

Factors Determine the Practicality of Architectural Design Service Fee Scale in Ethiopia

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Abstract: The adoption of an Architect's fee scale is important to improve ethical practice, promote innovation and improve the quality of architectural design service in Ethiopia. However, the effort of regulatory agencies is required to be more than preparing draft documents, submit to the responsible body, and waiting for endorsement. It is mandatory to work on factors that determine the practicality. The purpose of this study was therefore to identify factors determining the practicality of the Architecture service fee scale in Ethiopia through the assessment of principal architects' perceptions and experiences. The study was limited to Architecture design services and Principal architects. Principal Architects of firms registered for Architecture Service were asked to rate pricing strategies and factors related to market chain, institutional capacity, political economy, and market devices. A stratified sampling technique was adopted to sort out consulting Architecture firms across the country. The questionnaires were administered to 160 principal architects of consulting architecture firms in Addis Ababa, Bahir-Dar, Adama, Dessie, Harrar, and Dire Dawa cities of Ethiopia. A total of 57 responses were returned, but during the data pre-analysis task (response screening) one questionnaire from non-principal Architects was discarded. The perception of principal architects is evaluated on listed factors that fall into major categories such as institutional capacity, market chain, political economy, and market devices. The perceptions, which influence the use of the different approaches, were also presented. The author summarized, the identified factors in client/public Awareness creation, Collaboration, Requirements for Registration, licensing, Construction Permit and Control, Managing Human Resources, Managing Professional Ethics, Privatization/ free-market economic policy, Impacts of other policies such as Lease, Administrative structure of the Country, Quality of Architectural design service delivery.

Keywords: Architectural Design Services, Fee Scale, Principal Architects, Pricing Strategies, Regulatory Agencies

1. Introduction

The adoption of an Architect's fee scale is important to improve ethical practice, promote innovation and improve the quality of architectural design service in Ethiopia, however, it is also important to work more on its practicality. "According to Beale fee scale means the lack of price competition [4]". The primary purpose of the Fee Guide according to Beale is to support a fair exchange of value in establishing appropriate fees for an architect's professional services. He also states the idea behind the RIBA fee scales in the twentieth century was that clients choose an architect based on aptitude and availability rather than price. further, define Pricing strategy as the policy a firm adopts to

determine what it will charge for its products and services [20]. However, in the countries where the fee scale adopts Architects are obliged to refer to fee standards. However, Oluwatayo et al. states the construction industry has been said to be highly competitive, competition on price is often discouraged in the architectural industry [16]. The regulated percentage fees have been used in pricing design architectural services since the inception of the professional practice of architecture [16].

Professional bodies regulating the practice of architecture in several countries publish approved means of remuneration for architects. Oluwatayo et al. states countries also that have regulated percentage fees (Nigeria, Switzerland, Germany, and South Africa among others), while others (such as Canada) have done away with such price regulations as can be seen on

the professional practice abroad page of the International Union of Architects website. According to Beale RIBA fee scales were: Mandatory until 1982, Advisory until 1992, and abolished in 2009. Under the law of Kenya, the architects and quantity surveyors act, [1], established the minimum fee for normal service is 6 percent for new works and 10 percent for works on existing buildings [4]. Oluwatayo et al states, though professional bodies specify percentage and time charges, there are indications that these firms use other approaches [16]. They argue that is probably because of the complaints that clients are not willing to pay these percentage fees. They finally conclude that pricing approaches for architectural services may have been tailored to suit local requirements.

The 15th General Assembly approved recommended architects' fee scale [2]. The association noted that the absence of such a standard has had a dismal impact on the ethical practice of architecture and has led to a dysfunction in the market for architectural services however there have not been established architects' fee standards in Ethiopia. The Association, therefore, adopts the attached simplified and flexible AEA Architects' fee standard based on the UIA Accord on recommended international standards for professionalism in architectural practice, Consideration of current local context, and long-term application by BDE. However, Samuel states that there is hope for a government to decide on threshold fees in the construction industry for design and supervision works [19]. Therefore ECAEA had submitted the draft document to a government body. This evidence confirms that till present, the issue of fee scale remains the issue of discussion with government bodies and the recommended fee scale by AEA did not provide a solution. This probably signifies as there is the gap from the Association of Ethiopian Architects (AEA) on managing the recommended fee scale for its practicality.

