

# The Theory of Minimal Risk in Local Development Processes

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## Abstract

The paper starts from two practical findings: one is that in Romania, as in many other European countries (see Bulgaria, Spain, Greece, Poland, Hungary etc.) there are many local communities living in poverty, where one cannot speak of a local economy (there is a very small number of companies with low turnover), of competent local authorities or developed civic spirit (so a development process cannot be mentioned). There are communities in a T zero state of development, stage persisting despite the existence of national or European policies in the field. The second finding is that over time a number of theories / methods / models of local development have been formulated, applied with more or less success. Thus, this paper aims to summarize the main theories on local development and, as a result of their analysis, to propose a model / theory to be applied in local development processes to identify the most suitable model of development. The proposed model is based on risk analysis in local development processes, thus generating the theory of minimal risk within them.

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***Index terms***— local development, local community, risk analysis, endogenous, exogenous resources.

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Thus, this paper aims to summarize the main theories on local development and, as a result of their analysis, to propose a model / theory to be applied in local development processes to identify the most suitable model of development.

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**1 Keywords: local development, local community, risk analysis, endogenous, exogenous resources.**

## 2 I.

Local Development development corresponds to a process of mobility, of change with deliberate character for achieving economic-social objectives. Specialists 1 Local development is "the process of development, mainly economic in a given region or administrative-territorial unit, which determines an increase of the quality of life at local level" identify two phases of development -the virtual (VD) and real (RD). Real development has, is or should be accompanied by economic growth and is obtained from the conversion of VD in real development, process mediated by management. 2 . Local development has as objective "economic prosperity and social

welfare by creating a favorable business environment, along with community integration of vulnerable groups, using endogenous resources, private sector development” 3 Author ??: Faculty of Public Administration, National School of Political Studies and Public Administration Bucharest, Romania.

. 1 Dumitrescu M., Strategies and strategic management, Ed. Economic?, Bucure?ti, 2002, p. 96. 2 lat. Disolvere -to grow, to evolve. 3 Parlagi A., Dictionary for public administration, Ed. Economic?, Bucure?ti, 2004, p. 86.

Local Economic Development (LED) is “the process through which local public administration and/or the community, based on groups, manages existing resources and enter into a new commitment to partnership either with the private sector, or each other, to create new jobs, employment and to stimulate economic activities in a well-defined economic zone” 4 Economic development requires “regional or local economic capacity development and formulating the response to economic, technological and social changes etc.” . 5 DSEL actors include “authorities and government bodies (local, county and central) responsible for sectoral policies (industry, environment, labor, public works, transportation, etc.), representatives of economic activities and public services (businesses, banks, unions etc.), educational institutions, NGOs, mass-media etc.”

Local socio-economic development (LSED) is a process of development in a specific region or geographical area, which results in a better quality of local life. LSED refers to the development capacity of a local or regional economy to stimulate steady economic growth and thereby to create work places and conditions for capitalizing its own opportunities of rapid changes in economic, technological and social fields.

LSED’s major objectives are to contribute to economic prosperity and social welfare by creating a favorable business environment, along with community integration of vulnerable groups and promoting a dynamic and positive attitude of the population towards their own region development issues. LSED considers the social and cultural aspects of development.

## 3 II.

## 4 Theories Related to Local Development

Local development envisages the transition of a local community from a state A to state B, superior in terms of quality of life and standard of living, employment, social and environmental conditions etc.

## 5 Fig. 1 : Objective of local development

The methods and tools through which a community can move from state A to state B, have been the subject of numerous theories whose practical application has proven more or less successful, the conclusion of various specialists in the field being that existing theories can be applied to a limited number of cases. It cannot be affirmed that one of the theories enunciated represents through implementation, a development panacea, of shifting from VD to RD, from state A to state B.

Most theories focus on the foundation of development, resources needed to support and their background environment. There are a number of other theories of development, derived from the first category, starting from communities’ autonomy / dependence to communities neighboring / bigger / state / growth poles or in whose area of influence they are positioned. There are also theories that focus on the space or time of development.

In other words, development theories revolve around two categories of factors, the second category derived from the first: endogenous / exogenous resources and autonomy / dependence. According to this view, the regions cannot specialize in what they do best and thereby to benefit from the results of their own efforts, since the resources at the disposal of other regions give the latter a higher negotiation power on the market, and the only solution conceivable is to refuse to play this game, based on rules according to which by definition they will be overcome.

