



Insufficient Revenues from Property tax

How to escape a Catch-22 situation

An All Government Matters White Paper

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1 Overview

1.1 TOPIC

This white paper discusses the catch-22 situation that many Local Government (Municipalities) find themselves in where they seem to be unable to generate enough funds from Property tax (normally the largest and easiest source of income) because they lack the funds to do a proper valuation of those properties, needed to establish a good *Tax Base*¹ and a solution (the *Light Assessment Framework*) we have introduced in Ghana, enabling Local Government to break free and start Revenue collection.

1.2 ABSTRACT

1.2.1 Issue addressed

Local taxes normally represent the greatest source of autonomous income for Local Governments. Hence, it is very important and most likely that Local Government wants to fully control that. Property Tax normally is the greatest source of such income.

Valuation of properties falls behind due to the fact that either no money is available, the costs are too high, there are other priorities, or the political will is missing to spend the money on Valuation.

There seems to be a catch-22 situation, where there is no money to do Property Valuations and because there are no valuations done, the revenue generated from Property Tax falls behind. And because funds seem to be lacking, the negative effect is that there is a greater interest and pressure for Leakage², leading to even less funds for a community.

Not all options to solve the issue of insufficient funds are easy and there can be unwelcome side-effects.

1.2.2 Solution introduced

Introduction of the *Light Assessment Framework* for categorizing Properties in Ghana, attaching a flat tax rate to those categories, and collecting a few simple characteristics of the Properties in the field, circumvented the problem of undervalued properties and properties with a known value that is inaccurate or outdated.

The Light Assessment Framework category system contains a maximum of ten Main categories, each having a maximum of ten Subcategories. Examples of Main categories are e.g. *Residential area* and *Mixed-use Property*. Subcategories then can be for Residential area e.g. *Concrete/Brick/Steel 4 - 6 Rooms*. For Mixed-use Property, e.g. you can have a *Subcategory* called *Rural - Mainly Commercial with some Residential facilities*.

¹ The Tax Base is defined as the collective value of the property assets subject to taxation.

² Leakage is the term we use when money (to be) collected from Tax & Revenue “disappears” due to unauthorized or unanticipated dissemination or in plain words: theft.

Those categories and subcategories can be easily identified without in-depth knowledge of Valuing a property.

By determining a *Flat rate*, for each subcategory you quickly have a Tax Base that is useable for taxation purposes. It is even possible to extend this framework with multipliers; in case you want to influence the height of the tax with the actual number of rooms. Bu a word of caution is that when a light assessment has been executed from the outside of the premise, errors are easily made in estimating the actual number of rooms.

1.2.3 Gathering data and executing the light assessment

For obtaining data, an Android handheld device was used. A questionnaire guided Field staff through several questions. Depending on the answers other questions were asked and answered. Part of the exercise was to also take a photograph of the Property and register the Geo-coordinates. Not all properties have an address with a street name.

1.2.4 Findings

The Light Assessment Framework proved to be a good and workable solution to address the issues of unvalued and outdated valued properties. It created fast a solid way of generating more revenue from the property Tax Base. It must be seen as a starting point, were light assessment outcomes will be replaced by valuation data over time.

Electronic support of data gathering was key as that data was used and integrated in a Tax & Revenue Management System. It enabled some municipalities to prepare work in week 1, do the data gathering in weeks 2, 3 and 4 and start generating and distributing bills in week 5.

1.2.5 Recommendations

When you consider introducing this Light Assessment Framework it is important that you organize buy-in from officials on *National level* (Minister?) if legislation is explicit that valuation must be done by a specific authority. You will need to explain that this light assessment will not replace the official valuation, but merely will give you a starting point that will enable you to gradually grow to a full and wide-spread valuation of your property base.

If legislation is unclear at this point, it is advisable to agree with the proper officials on the way forward.

If more Municipalities are interested, try and agree on 1 common set of Main categories. On local level subcategories can differ. This make is somewhat easier to do nationwide statistics.

2 Catch-22 situation

2.1 INTRODUCTION

Local taxes normally represent the greatest source of autonomous income for Local Governments. Hence, it is very important and most likely that Local Government wants to fully control that. Property Tax normally is the greatest source of such income. The OECD³ stated that the extent of Local Government autonomy over revenues highly depends on the freedom to determine and influence the Tax Base, and the setting of the Tax Rate⁴.

