

# Developing A Public Value Waste Management Framework in Traditional Market

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**Abstract.** The growth of trade activity impacts on increasing waste volume. One of the waste problem that becomes the attention of government is waste management in traditional market. Waste problem besides being challenging, can also be an opportunity, as well as waste management in Traditional Markets. This paper aims to explore the public value management theory that can be applied to the practice of waste management in traditional market. This paper is a literature review by examining journals related to waste management and public value. The results of various literature reviews will be used to developing a framework for analyzing public value in waste management in traditional market. This paper focuses on the developing of public values in the waste management in traditional market that could be classified of several aspects which are basic legitimacy and support; operational capabilities and substantial value. The result of paper create a framework to a public value in waste management in traditional market. This framework will make a theoretical contribution to the study of public service management.

**Keywords:** public value; waste management; traditional market.

## INTRODUCTION

Environmental problems become a critical concerns for every country in the world, because of environmental problems have an impact in the state sustainable development so the state must be responsible in solving those challenge which is caused by environmental problems. One of the big challenges in overcoming environmental problems is the problem of solid waste. According to data from the World Economic Forum in 2018, global waste can grow by 70 percent in 2050 due to increasing urbanization and population. Municipal Solid Waste (MSW) is one of the burning issues which is highly debated among scientists and policy makers, because it affects public health and resource use, especially in developing countries (Chalhoub, 2018)<sup>1</sup>.

In Indonesia, the problem of waste management remains a protracted problem. Research on Sustainable Waste Indonesia (SWI) in 2018 revealed that as much as 24 percent of waste in Indonesia is still not managed properly. It can be concluded in the research report that about 65 million tons of waste are produced in Indonesia every day, around 15 million tons pollute the ecosystem and the environment. Only 7 percent of

the waste is recycled and 69 percent of the waste ends up at the Final Landfills Site (TPA). The report also found that the types of waste that were mostly produced were 60 percent organic waste, 14 percent plastic waste, followed by 9 percent paper waste, 4.3 percent metal, glass, wood and other materials 12.7 percent.

Many factors cause an increase in the volume of waste, one of which is from trading activities such as in

traditional markets. Waste from traditional markets in Indonesia is the second largest after household waste (Aye and Widjaya, 2006)<sup>2</sup>. Increasing the volume of waste in traditional markets both directly and indirectly in the increase volume of waste in a city. The waste can consist of vegetables and others including organic waste, food and beverage packaging, plastic waste and others. If this waste is not managed properly, it will affect many things, on the contrary it will affect the aesthetics, health, natural disasters and limited landfill capacity (Paharizal, 2017)<sup>3</sup>.

Waste management in traditional markets usually still uses a simple and traditional way. The process is carried out by janitors using equipment and supplies such as brooms, forks, tails, trash baskets, mops, mop sticks, buckets, and cleaning uniforms. Since morning the waste has been swept and then collected in the depot. Furthermore, the collected waste is transported to the landfill site. In managing solid waste, organic and inorganic waste has not been sorted. Waste problems in traditional market to being a challenge, can also be an opportunity, as well as waste management problems in the Traditional Market environment. One form of opportunity for waste is the existence of a waste bank program as a business owned by people who consider waste as a valuable economic commodity and savings (Wijayantia and Suryania, 2015)<sup>4</sup>.

Traditional markets as a tools of government in providing public services to the public in the trade sector should be able to generate benefits and added value in accordance with citizens expectations, this concept is known as Public Value. Public Value can be briefly

interpreted as an approach in the management of public services that emphasizes the creation of public value to produce something of value or useful and in accordance with the needs of the citizens.

This concept can be realized as a public managers who has awareness and good will as a public servant who is responsible for public satisfaction through excellent public services. A vision of “exploring” public managers aiming to create that value so as to meet the needs of citizens as defined by their organisation’s strategy and goals in the context of a political environment from which authority is obtained; and a focus on ensuring that the appropriate operational tools and resources are in place to ensure delivery of public value and the measurement of the value created (Moore, 1995; Turrell, 2013)<sup>5</sup>.

