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### SATISFACTION FRAMEWORK FOR BUILDING PERMIT APPLICANTS

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### **ABSTRACT**

The study determined the dimensions of the satisfaction for building permit applicants. The country already has a governing decree that ensures standards and guidelines for buildings and structures. However, citizens illegally construct due to difficulties in efficient office procedures and dissatisfaction with the services offered (Omorog et al., 2018; Nurrahmah & Tuti, 2021). This study aims to determine the dimensions influencing the satisfaction of building permit applicants through non-experimental quantitative Exploratory Factor Analysis (EFA). A research-designed survey was given to 150 applicants.

The researchers determined four dimensions, namely efficient processing, responsive staff and ease of access, fairness and transparency, and courteous and straightforward, that influence applicants' satisfaction with the building permit process. The results of this study can improve the service delivery of permit offices, providing satisfactory performance to applicants.

### **Keywords:**

Building Permit, Building Application, Quality, Service, Satisfaction

### INTRODUCTION

Building permit applicants are subject to a strenuous process of applying for the building permit. Though the Citizen's Charter in offices is imposed, issues in the existing building permit application process still show non-compliance (Reyes, 2013). Presidential Decree No. 1906 aims to provide a set of minimum standards and guidelines governing all buildings and structures, covering their site location, design, quality of materials, construction, use, occupancy, and maintenance. This is all for the protection of health, property, and public welfare along with the principles of effective environmental management and oversight (Section 102. PD No. 1906).

Despite the requirement for building permits before construction, many illegal constructions proceeded without the necessary documents. In Iloilo, some projects of the Department of Public Works and Highways were constructed without building permits (DailyGuardians, 2024). Cebu and Baguio had similar reports of illegal constructions, wherein notices of violations were issued (Cebu Daily News, 2024; Philippine News Agency, 2023). A three-story structure also fell into the creek in Quezon City (Inquirer, 2020).

Permit offices have expressed the accessibility and ease of application, saying that there are no reasons for owners not to obtain permits. However, the reported cases above significantly indicate that there are issues with the application of building permits. Several studies have uncovered these issues. The study by Omorog and colleagues (2018) found that many residents and citizens build establishments without the necessary documents and building permits. This is because citizens are facing difficulties due to the office's inefficient procedures. Another reason is dissatisfaction with the services offered (Nurrahmah & Tuti, 2021).

According to Adah and Elegba (2015), planning professionals must have the necessary knowledge, uphold professional ethics and values, and adopt a business-oriented approach when presenting planning products to achieve satisfactory services. Hence, this study aims to determine the dimensions that influence the satisfaction

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of applicants to improve the services of permit offices. Offices are complacent with their evaluations, and as government offices, complacency should be replaced with improvement to attain excellent performance (Reyes, 2013).

Satisfaction with public services covers several dimensions, such as compliance, responsiveness, service on time, receiving service itself, and hassle-free service (Lamsal & Gupta, 2022). For building permit applicants in Nepal, citizens face challenges due to factors of time constraints, financial burden, and complications arising from construction site issues (Thapa, Devkuta et al., 2023).

**Efficient processing.** Simplifying the application process for building permits has been consistently highlighted as a significant factor in enhancing satisfaction among applicants. Studies emphasize that a clear, straightforward application process minimizes confusion and reduces processing times, which in turn improves user satisfaction (Reyes, 2013). In this context, administrative simplification strategies, such as reducing paperwork and eliminating redundant steps, are effective for increasing efficiency and applicant approval.

Efficient processing is a cornerstone of applicant satisfaction. Research by Thapa and colleagues (2023) presents significant dissatisfaction with the certification process. Seventy-four (74%) applicants described it as a difficult task. The major factor for dissatisfaction was the additional cost, and other notable factors were managing work time for the certification process (52.8%), employee negligence (51.4%), site disputes (45.79%), and delays across various departments (40.65%).

Delays and bureaucratic hurdles are also common problems in the process of building permit application in two municipalities of Camarines Sur (Omorog, Benosas & Sias, 2018). The study identified seven common problems, some of which are processing time delays, excessive consumption of resources, and scarcity of human resources. The existing problematic process was simplified with the introduction of an electronic building permit system. This emphasizes the role of technology in expediting the permit process, such as online portals and digital document submission.