Selective isolation means an action that aims to satisfy the needs of the region within its own territory, starting from the adoption of appropriate economic policy measures at local level.

The second component of endogenous development, namely the use of regional strategic advantage means an export resource development through a parallel export sector, under tight control and developed only for products for which the region has a foothold in the market, regardless of political or economic requirements, which gives it a limited nature.

A model of endogenous development capable of ensuring the autonomy which is sustainable must be based on local characteristics and on the ability to control certain fundamental variables. In particular, such a model can be based on:

”-using local resources (labor, historic capital accumulated, entrepreneurship, specific knowledge of the manufacturing process, material resources) -the ability to check the local accumulation process; -innovation capacity; -the existence of inter-sectoral productivity both intra and inter-sectoral locally; 8 In this way the local economy is now the product of using and completely developing of local resources and its future can be controlled from within. 9 ii. Exogenous development theory 10 Exogenous development theory aims to analyze the impact and influence that the external economic and administrative environment exert over a local development system, mainly endogenous, with the aim 8 Edited by Huynh Cao Tri ( 1998), Participative administration and endogenous development, United Nations Educational, Scientific and Cultural Organization, pag 8 9 Stephen Gyrett ( anul), Local Development, ED Ashgate Publishing Company, p. 91. 10 Exogenous development theory aims to analyze

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the impact and influence that external economic and administrative environment exert on a local development system, mainly endogenous, with the aim of achieving a uniform local development focused on developing an innovative space.

of achieving a uniform local development focused on the development of an innovative area.

Both endogenous and exogenous factors contribute to the achievement of "a process of development, mainly economic in a given region or administrative-territorial unit, which increases the quality of life at local level", local development representing "the expression of local solidarity, creating new social relations and it manifests the will of the residents of a region to harness local resources". 11 Local development is conditioned by factors external from the local level. The local development framework emphasizes the importance of an environment and a policy, capacity building and transfer of resources for local development. Political and institutional environment for local development includes formal institutions such as laws, policies, an organizational system and an informal system represented by a set of values, norms and social practices that support autonomy and local governance, service delivery and the growth of the private sector at local level. 12 iii. Systemic analysis of the development

Systemic analysis of local development tries an integration of endogenous and exogenous factors by analyzing complex environmental and local development process flows.

We can speak of a European system of regional development, in which subsystems of local development can be found. The European system of regional development, like its other subsystems are systems with a mixed architecture, incorporating their own feedback mechanisms and whose evolutions have well defined finalities in the European or national regulatory framework. b) Theories based on the dependency/autonomy i. The theory of uneven development ??4 In the early 1960s a number of theories of uneven development center-periphery relationship have been highlighted, among the most important representatives of which are John Friedmann, Stuard Holland and Gunnar Myrdal. The basic idea of the development theory as chronological differentiation was developed by Nobel Prize winner for economics, Gunnar ??yrdal. 15 Therefore, underdeveloped regions and areas continue to exist, to the extent that growth process mechanisms merely amplify existing development schemes, as hypothesis evidenced by Gunar Myrdal as well.

It is believed that areas / regional disparities are based on chronological gaps inherent in the integration processes, gaps which result in imperfect mobility of production factors. This theory brings up the issue of economic time homogeneity, the development gaps being interpreted as chronological gaps.

## 6 ii. Theory of growth poles

The concept most often associated to development is that inequality is itself the essential element of development, both in time and space.

François Perroux 17 The concept of polarized space designates "all forces of attraction and rejection that an economic unit exerts upon goods and people in geometric space and the ensemble of attraction and rejection forces exerted on itself" formulates a theory based on a simple postulate: economic growth is not the same everywhere, and since it is geographically concentrated around key enterprises, Perroux considered that the polarizing agent is the "pilot enterprise". Development does not occur everywhere the same, as it manifests in growth poles that have a variable intensity, spreading through various channels having varying effects on the overall economy. This theory can be interpreted from the both perspectives of chronological differences and cumulative causation. ???5 He was a Swedish economist and politician, representative of the School of Stockholm, Nobel laureate for economics (1974). 16 G. Myrdal (1957), *Economic Theory and Under -Development Regions*, London, Duckworth. 17 François Perroux, is the one who introduced in 1949 the economic growth poles theory. Perroux defined economic growth poles in terms of what he called "abstract economic space" According to Perroux, the concept of abstract economic space is represented by three elements: "economic field", "a field of forces or influences", "homogeneous aggregate" 18 F. Perroux (1954), *L'Europe sans rivage*, Paris, PUF, p. 353.

