors were preserving their autonomy. The finding indicated that the difference in resourcefulness may affect the collaboration of sectors. Thus, the sectors are in tension between reconciling the individual identity of the organization and attaining the collective goal through integration.

Mutuality Dimension: Assessment on "mutuality dimension" showed that the moderate mutual benefit for the public sectors in the study. As the finding revealed, the sectors did not participate in a planned collaboration rather on routine activities that is equivalent to their individual goal.   Mutuality has its roots in interdependence and public organizations that collaborate must experience mutually beneficial interdependencies based either on differing interests what Powell (1990) calls complementarities or on shared interests which are usually based on homogeneity or an appreciation and passion for issues that go beyond an individual organization's mission such as the moral imperative of environmental degradation or a humanitarian crisis.

Trust and Reciprocity Dimension: The reciprocity or the exchange practice among the sectors was also moderate and mostly short term-oriented which was not strategic. This was in the sense that the future is uncertain and the sectors were less able to reconcile their immediate demand to their long-term demand. This, furthermore, creates blurs clarity to see trends and distorts strategic decisions (Eriksson & Nordgren, 2018). The sectors were not as such proactive enough to trust each other to work together on the strategic issue. Fountain (2013) found that implementation of public projects such as water projects, roads, construction and other public installations were significantly affected by loose connections and fragmented communication among the public sector organizations.

Regarding the skills and strategies required for inter-organizational integration, the public sectors did not utilize them to the expected level. This implies that the sectors did not work well on skill inducing activities such as training. Crosby, Hart & Torfing (2017) found that inadequate skills and ineffective strategies adversely affect a healthy development of collaborative behavior.

The results revealed that the public sectors had no adequate capacity to build strong professional relationships with parallel relevant entities. Moreover, the public sectors had inadequate ability to communicate openly in efforts to integrate. Huxham & Vangen (2005) indicate that strong communication with stakeholders is critical in implementing the collaborative approach. Furthermore, the result of the study showed that, even though there was moderate level of goal setting among the public sectors, it was not implemented well. Regarding this issue, Agranoff (2007) said that transparency in publishing goals informs the public and puts pressure on agencies to focus performance on priorities.

The results of this study further revealed that, even though the public sectors had moderate level of skills required, they demonstrated poor level of implementing systems thinking

principles. The great problem was that the employees were not motivated and guided well to pursue collaboration. The problem could be attributed to poor level of commitment of management and leadership. Therefore, the status of implementation of systems thinking principles was not adequate to attain the required level of synergy. Scholars such as Angel & Vernis (2006) and Agranoff & McGuire (2004) strongly argue that a reasonable level of skills and strategy is required to effectively implement systems thinking principles so as to enhance integration among the sectors.

Overall, organizational attributes such as culture and structure, communication, nature of leadership, attitudes, and level of availability and utilization of resource significantly affect the degree of integration and collaboration of public sectors. Wassihun (2018) found that lack of communication as well as lack of common and integrated plan is a challenge for collaboration. Girma and Suominen (2013) expressed that collaboration is highly influenced by leadership commitment and nature organizational cultures which are also true for this research.

5. Conclusions

The result of the study had the implication that much should be done as the level of integration among the public sector organizations of Oromia National Regional State was below the level of expectation. On the basis of the finding of the study, it could be concluded that the public sectors in the region had no adequate level of skills and know-how of collaboration. This might have greatly affected the potential to solve complex public problems that needs integration of public sectors in the study region.

The result of the study explicitly indicated that there were problems related to determination and motivation of public sectors of the study region to implement the principles as required. As the findings implied this was attributed to poor level of determination of management and leadership which entails poor planning, poor awareness and poor culture of collaboration. Accordingly, it could be concluded that not only is the strategic relations of the public sectors affected but also makes them unable to be benefit from the potential capabilities that could be created, had the sectors used it or if the sectors use it.

6. Policy Recommendations

Leaders, managers and all other public employees should identify and recognize institutional challenges and opportunities to inter-organizational integration and develop relevant strategies to address the effect of them. As a result, there may be opportunities to directly address institutional-level changes that may influence collaborative behaviors in some way. Possible recommendations have been provided primarily for policymakers and practitioners` (public employees).

Recommendations for Policymakers

Ethiopian civil service commission is recommended to provide leadership in creating the institutional incentives and environment that foster inter-organizational integration as a means of creating capacity rather than merely following traditional approach that considers collaboration initiatives as optional. Oromia civil service bureau is recommended to perform activities similar to Ethiopian civil service commission as it closely plans, organizes and supervises reform activities in other public organizations.