The key elements of Public Value is the existence of a strategic triangle consisting of 3 (three) elements that must be fulfilled by public sector organizations, namely: Legitimacy and Support, Operational Capabilities and Substantively Valuable. Based on this concept, Public Managers as policy formulation should be able to think and act strategically and be able to create a balance of the three elements. These three aspects must be able to

run simultaneously because if one of the three aspects is ignored then the expected public value creation cannot be realized.

Moore's concept of the role of the Public Manager is very relevant to the problem of waste management problems in Traditional Markets. Likewise, criticism of traditional waste management problems must be supported by regulations that can be overcome with operational requirements, and substantial added value related to Public Value. This paper is intended to analyze journals that apply special public value in the discussion of waste in traditional markets and establish approval of Public Value in Waste Management in Traditional Markets.

## METHODS

The practice of building public value in waste management is supported by several relevant previous research with the theme of waste management, and the public value summarized in the table:

**Table 1.** Relevant Previous Research.

No	Title, Author, Year	Methods	Result
1	Evaluation of Waste Management based Society (Marlina Kurnia, Siti Noor Khikmah, Farida) 2015	Qualitative Methode, Evaluation Approach	The society of the city of Magelang who are members of the Legok Makmur Kalisari Wates North Magelang Women's Association have managed organic and inorganic waste by making it compost fertilizer and handicrafts that improve the society's economy.
2	The Benefits of Waste Bank from Society of Semali, Salamkanci Village, Bandongan, Sub Distric, Magelang District:(The Study of Semali Berseri Waste Bank) (Sudati Nur Safiah, Whinarko Julipriyanto) 2017	Descriptive Qualitative Method	The Waste Bank program provides positive benefits both to the environment and also social, including: providing economic benefits for the society, improving public health, and increasing the activeness of the community to work together.
3	Waste Management As A Form Of Environmental Care For The Residents Of Trasan, Bandongan Sub District, Magelang District (Niswah Baroroh, Indah Fajarini, Indah Anisykurlillah) 2018	Qualitative Method	The society is aware of the importance of household-based waste management with the help of fertilizer through a waste bank. Certainly have a positive, social and economic impact.
4	Environmental and Economic Analysis of Waste Disposal Options for Tradisional Markets in Indonesia (Lu Aye dan E.R Widjaya) 2005	Cost and Benefit Analysis	This paper presents the results of environmental and economic assessments to compare the oprtions available for traditional market waste disposal in Indonesia
5	Building Blocks for Public Value (Marion Herder) 2017	Qualitative Method wit Comparison Analysis	To achieve high public value, at least 3-4 activities must be carried out: philosophical work, political work, technical work, managerial work.
6	Waste Bank: Waste Management Model in Improving Local Economy (Dwi Wulandari, Sugeng Hadi Utomo dan Bagus Shandy Narmaditya) 2017	Qualitative Method	Waste bank management is beneficial for environmental cleanliness and also increases the income of housewives around the waste bank program

No	Title, Author, Year	Methods	Result
7	Solid Waste Management in Chennai: Lessons from Exnora  (Niyati Mahajan) 2018	Qualitative Method	The results showed that the system of society participation in solid waste management through society awareness Exnora. The Civic Exnora has promoted communities directly involved in voluntary efforts in waste collection, recycling and applied concepts such as 3R (Reduce, Reuse and Recycle).
8	Public Values Policy of Social Agency of Surabaya City: Study about public value Campus Social Responsibility Program Surabaya City  (Danam Banyu Pakarti) 2018	Descriptive Qualitative Method	The Campus Social Responsibility program has public benefits and value for the community by reviewing the public triangle strategic approach.
9	<i>Public Value</i> Emergency Complaints Service Innovation <i>Command Center 112 of Surabaya City</i>  (Muhaimina)	Descriptive Qualitative Method	Emergency complaints as service innovations meet public values reviewed based on the public value strategic triangle approach.
10	Economic Evaluation of Mojokerto City in Pascitation Year 2015 with Travel Cost Method Analysis  (Indra R. Rahardyanto) 2018	Travel cost method	The Mojokerto City Government succeeded in holding public value management by reviewing the aspects of transparency, accountability, society participation and service innovation.
11	Sustainable Management Practices of Food Waste in Asia: Technological and Policy Drivers  (Prabhat Joshi, Cettiyyappan Visvanathan) 2019	A Qualitative SWOT Analysis	The policies and technological drivers to manage food waste in Asia have been shaped by increasing awareness of the countries to this issue
12	Public Policy and Technological Choices for Municipal Solid Waste Management a recent case in Lebanon  (Michel Soto Chalhoub) 2018	Case Study	Review the evolution policies related to Municipal Solid Waste (MSW), to address an illustrative cases of recent crisis in Lebanon and to develop multivariate analysis model on public attitudes towards MSW Management