**Responsive staff and ease of access.** The quality of interaction with the staff is a critical factor in determining applicant satisfaction. The result of Lamsal and Gupta's study (2022) shows that citizens are satisfied when government officials are compliant, responsive, and responsible. Low satisfaction was reported when staff did not respond to their demands, concerns, and needs.

Furthermore, the researchers highlighted the importance of hassle-free and simple services. Citizens were burdened by long procedures, queues, and inconvenient physical facilities, affecting satisfaction.

**Fairness and transparency.** Studies on building permit systems reveal that streamlined and clear processes enhance customer satisfaction. A fair and transparent system allows applicants to know what to expect and how long the process will take, thus reducing perceived bureaucratic barriers (Mueller et al., 2020). The World Bank (2019) emphasizes that transparent and rule-based frameworks minimize room for arbitrary decisions, further enhancing applicant satisfaction.

According to Lamsal & Gupta (2022), a lack of information on administrative processes, convenience, and other factors motivates third-party assistance. This negatively affects satisfaction since it requires additional costs.

Courteous and straightforward. Courtesy is an important factor in customer service as it gains clients' trust (Trako, 2017). Reyes (2013) emphasized the need for improvement in staff interpersonal relationships in the Local Government Units (LGUs) of Angeles and San Fernando, Pampanga. In the study, the staff's attention, politeness, and responsiveness were rated very satisfactory. However, a pleasant demeanor was rated satisfactory only.

### **OBJECTIVES**

This study aimed to determine the dimensions of satisfaction among building permit applicants. Additionally, it aimed to create a framework that can be used by organizations to improve their satisfaction.

#### **METHODOLOGY**

The study employed Exploratory Factor Analysis (EFA) and surveyed a sample of 150 building applicants. A researcher-designed, 30-item questionnaire using a 5-point Likert scale was administered, with each item centered on exploring service responsiveness, clarity of process, time taken, transparency, and overall experience with the process.

The collected data was systematically tallied, summarized, and statistically analyzed using SPSS Statistics, a software suite tailored for data management, complex analysis, multivariate assessments, business intelligence,



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and criminal investigation purposes. Among the analytical methods applied, the Kaiser-Meyer-Olkin (KMO) test was used to measure the adequacy of partial correlations, while the correlation matrix's identity was verified through Bartlett's test of sphericity (Shrestha, 2021). Additionally, the Scree Plot and Scree Test were employed, providing a line plot of eigenvalues that visualizes the range of factors analyzed (Watkins, 2018).

#### RESULTS AND DISCUSSION

The collected data was analyzed using Exploratory Factor Analysis (EFA). To evaluate the data's suitability for EFA, Bartlett's Test of Sphericity was used and supported by the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (Watkins, 2018).

In this study, the KMO value is exceptionally high at 0.943 (Table 1). As cited by Watkins (2018), KMO values of .50 are considered unacceptable by Child (2006), and the correlation matrix is not factorable. It is considered "marvelous" as described by Kaiser (1974) for KMO values of .90s. While Barlett's test generated an approximate Chi-Square value of 3324.831, with 435 degrees of freedom and a p-value of 0.000 (< 0.05). Bartlett's Test of Sphericity evaluates the factorability of the correlation matrix.

Kaiser-Meyer-Olkin Measure	.943	
Bartlett's Test of Sphericity   Approx. Chi-Square		3324.831
	df	435
	Sig.	.000

Table 1. KMO and Bartlett's Test

The high KMO value and significant Bartlett's Test of Sphericity confirm the suitability for factor analysis and that there is a correlation among the satisfaction variables. Furthermore, this supports the validity of the EFA results, suggesting a high likelihood of identifying distinct satisfaction dimensions in enhancing the building permit process.

