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Managing the Publicly Accessible Space Supply Process in Ethiopia's Urban Transition Process: The Urbanist-contextualist Outdoor Signage Management Gap in Addis Ababa

By: MARIAMAWIT AYELE ASFAW

June, 2023
Addis Ababa

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Advisor

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A thesis submitted to the school of graduate studies of Addis Ababa University, Ethiopian Institute of Architecture, Building Construction and City Development (EiABC), in partial fulfillment for master's degree in Urban Design and Development

Ethiopian Institute of Architecture, Building Construction and City Development (EiABC)

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DECLARATION

I, MARIAMAWIT AYELE, registration number GSR 6386/11 do here by declare that this thesis is my original work and that it has not been submitted partially or in full by any other person for an award of a degree in other universities.

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CONFIRMATION

I state that Mariamawit Ayele Asfaw has carried out this research work on the topic “Managing the Publicly Accessible Space Supply Process in Ethiopia's Urban Transition Process: The Urbanist-contextualist Outdoor Signage Management Gap in Addis Ababa” under my supervisions and it is sufficient for the partial fulfillment for award master’s degree of in Urban Design and Development.

Dr HEYAW TEREFE		June, 2023
Name of advisor	Signature	Date

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Unless specified, all the Pictures taken and tables drawn are generated by the author

Abstract

Emerging urban transition processes like that of Ethiopia are likely to have not only development and knowledge problems but also problems of research or the process with which solutions to the first two problems are searched. This research belongs to a thematic research group consisting of 14 researches concerned with the three problems.
One of the researches was dedicated to study of the third problem while the remaining were planned, on the one hand, to deal with the first two problems and, on the other, to test the recommendations of the research on the research process. Accordingly, the objectives of this research will be, on the one hand, to investigate the development and knowledge problems pertaining to outdoor signage and the Publicly Accessible Domain (PAD) of the city, which is considered as its soul and an important input for improvement of quality of life particularly for the majority whose access to high quantity and quality private domain is limited in developing country cities like Addis Ababa, and, on the other, to test the said recommendations.

A qualitative research methodology including interview, document review, analysis of implemented signage designs, and discussion were used for the research.

The research indicates that there is significant gap in the literature on outdoor signage management system for contexts like Ethiopia where low level and slow industrialization but rapid rate urban transition is likely to lower management capacity, create public and private domain space quantity constraints, and introduce the unmanaged/informal signage containers like buildings and open spaces.

CHAPTER ONE: INTRODUCTION

1.1 Background

The research is part of a group consisting of about 14 projects investigating the thematic area of the problems of the urban transition process in Ethiopia. The urban transition process's major problems are commonly two just like the problems of many other processes: development and knowledge problems. In addition, the developing status of developing countries like Ethiopia is likely to add a third problem: the problems of research or the process by which the development and knowledge problems are investigated. The objectives of the thematic research group are all the three problems. They are planned to be achieved by dedicating one of the researches to the third problem and by using the remaining projects for testing its recommendations so that the recommendations can be published, used widely, and assist in reducing the problems of research in Ethiopia's urban transition process.

Accordingly, the research on research has identified the common problems in applied urban transition research as long research time, fragmented research focus, gaps of reach out to the research demand side and, therefore, poor implementation of research result on the ground and has made two major recommendations:

- Using a standard conceptual framework developed by the research and
- Developing preliminary solutions after the literature and contextual reviews and using the data collection period also for their dissemination.

The Standard Conceptual Framework recommendation was made for the purpose of reducing research time and integrating the focus of urban transition research on the central element of the process. It was based on the data that:

- The focus of urban transition process research in Ethiopia have been varying while the process appeared to have a central element,
- University urban transition research in Ethiopia have been taking long time (average about 7 years for PhD and 4.5 years for MSC) because research time management mechanisms suggested in the literature such as contract with the research demand side and policies and regulations on the research supply side have not been effective, and
- Standardization of procedural issues such as problem selection, proposal writing, proposal review, proposal implementation, the proposal and research report writing structure, the proposal review process, financial access and accounting and even technical issues like

research methodology have been contributing to research time reduction since they avoid the time necessary to develop individual procedures for every research,

The objective was to similarly explore the potentials for standardizing the general substantive issues of the urban transition process in order to avoid the time necessary for developing individual conceptual framework for every research and in order to emphasize the central element of the process so that it becomes a common focus of research.

Thus, the general substantive issues of urban transition research were identified initially as market forces (demand and supply), the market failure management system, and the result. The framework was elaborated later based on the premise that the general question of applied urban transition process research is whether the results of the process are responsive to desired goals, that the question's premise is that the process and its results have opportunities and challenges for the desired goals, that some processes and results exploit the opportunities and address the challenges while others do not, that those which do are either 'perfect' processes or managed processes, and that, as a result, management becomes the central element of the urban transition process since perfect processes are rare. That made the general substantive issues: the urban transition element supply process (perfect/ imperfect process), the process's responsiveness failures to its opportunities and challenges, the failure management system, and the results which may be responsive or unresponsive to the desired goals. Responsive results are those in which opportunities are exploited and the challenges are addressed while unresponsive results are those in which the opportunities are unexploited and challenges are unaddressed (Figure 1).

On the other hand, the preliminary solution dissemination approach was recommended to reduce the reaching out to the demand side gap and to increase the potential for increasing result implementation and solving problems on the ground. It is based on the data that virtually none of the urban transition research have been implemented and solved problems on the ground, that the mainstream solutions of contractual engagements by the demand and supply sides and mechanisms such as post-research commercialization and technology transfers have been ineffective mainly because of the virtual inexistence of the demand side, the extended length of the research period, and the very low demand by researchers for post-research commercialization and technology transfers. Thus the recommendation is to develop a preliminary solution, not at the end of the research period, but at the end of the literature and contextual reviews and testing as well as disseminating it by the researcher during the data collection period.

Both recommendations are being tested on the researches of the group while the Standard Conceptual Framework was tested also on one PhD research outside the group. This research is one of the two members of the group that have reached completion stage.

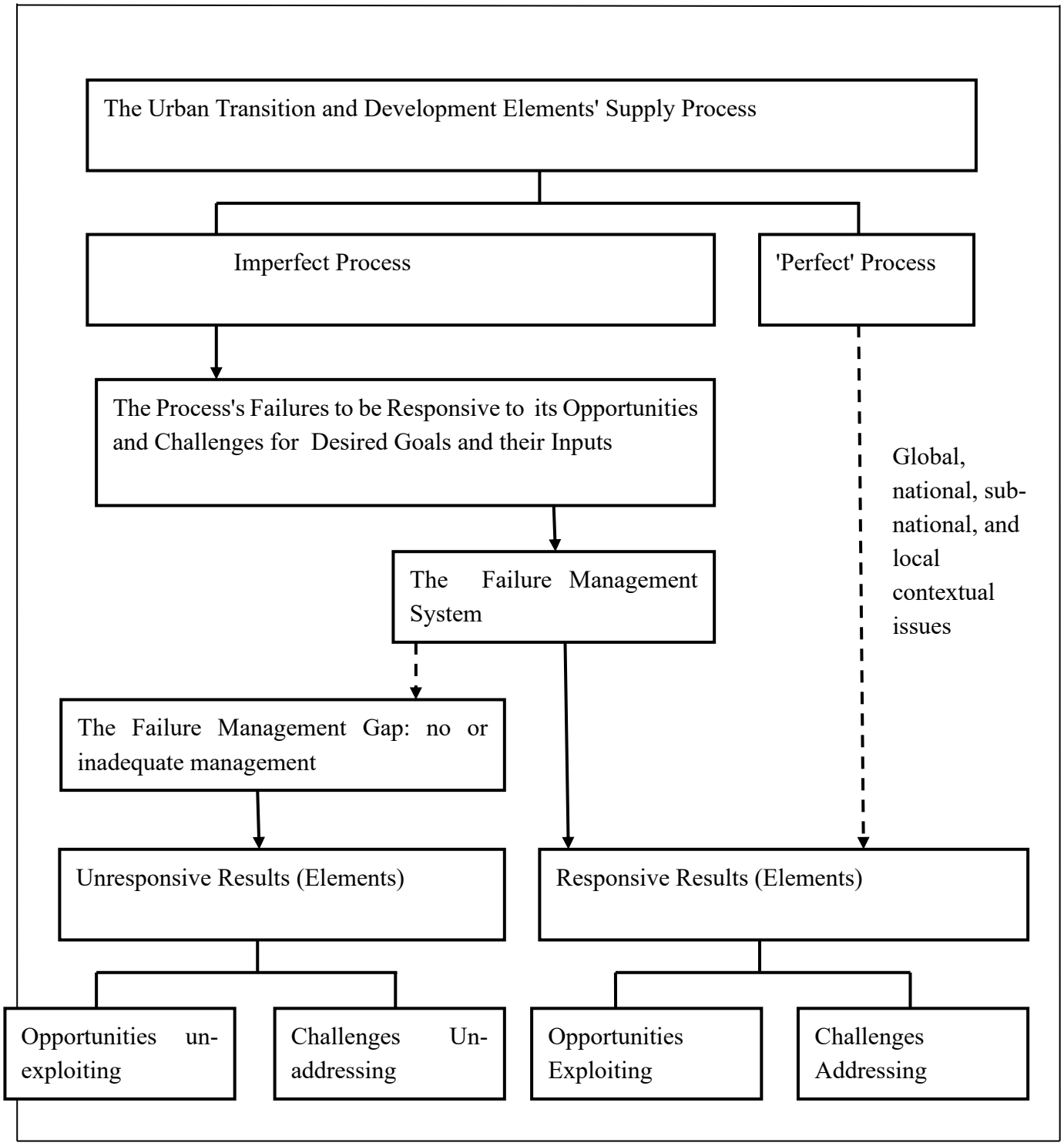

Figure 1.1: The Recommended Standard Conceptual Framework

1.2 Problem Statement

Urban centers have become major places of habitation in the world since 2007 and, as a result, many of their aspects including their space quantity and quality have become major issues of life quality improvement. One of the more significant is the use, quantity, and quality of their public spaces because they are accessible to all. The significance is likely to increase in countries like Ethiopia where most of the urban centers are unplanned and slum conditions are dominant and

where, as a result, the majority of the urban population lack access to adequate quantity and quality of space in the private domain. The space accessible to all. however, is not limited to public space which is defined commonly as space legally accessible to all and, therefore, under public control. It also includes space visually accessible to all which includes elements under private control such as private open spaces and building forms that frame the public space.

Thus, the quantity and quality of the publicly accessible domain (PAD) are the results of the supply processes of not only the public space but also those of the publicly visually accessible elements in the private domain such as outdoor signage, private spaces, and buildings. As the standard conceptual framework indicates, these processes are commonly imperfect and may not be responsive to their opportunities and challenges for the inputs, and, as a result, they are managed by urban plans and design codes, standards, etc. However, urban transitions like in Ethiopia which is at an emerging stage and is not accompanied by industrializations are likely to limit management capacity and the opportunity to use the mainstream management approaches and likely to create gaps of management of the processes.

1.3 Research Objectives

General Objectives

Thus, as an MSc research which is commonly applied, the general objective of this research was to investigate this management gap in the case of the outdoor signage supply process by taking Addis Ababa as a case, and to recommend how the gap can be reduced. But, as discussed in the background above, the research is conducted in the context of a thematic research project to which it belongs and which has the following three objectives:

- To investigate the practical problems of Ethiopia's urban transition process and how they can be reduced,
- To investigate the contribution of gaps in the literature to the problems, and
- To investigate the problems of urban transition research itself and contribute to their reduction.

Therefore, the context has made the specific objectives of the research the following:

- To investigate the management gaps of the outdoor signage process's responsiveness failures to its challenges and opportunities for the use, the quantity, and quality of the publicly accessible space in practice and how the gaps can be reduced,
- To investigate the contribution of gaps in the literature, and

- To contribute to reduction of the urban transition research problem by testing the two recommendations of the research on research (i.e. the standard conceptual framework and the pre-data collection preliminary solution reach out to the demand side approach).

1.4 Research Question

Thus, the lead questions of the research were:

- How are the outdoor signage supply process's responsiveness failures to its challenges and opportunities for the use, the quantity, and quality of the publicly accessible space managed, what are the major gaps, and how can they be reduced?
- What gaps in the literature have contributed to the problem?
- To what extent can the standard conceptual framework (**Figure 1**)assist in identifying the major variables of the research? and
- To what extent can a pre-data collection preliminary solution be developed close to the final solution for the research and what is its potential for facilitating reaching out to the research demand side?

1.5 Significance of the study

Rapid urban transition is increasingly making urban centers the major places of habitation in Ethiopia and their publicly accessible domains very important elements for life quality. But, together with the low level of transition and slow industrialization, it is also limiting the capacity of the mainstream literature and international practice for providing the knowledge and methods necessary for solving the urban transition process problems in general in contexts like Ethiopia and the problems of management of the supply processes of the elements of the publicly accessible spaces of urban centers such as the outdoor signage's supply process in particular. Therefore, research particularly on such elements are quite relevant to both the literature and practice and their outputs are likely to be significant.

1.6 Scope of the study

The study is thematically limited to the management of the outdoor signage supply process's responsiveness failures to its opportunities and challenges for the use, quantity, and quality of the publicly accessible spaces in Addis Ababa. It is spatially limited to Addis Ababa because the city has a relatively more developed outdoor signage supply process and the process's management system in addition to a wider scale of implemented signage designs.

CHAPTER TWO: METHODOLOGY

The specific objectives of this research stated above require qualitative methods like interview, document review, focus group discussion, and analysis of implemented signage in order to be achieved.

Interview and Discussion

Interview and discussion data were collected from several government bodies responsible for outdoor signage supply process management in order to answer the questions relating to the management system and its gaps as per the framework. They were also collected from the signage supply side which included 10 advertisement companies on issues such as the signage supply process, the types of signage most favored by the demand side, who decides the scale and number of signage, whether the effect of the signage on the PAD is considered and whether the signage are maintained. In the case of the reaching out through the preliminary solution approach the discussion was preceded by presentation of the solution. While the discussion with the management system was done formally and collectively it was done with the supply side informally and on a one to one basis.

Document Review

Document review data were collected mainly from permit regulations obtained from the signage supply process management system and from preliminary report on the research on the common problems of urban transition research. The data collected from permit regulations were concerned with the types of signage the document requires to be reviewed and the types of failures (opportunities and challenges) it requires to be managed. The data collected from the preliminary report on the research on the common problems of urban transition research were focused on issues such as the rationale and content of the standard conceptual framework and the preliminary solution approach recommended by the research.