The OECD developed a classification of own and shared revenues in accordance with the degree of local revenue autonomy:

- Local government sets the tax rate;
- Local government sets the tax base;
- Local government in control of both the tax rate and the tax base;
- Tax sharing arrangements;
- Local government determines the revenue split.

In this paper we will only discuss the first 3 bullet points. And we limit all examples to Property Tax only. Property tax is an effective local tax, because the nature of property makes it relatively simple for local governments to identify Owners / Taxpayers and to collect the taxes.

2.2 GOOD PRACTICES

Setting the Tax Base and setting the Tax Rate should be treated separately and independently as a good practice in order to avoid conflict of interests. Setting the Tax Base is done *Local Government Staff (Location⁵ (and Number) of Properties)* and by *Valuers* (Experts that determine the *Value* of Properties). Valuers should be accountable through an appeal process, if an owner of a Property challenges the assessed value. Setting the Tax Rate is usually the prerogative of the *elected politicians*.

At all times a conflict of interest should be avoided by having actions carried out by different levels of government. E.g. where local sources of revenue are scarce, local governments might be tempted to inflate the Tax Base in an attempt to increase their revenue, or locally influential people may exert pressure to have their tax liabilities reduced. In such cases, *Valuers* of the central government might provide a more objective assessment of the Tax Base.

2.3 NOT A SIMPLE WAY FORWARD

One could say that the way forward for Local Government to levy and collect Property Tax is clear and not complicated. Identify the Tax Base, i.e. all properties

³ The Organisation for Economic Co-operation and Development (OECD) is an international organisation that works to build better policies for better lives. Their goal is to shape policies that foster prosperity, equality, opportunity and well-being for all. The OECD draws on almost 60 years of experience and insights to better prepare the world of tomorrow.

⁴ The Tax Rate is e.g. the percentage of the value of a property asset that is paid as tax.

⁵ Also, National or Regional Land Registration authorities can be in place and can be used

and their value. The Tax Rate can be differentiated based on the type and usage of a property combined with its value. However, ...

2.3.1 Outdated valuation data

One of the challenges we faced in Ghana was that, in municipalities, properties were valued a long time ago. We are talking 10 – 15 years in the past. New properties that were built were not valued at all. Often built without the proper Building Permits, and in remote areas. The consequences are that the income of Local government (Municipalities) on Property tax is low because of inaccurate and missing base data, the Tax Base.

2.3.2 The costs of valuation

The cost of valuation is one of the reasons why properties are not valued every 2-4 years (or within any other justifiable time frame). Normally, an independent and specialized authority is responsible for valuation of properties. The costs they charge, largely depend on complexity of the object and the spread of properties in a given area. Cost will increase dramatically, when the spread of the area is huge.

2.3.3 Increase Tax Rates

Although increasing the Tax Rates every year, to keep up with e.g. inflation, could work and is used, but it has its limitations, because this is combatting symptoms and not addressing the root cause: Inaccurate Tax Base because of missing properties and outdated values.

A simple example is given below where the value of the property increases based on the inflation rate (or CPI) of Ghana and the Tax Rate is stable, and the value of the same property is stable, and the tax rates increased.

House built for 35,000							
Valuation / stable rates				No valuation / Increase rates			
Year	Rebuild price	Rate	Revenue	Rebuild price	Rate	Revenue	
2010	35,000	0.20%	70.00	35,000	0.20%	70.00	
2011	38,054	0.20%	76.11	35,000	0.22%	76.11	
2012	40,766	0.20%	81.53	35,000	0.23%	81.53	
2013	45,522	0.20%	91.04	35,000	0.26%	91.04	
2014	52,573	0.20%	105.15	35,000	0.30%	105.15	
2015	61,590	0.20%	123.18	35,000	0.35%	123.18	
2016	72,340	0.20%	144.68	35,000	0.41%	144.68	
2017	81,290	0.20%	162.58	35,000	0.46%	162.58	
2018	89,286	0.20%	178.57	35,000	0.51%	178.57	
			<u>1,032.84</u>				<u>1,032.84</u>

Rates will not increase this dramatically (double in 6 years), mostly because of political reasons. This means that in this situation only a revenue of 630 will be collected in 9 years. About 60% of what would have been justifiable.