Component	Initial Eigenvalues		Extraction Sums of Squared			Rotation Sums of Squared			
				Loadings			Loadings		3
	Total	% of	Cummu-	Total	% of	Cummu-	Total	% of	Cummu-
		Variance	lative		Variance	lative		Variance	lative
			%			%			%
Factor 1	15.594	51.980	51.980	15.594	51.980	51.980	6.469	21.562	21.562
Factor 2	1.298	4.328	56.308	1.298	4.328	56.308	6.038	20.127	41.689
Factor 3	1.184	3.946	60.254	1.184	3.946	60.254	3.460	11.532	53.221
Factor 4	1.149	3.829	64.083	1.149	3.829	64.083	3.259	10.862	64.083
Factor 5	.965	3.217	67.301						
Factor 6	.942	3.139	70.440						

Table 2. Total Variance Explained

The EFA identified 4 factors with corresponding eigenvalues of 15.594, 1.298, 1.184, and 1.149 (Table 2). Eigenvalues indicate the degree of variance explained by each factor in the dataset.

The first factor, with an eigenvalue of 15.594, explains a substantial total variance of 21.562%. It means that Factor 1 has a significant portion of the variability in the data. This is followed by factor 2 with 20.127% total variance, factor 3 with 11.532%, and Factor 4 with 10.862% total variance. Therefore, Factor 1 contributed the most, while Factor 4 had the least impact on the explained variance.

The scree plot showed a steep drop in eigenvalues, explaining the significant amount of variance for Factor 1 (Figure 2). It is followed by an "elbow" in Factor 4, indicating the optimum number of factors to retain (Watkins, 2018). Also, as shown in Table 2, the cumulative total variance of the four identified factors is 64.083%. This implies that these factors capture most of the underlying variation within the dataset, offering a significant representation of its structure.

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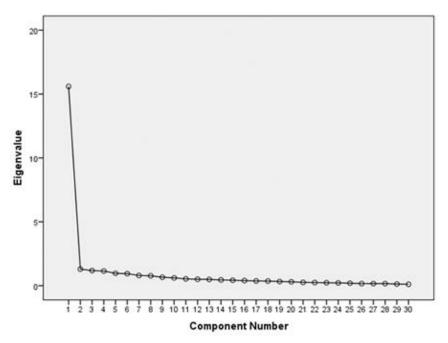


Figure 1. Scree Plot

Exploratory Factor Analysis (EFA) identified four dimensions from the collected data. These dimensions are efficient processing, responsive staff and ease of access, fairness and transparency, and courteous and straightforward.

**Efficient processing.** Based on Table 3 of this study, twelve (12) statements fall under the Efficient Processing dimensions. The statement that acquired the highest coefficient of 0.772 is item 24 (*The length of time it took to process my building permit was reasonable*). This is supported by the items with their corresponding loading coefficients such as item 30 (*Overall, I am satisfied with the building permit application system*) with a loading coefficient of 0.707, item 17 (*Scheduling inspections for the permit was an easy process*) with a loading coefficient of 0.701, item 8 (*The online portal for submitting the building permit application was easy to use*) with a loading coefficient of 0.634, item 21 (*Any issues or questions I had during the application process were resolved promptly*) with a loading coefficient of 0.625.

Items with less than 0.6 factor score are item 27 (If my application was rejected, the reasons for rejection were clearly explained) with a loading coefficient of 0.593, item 10 (The requirements for obtaining the building permit were transparent and communicated) with a loading coefficient of 0.591, item 26 (I was regularly updated on the status of my building permit application) with a loading coefficient of 0.567, item 23 (I am satisfied with the overall experience of applying for the building permit) with a loading coefficient of 0.567, and item 22 (The inspection process for the building permit was efficient and well-organized) with a loading coefficient of 0.524. The items with the least loading coefficient of 0.522 obtained were item 12 (I received regular communication and updates on the status of my application), and item 18 (I was kept informed about the status of my permit application throughout the process).