Royston et, al. defines Regulatory agencies as the state, the Securities and Exchange Commission, and professional associations that facilitate the achievement of very specified objectives, especially in providing, regulating services, and enhancing the careers of professional members [17]. On the other hand Consulting Architects of Alberta defines Consulting architects are business owners or managers who own or work for independent architecture or multidisciplinary design firms [7]. Enforcement of certain standards therefore in Architecture will determine by the institutional capacity of these regulatory agencies and consulting Architects. For these reasons, the research focuses on identifying factors determining the practicality of fee scale in Ethiopia. According to evidence from the literature the factors primarily fall into four categories: these are institutional capacity, market chain, political economy, and market devices [15]. Using Mean rating, ranking, and comparing mean values of responses from principal architects. The study is significant for literature and empirical evidence for further studies regarding fee scale, pricing strategies, and institutional capacity assessment, and it is expected to be an input in the process of deciding and managing thresholds fees in Ethiopia.

2. Literature Review

2.1. Architectural Design Service Fee Scale

Lincicome, R. and Weimin Z. broadly categorized Architectural services into pre-design services; design-through construction phase services; post-construction services [12]. According to Hayes most pre-design and postconstruction services are considered “additional” and those associated with the design through construction phases are considered “basic,” although many additional services can occur in these phases as well [11]. The UN Provisional Central Product Classification divides Architectural Services is divided into Advisory and pre-design architectural services, Architectural design services, Contract administration services, Combined Architectural design and Contract administration services, and Other Architectural Services. Architecture is a design service that means the provision of preliminary studies, designs, models, drawings, specifications, and technical documentation.

According to Beale Fee Scale refers to the lack of Architects' competition on price and that support a fair exchange of value in establishing appropriate fees for an architect's professional services [4]. Beale argues the core idea of fee scale is to establish an approach to choosing an architect based on aptitude and availability rather than price. The fee scale is the approach to estimating architectural service price according to the size and complexity of the project referring threshold fee established either by government regulatory authorities or the Architect Association. The calculation may include either as a percentage of the construction cost or hourly rates.

2.2. Factors Determining Practicality of Fee Scale and Selection of Pricing Strategies

Factors determining practicality of fee scale and pricing strategies emanate from the theory of sociology of market and Market devices. The sociology of markets investigates the way social structures facilitate price-setting. [15] The sociology-of-markets literature has shown that social relationships and common understandings about a product evolve to produce stable prices. Hence it draws heavily on three theoretical approaches: Network analysis, Institutional theory in organizational studies, and Political economy. Institutional theory and political economy both emphasize the state's role in constructing markets. Moreover, network analysis and institutional theory both explore how social structures transmit market information, define standard operating procedures, and generate trust. The literature on market devices however focuses on how products are created, evaluated, and priced. The institutions that do this are “market devices.”

2.2.1. Market Network / Chain

According to Neil and Ryan, definition Markets are socially constructed arenas where repeated exchanges occur between buyers and sellers under a set of formal and informal rules governing relations among competitors, suppliers, and customers [15]. Neil and Ryan also state these arenas operate

according to local understandings and rules that guide interaction, facilitate trade, define what products are produced, indeed constitute the products themselves, and provide stability for buyers, sellers, and producers.

Network Analysis is a metaphor, a way of studying the social mechanisms by which key market problems get resolved. The main emphasis area of sociology of markets' is that market actor is embedded in social relationships that define who they are and what they do, then network analysis enables mapping those relationships. The connections among these market actors can affect prices. It signifies the probability that well-connected firms will survive, market participants, compete better, and find customers and suppliers.

2.2.2. Institutional Capacity

According to Neil and Ryan, Institutional theorists often conceptualize markets as fields where firms watch one another, imitate one another, and build niches to reproduce their positions [15]. The observant and reflexive character of firm behavior can often mitigate competition and stabilize markets. Neil and Ryan also stress the institutional theory regarding how the formal laws, regulations, and actions of states and courts have profound effects on price setting and market structure. Moreover, firms can appeal to states for help. When incumbent firms successfully shape the rules governing their industry, they can reproduce their leading positions over time. They also examine the institutional theory and how the internal dynamics of states affect the way they intervene in markets. The structure of courts, ministries, and regulatory agencies, as well as struggles among parties and political factions, all affect state intervention. Informal rules and formal laws provide templates that make it easier for new actors to create new markets.

Since Formal laws granting property rights, safeguarding exchange and competition, and enforcing contracts make the exchange more predictable and conflicts among market participants easier to resolve. The existence of government provides an opportunity for vested interests in such regulation, such as professional bodies, to lobby for statutory support for barriers to entry, which conflicts with the need for competition. Regulatory agencies serve to implement laws and enforce laws. According to Royston et. al, definition Regulatory agencies are the state, the Securities and Exchange Commission (SEC), and professional associations. [17]. Royston et. al. also noted Regulatory agencies, such as professional associations, play an important role in theorizing change, endorsing local innovations, and shaping their diffusion. Agarwal and Islam stated that as non-profit organizations, professional associations usually come up with the interests of particular professions that engage individuals and represent the interest of professional practitioners [3]. They argues voluntary associations perform an important self-regulatory function within the broader scope of the built environment.