Analysis of Implemented Signage Supply

Finally, the data for the research also included those collected from observation of the results of the signage supply process. The results were categorized based on the PAD container types and on performance types of responsiveness to opportunities and challenges (responsive and unresponsive). Cases of all PAD container types and both performance types (responsive and unresponsive) were attempted to be observed. The data were focused on the PAD container type, on the signage form and quantity, on the signage's responsiveness performance to their challenges and opportunities for the PAD, and on the signage's supply process type (perfect, imperfect and managed unmanaged as per the conceptual framework).

Data Analysis

The two sets of data collected by the methods described above were analyzed by using two sets of analytical framework. The data on the signage supply process management gap were analyzed by using the degree of match between management task and management capacity. The data on management task were analyzed by using the issues of types of signage to be managed (reviewed) and types of signage supply process's failures to be managed (regulated) while the data on management capacity were analyzed by using mainly technical capacity inputs such as management (regulation) documents, human resource, infrastructure, and technology. The data on the results or implemented signage were analyzed, as discussed above by using the following framework:

- The PAD container type,
- The signage form,
- The signage's responsiveness performance to their challenges and opportunities for the PAD, and
- The supply process type (managed, unmanaged)

On the other hand, the data on the testing of the standard conceptual framework were analyzed by using two major issues: number of the research components on which the framework was applied and the number of the variables of the framework used in each component. Similarly, the data on the testing of the preliminary solution reach out to the demand side were analyzed by using the issues of the types of the reach out initiation, the type of the demand side that have gained access to the reach out, and the reach out process

CHAPTER THREE: LITERATURE REVIEW

Introduction

The recommended standard conceptual framework indicates that the literature review shall be focused on three major issues: outdoor signage and its supply process, the process's opportunities and challenges, and management of the process's responsiveness failures to its opportunities and challenges.

3.1 Outdoor Signage and its Supply Process

Outdoor signage is commonly visual elements consisting of information conveyed by symbols (like letters and images,) intended to be **communicated** to the public by using the 'shared environment' or the publicly accessible domain of the city (PAD). The information is referred to as the content while the symbols and their backgrounds, which are sometimes avoided, are referred to as the form. The form has attributes such as shape, scale, orientation, intensity, surface quality, material, color, etc. Signage types are classified commonly on the bases of message (direction, locality and street names, instructions,), material (acrylic, aluminum, wood, metal, plastic signs), and business location (on-premise and off-premise signs) (Elizabeth Antonelli, 2013). The classification also includes, indirectly, the signage container such as open space (ground signs) and buildings (wall, roof, projecting, marquee, and window signs).

Signage supply is strongly linked to demand. The largest demand sides are private business and the state. The demand and supply of signage is likely to be more intense in large urban centers than small ones because urban size often depends on business size. The Signage supply process commonly includes consultation (a stage in which the signage demand side meets the supply side), designing concepts and mock-ups, obtaining permit (when there is management), sign manufacturing (when they are not painted), sign installation, and inspection. (Integrated Signs, 2020)

Signage supply requires its PAD container supply. But the container and its supply issues and specially the PAD totality are rarely emphasized in the literature. The literature on the PAD of the city itself is dominated by the public space component which is commonly defined as space physically and visually accessible to all and, therefore, under public control. But many elements of the city used as containers of outdoor signage such as facades of private buildings and private open spaces are domains under private control but which frame the public space and are publicly visually accessible. In addition, it indicates that specially most of the latter are themselves developed informally or without management in cities of developing countries like Ethiopia.

Figure 3.1: Signage projecting from a building facade

Source: https://www.tunnicliffesigns.com/product/hanging-and-projecting-signs/

Figure 3.2: Letters or symbols only facade signage

Source: https://www.shutterstock.com/search/google-building

Figure 3.3: Letters or symbols only roof signage

Source: https://signsofexcellenceinc.com/products/outdoor-signs/roof-signs/

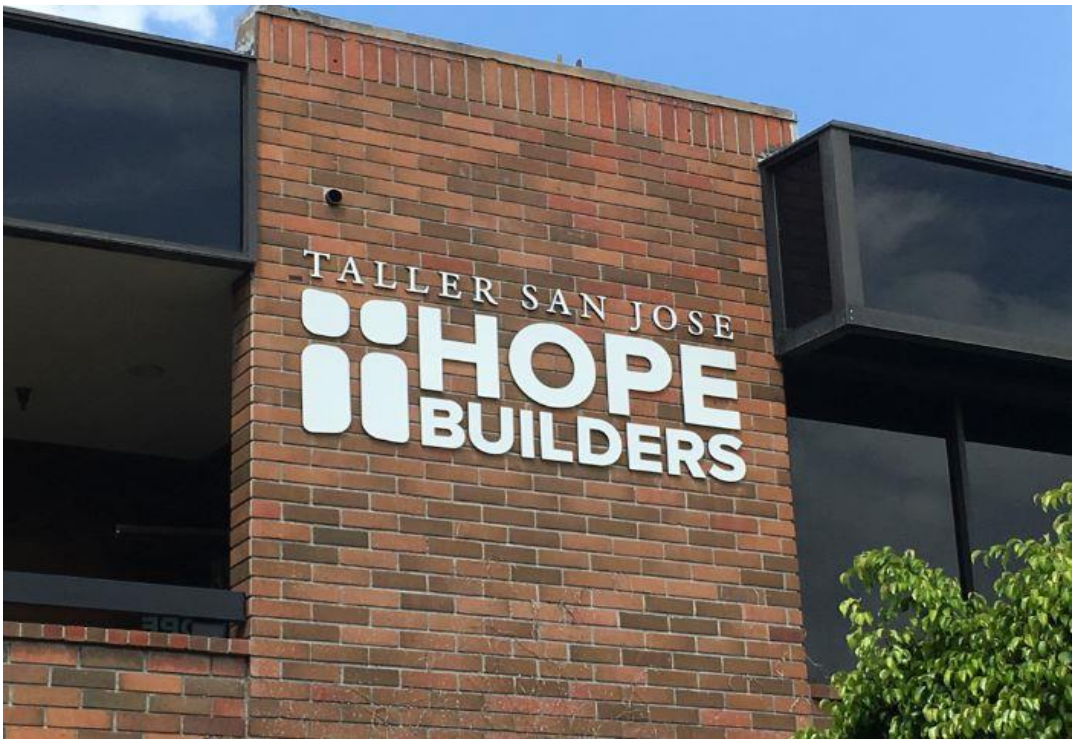

Figure 3.4: Letters or symbols only facade signage

Source: https://superiorsignsandgraphics.com/products_services/outdoor-signs/

Figure 3.5: Visual space contribution protecting signage

Source: https://www.huxleyandco.co.uk/toughened-glass-shop-fronts/

Figure 3.6: Visual space contribution preventing signage

Source: https://www.azbanners.com/signs/window-sign/

Figure 3.7: Symbol and background signage on building facade

Source: https://www.mockupworld.co/free/huge-outdoor-building-billboard-mockup/

Figure 3.8: Symbol and background signage in a publicly accessible open space

Source: (https://www.pinterest.com/pin/403001866657076437/)

3.2 Opportunities and Challenges of Signage

The literature on the opportunities and challenges of signage for the public space use, quantity, and quality is not focused on the signage formal elements such as shape, scale, orientation, etc. It is focused on issues like signage content, quantity, location, and technology.

3.2.1 The Opportunities

Earlier studies suggest a more positive and opportunity focused analysis of signage. For example, Claus and Claus (1976,1-5) suggest that *"signs are the people's communication." They have symbolically become part of the society and often represent the cultural identity and values of the society.* Lynch suggests even more opportunities in addition to identity. They are distinguishable from their surrounding environment, provide stability in urban organization, are symbolic, boost memory, give identity to distances and increase urban legibility (Behnoush Moghimi nia , 2017).

Vitality is also suggested by authors such as Zukin (1996) as one of the opportunities of signage. Zukin suggests that the lack of commercial signs can harm the social and economic vitality of city centers because, in many situations, it is the commercial atmosphere promoted by these media that attract consumers, visitors, and investors.'

Way finding is a signage content issue a widely exploited content in transportation planning to safely guide traffic flow in the urban realm to provide direction and guidance to pedestrians and drivers to their destinations and making available through signage alternative routes without placing unwarranted cost to the drivers and also ensuring safety of public spaces (Wei, 2009). This content also provides the opportunity for increasing the legibility and imageability of places and signage in general can be recognized by pedestrians as landmarks that can help their navigation through city centers (Robert Venturi, 1972).

The opportunities of signage also includes economic opportunities like getting visitors into and around the center of downtown with minimal confusion and duress to create a competitive shopping area (Gibbs, 2012), providing information and direction and promoting local economic development, and using signage as a component of tourism strategy for promoting local economic development (Diko, Signage: Land-use planning issues and dynamics, 2013).

3.2.2 The Challenges

Signage content can also be a challenge for public space use. It can be a challenge for public morals and values when it is objectionable, indecent or prejudicial. In particular, the content of outdoor advertising has a larger inherent potential to impact on public morals than the other advertising media due to the fact that it cannot be avoided, ignored, covered or switched off, which also means that children cannot be protected sufficiently from such contents.

The quantity and **spacing** of signage can be a challenge for both the signage itself and its environment. An excessive number of advertisements can exceed the user's capacity to read and understand since there is a limit in the quantity of signs that can be perceived by users in a single vision (Moles, 1987). Excessive number of signage can also lead to 'information overload' and 'environmental overstimulation' which may lead to various forms of behavior breakdown such as confusion, disorientation, desensitization to setting and decreased environmental awareness. Environmental overstimulation may also have economic implications since it may lead to lowering of human productivity (Evironmental impact of outdoor advertising, 2001).

Figure 3.9: Signage in high density in Seoul, Korea

Source: (https://www.dreamstime.com/seoul-street-shops-signs-korean-south-korea-lined-coffee-stores-buildings-image173435815)

Figure 3.10: Signage in high density Osaka, Japan

Source:https://www.alojapan.com/185349/visit-japan-thanks-to-tetsu6o6-for-this-great-shot-of-a-streetscape-in-osaka-the-signs-ma/)

The literature also suggest that, despite the economic opportunities described above, the proliferation of billboards and other signs may result in the devaluation of property values in both residential and commercial areas. (Evironmental impact of outdoor advertising, 2001).

In a more quantitative sense, outdoor signage form can also be a challenge for the 'sense of place' of a city which is defined as its unique features (its identity) resulting from the synergy between its form, function, and meaning. Meaning is defined, in this context, as the value people attach to space which can be 'utilitarian' or 'experiential' with the latter being personal and interpersonal (Rajala, et,al, 2020). As an element of city form signage has also the challenges of leading to loss of meaning and identity leading to the phenomenon described by Relph (1976) as 'placelessness.'(Kiandra Rajala, 2020)

The location of signage can be a challenge for traffic safety or for the traffic flow of cities. Outdoor advertisements are often placed in locations that are highly visible in order to achieve maximum exposure,. (Evironmental impact of outdoor advertising, 2001), Location can also be a challenge

for the ecology. Sensitive environments such as vegetation may be damaged in the process of erecting billboard structures or for the purpose of improving their visibility.

Signage technology particularly in terms of sound and light can be a challenge in urban areas. For example the use of modern sound technology has brought about an increase in sound pollution in urban areas. In addition, outdoor advertising contributes to light pollution or sky glow when properties and enterprises are illuminated at extremely high levels in order to attract attention. Light pollution may also have various detrimental effects such as ecological impact by interfering with the orientation mechanism of certain wildlife species;

Finally, in a more form focused view outdoor signage can be in conflict with the aesthetic composition and order of building facades. It is considered to be so when its form conflicts with the principle of organization of the façade and when it covers features related to building silhouette, facade details and facade articulation (Lang 1987, p.189). (Portella, 2014).

3.3 The Signage Supply Process's Failure Management System

The signage supply process, especially the part driven by private entities, is likely to be imperfect and fail to be responsive to its opportunities and challenges for the use, quantity, and quality of the public space unless managed. The permit component is included in the process for this purpose. It has often two components: permit issuance and closing permit.

Permit issuance takes place after processes like verifying that the use which the sign advertises is permitted, reviewing relevant documents and the plan for the scope of work, reviewing the signage designs by appropriate agencies for code compliance, and after the designs are approved by these agencies and all documents required for permit issuance are submitted. The compliance review documents or the management instrument provide compliant signage attributes which were defined through studies that relate the attributes to their opportunities and challenges for the desired goal often without including the latter two. Thus, the capacity to conduct such studies is essential for having an effective management instrument, Closing permit involves steps like beginning the signage installment work, getting the work inspected by all the required inspectors and getting the closing permit based on the recommendations of the inspectors.

Thus, the management system includes the management task (the opportunities and challenges to be managed) and the management capacity including the management institutions, the instruments like the codes by which the signage designs are reviewed, the review and inspection human

resource, and the technology (e.g. electronic) by which documents are submitted and shared etc. and the resources available to the task and the institutions, Obviously, management performance is likely to be proportional to the match between the task and the capacity.

International practice indicates that the signage supply process may also be banned instead of being managed or 'perfected'. For example, in 2007, Brazil's largest city, Sao Paulo, introduced the clean city law (Rapid Transition Alliance, 2019) which resulted in the removal of thousands of billboards (Kohlsted, 2016). In 2009, Chennai, India banned the erection of billboards. Several US states are billboard-free, including Vermont and Maine since the 1970s, Hawaii since the 1920s, and Alaska since 1998 (Rapid Transition Alliance, 2019).

Figure 3.11: Before and after images by Marcelo Palinkas of the São Paulo City Council

Source: https://99percentinvisible.org/article/clean-city-law-secrets-sao-paulo-uncovered-outdoor-advertising-ban/

CHAPTER FOUR: CONTEXTUAL REVIEW

4.1 Introduction

With only 22% urbanization level and more than 4% urbanization rate Ethiopia is in a process of emerging but rapid urbanization and urban growth. As a result, the demand component of the signage supply process is rapidly increasing in many of its urban centers. Ethiopia's urbanization however is the 'without industrialization' brand which has many ramifications. Business, the demand side of the signage supply process, has been slow in development and it is dominated by micro and small-scale in many of its urban centers. The financial capacity of the population is quite low limiting their access to adequate quantity and quality of space in the private domain making the quantity and quality of the PAD, which is the container component of the signage supply process, very important for improvement of quality of life. The financial capacity of governments is quite low making management capacity (the capacity to plan and implement) quite low. As a result although modern urban planning was introduced to the country nearly a century ago its urban centers have been emerging and growing largely unmanaged and as a result the PAD, the container component of the signage supply process, in many urban centers is itself likely to have substantial unmanaged or informally developed component. For example, according to (UN-HABITAT, 2020) about 64% of the urban population in Ethiopia lives in 'slum' conditions. The quantity of the public space component has not only constraints of supply but also of uses such as informal trade, small and micro-scale vehicular transport, and private car dominated transport.