. Balanced metropolis policy has as main objective the polarization of an area / region around several towns. iii. Von Thunen model 19 History of location theory begins with the issue of "Isolated state" written by Johann Heinrich Von Thünen in 1826. Thünen was not the first specialist who analyzed the economic phenomena in space, but he was the first who teated such phenomena using spatial analysis 20 Von Thünen's analysis shows that the structure of rural areas depends on its articulation to the urban environment; specifically the closest distance to the urban market determines the location of crops and agricultural landscape structure, thus directly influencing the urban landscape of a certain geographical area.

. The notion of isolated economy in an idealized space was a new, radical idea justifying why Thünen what considered the "father" of spatial economy. iv. Weber model 21 Weber's book, "Theory of branches location" has to be considered a successful treaty in the theory of location in that it shows a continued interest and it stimulates analytical work in the theory of location as a specialized branch of the economy. Alfred Weber's main area of interest was the choice of industrial localization. He was preoccupied with the analysis of the general factors of localization, applicable to a greater or lesser extent in every branch of industry.

It can be argued that a "strong" point of Weber's model lies in its ability to be operational. Appreciable influences of this theory are met in the analyzes regarding the optimal location of hospitals, warehouses, fire stations and other objects of interest, or production units of certain multinational companies.

v. Hotelling model 22 The essential contribution which the localization interdependence theory brings is easing this hypothesis, considering the spatial implications of oligopolies with no understanding among participants.

The first work developed in this direction belongs to Hotelling, the theory being extended by Lerner and Singer.

-models of the localization interdependence theory 19 Johann Heinrich von Thünen's lived in Germany (1783-1850) bringing its contribution to the development of modern science through the work "Der Isoliert Staat" -The Isolated State (1828) which was the first work of German origin in the history of the "theory of central places" . 20 M. Blaug ( 1992), *Economic Theory in Retrospect*, Editura Didactică și Pedagogică, București, p. 650. vi. Christaller's model 23 The development model focused on central places theory is one of the most elaborated space analysis models. It is affirmed that without this theory "it would not have been possible to speak of an independent theoretical geography from other sciences," -models based on the theory of central places 24 The purpose of this theory was to explain the size and number of cities, as well as the distance from where they are located within a given territory. The theory is based on the definition of the city, which is perceived as representing "a distribution center of goods and services for a certain number of inhabitants" this theory being initially developed by W Christaller and A. Losch.

## 7 25

Therefore, Christaller considered that a central system consists from: "a number of central locations grouped around a main central place"

, and the differences between these centers that provide goods and services to outlying areas.

## 8 26

? a main urban center located in the middle of the system;

this being the hypothesis that constituted the base of the theory of central places formulation.

Thus elements that make up such a system have been identified by Christaller as being the following:

? a certain number of urban centers positioned around the main urban center;

? the distance among urban centers;

? the position in which the urban centers are compared to the system of central places, and to other central systems within the region;

? area occupied by such a system of central places; 28 The notion of centrality justifies grouping of services, with the same standard, for the public in one place, these being subsequently provided to additional regions or areas of influence, which are thus polarized by the center. 25 T. L. Bell, S. R. Lieber, G. Rushton ( 1974), "Clustering of Services in Central Places", in "Annals of the American Geographers, Vol.64, No.2. p. 216 www.jstore.org 26 R. E. Preston ( 1971), "The structures of Central Place Systems", in *Economic Geography*, Vol.47, No.2., p. 137, www.jstore.org. 27 idem. 28 The feature of certain urban centers offering quality services to outlying areas is called centrality.

vii. Losch's model 29 In relation to theories based on cost, placed in the spatial monopoly context and to the theories of location interdependence, seen in the spatial oligopoly context of a small number of producers, the school of attraction area of a market leads the structure of competition one step further, placing it in the spatial oligopoly with a large number of manufacturers 30 Losch, as well as Christaller showed that regional networks have multiple dimensions. But regional networks are reducible to the functions of supply and demand for products of the same or different type. When it comes to an economic environment such simplifications can no longer be made, because, as Losch exemplified, an economic environment is a system of different markets, it is a body and not an organ . 31 viii. Zipf's model .

## 9 32

Zipf's law known as the law of "Rank -Size" correlates the size of a city (population size) with its rank (the position it occupies in the hierarchy of the urban system).