(i). Governance

According to William et, al. governance refers to the leadership and direction of an organization, leadership involves articulating and maintaining a vision and mission

for the organization which is shared by the board of directors/trusts or other oversight bodies [21].

(ii). Coherence

Coherence means the direct and indirect relation of regulatory agencies with national contexts such as state structure, economic system, homogeneity, and heterogeneity of society [18].

(iii). Communication

William et, al. stresses two-way communication of regulatory agencies such as the way government informs the regulatory agencies about policy and political issues that affect its target population(s) and the regulatory agencies on the other hand inform the government and local authorities about the situation in the field, the needs of the population(s) being served, and what is required for professionals to provide quality care [21]. On the other hand, communication involves the role of regulatory agencies to educate and engage the public and keep the public informed. The press and media will help the regulatory agencies to achieve this goal.

(iv). Collaboration

William et al. state collaboration is an approach for regulatory agencies to recognize and respond appropriately to the larger context in which it operates, including the social, political, ecological, economic, and other forces which surround it [21]. Which includes having regular contact with other institutions, organizations, groups, and members.

(v). Conflict of Interest

Conflicts of interest can also be created in situations involving members, members, and clients and between employers and employees. This according to Dimity et, al. recommends regulatory agencies specifically professional associations have a constitution, including provisions establishing the governing council and its committees and their decision-making routines [8]. For example, a disciplinary decision might be made, say to expel a member.

(vi). Human Resources

Human Resources refer to all the people connected in any way with the work of the professional association. Among these are management, staff, members, communities, funders, and board members [21]. According to Charles et, al. people are often the most valuable resources of an organization as to how they are developed and managed is critical to their productivity and the organization's success [5]. According to Beale a very important role of the Professional association is to increase the number of its members, and recruitment activities must be ongoing [14].

(vii). Financial Resources

AEA noted that A viable organization will initiate systems and procedures to budget regularly to meet financial needs and obligations, record these financial transactions, and monitor and report on its financial status [21]. Fundraising and other revenue generation, cost-sharing, and other staff efficiencies are means of boosting financial capacity.

(viii). Advocate a Profession and Quality Service Delivery

The regulatory agencies such as professional associations become a power base and a visible representation of the existence of the profession in a specific country and a legal entity with the right to mobilize resources (human, financial, and material) to implement activities and reach goals [14]. It advocates for the development and implementation of regulations for the profession to support mechanisms that protect the public and ensure that safe and competent professionals provide high standards of care. Regulatory agencies may also support, where appropriate, the enforcement of ethical practice and the development of relevant sanctions to be applied when care provision is substandard.

(ix). Knowledge Management

Knowledge Management is the process of acquiring, creating or capturing, sharing, and applying knowledge to fulfill the goals of a for-profit or non-profit organization. Agarwal and Islam stated that, Once Knowledge management is embraced by the association, members can identify and share the best practices and lessons learned, contribute to a thriving virtual repository, and engage in a variety of ways (including face-to-face and online) for gathering and exchanging knowledge [3]. That way, the profession can establish a common viewpoint and an agreed-upon stance regarding specific issues of practice and policy.

2.2.3. Political Economy

According to Neil and Ryan, Political Economy has pioneered thinking about the linkages between states, law, and markets and the historical emergence of systems of governance [15]. The political-economy literature on “comparative capitalisms” is the comparative study of capitalist arrangements and their effects on various outcomes including the role of the state in the market. Research shows that states with disorganized bureaucracies and poorly paid, incompetent bureaucrats are more prone to use their position to gain financial advantage by helping their friends and family or taking bribes and payoffs.

2.2.4. Market Devices

The literature on market devices focuses on a problem that neither network analysis nor the political economy is very good at treating (but that institutional theory arguably is). For markets to work, products need to be created, evaluated, and priced. The institutions that do this are “market devices.” The literature includes at least two approaches to thinking about them. One originates with the idea that we need conventions to make judgments of price and quality simpler. Many of these comparisons involve rankings and other quantitative indices.

3. Research Methodology

The Author adopts a quantitative type of research, since quantitative research, [6] relies on the collection and analysis of numerical data to describe, explain, predict, or control variables and phenomena of interest is a quantitative type of

research. A framework was established to quantify the respondent's perceptions and experiences. Creswell stated that two commonly used quantitative, non-experimental research designs are observational research and survey research.