CHAPTER FIVE: DEVELOPING THE PRELIMINARY SOLUTION

5.1 The Framework of analysis

The literature review suggests that the management task or the opportunities and challenges of the signage supply process are complex and many. On the other hand, the contextual review indicates that management capacity is low in Ethiopia and similar contexts. The problem is how to resolve this mismatch between management task and capacity. Two major options are available: either reducing the management task to match the capacity or rapid increase of the latter to match the former. The first option is likely to be more feasible in the Ethiopian context in the short term. That implies, on the one hand, reducing the number of signage types to be reviewed and, on the other, reducing the number of their opportunities and challenges to be managed or regulated.

5.1.1 Reducing Number of Signage Types

The fact that the research is about the opportunities and challenges of outdoor signage for the PAD provides opportunities for classifying the former by using components of the latter. This urbanist opportunity is used to reduce signage types to three major and six sub-types as shown in table below:

Table 5.1: Reduced number of signage types

<table>
<tr><td>Mainstream Classifications</td><td colspan="2">PAD (shared environment) based Signage Design Classification)</td></tr>
<tr><td rowspan="6">Material based (Acrylic, Aluminum, Wood digital, Fabric, Metal, Neon, Plastic, Pvc , Vinyl)
Function based (Direction, Locality, Street names and numbering, Information)
Location based (on and off premise, Signage on buildings: ground signs, Wall signs, Roof signs, Projecting, Marquee)
Physical structure based: figure-ground signage, Figure signage)</td><td rowspan="2">Signage in Public Spaces</td><td>Signage in public open spaces</td></tr>
<tr><td>Signage on structures in public spaces</td></tr>
<tr><td rowspan="2">Signage in Private Open Spaces</td><td>Signage in formal private open spaces</td></tr>
<tr><td>Signage in informal private open spaces</td></tr>
<tr><td rowspan="2">Signage on Private Buildings</td><td>Signage on formal buildings</td></tr>
<tr><td>Signage on informal buildings</td></tr>
</table>

5.1.2 Reducing the Opportunities and Challenge Types to be Managed

This part included not only reduction of opportunities and challenges suggested by the literature but also addition of those excluded because of the literature's gap of focus on contexts like Ethiopia. For example, as discussed in the contextual review many public spaces in cities of developing countries like Ethiopia are likely to be quantitatively constrained. While the private domains that frame them like buildings and spaces can contribute visually to the publicly accessible spaces and reduce the constraint. signage has the challenge of reducing the this contribution by 'aspatializing' the frame. Similarly the review suggests that the PAD signage container itself is likely to be informally developed and disordered. In this context signage has the opportunity to order the disorder but this opportunity is also never emphasized in the literature.

The reduction part concerns mainly the subjective opportunities and challenges like identity and sense of place. Order is assumed to be largely objective because it is defined as the organization principle. The definition, however, was contextualized as a product of three scenarios of the signage form in relation to the form of the signage container (the PAD element) namely: no variation, mini-variation, and justified maxi-variation while disorder was defined as unjustified maxi-variation.

Table 5.2: Signage Design Market's Contextualist-Urbanist Failure Types with signage design types

Signage Design Market ‘s Contextualist Urbanist Failure Types		Signage Design Type
Exploiting opportunities	Ordering disorder	Orderist (mini/non variationist, conditional izing the maxi-variationist)
Addressing challenges	Privatizing public use	Use privatizing
	Disordering order	Disorderist (unconditional maxi-variationist)
	Aspatializing the spatialist	The aspatializer
	PAD overloading	The overloader

The reduced signage types, the reduced opportunities and challenges , and the signage form elements responsible for the opportunities and challenges were integrated in the table below

Table 5.3: Signage design elements and types with their Opportunities and Challenges for the PAD

Signage design elements and types	Opportunities and challenges for the PAD					
	Public Control Domain		Private Control Domain			
	Space	Structures	Space		Buildings	
	Use privatizing, aspatializing, overloading	Harmonist, disorderist overloading	Formal	Informal	Formal	Informal
			Disorderist, aspatializing overloading	Orderist, disorderist, overloading	Harmonist, disorderist, aspatializing, overloading	Orderist, disorderist, overloading
Signage Shape						
Signage orientation						
Signage scale						
Signage intensity						
Signage surface quality						
Signage total						

5.2 Testing the Preliminary Solution's Outreach Performance

The test plan was a researcher-initiated reach out to the demand side during the final data collection period. The actual test was demand-initiated reaching out before the final data collection period. It took place after the researcher was invited by the demand side (the Addis Ababa City Plan Commission), through the University, following instruction from the PM to prepare regulations on signage, façade color, and urban green

The reach out involved a half day presentation of the preliminary solutions of this research and another on building form design opportunities and challenges for the PAD from the same research group to the technical personnel of the City Administration assigned from different sub-cities.

The presentation included the above tables and cases of implemented signage designs collected for the purpose. The cases attempted to cover all signage types and all opportunities and challenges. They were presented in 5 types as:

1. Public space privatizing
2. Structures in public space disordering, overloading,
3. Formal buildings harmonist, disordering, aspatializing, overloading,
4. Informal buildings disordering and overloading challenges, and
5. Informal buildings ordering opportunities.

The presentation was followed by intense discussions, request for research on urban green as well, expression of satisfaction, appreciation of the depth of the study, and a request for sharing the presentation files. Copies of the files were sent to the coordinator of the group the next day.

Figure 5.1: The Presentation (May 30, 2022 at Debrezeyit)

CHAPTER SIX: THE CASE STDY

6.1 Introduction

Addis Ababa the capital of Ethiopia is the largest city in the country, and as a result, it concentrates most of the business and thus most of the signage demand and supply. Spatially businesses are concentrated in its market centers, the main center and sub-centers and urban corridors that connect them and radiate out of them and which are often crowded with pedestrians, informal trade, small-scale public transport, and private cars. The city was established at the end of the 19th century before the introduction of modern urban planning to the country. It was also the first to get an urban master plan but until very recently the majority of its parts were developed informally. The majorities of its population are low-income and therefore lack access to adequate quantity and quality of space in the private domain.

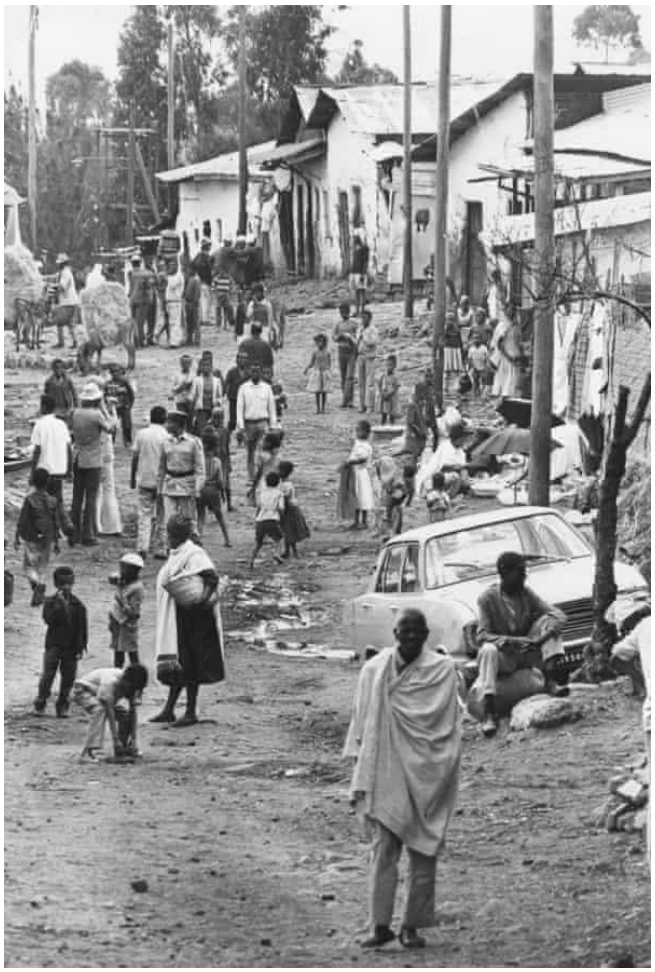

Figure 6.1: The publicly accessible domain in early Addis Ababa

Source: https://www.gettyimages.in/photos/addis-ababa

Figure 6.2: Outdoor Signage in early Addis Ababa

Source: https://qz.com/africa/1050062/ethiopia-photos-of-addis-ababa-show-young-peoples-lives-50-years-ago

The case study is organized into the post-data collection solution, analysis of the result chain (the signage supply process, the management system, and the result) by using the solution, and finally the test result of the standard framework.

6.2 The Post-data Collection Solution

The preliminary solution presented above was finalized as follows during the data collection period:

Table 6.1: Finalized preliminary solution

Reducing Management Task			
Reduction of Signage Types		Reduction of Failure Types	
		Opportunities	Challenges
I. Signage in the Public Domain (Space)	1.1 Outdoor signage in formal public spaces		Privatization of public use Disordering Aspatialization
	1.2 Outdoor signage in informal public spaces	Ordering	Privatization of public use Disordering Aspatialization
	1.3 Outdoor signage on structures and objects in public spaces		Privatization of public use Disordering Aspatialization
II. Signage in the Private Domain	2.1 Signage in formal private open spaces (public space frames)		Disordering Aspatialization
	2.2 Signage in informal private open spaces (public space frames)	Ordering	Disordering Aspatialization
	2.3 Signage on formal buildings (public space frames)		Disordering Aspatialization Frame typology shifting
	2.4 Signage on informal buildings (public space frames)	Ordering	Disordering Aspatialization

Table 6.2: Outdoor signage design Variables

	Outdoor Signage Form Elements	
1.	Shape	Orthogonal, deorthogonal, blendist
2.	Orientation	Orthogonal, deorthogonal
3.	Scale	Small-scale, sub-story scale, story scale, multi-story scale, multi-span scale
4.	Intensity	Symbols only, symbols and background
5.	Surface quality + material and technology	E.g. Color : Chromatic, Achromatic, blendist

The first table indicates that the solution is identical to the preliminary one except that in the final solution major types of signage are two rather than three, sub types are seven rather than six, the challenge list includes frame typology shift, and objects including mobile ones like transport vehicles are added to signage on structures in public spaces. In addition, the signage form (design) elements (variables) are provided with sub-variables. The most important of these provisions are the sub-variables of scale which are based on the structure of the most dominant signage container: building

6.3 The Signage Supply Process

The outdoor signage supply process in Addis Ababa consists of three major stakeholders: the signage demand side and the signage and its container supply sides. The main components of the demand side are government and private businesses. Private businesses are mainly located in spatial arrangements that allows them to be directly accessible individually from streets, or collectively accessible through intermediate spaces in the private domain.

The demand side is essentially involved in the selection of the signage container supplier and the advertising company. It also involves in the planning and design of the signage and its permit securing process. The advertisement companies are of two major types: those which involve in the planning, design, manufacturing, and installation of signage and those which involve in the latter two activities only. The container suppliers are of two major types: off premise container suppliers and on-premise container suppliers. The first supply signage containers to the demand side by either renting existing structures or by erecting container structures (like billboards) by leasing land mainly from the government. These types of suppliers are required to be licensed. The second types supply containers owned by themselves and are therefore not required to be licensed.

The process could take place in two ways one is a customer approaches an advertising company and discusses what he/she wants then the advertising company designs the signage. When the customer is satisfied with the design the permit process takes place by the customer itself if it is on a private building or private property then it is manufactured and installed but if the signage is in a public space the advertisement company owning the signage board which is also the company takes care of any permit related concern. The second way is the customer approaches an advertising company with design and size sometimes with also the permit the advertising company will only do the manufacturing and installation.

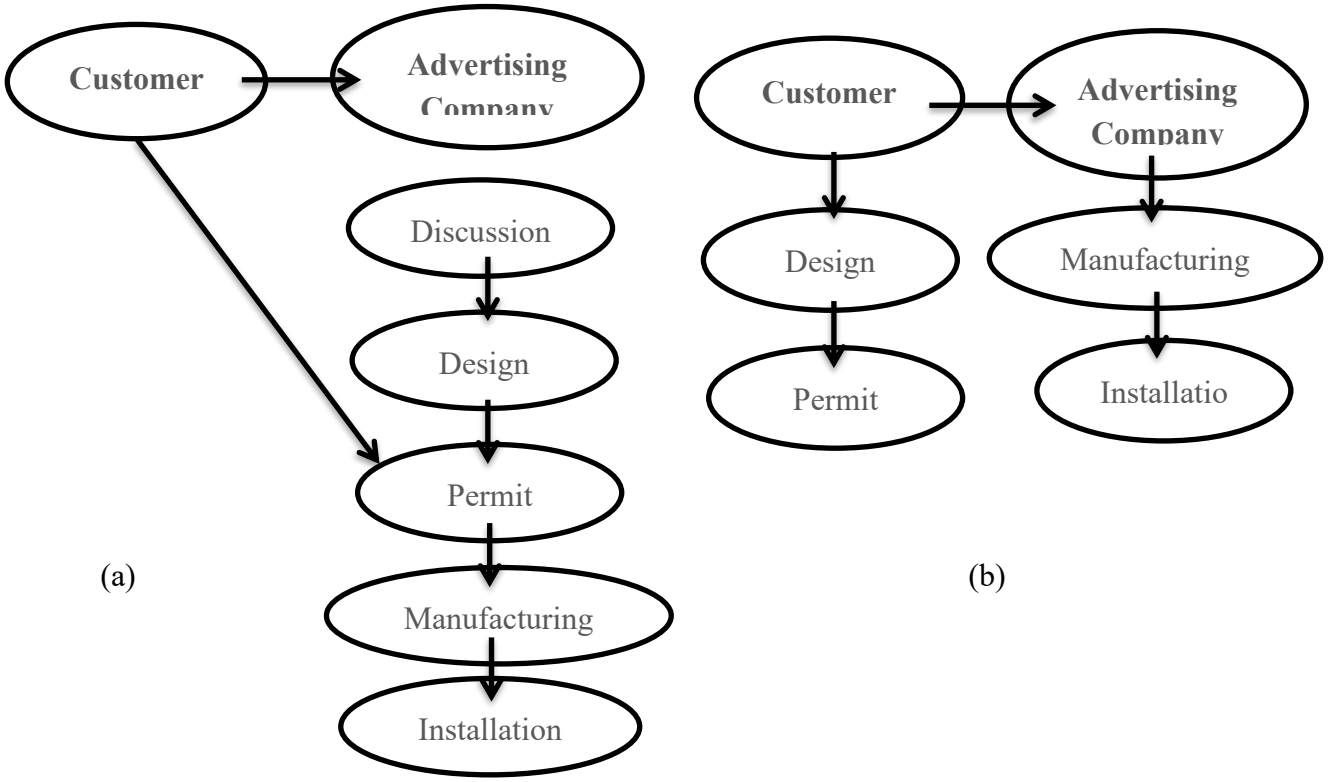

Figure 6.3: Signage development process

Source: Graphical illustration drawn by the author

The signage development process involves different actors based on the location of the signage but the main actors are Customer, Advertising and printing companies and Construction Industry Licensing and Control Authority. These actors and their influence on the quality and quantity of outdoor signage is as shown on

Table 4.3: Signage types with their respective decision makers

Signage Container (PAD)based Signage Design classification	**Quality**		**Quantity**
	Shape, orientation, color, intensity	Size/Scale	
Signage in public spaces Formal/Informal	Customer with advertising company	By specific size or within a range set by the government body	As the respective governing body
Signage on structures	Customer with advertising company	Customer with advertising company within the limited size range	As the respective governing body
Signage in private open spaces/ private building Both formal and informal	Customer with advertising company	Customer with advertising company within the limited size range	Customer with advertising company within the limited number of signs allowed.