2.4 A CATCH-22 SITUATION OCCURS

This catch-22 situation occurs when in fact you do not collect enough revenue to spend on services for your constituents and keep your operations going, like spending some amount (a percentage) on valuations. If valuations are not done at all, or are outdated, you miss out on justifiable revenue.

Tax administration should be inexpensive to administer, i.e. the tax yield should be much higher than the administrative costs. A realistic target is that the cost of administering a Property tax should be significantly less than five percent of the revenue generated!

2.5 THE MOMENT TO TAKE ACTION IS NOW!

When the Tax administration of a Municipality collects insufficient funds due to unvalued properties (not taxed), undervalued properties (not taxed enough), leakage (not all collected funds are returned handed over to the municipality), none or adequate sanctions for delinquent and non-compliant taxpayers (lack of political and individual willingness or funds), action needs to be taken!

There is a way to circumvent the lack of sufficient funds for valuation and revaluations and start almost afresh, building up the Tax Base qualitative and quantitative. It does not disqualify the need of a “real” valuation of properties, but it will start generating funds in a consistent manner.

For Local Government in Ghana⁶ we have introduced something we call the *Light Assessment Framework*.

⁶ In Ghana, All Government Matters supports the VNG International TREE project with taxation software. VNG International are experts in strengthening democratic local government in developing countries and countries in transition. The Ghana Tax Revenue for Economic Enhancement (TREE) project focuses on local revenue collection in 33 Metropolitan, Municipal and District Assemblies (MMDAs) and is funded by the Ministry of Foreign Affairs of the Netherlands

3 Light Assessment Framework

3.1 INTRODUCTION

The Light Assessment Framework is a model, basically a set of tables which are used to classify Properties. Using this model, to determine the height of the Property Tax to levy for a certain type of building, will reduce time and expenses and will increase revenues. It should not replace a *Valuation Model* or *Valuation work* executed by a designated authority but should be used to ignite quick revenue generation. Generated revenue then can be used to pay for traditional Property Valuation.

3.2 LIGHT ASSESMENT OF UNVALUED PROPERTIES

Unvalued properties (buildings) will be categorized by use of a so-called light assessment. This means that every property will be classified according to its characteristics in a predefined category system. First the main category will be identified and subsequently the subcategory. Every subcategory refers to a fixed amount: The Flat Rate.

We suggest that the category system contains a maximum of ten Main categories, each having a maximum of ten Subcategories. Although main - and subcategories can differ from municipality to municipality, it is recommended that an identical set of Main categories should be agreed upon. The subcategories and the associated rates may vary from municipality to municipality, depending on the local situation.

The next step is to determine a flat fee to pay for a certain category / subcategory. In the example below a building can be identified as a *Civic & Educational* property of the subcategory *Senior High School*. All Senior High Schools need to pay 1,500 in taxes.

#	Main category	#	Sub-category	Tax to pay
1	Property tax – Residential A	1	Stadium/Park	1000
2	Property tax – Residential B	2	Pre school (1 – 3 class rooms)	900
3	Property tax – Residential C	3	Basic School (Prim 1 – Prim 6)	1800
4	Property tax – Commercial property	4	Primary & JHS	2700
5	Property tax – Mixed usage	5	Senior High School	1500
6	Property tax – Light industry	6	Vocational School	1500
7	Property tax – Heavy industry			
8	Property tax – Civic & Educational			
9	Property tax – Hotels and Guest houses			
10	Property tax – Zero rate			

Identifying a Senior High School is no rocket science, but the model as such will leave enough room to detail certain categories more specifically.

3.3

EXAMPLE OF A FLAT RATE CATEGORY SYSTEM

In the table below an example has been given of such category system. In the first column you will find the *Main category* like *Residential A* or *Commercial* or *Heavy Industry*. You can identify up to 10 Main categories.

Then per Main category you can identify up to 10 different subcategories, e.g. for the Main category Residential A there is a have a *Subcategory* called *Concrete/Brick/Steel 4 - 6 Rooms*. For *Mixed use* e.g. we have a *Subcategory* called *Rural - Mainly Commercial with some Residential facilities*. In the column *Flat rate*, you will find the proposed rate (in local currency) for that Subcategory. Then there is a possibility to use multipliers. where e.g. the area in square meters of a Store is a multiplier of the rate (e.g. 300 sqm. * 20 (flat rate in currency)).