Creswell stated that Survey research is a second approach to conducting descriptive research its central purpose is to describe the characteristics of a group or population [6]. He defined survey is the primary quantitative research technique in which the researcher administers some sort of survey or questionnaire to a sample, or in some cases, an entire population of individuals to describe their attitudes, opinion, behaviors, experiences, or other characteristics of the population [6]. Therefore research adopted the survey method since the method avails the opportunity to make inferences about the experiences and perceptions of a population.

Primary data are collection conducted Using questionnaires. The questionnaire was administered to Principals of Consulting Architecture/ Engineers Firms. The questions were broadly classified into six sections/ variables (General background, pricing strategy, market chain, regulatory Authorities, Professional associations, political economy, and Market devices). All responses had numeric representation. To ensure that quantitative data collected from the questionnaire is entered correctly, scores of ‘Strongly Agree’, ‘Agree’, ‘Neutral’, ‘Disagree’ or ‘Strongly Disagree’, with the grading of 5, 4, 3, 2, 1 respectively, and percent distribution was constructed. Which is regarding perceptions of respondents. For respondents' experience with pricing, strategies researcher used Never, sometimes, occasionally, frequently, and very often, with a grading of 1, 2, 3, 4, 5, respectively.

To generalize from a random sample and avoid sampling errors or biases, a random sample needs to be of adequate size. [10] Hamed stated that there are numerous approaches, incorporating several different formulas. He, therefore, set a formula written for calculating the sample size for categorical data. The Author used this formula to calculate the sample size of response data.

$$n = \frac{p(100-p)Z^2}{E^2}$$

n is the required sample size P is the percentage occurrence of a state or condition E is the percentage maximum error required Z is the value corresponding to the level of confidence required.

- 1) The margin of error (E) – ± 5
- 2) Population – 160
- 3) Confidential Interval (P) – 15
- 4) Confidential Level (Z) – 99

A stratified sampling technique was adopted to sort out consulting Architecture firms across the country. The questionnaires were administered to 160 principal architects of consulting architecture firms. A total of 57 responses were returned, but during the data pre-analysis task (response screening) one questionnaire from non-principal Architects was discarded. The corresponding minimum sample size for

the population was chosen by stratifying. The strata are based on the location of firms and category of license; the

populations for each stratum were classified hereunder in table 1.

Table 1. Stratified samples.

City-States and Regions	CAT 01	CAT 02	CAT 03	CAT 04	CAT 05	Total	sample	Sample Percentage
Addis Ababa	57	7	27	10	30	131	37	28.24%
Dire Dawa					1	1	1	100%
Harari					1	1	1	100%
Oromiya			1		1	2	1	50%
Amhara	3		6	1	10	20	15	75%
Tigray			1		1	2	-	-
SNNPR			1		1	2	1	50%
Somali	1					1	-	-
Total	61	7	36	11	45	160	56	35%

Data collected were analyzed to get statistical measures such as means and standard deviations for easy interpretation of the study findings. To establish the rank of each of the study's factors concerning their presence in architectural service delivery in Ethiopia, the study made use of average mean and average standard deviation. For a better understanding of the cases under discussion, the statistical package for social sciences, version 20 (SPSS-20), graphs, and diagrams were used for presentation and analysis. Using SPSS the analysis goes through three stages rating, ranking, and comparing mean response values consecutively.

4. Data Presentation and Discussion

4.1. Demography of Respondents

Respondents were requested to indicate their gender category. This was sought because of ensuring gender equity amongst the respondents. Results obtained showed that the majority of the respondent were males (83.9%) and the remaining 16.07% are females. This shows the unbalanced distribution of the gender signifying that the outcome of the

study is dominated by the opinions of males.

Overall, 100% of respondents. Which is composed of 12 (20%) PAR and 44 (80%) PPAR licensure. Eight females have a professional practicing Architect license and one with a practicing Architect license. 11 males have practicing Architect licenses and the remaining 36 males' architects have Professional Practicing License. *Table 2* presents a Comparison of Professional licenses with the gender of respondents based on the mean. Thus, there is by far, a greater discrepancy in gender balance between male and female respondents. However, concerning professional practicing architects Mean value of Females dominate over males.

Table 2. Gender and professional license category Mean Rate.