Item 24, 30, and 17 all shows factor score of more than 0.7. It indicates that the length of time and easy process strongly influence efficient processing of the permit office. The building permit applicants are aware of the proper process of the building permit application. Although there is some difficulty in terms of compliance resulting in the increased length of time in obtaining a building permit, the additional length for the processing time is somewhat reasonable for them. The applicants' issues and concerns during the building permit process are also properly addressed by the LGU. In summary,

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Item	Attributes		Theme
24	The length of time it took to process my building permit was reasonable	.772	
30	Overall, I am satisfied with the building permit application system	.707	
17	Scheduling inspections for the permit was an easy process	.701	
8	The online portal for submitting the building permit application was easy to use	.634	
21	Any issues or questions I had during the application process were clearly explained	.625	
27	If my application was rejected, the reasons for rejection were clearly explained	.593	
10	The requirements for obtaining the building permit were transparent and clearly communicated	.591	Efficient Processing
26	I was regularly updated on the status of my building permit application	.567	
23	I am satisfied with the overall experience of applying for the building permit	.559	
22	The inspection process for the building permit was efficient and well-organized	.524	
12	I received regular communication and updates on the status of my application	.522	
18	I was kept informed about the status of my permit application throughout the process	.522	

Table 3. Rotated Matrix with Group Attributes under Efficient Processing

Similarly, the study of Thapa et al (2023) shows that 52.80% of the applicants in Lalitpur City are dissatisfied due to time for certification process. Furthermore, the applicants believed that these challenges in efficient processing is due to the lapses of the permit office. Responses of the study favored mitigation. One of the ways to mitigate is to use technology for automation, which is also a goal of our government. The study of Omorog, Sias & Benosa (2018) addressed processing delays through the electronic building permit system and other challenges such as scarcity in human resource. These only shows that addressing timeliness is crucial for the satisfaction of building permit applicants. Our government is already transitioning to automation and digitalization. It has also strengthened the implementation of the Anti-Red Tape Act. With these steps taken to have efficient processing, permit offices needs to adhere to policies and to stay open to changes in order to satisfy every applicant's needs.

Responsive staff and ease of access. Based on Table 4 of this study, ten (10) statements fall under the responsive staff and ease of access dimension. The statement that acquired the highest coefficient of 0.684 is item 5 (Staff responded to my inquiries on time). This is supported by the item 2 (The guidelines for the building permit were easily accessible and straightforward) with a loading coefficient of 0.676, item 15 (The permit application forms were user-friendly and easy to fill out) with a loading coefficient of 0.666, item 6 (The staff were helpful in resolving any issues I encountered during the application process) with a loading coefficient of 0.661, item 13 (Communication from the permit office was timely and informative) with a loading coefficient of 0.626, item 4 (The information provided by staff about the application process was accurate and helpful) with a loading coefficient of 0.610, item 19 (The permit office was supportive throughout the application process) with

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a loading coefficient of 0.599, item 20 (*The level of detail provided on the building permit requirements was satisfactory*) with a loading coefficient of 0.557, and item 7 (*Staff were available when I needed assistance with my building permit application*) with a loading coefficient of 0.553. The item with the lowest loading coefficient of 0.500 obtained was item 9 (*Submitting the required documents for the building permit was a straightforward* 

process).

Item	Attributes	Factor Score	Theme
5	Staff responded to my inquiries in a timely manner.	.684	
2	The guidelines for the building permit were easily accessible and straightforward.	.676	Responsive Staff and Ease
15	The permit application forms were user-friendly and easy to fill out.	.666	of Access
6	The staff were helpful in resolving any issues I encountered during the application process.	.661	
13	Communication from the permit office was timely and informative.	.626	
4	The information provided by staff about the application process was accurate and helpful.	.610	
19	The permit office was supportive throughout the application process.	.599	
20	The level of detail provided on the building permit requirements was satisfactory.	.557	
7	Staff were available when I needed assistance with my building permit application.	.553	
9	Submitting the required documents for the building permit was a straightforward process	.500	

Table 4. Rotated Matrix with Group Attributes under Responsive Staff and Ease of Access

All items with more than 0.6 factor score mentions the role of staff and ease of access to forms, guidelines and information, which strongly contributes to satisfactory building permit application process. The results show that the staff from the LGU Building Office is accommodating towards the inquiries and concerns of the building permit applicants. It indicates that there is proper communication between the applicants and staff. Also, proper dissemination of information and guidelines for the application process shows that applicants are well-guided through the process. Lastly, user-friendly forms that can be easily filled out by applicants are provided. In summary, applicants experience a smooth building permit application process because responsive staff and of ease of access.