To asses to which outdoor signage process is the factor or cause of the disorder of outdoor signage in Addis Ababa , 10 advertising companies were asked different questions relating to outdoor signage development process the response is summarized on Table below:

Table 6.4: Response of advertising and printing companies on the signage process

Questions		Respondents who said					
		Signage that is very bold, eye-catching and different			Signage that matches with the building and adjacent signage		
Which one describes best most request from customers	Number	9			1		
	%age	90			10		
		For signage in public space			For signage on private property		
		Customer	The Advertising company	The governing body	Customer	The Advertising company	The governing body
	Number	4	6	0	5	5	0

Who decides on the design of the signage?	%age	40	60	0	50	50	0
Who decides on the number signage?	Number	2	0	8	6	0	4
	%age	20	0	80	60	0	40

		For signage in public space		For signage on private property	
		Yes	No	Yes	No
Do you consider the billboards and building around the area?	Number	7	3	2	8
	%age	70	30	20	80
Do you do maintenance after signs are mounted?	Number	9	1	0	10
	%age	90	10	0	100

The development process of signage is crucial as to understand the situation of the outdoor signage in the PAD of Addis Ababa. In order to understand this some questions were raised to Advertising and printing companies and their response shows that the design of outdoor signage is based on the decision made 100% by the customer and advertising company while the number of signage in public space is 80% the decision of the governing body and in private property the major shareholder in deciding number of signage is the customer with 60%.

The response also shows that 90% of the customers want a bold eye-catching and different signage design. Consideration of buildings and other signage in private property is not considered for 80% of the respondents. While for signage in public space 70% said they consider signage and buildings adjacent to their signage but their only reason was not to cover up each other. When it comes to maintenance none of the respondents do maintenance on private property but 90% do maintenance for signage in public space since they own the billboards.

The supply process has a very limited awareness of the opportunities and challenges of signage for the PAD quantity and quality. For example 9 out of 10 advertisement companies indicated that the demand side typically demanded signage forms that are maxi-variationist and eye catching regardless of their relationship with the form of their container. In addition, 8 out of 10 admitted that they themselves rarely attempted to manage the challenge posed by the signage form for the order of the PAD or its component containers and other signage.

6.4 The Process's Failure Management System

As discussed in the literature review the management system has different levels and consists of institutions, management tasks (goals), management strategy (like regulation, persuasion, etc), and management capacity (including financial and technical). The technical part includes human resource, technology, infrastructure, and management instruments like regulations, guidelines, etc. The latter are the main sources of data on management task.

Addis Ababa does not have a city level signage supply process management system. It only has sub-city and local (woreda) level systems. The local level system controls signage on local roads and shop fronts but it is not mentioned explicitly in the structure of the organization in which it is organized. The sub-city level system is responsible for signage on main roads and for:

- Deciding the locations of off-premise billboards
- Giving Outdoor Advertisement signage permit as per the rules and regulations
- Inspection of permitted signage design implementation.
- It is also organized only as an ad hoc together with the Building Use Permit Control which is one of the four teams organized under the Construction Industry Licensing and Control Works Coordination which is in turn one of the wings of an office called the Construction Industry Licensing and Control Office.

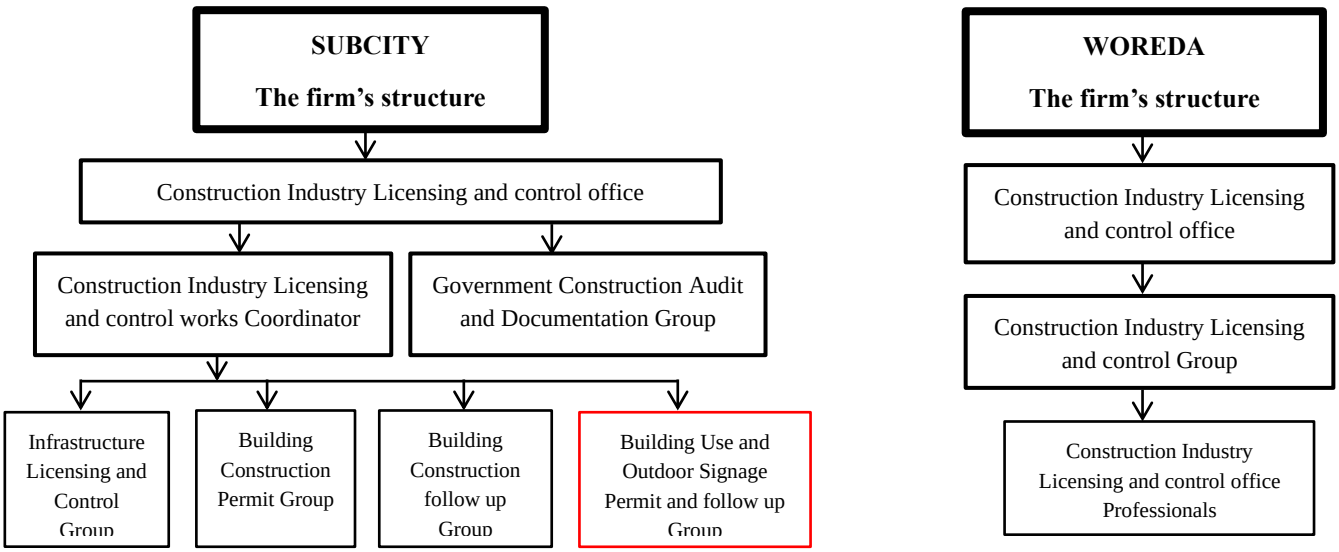

Figure 6.4: Structure of the outdoor signage control departments (Translated from Amharic by the author)

The office is poorly manned and equipped. It has only one staff responsible for signage permit. The staff does not have specific training or qualification for the job. In addition, the office is poorly provided with resources for major activities like inspection.

The management strategy at both levels is regulation. Currently the main management instrument for on-permise and off-permise signs on local roads is based on the 1997E.C (2005) outdoor advertisement regulation. But for off premise advertisement on main roads there was no regulation since 2005E.C (2012) because the regulation has been under amendment and because the directives and guidelines could not be prepared before completion of the amendment. The existing regulation has 31 major Articles. It suggests close to 20 signage types classified based partly on container types, material, and technology. They are summarized into seven types for service fee determination purposes. The summary does not include penalties for unpermitted signage. Explicitly stated challenges intended to be managed include fire safety, traffic safety, and 'ruining the aesthetics of the city and buildings'. Short analysis of the regulation by using the urbanist-contextualist management task is provided here under:

6.4.1 Order Challenges

Art. 15 of the regulation attempts to manage the order challenges of signage scale and quantity on building roofs but it leaves their color, intensity, orientation and pattern unmanaged. Similarly, Art. 16 requires that signage close to each other should have similar scale and shape but again leaves their color, pattern, intensity, orientation, etc. which are very important ordering form elements unmanaged. In addition, while in most circumstances the signage container order like that of buildings is constant the regulation allows signage forms to vary freely by using requirements such as 'not more than', 'should not exceed', 'not greater than', and 'not less than.' For example Art. 16 requires signage width not to exceed the width of building elements they are supposed to be installed on. But, in addition to neglecting the signage form elements outside width, it allows the width itself to be variable and therefore to be potentially in a maxi-variationist and disordering relationship with the width of the building elements.

6.4.2 Privatization of Public Space

The regulation appears to allow location of private billboards in public spaces. Art. 5 and 7 mention the spaces by name as main and local roads while Art. 6, 12, 13, and 14 use the signage types of 'digital advertising billboards', 'large billboards', 'free standing small
billboards', and 'free standing digital billboards' respectively that implicitly suggest the public space container. Art. 4 is quite explicit. It allows locating multiple private signage on street roundabouts including at their centers which are historically used for placing public monuments.

6.4.3 Public Space Frame Type Shifting Challenges

Plot boundaries such as fences, buildings, and spaces under private control are public space frames and signage quantity has challenges not only for the order but also for the type of this frame: large quantity of signage can shift the frame from open space, landscape, wall or building façade to signage and alter the quality of the public space. The regulation does not have adequate provisions to manage this challenge.

6.4.4 Aspatialization of the Visually Publicly Accessible Space

The public space frame under private control discussed above has opportunities for increasing the quantity of the visually publicly accessible space. Private open spaces and even building interiors can be visually, if not physically, accessible to all and thereby increase visual space quantity. While signage have the challenges of wasting these opportunities the regulation does not have provisions for managing the challenges. In fact, Art. 19 allows signage location on windows only at the ground floor at the very level building interiors can most effectively contribute to visual space quantity.

6.4.5 Ordering Opportunities

Signage form also has the opportunities for ordering disordered containers. In contexts like Ethiopia the disordered containers are likely to be the majority since the public space frame elements described above can all be developed informally or unmanaged. Even many parts of the public space itself like river areas and open spaces can be unmanaged and therefore disordered. The regulation does not have provisions for exploiting the opportunity of signage for ordering the disorder.

6.5 The Process's Result: The implemented signage cases

Case Selection Criteria

The outdoor signage supply process's results were studied by selecting cases because the results are quite large in number. Therefore, cases were selected by using two major methods:

1. By using the simplified and PAD related outdoor signage types classification and
2. By using the responsive and unresponsive to the objective opportunities and challenges based outdoor signage supply process type classification.

Cases from each type will be presented in the two categories. Data were analyzed as discussed in the methodology section by using a framework consisting of the PAD container type, the signage

form, the signage's responsiveness performance to their challenges and opportunities for the PAD, and the supply process type (managed, unmanaged)

6.5.1 Unresponsive Signage Cases

These are cases in which opportunities and challenges for the public space use, quantity and quality are unexploited and unaddressed.

Case 1. Signage in a formal public space

Figure 6.5: Photo showing signage at Arat kilo round about

Table 6.5: Analysis for unresponsive signage in a formal public space

Analytical Framework				Data
Signage Type	PAD container type			A formal public space, the Arat Kilo round-about with the liberation monument located at the centre
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Double storey
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: maxi-variationist
		Spacing		Dense, irregular top and bottom
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - public space privatization - disordering - public space frame type shifting: the public space frame which was building façade and green is now shifted to signage

Case 2: Signage on a Structure in a Public Spac

Figure 6.6: Photo showing signage on the structure of the railway infront of Mariot Hotel

Table 6.6: Analysis for unresponsive signage on a structure in a public space

Analytical Framework				Data
Signage Type	PAD container type			**Structure in public space:** the LRT Bridge Structure (in front of Mariot Hotel)
	PAD related form classification	Shape		Orthogonal,
		Orientation		orthogonal
		Scale		Double-storey, multi-span
		Symbol		Maxi-variationist
		Surface quality		Color: maxivariationist
		Spacing		Dense
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - public space privatizing - disordering: color: maxi-variationist; symbol: maxivariationist: shifting to figure ground type (the whole, the pillars and beams)

Case 3 : Signage on a Formal Building Frame

Figure 6.7: Photo showing signage on a building (Lemat le edget) at Sebara babure

Table 6.7: Analysis for unresponsive signage on a formal building frame

Analytical Framework				Data
Signage Type	PAD container type			Formal building frame (Sebara Babur area)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Small
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: maxi-variationist
		Spacing		Dense, irregular top and bottom
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - disordering (color: maxi-variationist; symbol: maxivariationist, scale: maxivariationist) - Frame type shifting

Case 4: Signage on a Heritage Building frame

Figure 6.8: Photo showing signage on a heritage building at piassa

Table 6.8: Analysis for unresponsive signage on a heritage building frame

Analytical Framework				Data
Signage Type	PAD container type			Heritage building frame at Arada
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Small
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: maxi-variationist
		Spacing		
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - disordering (color: maxi-variationist; symbol: maxivariationist, scale: maxivariationist) - Frame type shifting: from heritage to ordinary

Case 5: Signage on the Spatialist Part of a Formal Building Frame

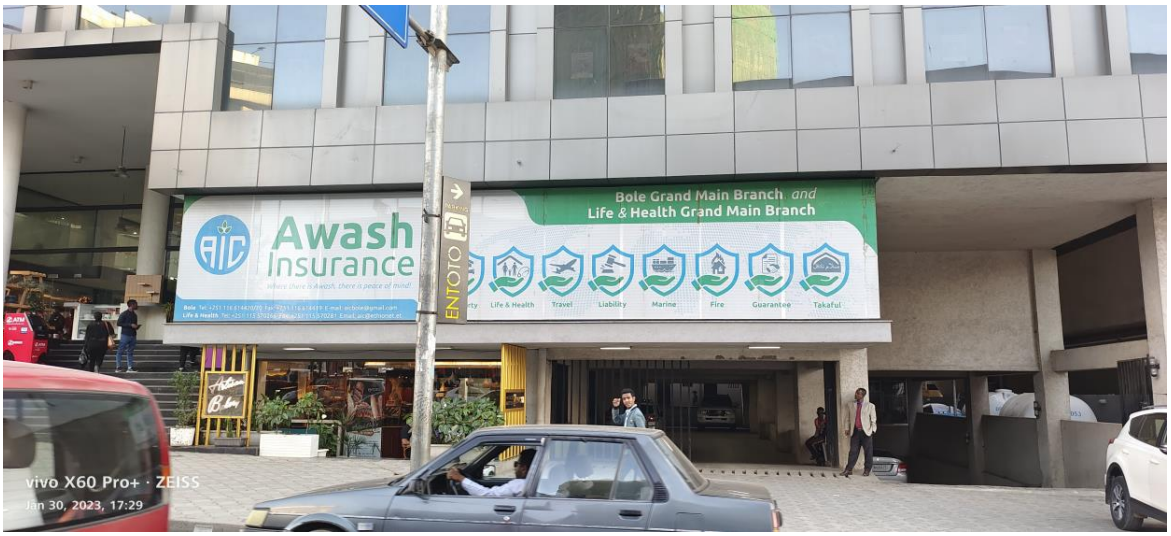

Figure 6.9: Photo showing signage on a building at bole road around Japan area

Table 6.9: Analysis for unresponsive signage on the spatialist part

Analytical Framework				Data
Signage Type	PAD container type			A formal building frame's spatialist part (Bole Road)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Full span
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: mini and maxi-variationist
		Spacing		Dense
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenge unaddressed: - Aspatialization

Case 6 : Signage on Informal Building Frames

(a) (b)

Figure 6.10: Photo showing signage on informal buildings at 5kilo (a) and piassa (b)

Table 6.10: Analysis for unresponsive signage on informal building frames

Analytical Framework				Data
Signage Type	PAD container type			Informal building frames (Piassa, Amist Kilo area)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Small, maxi-variationist
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: mini and maxi-variationist
		Spacing		Dense, irregular bottom and top
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Opportunities unexploited: - ordering

6.5.2 Responsive Signage Cases

These are cases in which opportunities and challenges for the public space use, quantity and quality are exploited and addressed.