		PAR		PPAR	
		Mean	N	Mean	N
Gender	Females	0.1111	9	0.8889	9
	Males	0.2340	47	0.7660	47
	Total	0.2143	56	0.7857	56

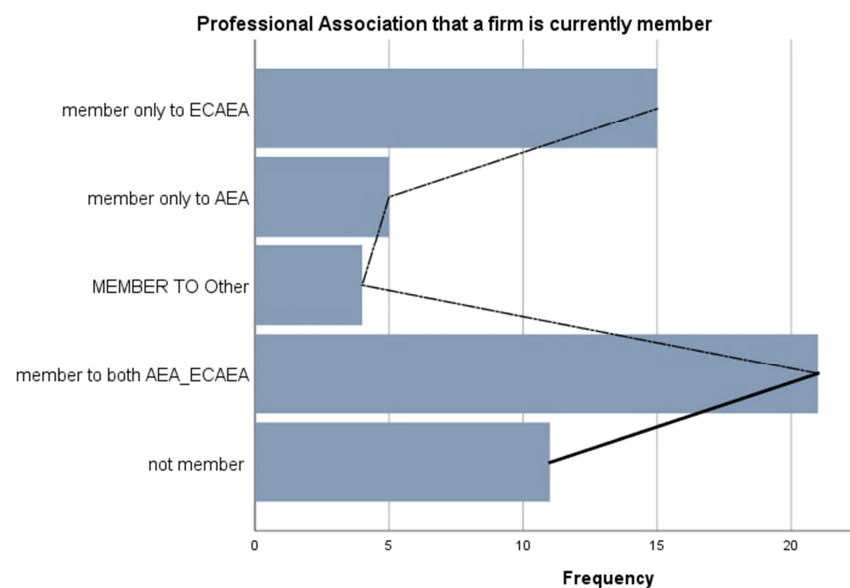


Figure 1. Degree of consulting firms' membership status to professional associations concerning location.

In addition, as depicted in Figure 1, the maximum respondents of the survey were firms that are a member of both Association of Ethiopian Architects and the Ethiopian Consulting Architects and Engineers Association. The respondents from the Amhara region are also a member of the South-Wollo consulting Engineers and Architects Association. This evidence confirms the availability of regional/local chapters.

4.2. Rate and Rank of the Degree of Presence of Factors Determining the Practicality of Fee Scale in Ethiopia

Respondents were requested to rate the factors determining the practicality of the fee scale in Ethiopia. The factors identified were broadly grouped into four categories. These

are: 1) Factors regarding the institutional capacity of regulatory agencies; 2) Factors regarding the market chain of consulting architecture firms; 3) Factors regarding political-economic context/ nationwide, and 4) Factors regarding market devices. Considering the type of response two categories are identified responses based on experience (answer how often) and perception (agree, disagree). Seven variables are such as type of service, pricing strategies, market chain, construction sector regulatory authorities, professional associations, political economy and market devices are fall under these two categories. However, the type of services and type of pricing strategies are “market devices”, and need to study separately.

Table 3. Mean rate and rank of Principal Architects responses on listed factors determining the practicality of Architectural design service fee scale.

Rank by mean Value		N	Sum	Mean	Variance	
		Statistic	Statistic	Statistic	Std. Error	Statistic
1	Architects level of communication skills	56	262.0	4.6786	.08493	.404
2	Integrity to maintain professional ethics in carrying out professional duties	56	261.0	4.6607	.08929	.446
3	Time allotted for design development and documentation	56	258.0	4.6071	.10090	.570
4	Commitment of Architects to Deliver Quality of Architectural Service	56	258.0	4.6071	.09073	.461
5	Use of standard systems/norms for design/construction service processes	56	257.00	4.5893	.10122	.574
6	Privatization of Consulting firms	56	245.0	4.3750	.10053	.566
7	Requirements for Registration and Licensing	56	235.0	4.1964	.10006	.561
8	Impacts of other policies such as: Construction, Lease	56	233.0	4.1607	.10744	.646
9	Total Number of registered Architects	56	229.0	4.0893	.13062	.956
10	Requirements For construction permits	56	228.0	4.0714	.11638	.758
11	Regulate professional ethics issues	56	228.0	4.0714	.17256	1.668
12	Client Perception on Architectural Design Service	56	225.0	4.0179	.10958	.672
13	Total Number of Firms Registered for Consulting Architectural Service	56	225.0	4.0179	.10030	.563
14	Administrative structure of the country	56	223.0	3.9821	.12351	.854
15	Client Consulting Firms relation	56	223.0	3.9821	.11250	.709
16	Conformance of Fee Scale with free market economic policy	56	221.00	3.9464	.14284	1.143
17	Collaboration works other professional associations	56	221.00	3.9464	.10636	.633
18	strength of regulations/statutory requirements	56	221.0	3.9464	.14284	1.143
19	Number of registered members	56	220.0	3.9286	.11913	.795
20	Fee scale can assure quality of Architectural design service	56	220.0	3.9286	.12447	.868
21	Sources Projects	56	220.0	3.9286	.10147	.577
22	Available Architectural Design Service Standards	56	218.0	3.8929	.12400	.861
23	Awareness of its activities among its members	56	216.0	3.8571	.13587	1.034
24	Collaboration work with local and international organizations	56	216.0	3.8571	.10638	.634
25	Availability of forum for Professional dialogue	56	216.0	3.8571	.12068	.816
26	Service delivers by consulting firms	56	214.0	3.8214	.12512	.877
27	Requirements of membership	56	212.0	3.7857	.13891	1.081
28	Availability of Repetitive Clients	56	212.0	3.7857	.11024	.681
29	Organizational Culture in Regulatory Authority	56	210.0	3.7500	.12287	.845
30	Organizational structure	56	208.0	3.7143	.12145	.826