Source: Researcher, 2019

This research is focused on building public value in the waste management in traditional markets that have differences and also become novelty. This research with previous research is located on the approach used, namely combining the public value approach with waste management in traditional markets. The public value approach is used to design a framework of public value management in waste management in traditional markets

Based on initial search results the focus is limited to "public value" and "strategic triangle" rather than the use of broader terms such as "social value" or "added value". Also at this stage of the search there was not much discussion linking waste management in traditional markets with public value. For example, to identify a series of articles on "public values in waste management" some of which are related to added value in household waste management (Damanhuri et al, 2009)<sup>6</sup>. In choosing a database to be used as material for analysis, we chose to be specific to social science (ISI / Web of science). Because of the large number of articles available on public value in general, the selection of articles relevant to this study is aided by references to various literature reviews or comprehensive studies of public values. For additional information and materials

related to the focus of the research comes from the Journal of Waste Management

**Table 2.** Summary of Literature Search.

Search #	Search of Words	Database of Results
1	Public Values	144
2	Solid Waste Management	1090
3	Household Waste Management	339
4	Hospital Waste Management	770
5	Traditional Market Waste Management	653
6	Value Chain Management	700
7	Search 1 dan 5	0

Resource: Researcher, 2019

The results of bibliometric studies on 3555 publications with the theme of waste management are accessed in the Journal of Waste Management and 144 publications with the theme Public Value conducted by (Alford and O'Flynn, 2008; Williams et al, 2009; Coyle and Woolard, 2010; Williams & Shearer, 2011, and Turrel, 2013) show (see columns 1 and 5) by identifying the main themes in each article and grouping them to

build a description of key themes that are relevant to the aims and context of this research. There has been no research that reviews the public value associated with waste management in traditional markets and the desire to make a theoretical contribution to increasing the role of traditional markets as public service providers, so Moore's view of the role of public managers seems very relevant. Likewise, data showing waste from traditional markets as the second largest waste after household waste seems to be overcome by emphasizing the legitimacy, network relations and operational capacity that exists in the public value literature.

This paper is a Literature Review study by examining journals related to waste management and Public Value. The results of this literature review will be used to build a Public Value analysis framework in waste management in traditional markets. This framework will make a theoretical contribution to the study of public sector management and practical contributions to waste management in traditional markets.

## RESULTS AND DISCUSSION

### Theoretical Development of Public Value

Public Value is a new paradigm in organizational governance introduced by Mark Moore, especially public organizations that emerged in the mid-1900s in response to the previous paradigm, the traditional model of public administration and the New Public Management (NPM). The presence of this theory is a reaction to applying the concepts and techniques of private sector management in the public sector to improve organizational capability (Collins, 2007; O'Flynn, 2007; Stoker, 2006)<sup>7</sup>. Basically trying to realize public value with a service delivery approach, and commitment to public service ethics (Stoker, 2006).

In simple terms, Public Value can be interpreted as a paradigm in organizational management to promote public value as an objective core in organizational management. Stoker (2006) argues that the aim is to achieve public value in handling problems experienced by the community. In addition, public sector organizations are required to be able to manage public values within the organization's managerial framework in order to produce good public services to the society. This is the essence of Public Value, which is how public organizations realize and manage public value with a variety of techniques, approaches, or strategies in providing public services.