Case 1: Signage in an Informal Public Space

Figure 6.11: Photo showing signage on a bridge located on bole road

Table 6.11: Analysis for responsive signage in an informal public space

Analytical Framework				Data
Signage Type	PAD container type			An informal public space (a river); Bole Road
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Multi-span, full storey
		Symbol		Maxi-variationist images
		Surface quality		Color: mini and maxi-variationist
		Spacing		dense
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	Public sector signage
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		Opportunity exploited: - ordering
		Unresponsive		

Case 2: Signage on an Informal Building Frame

Figure 6.12: Photo showing signage on informal building at Haya hulet

Table 6.12: Analysis for responsive signage in an informal public space

Analytical Framework				Data
Signage Type	PAD container type			An informal building frame (Haya hulet area)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Sub-storey
		Symbol		Maxi-variationist images
		Surface quality		Color: mini and maxi-variationist
		Spacing		
Signage supply process	Type	'Perfect'		'Perfect management system'
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		Opportunity exploited: - ordering
		Unresponsive		

Case 3: Signage on a Formal Building Frame

Figure 6.13: Photo showing signage on a formal building at Sement hotel

Table 6.13: Analysis for responsive signage on an informal building frame

Analytical Framework				Data
Signage Type	PAD container type			Formal building frame
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Multi-storey
		Symbol		Maxi-variationist images
		Surface quality		Color: mini -variationist
		Spacing		
Signage supply process	Type	'Perfect'		‘Perfect management system’
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		Challenge addressed: - disordering
		Unresponsive		

CHAPTER SEVEN: MAJOR FINDING AND CONCLUSION

7.1 Findings

The research has four major findings:

- Outdoor signage management task in Addis Ababa is oversized while the management capacity is undersized,
- The urbanist-contextualist management task resizing preliminary solution approach appears to have a good potential for reducing the gap,
- The test result of the preliminary solution approach is positive, and
- The test result of the standard conceptual framework is positive.

7.1.1 Management Task is Oversized while Management Capacity is Undersized

The analysis above indicates that even though the signage management task in Addis Ababa is undersized compared with mainstream practice because it excludes challenges like identity and sense of place it is oversized for the management capacity in the city. On the one hand, the capacity is insufficient to manage even basic challenges like content, fire safety, and traffic safety through the complete procedures of signage design review and design implementation inspection but, on the other, the task includes aesthetics which is a subjective challenge. However, the regulation document and the result on the ground indicate that there is no significant implementation of management of this challenge.

7.1.2 The Urbanist-contextualist Management Task Resizing Approach has Good Potentials

The urbanist-contextualist approach was intended to resize the management task not only by reducing the types of signage but also by resizing the challenges and opportunities by focusing on the objective ones like quantity of signage, space quantity reduction (aspatialization), privatization of public space, and order (the more objective aspect of aesthetics) in addition to safety. It attempts to simplify the management of the more complex management of private signage in public spaces through banning and the challenges and opportunities of order by using the order of the signage containers like buildings. The new challenge of Aspatialization and the new opportunity ordering disordered signage containers like informal buildings have the effect of increasing the substantive management task. However, overall the approach has the effect of decreasing the procedural management task because it intends to manage the more complex order challenge by the order of the signage containers and to exclude public spaces from the list of private signage containers.

7.1.3 The Test Result of the Preliminary Solution Approach is Positive

The test process of the proposed preliminary result approach involved developing the preliminary solution by making it as close as possible to the final solution to insure its effectiveness after the literature and the conceptual reviews, developing a researcher-initiated reaching out plan to the demand side, implementing the plan, and evaluating the plan and its implementation. Accordingly, comparison of the preliminary and the final solutions has indicated that their difference is quite limited indicating the content effectiveness of the preliminary solution approach.

However, the procedural feasibility of the researcher-initiated reaching out approach could not be tested because of the approach's replacement by the demand side-initiated reaching out, while the former was at a planning stage. Nonetheless, the replacement has indicated the procedural effectiveness of the approach regardless of which side had initiated the reach out. The preliminary solution has helped to effectively respond to the request and indicated to the demand side that there is a responsive research supply side.

7.1.4 The Test Result of the Standard Conceptual Framework is Positive

Testing the premise that the conceptual framework of urban transition research can be standardized requires using the framework in the research and checking whether its variables apply to the different components of the research. The table below shows the different components of the research and what variables of the conceptual framework applied to each component.

Table 7.1: Components of the Research and the Variables of the Framework Applied

	Components of the Research	Variables of the Framework Applied
1.	Title	• The element (outdoor signage) supply process • Management gap
2.	Objective	• To investigate the signage supply process, the process's failure management system, and its result
3.	Method	Data sources: • The signage supply side • The management system • The result
4.	Literature review	• The element (outdoor signage) supply process • The process's challenges and opportunities

		• The failure management system
5.	Contextual review	• Low management capacity
	Data and analysis	• The element (outdoor signage) supply process • The failure management system • The result: implemented signage supply and their responsiveness to challenges and opportunities
6.	Findings	• Management task and management capacity • The urbanist-contextualist management approach
7.	Conclusion	• Management system • Management capacity • Opportunities and challenges
8.	Recommendation	• Management task • Management capacity • Challenges and opportunities

The table indicates that the variables of the standard conceptual framework have applied to all substantive components of the research including the methodology.

As stated in the problem statement currently the framework is being tested on 12 other projects out of which the test on one of the projects has reached a completion stage. In addition, it has been tested on a PhD research which is outside the group and which is currently submitted for defense.

7.2 Conclusion

The research has indicated that there is gap in the literature in outdoor management system for contexts like Ethiopia where low level and slow industrialization but rapid rate urban transition is likely to lower management capacity, create public and private domain space quantity constraints, and introduce the unmanaged/informal signage containers like buildings and open spaces. More specifically, the research has indicated the following gaps in the literature:

The disordered container ordering opportunities of outdoor signage,

The aspatialization challenge,

The public space frame typology shifting challenge, and

A common framework of analysis for signage and their container, the PAD in general and its dominant component the building frame in particular

CHAPTER EIGHT: RECOMMENDATION

8.1 Introduction

In addition, the research has indicated the need for the following actions for improving development practice by reducing the gaps of management of the outdoor signage supply process's responsiveness failures to its opportunities and challenges for the PAD's quantity and quality:

- Planning for increasing outdoor signage management capacity with increase in urbanization level to gradually match it with management task
- Revising the outdoor signage regulation for Addis Ababa by focusing also on:
  - The private bill board free public space and heritage frame,
  - The container order (Architectural design) regulated signage form and quantity,
  - The disordered frame ordering opportunities of outdoor signage, and
  - The aspatialization challenges of outdoor signage.
- Using percentage of the container surface to manage the frame typology shifting challenge,
- Using financial penalty to manage the challenge of unpermitted signage and to reduce the inspection task, and
- Doing research on how building facades, which are the main containers of signage, can be collectively ordered in the absence of management by urban design.
- Continuation of testing the standard conceptual framework and the preliminary solution approach since they appear to have potentials for reducing the common problems of urban transition research.

ANNEX I

ARTICLE

Managing the Publicly Accessible Space Supply Process in Ethiopia's Urban Transition Process: The Urbanist-Contextualist Outdoor Signage Management Gap in Addis Ababa

Mariamawit Ayele and Heyaw Terefe

Abstract

The quantity and quality of urban public space or the space accessible to all are important inputs for improvement of urban quality of life. They are especially important in developing countries like Ethiopia where the majority of the urban population lack access to adequate quantity and quality of space in the private domain. They are results of the supply processes of the elements of the public space such as the space, its contents such as outdoor signage, and its frame such as buildings. As a result, the processes have challenges and opportunities for the public space use, quantity and quality but because they are commonly imperfect and may not be responsive to their opportunities and challenges they are managed through regulations by urban plans and designs codes, etc. However, urban transitions in countries like Ethiopia which are at an emerging stage and are not accompanied by industrializations are likely to limit the opportunity to use mainstream management approaches and likely to create gaps of management of the processes. By taking Addis Ababa as a case, the objective of this study is, therefore, to investigate how to fill this gap in the management of the supply process of outdoor signage which is one of the contents of public space.

A qualitative research methodology including interview, document review, analysis of implemented signage designs, and discussion were used for the research.

The research indicates that there is significant gap in the literature on outdoor signage management system for contexts like Ethiopia where low level and slow industrialization but rapid rate urban transition is likely to lower management capacity, create public and private domain space quantity constraints, and introduce the unmanaged/informal signage containers like buildings and open spaces.

I. Introduction

1.1 Background

Urban centers have become major places of habitation in the world since 2007 and, as a result, many of their aspects including their space quantity and quality have become major issues of life quality improvement. One of the more significant are the use, quantity, and quality of their public spaces because they are accessible to all. The significance is likely to increase in countries like Ethiopia where most of the urban centers are unplanned and slum conditions are dominant and where, as a result, the majority of the urban population lack access to adequate quantity and quality of space in the private domain.

The space accessible to all. however, is not limited to the public space which is defined commonly as space legally accessible to all and, therefore, under public control. It also includes space visually accessible to all which include elements under private control such as private open spaces and building forms that frame the public space.

Thus, the quantity and quality of the publicly accessible domain (PAD) are the results of the supply processes of not only the public space but also those of the publicly visually accessible elements in the private domain such as outdoor signage, private spaces, and buildings. These processes are commonly imperfect and may not be responsive to their opportunities and challenges for the inputs and, as a result, they are managed by urban plans and designs codes, standards, etc. However, urban transitions like in Ethiopia which are at an emerging stage and are not accompanied by industrializations are likely to limit management capacity and the opportunity to use mainstream management approaches and likely to create gaps of management of the processes.

1.2 Research Objectives

The general objective of this study is, therefore, to investigate how to fill this gap in the management of the supply process of outdoor signage which is one of the elements of the publicly accessible part of the urban centers by taking Addis Ababa, the capital of Ethiopia, as a case.

Specifically, the research is aimed at:

- Investigating the management gaps of the outdoor signage supply process's responsiveness failures to its opportunities and challenges for the use, quantity, and quality of the public space of the city .

Addis Ababa is selected for the study because of its relatively more advanced signage supply process, the process's failure management system, and extent of implemented signage.

1.3 Methodology

A qualitative research methodology including interview, document review, analysis of implemented signage designs, and discussion were used for the research.

Interview was used to collect data from several government bodies responsible for outdoor signage supply process management and from the signage supply side which included 10 advertisement companies. Presentation and discussion of a preliminary solution developed based on the literature and contextual reviews were used to collect data from a meeting of technical personnel of the signage supply process management system.
Document review were used to collect data mainly from permit regulations obtained from the signage supply process management system.

Analysis of Implemented Signage was used to collect data from implemented signage.
The data on the signage supply process management gap were analyzed by using the degree of match between management task and management capacity. The data on management task were analyzed by using the issues of types of signage to be managed (reviewed) and types of signage supply process's failures to be managed (regulated) while the data on management capacity were analyzed by using mainly technical capacity inputs such as management (regulation) documents, human resource, infrastructure, and technology. The data on the results or implemented signage were analyzed by using:

- The signage type including their PAD container type and their form and
- The signage supply process including their responsiveness performance to their challenges and opportunities for the PAD, and their supply process type (managed, unmanaged)

II. Literature Review

The literature review is focused on discussion of outdoor signage and its supply process, the process's opportunities and challenges for the PAD, and management of the process's responsiveness failures to its opportunities and challenges.

2.1 Outdoor Signage and its Supply Process

Outdoor signage are commonly visual elements consisting of information conveyed by symbols (like letters and images,) intended to be **communicated** to the public by using the 'shared environment' or the publicly accessible domain of the city (PAD). The information is referred to as the content while the symbols and their backgrounds, which are sometimes avoided, are referred to as the form. The form has attributes such as shape, scale, orientation, intensity, surface quality, material, color, etc. Signage types are classified commonly on the bases of message (direction,

locality and street names, instructions,), material (acrylic, aluminum, wood, metal, plastic signs), and business location (on-premise and off-premise signs). The classification also includes, indirectly, the signage container such as open space (ground signs) and buildings (wall, roof, projecting, marquee, and window signs).

Signage supply is strongly related to demand. The largest demand sides are private business and the state. The demand and supply of signage is likely to be more intense in large urban centers than small ones because urban size often depends on business size. The Signage supply process commonly includes consultation (a stage in which the signage demand side meets the supply side), designing concepts and mock-ups, obtaining permit (when there is management), sign manufacturing (when they are not painted), sign installation, and inspection.

Signage supply requires its PAD container supply. But the container and its supply issues and specially the PAD totality are rarely emphasized in the literature. The literature on the PAD of the city itself is dominated by the public space component which is commonly defined as space physically and visually accessible to all and, therefore, under public control. But many elements of the city used as containers of outdoor signage such as facades of private buildings and private open spaces are domains under private control but which frame the public space and are publicly visually accessible. In addition, it indicates that specially most of the latter are themselves developed informally or without management in cities of developing countries like Ethiopia.