4.3. Discussion

The study demonstrates on identifying factors determining the practicality of fee scale in Ethiopia, following rating, ranking, and comparing principal architects' perceptions and experiences. The data suggest that responses from male, PPAR licensed principal architects are predominant. Principal Architects from CAT 01 firms, location Addis Ababa, and small-size firms also take a majority of statistics. Firms were private limited companies operating in Ethiopia.

The mean ranking of principal architect's perceptions on

factors categorized under the market chain variable revealed that Client Perception of Architectural Design services, Client Consulting Firms relations, and Sources Projects are top ranking factors that determine the practicality of fee scale in Ethiopia. Top-ranked factors regarding variable construction sector regulatory authorities are; Requirements for Registration and Licensing, Total Number of registered Architects, Requirements For construction permits, and Total Number of Firms Registered for Consulting Architectural services. Regarding professional associations, top-ranked factors are; Regulate professional ethics issues, Collaboration

works other professional associations and the Number of registered members. Privatization of Consulting firms, Impacts of other policies such as Construction, Lease, and administrative structure of the country, and Conformance of Fee Scale with free-market economic policy. factors such as; Level of design and managerial competency of practicing architects, Architects' level of communication skills; to fully understand client's requirements and clearly express their ideas, Integrity to maintain professional ethics in carrying out professional duties are also top-ranked in the market devices category. Identified factors are summarized into Awareness creation, Collaboration with Clients, Sources of Projects, Requirements for Registration, licensing, Construction Permit and Control, Managing Human Resources, Managing Professional Ethics, Privatization/ free-market economic policy, Impacts of other policies such as Lease, Administrative structure of the Country, Quality of Architectural design service delivery.

4.3.1. Clients / Public Awareness

Regulatory authorities require to work on creating awareness among the general public; Clients specifically on Architectural Design services, the requirement of construction permits, and the price of Architectural design services. [18] supports the idea that regulators need to be able to communicate strategically, without being perceived as stepping into the political arena. Evidence in the Addis Ababa transportation sector, the commission payment for brokers, and the way lawyers set fees to confirm the importance of creating awareness of the practicality of fee scale. In the transportation sector; For the item to be traded, the government establishes an estimate of benchmark pricing. the parties should submit payment invoices to the transportation authority early before the transaction of goods. Regarding brokers, the general public knows that the percent commission is mandatory to pay so that clients will not bargain on the fee. the voluntary consensus standard is established even no need the government decision to decide on threshold fee. The availability of a forum for professional dialogue; through social media, radio programs, television programs, formal meetings and so on are recognition of excelling architectural practice performance; and the role/mandate of the regulatory agencies.

4.3.2. Requirements for Construction Permits, Licensing, and Renewal

Statistically significant response from a majority of Practicing architects suggests that Requirements for construction permits are important for the practicality of architecture design fee scale in Ethiopia. Principal architects CAT 05 consulting architects and Engineers also agree on its importance. In Ethiopia, project construction will permit only if and only if they are handled by a registered and certified architecture firm. Whenever requests are made to the approval and permitting body, the requesting body should include a land ownership document, a copy of the plan showing the vicinity with the city plan, and present architectural, structural, electrical, sanitary, fire escape,

electromechanical plan, details of buildings in the area of construction, and credentials of the people that prepared the designs. A consent signed by the neighborhood is also one of the requirements. Permits from the construction permit offices are also required for maintenance, demolition, and plan improvement. However, The authorities have no mandate to control architecture design progress in the consulting firms.