Developing management guidance for enhancement of inter-organizational integration through collaboration is recommended. The civil service commission and bureau are recommended to develop guidance to organizations encouraging the use of collaborative approaches. Organizational managers are expected to expand lessons learned, best practice, guidance, and training to support organizational collaboration.

The commission and bureau is recommended to continue to play the dual roles of facilitator and enforcer as they play multiple roles with respect to collaboration. Politicians are also recommended to make the inter-organizational integration a political dialogue and agenda. Top executives should motivate public sectors to make them engage in inter-organizational integration initiatives through payment for performance, recognition for effective participation and positive treatment for those sectors that contribute for collaboration.

Recommendations for Practitioners/Public Sector Organizations

Proactively identifying and addressing barriers in sharing resources and legal authority that come as the result of jurisdictional boundaries of various collaboration committees.

The public sector organizations are expected to acquire important technological infrastructure such as ICT that facilitates collaboration and sharing of resources. They are also recommended to have commonly set plan that guides their collaboration. This could be related to allocation of budget for this purpose.

The public sectors need to establish strategies that motivate employees to develop collaborative behaviors. This could be achieved through performance appraisal, incentives and recognition of employees. Collaborative initiatives require different types of legitimate authority structures and division of labor, depending upon scale, scope, urgency, and core task dimensions in the context.

Finally, it could be recommended that future researchers focus on the impact of inter-organizational integration on organizational performance and its significance.

Acknowledgement

Reference

Agranoff R. and M. McGuire (2004). Collaborative Public Management.   Washington: Georgetown   University Press.

Agranoff, R. (2007). Managing within Networks: Adding Value to Public Organizations. Washington, D .C: Georgetown University Press.

Bardach, Eugene (1998). Getting Agencies to Work Together. Washington, D   .C: Brookings Institution Press.

Crosby, B. C., P. 'T Hart, and J. Torfing (2017). Public Value Creation through   Collaborative Innovation.   Public Management Review 19 (5): 655–   669.

Doz, Yves L. (1996). The Evolution of Cooperation in Strategic Alliances: Initial Conditions Or Learning   Processes?" Strategic Management   Journal 17, 55–83.

Eriksson, E. M., and L. Nordgren (2018). From One-Sized to Over-individualize? Service Logic's Value Creation. Journal of Health   Organization and Management 32 (4): 572–586.

Ethiopian Civil service Commission (2018) annual report. Unpublished.

Girma, A., and Suominen, A.(2013).Sector collaboration: a case study from Ethiopia.IRC International Water and Sanitation Center, The Hague, Netherlands.

Gray, Barbara. (1989). Collaborating: Finding Common Ground for Multiparty Problems. San Francisco: Jossey-Bass.

Huxham, C. and Vangen, S. (2004). Doing Things Collaboratively: Realizing the advantage or Succumbing to Inertia? Organizational Dynamics, 33(2):190- 201.

Isett, Kimberly Roussin and Keith G. Provan (2005). The Evolution of Dyadic Interorganizational Relationships in a Network of Publicly Funded Nonprofit Agencies." Journal of Public Administration Research and Theory.

Jane Fountain (2013). Implementing Cross-Agency Collaboration: A Guide for Federal Managers.

Johnson, Lawrence J., et al (2003) Stakeholders' Views of Factors that Impact Successful Interagency Collaboration. Exceptional Children 69.

McGuire, M. (2006). Collaborative Public Management: Assessing What We Know and How We Know It. Public Administration Review 66 (1): 33– 43.

Metzenbaum, Shelley H.(2006). Performance Accountability: The Five Building Blocks and Six Essential Practices, IBM Center for The Business of Government.

O'Leary, Rosemary and Catherine Gerard (2012). Collaboration across Boundaries: Insights and Tips from Federal Senior Executives. IBM Center for the Business of Government.

Oromia regional Civil service Bureau (2017-2019) annual report. Unpublished.

Perry, James L., and Ann Marie Thomson (2004). Civic Service: What Deference Does It Make? Armonk, NY: M.E. Sharpe.

Powell, Walter W (1990). Neither Market nor Hierarchy: Network Forms of Organization. In Research in Organizational Behavior, vol. 12, edited by Barry M. Staww and Larry L. Cummings, 295 336.

Radin, Beryl (2012). Federal Management Reform in a World of Contradictions. Washington, D .C: Georgetown University Press.

Stoker, G. (2006). Public Value Management: A New Narrative for Networked Governance? The American Review of Public Administration 36 (1): 41– 57.

Tom Eewntwistle (2014). Collaboration and Public Services Improvement: Evidence Review Prepared for the Commission on Public Service Governance and Delivery. PPIW Report No.2.