Main category	Subcategory	Flat rate	Multiplier
Residential A	Concrete/Brick/Steel 1- 3 Rooms	15	N/A
	Concrete/Brick/Steel 4 - 6 Rooms	50	N/A
	Concrete/Brick/Steel 7 - 10 Rooms	80	N/A
	Concrete/Brick/Steel (11 and more Rooms	120	N/A
	Other	150	N/A
Residential B	Concrete/Brick/Steel 1- 3 Rooms	8	N/A
	Concrete/Brick/Steel 4 - 6 Rooms	20	N/A
	Concrete/Brick/Steel 7 - 10 Rooms	40	N/A
	Concrete/Brick/Steel (11 and more Rooms	60	N/A
	Other	120	N/A
Residential C	Concrete/Brick/Steel 1- 3 Rooms	8	N/A
	Concrete/Brick/Steel 4 - 6 Rooms	20	N/A
	Concrete/Brick/Steel 7 - 10 Rooms	40	N/A
	Concrete/Brick/Steel (11 and more Rooms	60	N/A
	Other	80	N/A
Commercial	Financial Institutions	10,000	N/A
	Telecom Properties	10,000	N/A
	Licensed Properties	1,200	N/A

Main category	Subcategory	Flat rate	Multiplier
	Hotels and Hostels (Small size 1 up to 14 rooms)	800	N/A
	Hotels and Hostels (Big Size 15 Rooms and above)	1,500	N/A
	Recreational centers	800	N/A
	Stores	15	Number of Sq. Meters
	Offices	20	Number of Sq. Meters
	All other Commercial Properties	17	Number of Sq. Meters
Mixed use	Urban - Mainly Residential with some stores attached	400	N/A
	Urban - Mainly Residential with some ground floor stores	600	N/A
	Urban - Mainly Commercial with some Residential facility	800	N/A
	Rural - Mainly Residential with some stores attached	200	N/A
	Rural - Mainly Residential with some ground floor stores	400	N/A
	Rural - Mainly Commercial with some Residential facilities	600	N/A
Light Industry	A - Small Size	500	N/A
	B - Medium Size	1,000	N/A
	C - Big Size	1,500	N/A
Heavy Industry	A - Small Size	10,000	N/A
	B - Medium Size	20,000	N/A
	C - Big Size	30,000	N/A
Civic + Educational	Day care - Small	250	N/A
	Day care - Other	500	N/A
	Pre-school - Small	400	N/A
	Pre-school - Other	800	N/A

Main category	Subcategory	Flat rate	Multiplier
	Junior High School	1,000	N/A
	Senior High School	1,500	N/A
	Tertiary	2,000	N/A
	University/College	15,000	N/A
	Stadium/Park	25,000	N/A
Unknown	Unknown	0	N/A

Note that:

- Categories Residential A, B and C in the example above refer to different quality of municipality areas, as reflected by the rates for each subcategory.
- Subcategories might refer to such varied characteristics as size of building or revenue of companies.
- Categories may have just one subcategory.
- We recommend that one category is reserved for cases where characteristics are not determined, or where tax is not supposed to be levied, such as *Government buildings*, places of worship (*Churches, Temples or Mosques*), etc.

3.4 DEFINING THE FLAT RATES

The *Flat rates* are used for tax calculation purposes. In order to determine Flat rates that make sense, there seem to be multiple options. It makes sense that, before you can determine what the Flat Rate must be, that several properties in each category and subcategory are assessed by a knowledgeable party (e.g. Governmental Institution (e.g. Land Valuation in Ghana) or Real Estate Agents) or, if available, historical valuation data. Based on that assessment, within a safe range, a number can be given for taxation.

3.5 EXECUTING THE LIGHT ASSESSMENT

In Ghana we introduced support of mobile devices (tablets) with an App running a questionnaire to support *Field staff* collecting data. Field staff went from door to door collecting data like, where is the property located (address / geo location), who is the owner, what type of property is it (Main – and subcategories) and much more. In chapter 4 there will be more detail about data collection.