4.3.3. Registration, Licensing, Renewal and Construction Permit Requirements

Statistically significant response of PAR score high mean rate than PPAR on the factor "requirement for registration and licensing and a total number of firms registered". Compared to developing nations such as Nigeria, the professional associations in the construction sector of Ethiopia has nothing to do with licensure. However, there are efforts in construction works regulatory authorities to update registration and licensing requirements. Construction Certification and Registration Directive No. 648/2021 declares that shifts its focus from the material-based requirement of registration to professional qualifications. A new directive is expected to enable professionals and organizations are working based on registration and certification, correct ethical problems, and performance gaps, and create job opportunities for small and medium enterprises. A new directive also minimized some difficulties like office requirements to have to establish the consulting firm. Though a revised directive facilitates job creation, It is further required to focus on the creation of large size and organized consulting firms in the construction sector.

4.3.4. Managing Ethics

Statistically significant responses show that it is essential to manage professional ethics matters parallel with adopting threshold fee. Evidence from Association of Ethiopian Architects confirms that there are efforts to manage members' conduct. Constitution that guides members' conduct and ethical issues is available and distributed to members by the AEA secretariate through email. Unethical acts by members are managed by the ethics board and give decisions based on this constitution. Any transgression of the established ethical standard by an Architect or Architectural firm may result in a reprimand (warning), suspension, or revocation of his or her license to practice, as well as exclusion from relevant membership. For this it is required to work with construction works regulatory authority specifically on licensing issues.

4.3.5. Managing Human Resource

It is paradoxical that the highest mean score for the factor "Total number of registered members" was by not member of any professional association. the essentiality of human resources is confirmed by Charles et, al. people are often the most valuable resources of an organization has how they are developed and managed is critical to their productivity and the organization's success [5]. Moyo states that a very important role of the Professional association is to increase

the number of its members, and recruitment activities must be ongoing [14]. The strength of professional associations primarily depends on the total number of members. As a result professional associations can influence government decisions; specifically. The right; the dignity of the profession rested on its united front of expertise, not the cheapness of its members.

4.3.6. Collaboration

Collaboration according to William et, al. is an approach for regulatory agencies to recognize and respond appropriately to the larger context in which it operates, including the social, political, ecological, economic, and other forces which surround it [21]. Which includes having regular contact with other institutions, organizations, groups, and members. Statistically, the significant response shows that members of AEA agree to Collaboration work with members and Client consulting firm relation essentiality; Practicing architects (PAR) also agree on its importance for the practicality of fee scale in Ethiopia.

The evidence from AKA confirms the finding since the fee scale is established in this country and the association incorporates Architects, Quantity Surveyors, Town Planners, Engineers, Landscape Architects Environmental Design Consultants, and Construction Project Managers. The Association also acts as a link between professionals and stakeholders in the construction industry: Including policymakers, manufacturers, real estate developers, and financial institutions. AKA has organized into six Chapters; Architects, Engineers, Quantity Surveyors, Landscape Architects, Town Planners, Environmental Design Consultants, and Construction Project Managers. Though such collaboration and incorporation of different professionals are not available in the Association of Ethiopian Architects, there is evidence that the Ethiopian Consulting Architects and Engineers association incorporates Civil Engineers, Mechanical Engineers, Chemical Engineers, and Electrical Engineers.

4.3.7. Privatization

Respondents agree on the essentiality of Privatization; support for private sector-led growth with state-centric economic planning. In addition, privatization lets to decreases the government's stake in managing services and production of organizations. This implied the ability of the government to regulate the financial transactions of firms, organizations, and the general market. as well as enforcement of fee scale.

According to London and Routledge, Construction in the United States is 78% privately financed [13]. for this matter Fee scale is completely abolished in the USA. London & Routledge also states Construction, in Germany, is under 50% privately financed. Despite the European Union's prohibition on fee schedules, Germany continues to employ the *Honorarordnung für Architekten und Ingenieure* (HOIA) system. Evidence of developing nations in Africa contradicts the context. Kenya, Nigeria, and South Africa established fee scales, besides the private sectors investment dominates than

government investments. According to data from the National Construction Authority (NCA), private sector investments were the main drivers of the Kenyan construction industry. In Nigeria, most of the enterprises had been successfully privatized. The real estate sector now constantly generates more economic activity than other sectors. South Africa's private sector is relatively dynamic, although firms face a highly unionized labor force and working condition agreements negotiated between large firms and unions. Contexts in such countries revealed that the proportion of private sector to government investment will determine the practicality of fee scale but it will not be a single determinant factor.

4.3.8. Impacts of Lease and Other Policies

Statistically significant response from Principal Architects revealed that policies such as lease policy will have an impact on the practicality of fee scale in Ethiopia. a statement by Hagos confirms the impact of the lease on the construction sector; clients come after the completion of the deadline set on the lease contract and ask for the permit [9]. which exposes the process to corruption; delay deliberately made to pave the way to inappropriate benefits and corruption. The evidence implies it affects the institutional capacity of regulatory authorities furthermore practicality of fee scale.