Spano (2009)<sup>8</sup> said that indicators of achieving public value in terms of outcomes are the fulfillment of society needs. The higher society satisfaction, the greater the public value created in a program or activity of public sector organizations. Whereas in terms of decision making, public value can be achieved when the decision making process is based on the existence of a

relationship (social and political interaction) that is close and dynamic between institutional, political and corporate dimensions to ensure there is a shared commitment between the parties related to the alignment of achieving goals (Pasaribu, 2014; Carli 2011)<sup>9</sup>. Agree with Spano's statement, Turrel (2017) 10, said that the achievement of public value is centered on the needs of the public as citizens and also as consumers /users, creating values that are more useful than just achieving targets/ goals, and those needs are collective needs .

To facilitate understanding of public value, here is a simple example of the creation of public value in the management of waste by public sector organizations compared to management by private organizations. Private sector waste management will be limited to convenience and aesthetic issues, while the public sector will target greater results, namely public health, not limited to comfort and aesthetics. This is what is called public value creation (Moore, 1995) <sup>11</sup>.

### Key Elements of Public Value

In the concept of public value, a key elements is introduced by Moore (1995) to assess the ability of public sector organizations to manage public value, known as the strategic triangle (strategic triangle).

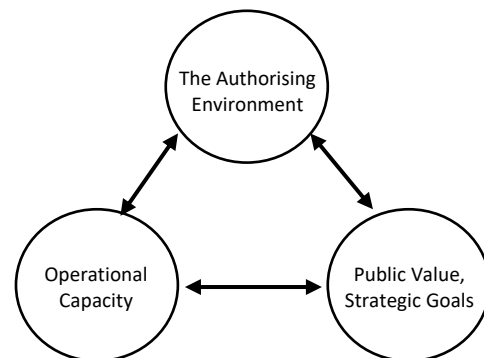


Figure 1. The Strategic Triangle. (Sumber: Moore (1995))

The three main aspects of the strategic triangle in Figure 1 above, the nomenclature is often different in some literature. For example, Alford and O'Flynn (2009) <sup>12</sup> term it with legitimacy and support (the authorizing environment), operational capabilities (operational capacity), and substantively valuable (public value, strategic goals). Although there are differences in nomenclature, the operational definitions remain the same. Following is an explanation of these three aspects:

- The authorising environment (legitimacy and support).  
Doable with the available organizational and external capabilities needed to produce public service.
- Operational capacities (Operational capabilities)  
attract sufficient ongoing support – and concomitant resources from the authorising environment, that is, from political and other stakeholders taken as a

whole, with due recognition of their differential power.

- Public value, strategic goal (Substantively valuable) be aimed at creating something substantively valuable in terms of economic values, social and cultural values, political values, ecological values, and educational values.

**Table 3.** Categorisation of Public Values Source: Benington (2011).

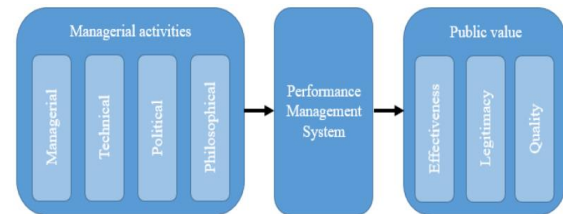
Economic Value	Adding value to the public realm through the generation of the economic activity and employment.
Social and Cultural Value	Adding Value to the public realm by contributing to social capital, social cohesion, social relationship, social meaning and cultural identity, individual and community well being.
Political Value	Adding value to the public realm by stimulating and supporting democratic dialogue and active public participation and citizen engagement.
Ecological Value	Adding value to the public realm by actively promoting sustainable development and reducing public “bads” like pollution, waste and global warming.