3.6 CRITERIA FOR CATEGORIZATION

To be able to determine if a property belongs in the Light Industry category of a B Medium size can be challenging.

3.6.1 Main category

As a starting point we proposed 8 Main categories:

- Residential A
- Residential B
- Residential C
- Commercial
- Mixed use
- Light Industry
- Heavy Industry
- Civic + Educational

And category called “Unknown”.

The first challenge is to define these main categories and set crystal clear criteria enabling field staff to, unambiguously and without any doubt, assign a category to a property.

An example is given below:

Category	Definition	Criteria
Residential C	This zone comprises urban low income and informal sector housing areas, which can be upgraded to meet the minimum space requirements. This segment of the urban population is most deprived, cash trapped, but very innovative and resourceful. These zones will be sited near major business centers and traffic corridors to facilitate easy access and reduce transport cost. Public transport facilities, educational, Public Open Spaces, local markets and mixed uses will be provided to enhance livability.	<ul style="list-style-type: none"> ▪ Low income and informal sector housing areas ▪ Can be upgraded to meet the minimum space requirements ▪ Near major business centers ▪ Near traffic corridors to facilitate easy access and reduce transport cost
Light Industry	Light industry is industries that usually are less capital-income intensive than heavy industry and is more raw material-oriented than business-oriented, as it typically produces smaller consumer goods. Most light industry products are produced (manufactured) for end users rather than as intermediates for use by other industries.	<ul style="list-style-type: none"> ▪ Raw material-oriented ▪ Produces smaller consumer goods ▪ Manufactured for end users

3.6.2 Subcategory

Category	Subcategory	Definition	Criteria
Residential C	Concrete/Brick/Steel 1- 3 Rooms	A residential 3 type of property made of concrete, brick or steel with 1 to 3 rooms	<ul style="list-style-type: none"> ▪ Residential area C; AND ▪ Structure of concrete, brick or steel; AND

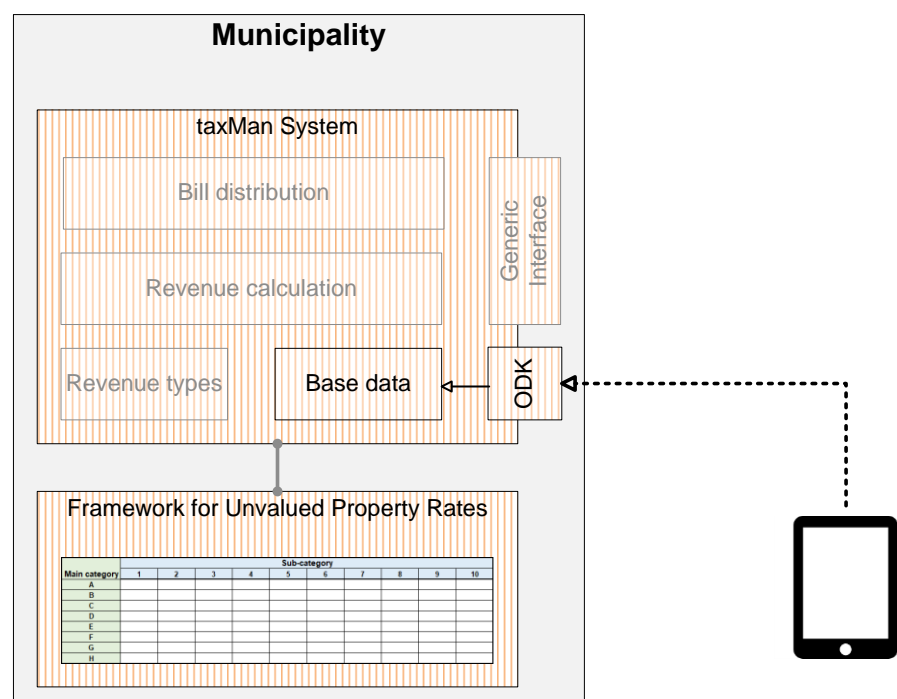
Category	Subcategory	Definition	Criteria
		(kitchen and bathroom excluded)	<ul style="list-style-type: none"> ▪ 1 to 3 rooms
	Concrete/Brick/Steel 4 - 6 Rooms	A residential 3 type of property made of concrete, brick or steel with 1 to 3 rooms (kitchen and bathroom excluded)	<ul style="list-style-type: none"> ▪ Residential area C; AND ▪ Structure of concrete, brick or steel; AND ▪ 4 to 6 rooms
	Concrete/Brick/Steel 7 - 10 Rooms	A residential 3 type of property made of concrete, brick or steel with 1 to 3 rooms (kitchen and bathroom excluded)	<ul style="list-style-type: none"> ▪ Residential area C; AND ▪ Structure of concrete, brick or steel; AND ▪ 7 to 10 rooms
	Concrete/Brick/Steel (11 and more Rooms)	A residential 3 type of property made of concrete, brick or steel with 1 to 3 rooms (kitchen and bathroom excluded)	<ul style="list-style-type: none"> ▪ Residential area C; AND ▪ Structure of concrete, brick or steel; AND ▪ 11 and more rooms
	Other	A residential 3 type of property not in any of the other subcategories	<ul style="list-style-type: none"> ▪ Residential area C; AND ▪ NOT in any of the subcategories mentioned above