4.3.9. Administrative Structure and National Context

Statistically significant responses from Principal architects show that the Administrative structure of the government will have an impact on the practicality of the fee scale in Ethiopia. According to London & Routledge architecture and institutional capacity of professional associations in Germany, Sweeden, France, and the USA are influenced by the overall national context [13]. London and Routledge revealed that in German the Architekten Kammers ("Land of Chambers"), are semi-public organizations that operate under a government ministry. Architects pay the government a share of their monthly compensation, which is then passed on to the Kammers. This system aids in the connection of individual architects to the larger system as well as to one another. The Kammer's institutional strong ties to engineering, construction, urban planning, and landscape management. Nearly the same as Germany; France's professional architecture association, the Ordre des Architectes is regulated financially by the Ministry of Culture, to which members pay dues then allocated to the Ordre. While the Ordre focuses exclusively on architecture, The Ministry of Culture coordinates the concerns of architects with those of contractors, engineers, developers, and clients and facilitates interactions between these players. Sweden's Architecture is under several ministries within the government; such as the Ministry of Culture, the Ministry of Housing, and the Ministry of Environment. Primary benefits - among these is direct support for architectural research.

4.3.10. Quality of Architectural Design Service Provision

The statistically significant response of practicing

architects revealed that professional competency, communication skill, the commitment of architects determine and the quality of Architectural design service delivery. Time allotted for architectural design service delivery also impacts pricing strategy and practicality of fee scale in Ethiopia. Clients pay in exchange for services delivered by consultants. The finding is in line with certain evidence from construction sector regulatory authorities. Hagos stated that some experts cannot effectively communicate their comments and suggestions,” and could not accomplish permit by the required standard of date [9].

5. Conclusions

The adoption of an Architect's fee scale is important to improve ethical practice, promote innovation and improve the quality of architectural design service in Ethiopia, however the effort of regulatory agencies is more than preparing a draft document and deciding by the responsible organ of government. It is mandatory to work on factors that determine that determines the practicality. The purpose of this study was therefore to identify factors determining the practicality of the Architecture service fee scale in Ethiopia through the assessment of principal architects' perceptions and experiences. A stratified sampling technique was adopted to address the perception of principal architects across the nation. However, the ANOVA mean comparison test reveals that there is no statistically significant response received based on the location of respondents. The concentration of Consulting Architects in Addis Ababa and Amhara regional states dominates the response so it is difficult to generalize a result across the nation. even though consulting architecture firms are found In such cities and regions they provide services to clients came from across the nation. The author found that negotiation based on cost (negotiation rate) is a popular pricing strategy adopted by a majority of consulting architecture firms. In addition to negotiation rate, pricing strategies based on market price, percentage fees, cost-, and time-based approaches respectively were popular pricing strategies. while competitive AEA/ BDE fee scale, pricing based on value and random estimation were the least popular. The findings of the study indicate that the popularity of pricing approaches varied with the registration category, size as well as the ages of the firms. The least popular of the BDE fee scale revealed the weakness of the Association of Ethiopian Architects.

The results of this study have shown that the perceptions of principal architects are influenced by their gender, professional license category, consulting firms' registration category, membership status to professional associations, and size, and age of firms. Consecutive analysis (rating, ranking, and comparing mean values) of collected responses revealed factors that determine the practicality of the fee scale in Ethiopia. The identified factors are Client Perception of Architectural Design Service, Client Consulting Firms relation, Sources Projects, Requirements for Registration and Licensing, Total Number of registered Architects, Requirements For

construction permits, Total Number of Firms Registered for Consulting Architectural Service, Regulate professional ethics issues, Collaboration works other professional associations, Number of registered members, Privatization of Consulting firms, Impacts of other policies such as Construction, Lease and Administrative structure of the country, Conformance of Fee Scale with free-market economic policy. factors such as; Level of design and managerial competency of practicing architects, Architects' level of communication skills, and Integrity to maintain professional ethics in carrying out professional duties. Therefore the author summarised these top-ranked factors in to clients/public Awareness creation, Collaboration, Requirements for Registration, licensing, Construction Permit and Control, Managing Human Resources, Managing Professional Ethics, Privatization/ free-market economic policy, Impacts of other policies such as Lease, Administrative structure of the Country, Quality of Architectural design service delivery.

The research is limited to architectural design services and practicing architects. Further studies may however be required to identify factors with other architectural services such as construction supervision and project management. Future studies may also require on perceptions of clients and employees in consulting architecture firms.

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