Lower satisfaction is associated with the staff's responsiveness to demands, concerns, and needs of the applicants (Lamsal & Gupta, 2021). Thapa and colleagues (2023) stated that the goal of the local authority is to enhance customer satisfaction by addressing the concerns that arise from the applicants during the building permit application process. The entire process occurs between the staff and applicants, hence the staff of the permit office should be responsive to achieve satisfactory service and to fulfill the duty of being public servants.

**Fairness and Transparency.** Based on Table 5 of this study, three (3) statements fall under fairness and transparency. All items have high factor score. The statement that acquired the highest coefficient of 0.755

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is item 29 (I am confident that the final decision on my permit application was accurate and fair). It is supported by item 25 (Making modifications to my existing application (if needed) was an easy process) with a loading coefficient of 0.733. The item with the lowest loading coefficient of 0.688 is item 16 (The criteria for building permit approval or rejection were clearly explained).

The building permit application criteria were very clear to leave no opening for questioning what was sought. In cases where an applicant is required to revise his/her application, the procedure is easy and not stressful at all. Above all, the applicant would have a sense of reassurance that there was fairness and accuracy in the ultimate decision over his/her building permit. This example demonstrates that a fair, just, and organized system not only ensures success but also instills trust between applicants and the authorities.

Item	Attributes	Factor Score	Theme
29	I am confident that the final decision on my permit application was accurate and fair	.755	Fairness
25	Making modifications to my existing applications (if needed) was an easy process	.733	And Transparency
16	The criteria for building permit approval or rejection were clearly explained	.688	

Table 5. Rotated Matrix with Group Attributes under Fairness and Transparency

The result of this study aligns with Mandi et al (2019), stating that important qualities include reliance on the ultimate judgment's correctness and fairness, ease in adjusting, and transparency of standards applied to accept or refuse permits. The important aspects are a transparent, fair system that ensures applicants are treated fairly and understand that process clearly. There is one issue that needs to be addressed, which is that the applicant should be promptly informed of their application status, which the Building Official Office should try to work on.

Also, Grimsley's (2023) view that transparency of the applicants' building permit application status and fairness of evaluation are vital in the building industry. The applicants need the building permit to be able to occupy the building safely; hence, an occupancy permit is issued after the building permit. An occupancy permit is a prerequisite document for business establishments, as it is a document required in the application for a business permit, according to the Joint Memorandum Circular (2016). Applicants who rated they are confident in the final decision of the permit applications and thought the process was fair and accurate have complied with the JMC Circular for Processing Business Permits and Other Licenses.

**Courteous and Straightforward.** Based on Table 6 of this study, three (3) statements fall under courteous and straightforward. The statement that acquired the highest coefficient of 0.698 is item 14 (*The staff handled my application in a professional and courteous manner*). It is supported by item 28 (*The appeal process (if applicable) was fair and easy to follow)* with a loading coefficient of 0.687. The item with the lowest coefficient of 0.598 is item 1 (*The application process for the building permit was clear and easy to understand*).

Applicants have confidence and are supported by the study, further showing when the application is treated with courtesy and with efficiency. A clear and understandable application will minimize confusion and manage the permit journey, hence opening the system up. In the appeals process, fairness and transparency are also important in giving applicants an avenue to present their concerns assuredly. Overall, all these factors contribute to an effective and easy application procedure where applicants are very informative and are treated justly, thus raising their satisfaction with the building permit system.