In the managerial paradigm, the quality of public values is approved by the attitudes and activities of public managers. Moore (2013)<sup>13</sup>, provides four activities that public managers can carry out in managing public values, which are agreed upon:

- a. Philosophical activity: creating normatively strong public value  
Relating to the determination and definition of public value to be achieved by public institutions. A public manager must know what must be done to enlarge the results of the organization.
- b. Political activity: negotiating a form of accountability  
In connection with building a network and agreement on important dimensions of value to be realized. Networks that are built can be internally or externally with the goal of people who have power. That way, it will be easy to determine which public value will be realized.
- c. Technical activity: establishing operational measurements for valuing public values.  
Related to the development of empirical steps (measurement) to assess the extent to which public value is reflected in the activities of the organization.
- d. Managerial activity  
Relates to information that is actively used to enhance public value creation.

The combination of these four activities is the key to good management to realize public value. Herder (2017)<sup>14</sup> conducted an investigative research into the condition of public values in public organizations by identifying the four activities mentioned above. As a result, the

public value is greater when the public manager implements these activities.



**Figure 2.** Attitudes and Activities of Public Managers. (Source: Moore (2013))

### Public Value and Waste Management in Traditional Market

According to O'Flynn (2002) in Todurut and Tselentis (2015)<sup>15</sup>, the concept of public value has been described as a multidimensional structure, as a reflection of collective expression, created not only through results, but also through processes that can produce trust and equality. The concept presented by O, Flynn (2002) also represents a comprehensive approach regarding public management and continuous improvement of public services.

Then Kernaghan (2003)<sup>16</sup> explained that the notion of public values is the essence of good governance. Public values can be seen as ideals, created as principles, to be followed when generating public services or regulating citizens' behavior. Moore as the initiator of public value defines public value as a framework that helps us connect with what we believe is valuable and requires public resources together with ways to improve understanding of the essence of public value. The public value referred to in this paper is a management framework to produce a service that is valuable and in accordance with the needs of the society.

The main elements of public value is the strategic triangle that must meet legitimacy and support, operational capabilities and substantively valuable. Legitimacy and support means being legitimate and politically sustainable that is to draw the support time and concurrent resources from an authorizing environment, that is from political stakeholders and others taken as a whole on the grounds of recognition of their differential strengths. Legitimacy and support in waste management in traditional markets can be strengthened through policies made by public manager or related parties.

Operational capability can be interpreted operationally and administratively as feasible, it can be done with the available organizational and external capabilities needed to produce it. In this case attracting and managing operational resources needed to meet the desired results that is, public value. Operational capability in managing waste in traditional markets can be done in collaboration with other parties. Adoption of

successful methods in other city can be carried out and prepare sufficient personnel in the field.

Substantial value in strategic triangles developed by Moore, aimed at creating something substantially valuable. According to Benington (2011)<sup>17</sup> public values have meaning beyond market coordinates and consider political and social factors as follows:

- Economic value, which is an additional value in the public sphere because it generates economic activity and employment. Waste management in traditional markets can increase economic added value for traders and also traditional market managers.
- Cultural and social values are additional values in the public sphere because they contribute to social capital, social unity, social relations, cultural identity, individual well-being and equity of quality or level, protection and promotion of cultural diversity. The involvement of various stakeholders and traders will ultimately strengthen the existing social capital.
- Educational value is the added value in the public sphere through the outlining of formal and informal education opportunities, additional knowledge of the ability and capacity to act as a society. Waste management in traditional markets also functions to educate people to protect the environment around them, especially traders who sell at traditional markets.
- Ecological value that is adding value to the public sphere by promoting sustainable development, reducing pollution, waste and global warming. Waste management methods in traditional markets can also contribute to sustainable development programs in waste problem.