2.2 Opportunities and Challenges of Signage

The literature on the opportunities and challenges of signage for the public space use, quantity, and quality is not focused on the signage formal elements such as shape, scale, orientation, etc. It is focused on issues like signage content, quantity, location, and technology.

The Opportunities

Earlier studies suggest a more positive and opportunity focused analysis of signage. For example, Claus and Claus (1976,1-5) suggest that *"signs are the people's communication." They have symbolically become part of the society and often represent the cultural identity and values of the society.* Lynch suggests even more opportunities in addition to identity. They are distinguishable from their surrounding environment, provide stability in urban organization, are symbolic, boost memory, give identity to distances and increase urban legibility (Behnoush Moghimi nia , 2017).

Vitality is also suggested by authors such as Zukin (1996) as one of the opportunities of signage. Zukin suggests that the lack of commercial signs can harm the social and economic vitality of city centers because, in many situations, it is the commercial atmosphere promoted by these media that attract consumers, visitors, and investors.'

Way finding is a signage content issue a widely exploited content in transportation planning to safely guide traffic flow in the urban realm to provide direction and guidance to pedestrians and drivers to their destinations and making available through signage alternative routes without placing unwarranted cost to the drivers and also ensuring safety of public spaces (Wei, 2009). This content also provides the opportunity for increasing the legibility and imageability of places and signage in general can be recognized by pedestrians as landmarks that can help their navigation through city centers (Robert Venturi, 1972).

The opportunities of signage also includes economic opportunities like getting visitors into and around the center of downtown with minimal confusion and duress to create a competitive shopping area (Gibbs, 2012), providing information and direction and promoting local economic development, and using signage as a component of tourism strategy for promoting local economic development (Diko, Signage: Land-use planning issues and dynamics, 2013).

The Challenges

Signage content can also be a challenge for public space use. It can be a challenge for public morals and values when it is objectionable, indecent or prejudicial. In particular, the content of outdoor advertising has a larger inherent potential to impact on public morals than the other advertising media due to the fact that it cannot be avoided, ignored, covered or switched off, which also means that children cannot be protected sufficiently from such contents.

The quantity and **spacing** of signage can be a challenge for both the signage itself and its environment. An excessive number of advertisements can exceed the user's capacity to read and understand since there is a limit in the quantity of signs that can be perceived by users in a single vision (Moles, 1987). Excessive number of signage can also lead to 'information overload' and 'environmental overstimulation' which may lead to various forms of behavior breakdown such as confusion, disorientation, desensitization to setting and decreased environmental awareness. Environmental overstimulation may also have economic implications since it may lead to lowering of human productivity (Evironmental impact of outdoor advertising, 2001). The literature also suggest that, despite the economic opportunities described above, the proliferation of billboards

and other signs may result in the devaluation of property values in both residential and commercial areas. (Evironmental impact of outdoor advertising, 2001).

In a more quantitative sense, outdoor signage form can also be a challenge for the 'sense of place' of a city which is defined as its unique features (its identity) resulting from the synergy between its form, function, and meaning. Meaning is defined, in this context, as the value people attach to space which can be 'utilitarian' or 'experiential' with the latter being personal and interpersonal (Rajala, et,al, 2020). As an element of city form signage has also the challenges of leading to loss of meaning and identity leading to the phenomenon described by Relph (1976) as 'placelessness.'. (Kiandra Rajala, 2020)

The location of signage can be a challenge for traffic safety or for the traffic flow of cities. Outdoor advertisements are often placed in locations that are highly visible in order to achieve maximum exposure,. (Evironmental impact of outdoor advertising, 2001), Location can also be a challenge for the ecology. Sensitive environments such as vegetation may be damaged in the process of erecting billboard structures or for the purpose of improving their visibility.

Signage technology particularly in terms of sound and light can be a challenge in urban areas. For example the use of modern sound technology has brought about an increase in sound pollution in urban areas. In addition, outdoor advertising contributes to light pollution or sky glow when properties and enterprises are illuminated at extremely high levels in order to attract attention. Light pollution may also have various detrimental effects such as ecological impact by interfering with the orientation mechanism of certain wildlife species;

Finally, in a more form focused view outdoor signage can be in conflict with the aesthetic composition and order of building facades. It is considered to be so when its form conflicts with the principle of organization of the façade and when it covers features related to building silhouette, facade details and facade articulation (Lang 1987, p.189) (Portella, 2014).

2.3 The Signage Supply Process's Failure Management System

The signage supply process, especially the part driven by private entities, is likely to be imperfect and fail to be responsive to its opportunities and challenges for the use, quantity, and quality of the public space unless managed. The permit component is included in the process for this purpose. It has often two components: permit issuance and closing permit.

Permit issuance takes place after processes like verifying that the use which the sign advertises is permitted, reviewing relevant documents and the plan for the scope of work, reviewing the signage designs by appropriate agencies for code compliance, and after the designs are approved by these agencies and all documents required for permit issuance are submitted.

The compliance review documents or the management instrument provide compliant signage attributes which were defined through studies that relate the attributes to their opportunities and challenges for the desired goal often without including the latter two. Thus, the capacity to conduct such studies is essential for having an effective management instrument, Closing permit involves steps like beginning the signage installment work, getting the work inspected by all the required inspectors and getting the closing permit based on the recommendations of the inspectors.

Thus, the management system includes the management task (the opportunities and challenges to be managed) and the management capacity including the management institutions, the instruments like the codes by which the signage designs are reviewed, the review and inspection human resource, and the technology (e.g. electronic) by which documents are submitted and shared etc. and the resources available to the task and the institutions, Obviously, management performance is likely to be proportional to the match between the task and the capacity.

International practice indicates that the signage supply process may also be banned instead of being managed or 'perfected'. For example, in 2007, Brazil's largest city, Sao Paulo, introduced the clean city law (Rapid Transition Alliance, 2019) which resulted in the removal of thousands of billboards (Kohlsted, 2016). In 2009, Chennai, India banned the erection of billboards. Several US states are billboard-free, including Vermont and Maine since the 1970s, Hawaii since the 1920s, and Alaska since 1998 (Rapid Transition Alliance, 2019).

III. Contextual Review: Ethiopia

With only 22% urbanization level and more than 4% urbanization rate Ethiopia is in a process of emerging but rapid urbanization and urban growth. As a result, the demand component of the signage supply process is rapidly increasing in many of its urban centers. Ethiopia's urbanization however is the 'without industrialization' brand which has many ramifications. Business, the demand side of the signage supply process, has been slow in development and it is dominated by micro and small-scale in many of its urban centers.

The financial capacity of the population is quite low limiting their access to adequate quantity and quality of space in the private domain making the quantity and quality of the PAD, which is the container component of the signage supply process, very important for improvement of quality of life. The financial capacity of governments is quite low making management capacity (the capacity

to plan and implement) quite low. As a result although modern urban planning was introduced to the country nearly a century ago its urban centers have been emerging and growing largely unmanaged and as a result the PAD, the container component of the signage supply process, in many urban centers is itself likely to have substantial unmanaged or informally developed component. For example, according to (UN-HABITAT, 2020) about 64% of the urban population in Ethiopia lives in 'slum' conditions. The quantity of the public space component has not only constraints of supply but also of uses such as informal trade, small and micro-scale vehicular transport, and private car dominated transport.

IV. Analytical Framework

The literature indicate that the signage management task or the opportunities and challenges are not only objective but also subjective. In addition, the management instruments state only the requirements or the means necessary to manage the process to respond to its opportunities and challenges usually in terms of signage form like size or scale or type without relating them directly to the challenges and opportunities. Relating the means to the subjective ends and managing such ends require high management and management instrument preparation capacities, which as discussed above are, unlikely to be available in contexts like Ethiopia. On the other hand, because mainstream signage literature is not based mainly on contexts like Ethiopia it has gaps in the areas of the challenges of signage for aggravating the publicly visually accessible space quantity constraint and in its opportunities for ordering the unmanaged ('unplanned' 'unordered') urban development context.

For the literature to be more effective in such contexts signage classification shall be simplified and together with their form they shall be related to the PAD and objective management tasks (opportunities and challenges) related to the dominantly unmanaged urban development shall be included and emphasized.

Table 1 shows how signage form classification can be simplified and PAD related. Shape and orientation variations can be reduced to three types: orthogonal (90 degree sides and connections based), de-orthogonal (all other degrees), and mixed. Scale variations can be based on the scale of buildings which are the dominant elements of the urban environment and which are commonly the dominant outdoor signage containers.

Table 1: Simplified and PAD related Outdoor Signage Form Classification

	Simplified and PAD Related Outdoor Signage Form Classification	
1.	Shape	Orthogonal, de-orthogonal, mixed ('blendist')
2.	Orientation	Orthogonal, de-orthogonal, mixed ('blendist')
3.	Scale	Small-scale, sub-story scale, story scale, multi-story scale, multi-span scale
4.	Symbol type	Free standing, on background

Table 2 shows how outdoor signage type classification can be simplified and PAD related. In addition, it shows their objective opportunities and challenges which shall be emphasized in contexts like Ethiopia. Order is assumed to be largely objective because it is defined as the organization principle. In relation to this opportunity and challenge the management task is basically to reject outdoor signage that have unjustifiably wide variation with this principle (the maxi-variationists) and to permit those with no variation or narrow variation with the principle (the mini-variationists). In addition, in the unmanaged urban development context where there is gap in order or such organizational principle the management task includes enabling reduction of the gap.

Table 2: Objective Outdoor Signage Management Tasks Relavant to Contexts like Ethiopia

Simplified and PAD Related Signage Type Classification		Additional Objective Outdoor Signage Management Tasks Relevant to Contexts Like Ethiopia	
		Opportunities	Challenges
I. Signage in the Public Domain (Space)	1.1 Outdoor signage in formal public spaces		• Privatization of public use • Decreasing order (disordering order), • Decreasing space quantity ('aspatialization)
	1.2 Outdoor signage in informal public spaces	Ordering	• Privatization of public use • Increasing disorder, • Decreasing space quantity ('aspatialization)

	1.3 Outdoor signage on structures and objects in public spaces		• Privatization of public use • Decreasing order (disordering order), • Decreasing space quantity ('aspatialization) • Public space frame typology shifting
II. Signage in the Publicly Accessible Private Domain	2.1 Signage in formal private open spaces (public space frames)		• Decreasing order (disordering order), • Decreasing visual space ('aspatialization) • Public space frame typology shifting
	2.2 Signage in informal private open spaces (public space frames)	Ordering	• Increasing disorder • Decreasing visual space ('aspatialization ')
	2.3 Signage on formal buildings (public space frames)		• Decreasing order (disordering order), • Decreasing visual space ('aspatialization) • Public space frame typology shifting
	2.4 Signage on informal buildings (public space frames)	Ordering	• Increasing disorder • Decreasing visual space ('aspatialization ')

V. Case Study of Outdoor Signage and their Supply Process in Addis Ababa

5.1 Introduction

Addis Ababa the capital of Ethiopia is the largest city in the country, and as a result, it concentrates most of the business and thus most of the signage demand and supply. Spatially businesses are concentrated in its market centers, the main center and sub-centers and urban corridors that connect

them and radiate out of them and which are often crowded with pedestrians, informal trade, small-scale public transport, and private cars.

The city was established at the end of the 19th century before the introduction of modern urban planning to the country. It was also the first to get an urban master plan but until very recently the majority of its parts were developed informally. The majority of its population are low-income and therefore lack access to adequate quantity and quality of space in the private domain. The case study is organized into analysis of the result chain (the signage supply process, the management system, and the result).

5.2 The Signage Supply Process

The outdoor signage supply process in Addis Ababa consists of three major stakeholders: the signage demand side and the signage and its container supply sides. The main components of the demand side are government and private businesses. Private businesses are mainly located in spatial arrangements that allows them to be directly accessible individually from streets, or collectively accessible through intermediate spaces in the private domain.

The demand side is essentially involved in the selection of the signage container supplier and the advertising company. It also involves in the planning and design of the signage and its permit securing process. The advertisement companies are of two major types: those which involve in the planning, design, manufacturing, and installation of signage and those which involve in the latter two activities only. The container suppliers are of two major types: off premise container suppliers and on-premise container suppliers. The first supply signage containers to the demand side by either renting existing structures or by erecting container structures (like billboards) by leasing land mainly from the government. These types of suppliers are required to be licensed. The second types supply containers owned by themselves and are therefore not required to be licensed.

The supply process has a very limited awareness of the opportunities and challenges of signage for the PAD quantity and quality. For example 9 out of 10 advertisement companies indicated that the demand side typically demanded signage forms that are maxi-variationist and eye catching regardless of their relationship with the form of their container. In addition, 8 out of 10 admitted that they themselves rarely attempted to manage the challenge posed by the signage form for the order of the PAD or its component containers and other signage.

5.3 The Process's Failure Management System

As discussed in the literature review the management system has different levels and consists of institutions, management tasks (goals), management strategy (like regulation, persuasion, etc), and management capacity (including financial and technical). The technical part includes human resource, technology, infrastructure, and management instruments like regulations, guidelines, etc. The latter are the main sources of data on management task.

Addis Ababa does not have a city level signage supply process management system. It only has sub-city and local (woreda) level systems. The local level system controls signage on local roads and shop fronts but it is not mentioned explicitly in the structure of the organization in which it is organized. The sub-city level system is responsible for signage on main roads and for:

- Deciding the locations of off-premise billboards
- Giving Outdoor Advertisement signage permit as per the rules and regulations
- Inspection of permitted signage design implementation.
- It is also organized only as an ad hoc together with the Building Use Permit Control which is one of the four teams organized under the Construction Industry Licensing and Control Works Coordination which is in turn one of the wings of an office called the Construction Industry Licensing and Control Office.