4 Data collection

4.1 OBTAINING DATA

For obtaining the data, an Android handheld device ⁷was used. A questionnaire guided Field staff through several questions. Depending on the answers other questions were asked and answered.

The questionnaire was created in such a way that answering it, will give a full insight of Main category, subcategory, ownership, maybe the tenant, next to obvious data like location and/or address. Additionally, a photograph of the property could be added to that data.



The steps for obtaining the data and using it for calculation of taxes are straight forward:

- Configure App on handheld device
- Collect data with the App in the Field
 - Property and Owner
 - Main Cat / Sub-Cat
 - Picture + Address (and GPS Co-ordinates)

⁷ We used several different Android devices with Android version 4.1 and higher with at least 16Gb of memory (Android already consumes about 6Gb). Depending on the number of maps and data you plan to use more memory is better (32Gb). Especially, when you also use the device to support Collectors in the field distributing bills. It ran an open-source application (ODK) to drive the questionnaire.

- Upload and process the Data using a configured Tax & Revenue Application
- Calculate the Property Tax
- Create and Send the Bill
- Collect the Money

4.2 EFFORT

You will not get a 100% clean and complete data collection. The 80/20 rule also works here. You can collect 80% of the data in 20% of the time and the 20% remaining and hard to get data in 80% of the time.

The question is, is that last and remaining 20% important enough to spend 80% of time and costs on? Or is there a subtle way to improve data quality later on?

Our experience is that the first and second year after the initial exercise of collecting data, most of the changes to the original data take place and only on between 5 - 9% of the total of the data. There was only one instance, where a municipality decided to start afresh (streamlined their framework) after the first round of data collection.

5 Conclusion

5.1 FINDINGS

The Light Assessment Framework proved to be a good and workable solution to address the issues of unvalued and outdated valued properties. It created fast a solid way of generating more revenue from the property Tax Base. It must be seen as a starting point, were light assessment outcomes will be replaced by valuation data over time.

Electronic support of data gathering was key in more than one way. The questionnaire and answers drove the interaction with owners and tenants. Data was stored centrally (Google Drive). Photographs of the properties and in some cases IDs of owners were captured and stored with that data.

This was very helpful when that data was used and integrated in a Tax & Revenue Management System. In this case, the taxMan application. It enabled some municipalities to prepare work in week 1, do the data gathering in weeks 2, 3 and 4 and start generating and distributing bills in week 5.

5.2 RECOMMENDATIONS

When you consider introducing this Light Assessment Framework it is important that you organize buy-in from officials on *National level* (Minister?) if legislation is explicit that valuation must be done by a specific authority. You will need to explain that this light assessment will not replace the official valuation, but merely will give you a starting point that will enable you to gradually grow to a full and wide-spread valuation of your property base.

If legislation is unclear at this point, it is advisable to agree with the proper officials on the way forward.

If more Municipalities are interested, try and agree on 1 common set of Main categories. On local level subcategories can differ. This make is somewhat easier to do nationwide statistics.

Keep it simple!



Light Assessment Framework

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All Government Matters B.V.
Bloemendaalseweg 75
2803 AW Gouda
The Netherlands

Worldwide Inquiries:
info@allgovmatters.com

Visit:
www.allgovmatters.com

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