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Item	Attributes	Factor Score	Theme
14	The staff handled my application in a professional and courteous manner	.698	Courteous and
28	The appeal process (if applicable) was fair and easy to follow	.687	Straightforward.
1	The application process for the building permit was clear and easy to understand	.598	

### Table 6. Rotated Matrix with Group Attributes under Courteous and Straightforward.

The theme, courteous and straightforward, is in connection with Archistarmarketing's (2024) Navigating Compliance Challenges in Permit Application as it shows how crucial it is for employees to be professional, clear in communication, and fair in dealing with applicants to have a satisfactory experience with them. Candidates tend to be better prepared and more supported, as said by the study, if staff members treat applications politely and effectively. Moreover, to make the system easier, a simple and understandable application process must be in place to avoid mistakes and hasten the permit process. Additionally, the appeals procedure should be impartial and transparent because this is where applicants will be comfortable enough to raise issues. These components help ensure a positive and easy application process where candidates feel educated and treated properly, increasing their satisfaction with the building permit system.

### FRAMEWORK DEVELOPED BASED ON THE FINDINGS

The framework in Figure 2 is a holistic representation of the critical dimensions that influence satisfaction among building permit applicants. It integrates four key dimensions—Efficient Processing, Fairness and Transparency, Responsive Staff and Ease of Access, and Courteous and Straightforward—which collectively address the multifaceted expectations and experiences of the applicants.

Every dimension emphasizes a crucial aspect of service delivery and highlights its role in shaping overall satisfaction. The central position of the framework suggests that these dimensions are interdependent, contributing equally to the satisfaction levels of applicants.

**Efficient Processing.** This dimension indicates the significance of prompt and orderly processing of applications affects satisfaction by applicants as shown in the results of this study. Similarly, the study of Thapa and colleagues (2023) found that people wait for 2-3 months and pay more for hiring an agent, paper processing, and documentation. These unethical practices have shown dissatisfaction among the people. Time delays and complicated processes should be simplified by digitalization (Omorog, Benosas & Sias, 2018).

**Responsive Staff and Ease of Access**. This dimension points to the importance of accessibility and customer service in ensuring a smooth application process—supportive staff act as facilitators, bridging any gaps in understanding or procedural challenges. Negligence of employees creates dissatisfaction among applicants (Thapa, Dekota, et al., 2023). They should build customer relationships to understand and address client needs (Reyes, 2013).



Figure 2. The Dimensions that Satisfy the Building Permit Applicants

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**Fairness and Transparency.** Emphasis on fair treatment and transparency in the processes gives this dimension an ethical input towards governance. Lamsal & Gupta (2022) concluded that the provision of services should be in accordance with rules, regulations, and procedures for high satisfaction of citizens. Furthermore, the researchers emphasized that efficient processing must be provided even without personal contact with the staff. Fairness and transparency in operations strengthen not only the credibility of the issuing authority but also promote confidence among applicants.

**Courteous and Straightforward.** Effective communication is pivotal in managing expectations and providing clear guidance. Courteous interactions coupled with concise communication contribute to an applicant-friendly environment (Reyes, 2013). Also, it will prevent multiple service attempts that can cause dissatisfaction among the applicants (Lamsal & Gupta, 2022).

Even though each dimension operates separately, together they collectively make the applicant experience cohesive and strong by satisfying the entire satisfaction framework. The model depicts that addressing one dimension may not work to solve the issue. Thus, a balanced approach incorporating all dimensions is crucial for achieving holistic satisfaction.

The framework provides a structured approach to understanding and improving building permit application processes. Future research and service delivery improvements can draw on this model to ensure that the application process remains applicant-centric and adaptable to evolving needs.

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### **CONCLUSION**

The factor with the highest total variance is efficient processing, showing that building permit application processing should be easy and prompt. Responsive staff and ease of access to resources enhance the application process, while fairness and transparency create trust and confidence among applicants. Lastly, the courteous and straightforward factor emphasizes the importance of professionalism and simplicity during interaction.

The result of this study is similar to other studies, which show that building permit applications should be streamlined, digitalized, and applicant-centered to address dissatisfaction. The satisfaction framework of this study shows that each factor must be addressed collectively to achieve a satisfactory permit system.

Despite efforts to optimize processes, problems including delays, ambiguous instructions, and uneven staff interactions still exist and have a big influence on overall satisfaction ratings. Through this framework, local government units or the building permit issuance office can increase the satisfaction of applicants.

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