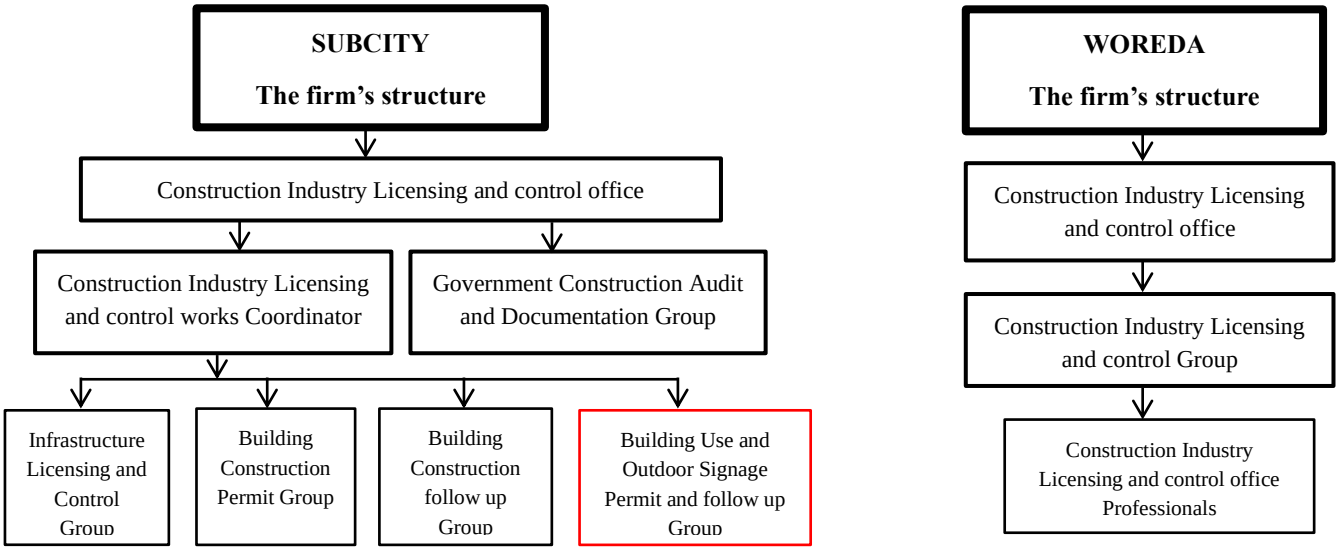

Figure 1: Structure of the outdoor signage control departments

(Translated from Amharic by the author)

The office is poorly manned and equipped. It has only one staff responsible for signage permit. The staff does not have specific training or qualification for the job. In addition, the office is poorly provided with resources for major activities like inspection.

The management strategy at both levels is regulation. Currently the main management instrument for on-permise and off-permise signs on local roads is based on the 1997E.C (2005) outdoor advertisement regulation. But for off premise advertisement on main roads there was no regulation since 2005E.C (2012?) because the regulation has been under amendment and because the directives and guidelines could not be prepared before completion of the amendment. The existing regulation has 31 major Articles. It suggests close to 20 signage types classified based partly on container types, material, and technology.

They are summarized into seven types for service fee determination purposes. The summary does not include penalties for unpermitted signage. Explicitly stated challenges intended to be managed include fire safety, traffic safety, and 'ruining the aesthetics of the city and buildings'. Short analysis of the regulation by using the urbanist-contextualist management task is provided hereunder:

Order Challenges

Art. 15 of the regulation attempts to manage the order challenges of signage scale and quantity on building roofs but it leaves their color, intensity, orientation and pattern unmanaged. Similarly, Art. 16 requires that signage close to each other should have similar scale and shape but again leaves their color, pattern, intensity, orientation, etc which are very important ordering form elements unmanaged. In addition, while in most circumstances the signage container order like that of buildings is constant the regulation allows signage forms to vary freely by using requirements such as 'not more than', 'should not exceed', 'not greater than', and 'not less than.' For example Art. 16 requires signage width not to exceed the width of building elements they are supposed to be installed on. But, in addition to neglecting the signage form elements outside width, it allows the width itself to be variable and therefore to be potentially in a maxi-variationist and disordering relationship with the width of the building elements.

Privatization of Public Space

The regulation appears to allow location of private billboards in public spaces. Art. 5 and 7 mention the spaces by name as main and local roads while Art. 6, 12, 13, and 14 use the signage types of 'digital advertising billboards', 'large billboards', 'free standing small billboards', and 'free standing digital billboards' respectively that implicitly suggest the public space container. Art. 4 is quite explicit. It allows locating multiple private signage on street roundabouts including at their centers which are historically used for placing public monuments.

Public Space Frame Type Shifting Challenges

Plot boundaries such as fences, buildings, and spaces under private control are public space frames and signage quantity has challenges not only for the order but also for the type of this frame: large quantity of signage can shift the frame from open space, landscape, wall or building façade to signage and alter the quality of the public space. The regulation does not have adequate provisions to manage this challenge.

Aspatialization of the Visually Publicly Accessible Space

The public space frame under private control discussed above has opportunities for increasing the quantity of the visually publicly accessible space. Private open spaces and even building interiors can be visually, if not physically, accessible to all and thereby increase visual space quantity. While signage have the challenges of wasting these opportunities the regulation does not have provisions for managing the challenges. In fact, Art. 19 allows signage location on windows only at the ground floor at the very level building interiors can most effectively contribute to visual space quantity.

Ordering Opportunities

Signage form also has the opportunities for ordering disordered containers. In contexts like Ethiopia the disordered containers are likely to be the majority since the public space frame elements described above can all be developed informally or unmanaged. Even many parts of the public space itself like river areas and open spaces can be unmanaged and therefore disordered. The regulation does not have provisions for exploiting the opportunity of signage for ordering the disorder.

Study of the Process's Result: the implemented signage cases

Case Selection Criteria

The outdoor signage supply process's results were studied by selecting cases because the results are quite large in number. Therefore, cases were selected by using two major methods:

1. By using the simplified and PAD related outdoor signage types classification and

2.By using the responsive and unresponsive to the objective opportunities and challenges based outdoor signage supply process type classification.

Data were analyzed by using:

- The simplified PAD related signage form
- The signage supply process's performance in being responsive to the objective opportunities and challenges and the supply process's type (in terms of management of its failures: managed/unmanaged) that had been driving the performance.

5.4 Unresponsive Signage

These are cases in which opportunities and challenges for the public space use, quantity and quality are unexploited and unaddressed.

Case 1. Signage in a formal public space

Figure 2: Photo showing signage at Arat kilo round about

Table 3: Analysis for unresponsive signage in a formal public space

Analytical Framework				Data
Signage Type	PAD container type			A formal public space, the Arat Kilo round-about with the liberation monument located at the centre
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Double storey
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: maxi-variationist
		Spacing		Dense, irregular top and bottom
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - public space privatization - disordering - public space frame type shifting: the public space frame which was building façade and green is now shifted to signage

Case 2: Signage on a Structure in a Public Space

Figure 3: Photo showing signage on the structure of the railway infront of Mariot Hotel

Table 4: Analysis for unresponsive signage on a structure in a public space

Analytical Framework				Data
Signage Type	PAD container type			**Structure in public space:** the LRT Bridge Structure (in front of Mariot Hotel)
	PAD related form classification	Shape		Orthogonal,
		Orientation		orthogonal
		Scale		Double-storey, multi-span
		Symbol		Maxi-variationist
		Surface quality		Color: maxivariationist
		Spacing		Dense
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - public space privatizing - disordering: color: maxi-variationist; symbol: maxivariationist: shifting to figure ground type (the whole, the pillars and beams)

Case 3 : Signage on a Formal Building Frame

Figure 4: Photo showing signage on a building (Lemat le edget) at Sebara babure

Table 5: Analysis for unresponsive signage on a formal building frame

Analytical Framework				Data
Signage Type	PAD container type			Formal building frame (Sebara Babur area)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Small
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: maxi-variationist
		Spacing		Dense, irregular top and bottom
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - disordering (color: maxi-variationist; symbol: maxivariationist, scale: maxivariationist) - Frame type shifting

Case 4: Signage on a Heritage Building frame

Figure 5: Photo showing signage on a heritage building at piassa

Table 6: Analysis for unresponsive signage on a heritage building frame

Analytical Framework				Data
Signage Type	PAD container type			Heritage building frame at Arada
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Small
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: maxi-variationist
		Spacing		
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenges unaddressed: - disordering (color: maxi-variationist; symbol: maxivariationist, scale: maxivariationist) - Frame type shifting: from heritage to ordinary

Case 5: Signage on the Spatialist Part of a Formal Building Frame

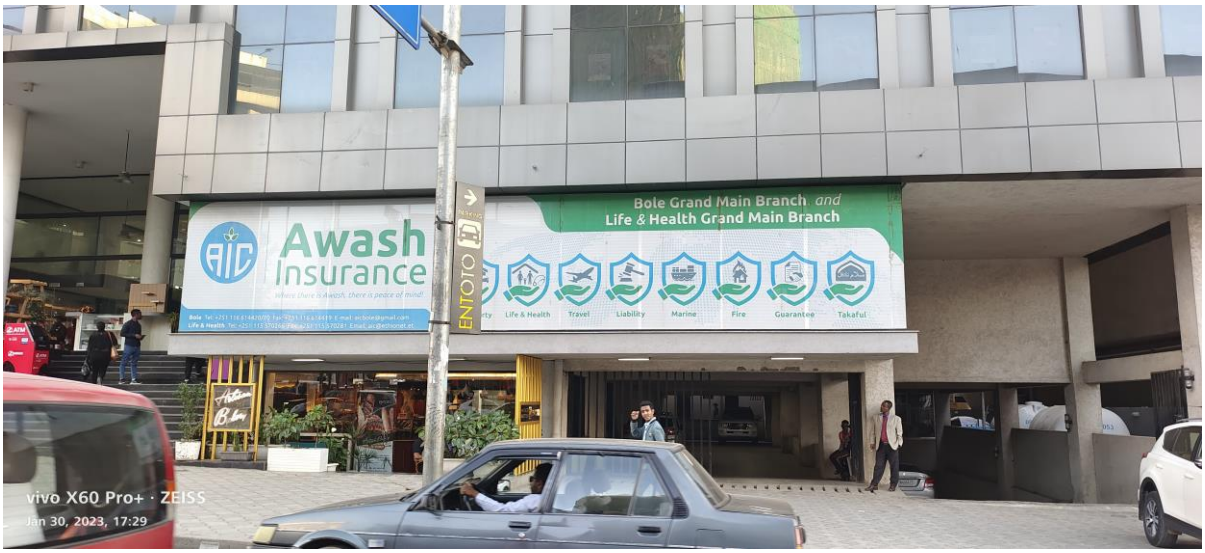

Figure 6: Photo showing signage on a building at bole road around Japan area

Table 7: Analysis for unresponsive signage on the spatialist part

Analytical Framework				Data
Signage Type	PAD container type			A formal building frame's spatialist part (Bole Road)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Full span
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: mini and maxi-variationist
		Spacing		Dense
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Challenge unaddressed: - Aspatialization

Case 6 : Signage on Informal Building Frames

(a) (b)

Figure 7: Photo showing signage on informal buildings at 5kilo (a) and piassa (b)

Table 8: Analysis for unresponsive signage on informal building frames

Analytical Framework				Data
Signage Type	PAD container type			Informal building frames (Piassa, Amist Kilo area)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Small, maxi-variationist
		Symbol		Maxi-variationist letters and images
		Surface quality		Color: mini and maxi-variationist
		Spacing		Dense, irregular bottom and top
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		
		Unresponsive		Opportunities unexploited: - ordering

5.5 Unresponsive Signage

These are cases in which opportunities and challenges for the public space use, quantity and quality are exploited and addressed.

Case 1: Signage in an Informal Public Space

Figure 2: Photo showing signage on a bridge located on bole road

Table 9: Analysis for responsive signage in an informal public space

Analytical Framework				Data
Signage Type	PAD container type			An informal public space (a river); Bole Road
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Multi-span, full storey
		Symbol		Maxi-variationist images
		Surface quality		Color: mini and maxi-variationist
		Spacing		dense
Signage supply process	Type	'Perfect'		
		Imperfect	Managed	Public sector signage
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		Opportunity exploited: - ordering
		Unresponsive		

Case 2: Signage on an Informal Building Frame

Figure 9: Photo showing signage on informal building at Haya hulet

Table 10: Analysis for responsive signage in an informal public space

Analytical Framework				Data
Signage Type	PAD container type			An informal building frame (Haya hulet area)
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Sub-storey
		Symbol		Maxi-variationist images
		Surface quality		Color: mini and maxi-variationist
		Spacing		
Signage supply process	Type	'Perfect'		‘Perfect management system’
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		Opportunity exploited: - ordering
		Unresponsive		

Case 3: Signage on a Formal Building Frame

Figure 3: Photo showing signage on a formal building at Sement hotel

Table 11: Analysis for responsive signage on an informal building frame

Analytical Framework				Data
Signage Type	PAD container type			Formal building frame
	PAD related form classification	Shape		Orthogonal
		Orientation		Orthogonal
		Scale		Multi-storey
		Symbol		Maxi-variationist images
		Surface quality		Color: mini -variationist
		Spacing		
Signage supply process	Type	'Perfect'		‘Perfect management system’
		Imperfect	Managed	inadequately managed: - management instrument is inadequate - review for content and fee only - inspection: never done
			Unmanaged	
	Responsiveness to objective challenges and opportunities	Responsive		Challenge addressed: - disordering
		Unresponsive		

VI. Findings:

The research has two major findings:

- Outdoor signage management task in Addis Ababa is oversized while the management capacity is undersized,
- The urbanist-contextualist management task resizing preliminary solution approach appears to have a good potential for reducing the gap,

Management Task is Oversized while Management Capacity is Undersized

The analysis above indicates that even though the signage management task in Addis Ababa is undersized compared with mainstream practice because it excludes challenges like identity and sense of place it is oversized for the management capacity in the city. On the one hand, the capacity is insufficient to manage even basic challenges like content, fire safety, and traffic safety through the complete procedures of signage design review and design implementation inspection but, on the other, the task includes aesthetics which is a subjective challenge. However, the regulation document and the result on the ground indicate that there is no significant implementation of management of this challenge.

The Urbanist-contextualist Management Task Resizing Approach has Good Potentials

The urbanist-contextualist approach was intended to resize the management task not only by reducing the types of signage but also by resizing the challenges and opportunities by focusing on the objective ones like quantity of signage, space quantity reduction (aspatialization), privatization of public space, and order (the more objective aspect of aesthetics) in addition to safety. It attempts to simplify the management of the more complex management of private signage in public spaces through banning and the challenges and opportunities of order by using the order of the signage containers like buildings. The new challenge of Aspatialization and the new opportunity of ordering disordered signage containers like informal buildings have the effect of increasing the substantive management task. However, overall the approach has the effect of decreasing the procedural management task because it intends to manage the more complex order challenge by the order of the signage containers and to exclude public spaces from the list of private signage containers.