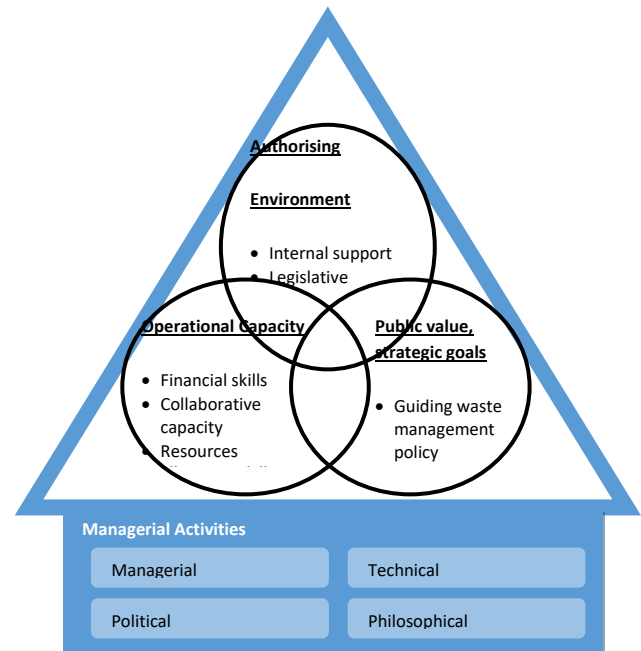
### A Proposed Public Value Waste Management Framework in Traditional Market

In order to build public value on waste management, we identify public value theories and apply key elements of public value (triangle strategy) as the basis for creating a public value waste management framework (PVWMF) in traditional markets. Then to improve the quality of public values, we adopt Moore's (2013) concept of managerial activities in managing public values.

In this framework, the public manager will back up all key elements of public value through its activities. Authorizing aspects of the environment. Public managers must be able to create a political network by cooperation with other stakeholders. This aims to strengthen the waste management organization so that it has an advantageous position in determining what public values will be formed and facilitate the implementation of the strategy to be carried out because it has received formal legal approval from the stakeholders.

Operational capacity aspect, the prominent activity is managerial activity. Public managers will often have some level of control over the allocation of resources to the pursuit of strategic goals (Mintrom & Luetjens,

2015). The dominant manager's job is within the organization to develop and enhance the organization's ability to increase public value. This is important because the main aspects of successful waste management depend on the capacity of the organization itself.



**Figure 3.** Public Value Waste Management Framework (PVWMF). Source: Researcher, 2019

Aspect of strategic goals, related to strategies implemented by public managers to accelerate the creation of public value. This aspect has more to do with operational and technical matters such as creating training programs for employees, implementing external cooperation programs, guiding waste management policies generated through previous political activities.

All key aspects / elements of PVWMF that we offer are inseparable, in other words interrelated in order to produce public value. In implementing this framework, at least public manager implements four activities so that the resulting public value is more qualified and contains elements of value in public values: economic value, socio-cultural value, political value and educational value.

### Conclusion and Future Scope

To build public value in waste management in traditional markets that have differences and also become novelty. this research uses an approach by combining a public value approach with waste management in traditional markets. The public value approach is used to design a framework of public value management in waste management in traditional markets.

In the concept of public value, the main strategy introduced by Moore (1995) is to assess the ability of



public sector organizations to manage public values known as the strategic triangle, namely the authorization environment (legitimacy and support), operational capacity and strategic goals (Substantively valuable). Substantial values in strategic triangle were developed by Moore, designed to produce something of substantial value valued in economic value, cultural and social value, political value, educational value and ecological value.

In relation to waste management in traditional markets there are several values that are substantially valuable. Among them in terms of economic value, waste management in traditional markets can increase economic added value for traders and also traditional market managers. From the cultural values the involvement of various stakeholders and traders will ultimately strengthen the existing social capital. From the political value of community commitment and participation in policies related to environmental cleanliness can be improved through the waste management around them. Educational value Waste management in traditional markets also serves to educate the community to protect the environment around them, especially traders who sell at traditional markets. In addition, the ecological value will also be very significant, considering that waste management methods in traditional markets can also contribute to sustainable development programs that have a wide impact on the environment.

## Discussion

All aspects of public value in waste management in Traditional Market that researchers offer cannot be separated, in other words interrelated in order to produce public value. In implementing this framework, at least public manager implements four activities so that the public value generated is more qualified. This research certainly still has many limitations including being limited to building a waste management framework in traditional markets through a literature study where the framework offered has not yet conducted field testing. Besides that the public value element used is still limited to the strategic triangle and activities that should be carried out by the public manager while there are still many other elements that can be the focus of analysis.

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