Conclusion

The research has indicated that there is gap in the literature in outdoor management system for contexts like Ethiopia where low level and slow industrialization but rapid rate urban transition is likely to lower management capacity, create public and private domain space quantity constraints, and introduce the unmanaged/informal signage containers like buildings and open spaces. More specifically, the research has indicated the following gaps in the literature:

- The disordered container ordering opportunities of outdoor signage,
- The aspatialization challenge,
- The public space frame typology shifting challenge,
- A common framework of analysis for signage and their container, the PAD in general and its dominant component the building frame in particular

Recommendations

In addition, the research has indicated the need for the following actions for improving development practice by reducing the gaps of management of the outdoor signage supply process's responsiveness failures to its opportunities and challenges for the public spaces use, quantity, and quality:

- Planning for increasing outdoor signage management capacity with increase in urbanization level to gradually match it with management task
- Revising the outdoor signage regulation for Addis Ababa by focusing also on:
  - The private bill board free public space and heritage frame,
  - The use of a common framework of analysis for signage and their containers and the use of, particularly, the building container order (Architectural design) regulated signage form and quantity,
  - The disordered frame ordering opportunities of outdoor signage, and
  - The aspatialization challenges of outdoor signage.
- Using percentage of the container surface to manage the frame typology shifting challenge,
- Using financial penalty to manage the challenge of unpermitted signage and to reduce the inspection task, and
- Doing research on how building facades, which are the main containers of signage, can be collectively ordered in the absence of management by urban design.

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ANNEX II

A. QUESTIONNAIRES RELATED FOR BUSINESS OWNERS AND ADVERTISEMENT COMPANIES

For the partial fulfillment of the requirement of master's degree in urban design and development from Addis Ababa University, I am conducting this dissertation on "developing a frame work for signage visual quality on public space", the result of my study can be used by the municipality or other existing problems (if any) related to signage in the city. So, I politely ask you to give me clear and unbiased information on what you are asked below.

I. PERSONAL INFORMATION

1. Name of Company:

_____

2. Your Address:

_____

3. For how long have you worked in this business?

□ Less than 2 years □ 2-5 Years □ 5-10 Years □ More than 10 years

II. QUESTIONNAIRES TO GET GENERAL INFORMATION

1. Which one describes best most request from customers?

□ Signage that is very bold, eye-catching and different

□ Signage that matches with the building and adjacent signage

5. Who decides on the design of the signage?

□ Customer □ The Advertising company □The governing body

6. Who decides on the number signage?

□ Customer □ The Advertising company □The governing body

7. Do you consider the billboards around the area and the building the signage is going to be installed on before designing billboard to be constructed?
   □ NO □Yes

8. Do you do maintenance after signs are mounted?
   □ NO □Yes

B. QUESTIONNAIRES FOR SELECTED OFFICIALS OF THE TOWN MUNICIPALITY

For the partial fulfillment of the requirement of master's degree in urban design and For the partial fulfillment of the requirement of master's degree in urban design and development from Addis Ababa University, I am conducting this dissertation on "developing a frame work for signage visual quality on public space", the result of my study can be used by the municipality or other existing problems (if any) related to signage in the city. So, I politely ask you to give me clear and unbiased information on what you are asked below.

A. PERSONAL INFORMATION

Your department _____

Your position in the town's municipalities (in department)_____

Your total work experience in the municipality _____

II.QUESTIONNAIRES ON GENERAL INFORMATION OF THE CITY

1. Total number of commercials companies to request permits and get approval?
   _____
2. What are the major conditions which can be considered as the strengths of the management system?
   _____
   _____
   _____
   _____
3. What are the major conditions which can be considered as weaknesses of management system?
   _____
   _____
   _____
   _____
4. What are the major requirements to get a permit?
   _____
   _____
   _____
   _____

ANNEX III

THE STANDARD RULE AND REGULATION

1. Outdoor Advertising permit level

In this the responsibility of the municipalities and the local authorities (Woreda) is stated. The municipalities give permit to outdoor advertisements on buildings at main roads and on local roads if the advertising board is digital. On the other hand the local authorities give permit to advertisements within their property; banners, posters, brochures, and flyers finally advertisement on local roads.

2. Outdoor Advertising standard conditions

Here standard conditions for the advertisement is set some of them are:

- Signs should not block sun light, heritage site and traffic flow of both vehicle and pedestrians.
- Signs should have Amharic as its communicating language.
- If the sign board includes glass as one of its materials then the glass should have a thickness of 6mm and should not shatter from breaking.
- If the sign board is only one sided then the back of the board should be covered with a material that does not ruin the aesthetics of the city.
- The sign must be kept clean by the owner of the sign.
- Sign billboards should not be left empty for the purpose of aesthetics.

3. Required applications for permit

List of documents and applications required are:

- Sign board Architectural and Structural design.
- Request letter including size and if it uses electric power, source of the power.
- Writing, picture or shapes on the sign to be advertised.
- Lize agreement and temporary karta.
- Renewed license

4. Standard conditions for advertising billboards on roundabouts

Some standard conditions put for advertisement on roundabouts are:

- No advertising billboard is allowed in the middle of a roundabout except if there is a company that is developing and taking care of the roundabout and has permission from Addis Ababa road authority.
- Distance between two billboards should be at least 3m.
- The size of the billboards is set before bid

5. Standard conditions for advertising boards on main roads

- Distance between two consecutive boards is a minimum of 50m.

- The size, the type and location of the sign is set before bid.
- Information like advertisers name and addresses, permit number, permitting body and permit expiring date should be included on the pole within an area not more than 0.3 square meters.

6. **Standard conditions for digital advertising billboards**
   - They should be 50m away from pedestrian crossings, intersections and roundabouts
   - There should be a 150m gap between two consecutive digital billboards.
   - The message transferred should be at least 8 seconds. It should calculated based on the following formula: visible time of message = distance from the billboard divided by speed limit of the road.
   - Time between two messages should not be more than 1 second
   - Brightness of the screen should not be more than 300 candela per meter square during the day and 100 candela per meter square during the night.
   - Information like advertisers name and addresses, permit number, permitting body and permit expiring date should be included on the screen.
7. **Standard conditions for billboards on local roads**
   - The signs should not be reflective as well as blinking
   - Information like advertisers name and addresses, permit number, permitting body and permit expiring date should be included on the pole within an area not more than 0.3 square meters.
   - The sign should have a height of 2.5 meter from the ground and there should be a distance of 2m between two consecutive signs.
8. **Standard conditions for advertising signs on building roof top, wall and interiors.**
9. **Standard conditions for advertising on banner material**
   - Should not be hanged on electric or telecommunication poles except for religious institutes, non-profit governmental organizations can do so if have permit from Ethiopian Electric corporation or Ethio telecom and they should be:
     - To advertise time limited situations
     - Cannot be used to advertise product or service
     - Not more than one banner on one pole
     - Should be 2 meter lower than the line and should not be a traffic hazard
     - Should be posted a week before the time limited situation its advertising
     - Should not be posted cross a road
     - Advertising using banners on roundabout is not allowed unless especial agreement with the Ethiopian road authority
10. **Standard conditions for advertising on vehicles**

11. Standard conditions for advertising by using flyers and posters

- Posters, small stickers, flyers, brochures, leaflets:
    - Should be posted on posting boards
    - Posting on fences, bus stations, telecom or electric poles is not allowed
    - Advertising by scattering these type of advertisements on air is not allowed
    - The above criteria's are not applied for non-profit governmental bodies
    - The advertiser takes responsibilities for the content or conveyed message

12. Large Billboards

- Large three dimensional bill boards (Super Billboard)
    - The area should not be less than 40square meter and greater than 81square meter.
    - If there is a passage underneath, the height of the billboard from the ground should have a clear height of 2.5m and a total length from the ground should be a maximum of 20m.
- Custom-made free standing billboards should:
    - Not have an area less than 8 square meters and greater than 36 square meters.
    - The height and width consecutively should be 3mx12m, 3mx6m, 2mx4m
- Large-billboards
    - These are billboards with an area not less than 18 square meters
    - If there is a passage underneath, the height of the billboard from the ground should have a minimum clear height of 2.5m and a total length from the ground should be a maximum of 7.5m.

13. Free standing small billboards

- Small billboards should not have an area less than 4.5 square meters
    - The height and with consecutively should be 1.5mx2.5m, 1.5mx3m, 1mx4m.
- The height of the billboard from the ground should have a minimum clear height of 2.5m and a total length from the ground should be a maximum of 4.5m.

14. Digital Billboards

- Should be fire resistant
- Should have its own electric line, conductor and switch
- If it is free standing it should not have an area greater than 6msq and should not have a height and width less than 2m,1m respectively and greater than 1.5m, 3m respectively.

15. Billboards on building roof top

- It is not allowed to install more than 4 signage.
- Should not go beyond the roof top

- Signage on the roof of a building with more than 15 floors should not have an area less than 75sqm and more than 300sqm.
- Signage on the roof of a building with less than 6m height or 2 floors then the signage area should be 2msq.
- Signage on the roof of a building with a height between 6m up to 9m or 3 floors then the signage area should be 6msq.
- Signage on the roof of a building with a height between 9m up to 12m or 4 floors then the signage area should be 12msq.
- Signage on the roof of a building with a height between 12m up to 18m then the signage area should be 14msq.
- Signage on the roof of a building with a height more than 18m then the signage area should be 18msq.
-

16. Advertisement on building interior and exterior
    - An outdoor signage installed on beam, railing, corridor, balcony, column and so on should not exceed past the building element and should not block windows and entrances including fire exits.
    - Signage on beam should not have a height and width more than 0.75m and 3m.
    - Should not go beyond the structure it is installed on
    - Should in similar size and shape to the signage next to it.
    - Awining signs should not have a height less than 2.5m; should not ruin the aesthetics of the building and should not block pedestrian walkway.
17. Painted advertisement on building façade
    - Should not exceed 15% of the façade it is painted on or should not exceed 36sqm.
    - The painting should be recessed 30cm in all direction of the facade
18. Projecting signage
    - Should be installed in portrait manner
    - If it is placed at a height under 6m then it should not have a height, width and area greater than 3m, 1.5m and 2.4sqm respectively.
    - If it is placed at a height greater than 6m it should not have a height, width and area greater than 5m, 2m and 8sqm respectively.
    - It should not be installed at a height less than 2.5m.
    - It should not block windows, doors or fire exits.
19. Advertisement on windows
    - Could only be put on the ground floor of the building
    - The glass outdoor signage is put on should have a minimum thickness of 0.6cm.

20. Advertisement on fences
    - Should not be greater than 18 square meters
    - Should not extend out from the fence
    - If more than one they should have similar size and shape
    - If it is a construction site the size can be equal to the fence
21. Monumental signs
    - Should not be placed on pedestrian walkway
    - If the sign is one sided then the size should not be more than 2 square meters and it is two sided then it should not be more than 4 square meters.
22. Hanging signs
    - The area should not be more than 7 square meters
    - The sign should be hanged one month before the conveyed message time starts and afterwards it should not stay more than seven days.
23. Advertisement on street furniture
    - Should not be placed in a way it interferes with the function of the element.
    - Should not be placed in a way it becomes a traffic hazard.
    - Should not extend beyond 30cm from the element it is placed on.
24. Three dimensional outdoor advertisement either on ground or building
    - Should not have a height greater than 2m and a width of 1.3m in diameter
    - If on the ground the height should not extend beyond 4m from ground
25. Outdoor advertisement on floating balloons and similar kinds
    - When floating or moving it should not be a hazard to planes.
    - The advertiser should first get a permission letter from the responsible body and present it to the office.
    - Should not float more than the height permitted.
    - Should not float in restricted areas.
    - It is restricted on any kind of roads
26. Restricted outdoor advertisement
    - Illegal drugs
    - Drugs that are not taken without doctor’s prescription
    - Narcotic or psychotherapy drugs
    - Weaponries
    - Betting advertisement
    - Loan shark advertisement
    - Cigarette and other nicotinic products

- Advertisements with political intentions except for registered opponent parties during election
- Advertisement conveying a message that alcohol is good for health; that it improves private and social success
- Advertisement without permit
- Changing content of the sign after permission without a second permission

27. Banned outdoor advertisement
    - Based on regulation number 41/2011 any kind of Alcohol advertisement is not allowed.
28. Terminating advertisement work
29. Advertisements free from service payment
30. Advertisement service payments
31. Advertisement service payment collection methods
32. Outdoor Advertisement work service payment amounts

Table: Outdoor Advertisement service payment standard

No.	Outdoor Advertisement type	Measuring unit		payment In birr
1	On-premise sign either on building or fence	Square meter	A year	250.00
2	On-premise free standing sign	Square meter	A year	500.00
3	Off-premise free standing sign	Square meter	A year	600.00
4	On building roof top	Square meter	A year	500.00
5	On vehicles	Square meter	A year	300.00
6	Hanging signs	Square meter	daily	25.00
7	Signs on poles and free standing elements	by page	once	0.25
8	Flyers	By page	once	0.25

There is also a regulation concerning outdoor advertisement under the bureau of land development and management. It is concerned about temporarily acquirement of places set for outdoor advertising. This regulation describes the services that are allowed temporary placement where one of them is advertisement on billboards. It contains how to renew and for how long temporary lize agreement is valid; It describes which advertisement are free from payment; It also describes how to apply for temporary land acquirement.

The above listed points are the current regulation and a new rule and regulation is underway the rule (denbe) in general contains the following

The final draft of the rule has six chapters:

B. General Definitions:

- This part defines meaning of some words used as per the context of the regulation

C. Requirements for implementing outdoor advertisement work and content of plan preparation

- This section lists general requirements that need to be fulfilled such as the advertisement should comply with the master plan as well as the local development plan; it should not stir any traffic sign; it should be energy saving if it uses any and other general requirements
- The other decree of this section is about the content of the advertisement. It states that the advertisement should be ethical, truthful, not disregard others product or service; must be written local language (can have additional other language) and not go against the societies cultural and social value.

D. Outdoor advertisement work right and permission process

- It states about the rights of citizens to do advertisement works as well as the approval process needed to work
- About billboard construction permission
- About permission renewal
- About special assurance letter requiring advertisement
- About disclosure of change in address
- About ending outdoor advertisement of certain product or service
- About giving priority to citizen's common good
- Outdoor advertisement placement location
- Location of advertisement given by bid
- Renovation or change on the outdoor advertisement

E. Outdoor advertisement work competency authentication and implementation control

- Outdoor advertisement general certification rank
- Outdoor advertisement time line
- Electoral competition for advertising time line
- Property damage control
- Setting guideline for outdoor advertisement quality and standard rank
- Service fee and its timeline
- Free service fee formality
- Outdoor advertisement works rules and monitoring responsibility

F. Implementing bodies responsibility and duty

- The responsible officer duty and responsibility
- Land bank and transfer agency duty and responsibility
- Addis Ababa city traffic police duty and responsibility
- Peace and safety administration duty and responsibility

G. Special decrees

- Obligation of co-operation
- Unwarranted removal of outdoor advertisement
- Submitting petition to the permission giving body
- Submitting appeal
- Transition decree
- Penalty
- Dismissed regulations
- Power of formulating rules and guidelines accordingly to the regulation
- Regulation working time line

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