The rank-size relationship considers cities as elements of a system within which each of them is closely interdependent with the others, showing the hierarchical organization as the main form of organization.

Rank-size distribution of the urban system highlights its particular elements, such as the evolution of urban growth or competition between cities, providing an overview of the representation of cities' sizes in the territorial profile of the country.

Zipf's Law, states that the population of a given city, tends on average to be equal to the ratio between the population of the most important center and the order number of that city rank, rank determined from the size of the population.

In these circumstances, knowing the population number of the most important city, both the population of the other cities and the total urban population can be deduced.

The relationship rank-size has a high diagnostic power of urban systems, being able to absorb and to produce spatial information for short periods of time.

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## 10 III.

### 11 Minimum Risk Theory

Dictionary of Finance and Banking defines the risk as the possibility of suffering a loss or damage in transactions ??? . Risk is defined as the "potential adverse deviation from expected results 34 Authors like M. Blaug ". In this logic, risk in the local development process represents the non-achievement of the goals undertaken or the inability to move from VD to RD. ??? or F. Knight 36 a) Local development risks identification suggest that risks can be calculated. In fact there are methods of calculating the risks of the public organizations in Romania.

The minimum risk theory in the local development involves identifying risk, calculating the probability and their impact, risk tolerance assessment and formulating measures to counter the risks. Real local development means, according to this theory, a sum of processes with minimal risk. Calculating the risks and applying those processes whose risks are minimal, it is possible to implement, as appropriate, any of the above theories. Each, depending on particular cases, may be applicable, may have results or may not.

According to the formulated definition, the application of risk theory in the local development process assumes the completion of certain stages.

Risk identification is closely related to the formulation of development objectives. Risks can be formulated only related to objectives whose achievement is affected by their materialization. Risk identification process is not and objective but a subjective process, related to experience and knowledge of the one who identifies them. Risks are actually perceptions on factors that may affect the achievement of certain objectives. The same objective formulated in different communities may be subjected to the same risks, but with different probability and impact, or may be subject to different risks.

But beyond individual cases, we intend to identify common risks specific to the general objectives of local development, the transition from the VD to RD or moving from the state A to B. These general objectives are subsumed to their specific community goals, SMART objectives.

Specific risks of the endogenous growth theory are: physical capital risks, risks relating to technological innovation, human capital risks and public capital risks.

From the exogenous development theory, we can identify the following categories of risks: risks concerning the macroeconomic environment, risks ??? In any of the cases, there is a risk of nonparticipation and non-involvement of either category.

### 12 b) Risks evaluation

Once the risks are identified, the next stage is their evaluation from the probability of materialization and of the impact (consequences) over the objectives. The combination of the estimated probability and impact levels represents the exposure to risk based on which the risks profile is developed.

An evaluation method is the one proposed by From the exogenous perspective, representatives of the macroeconomic, technological, ecological, cultural, political / governmental, legal environment are involved.

By applying this method of assessment for identified risk, it is possible that, for example, for the non-participation of citizens in local development processes in a community, the risk to have a medium probability and low impact, resulting in a score of 6, and in another community, the probability to be very high and the impact high, resulting in a score of 20.

In the case of support or interest from macroeconomic environment, in a community the risk may have a high probability and moderate impact, resulting in a score of 12, and in another community, the probability to be low and the impact low, resulting in a score of 4.

In such a hypothetical situation, applying minimal risk theory, the first community will be based predominantly on endogenous elements and the second on exogenous.

### 13 c) Formulating responses to risk

Once identified and measured, risk minimization plans, measures are necessary, Response to risk depends on the nature of risk seen from the perspective of controlling possibilities (of power). In fact, it is about the answer to the following questions: can risks be controlled by the community or not? If yes, can the community control the risks to a satisfactory level? If not, can the community outsource risks or risks generating activities?

IV.

### 14 Conclusions

Local development is a process that is based on endogenous and / or exogenous factors. The ratio of these factors and the success of the development process starting from one or the other category of factors can be determined / calculated by applying the risk theory. The success of development processes requires consideration of processes with minimal risk and a greater probability of achievement. It is true that the economic theories argue that results can be achieved in conditions of maximum risk, the private investor being the one to decide to what extent and which risk categories are assumed. However, in the case of the local development process, coordinated by public policy makers involving public resources one cannot speak about a maximum risk taking.



Figure 1:

Figure 2:

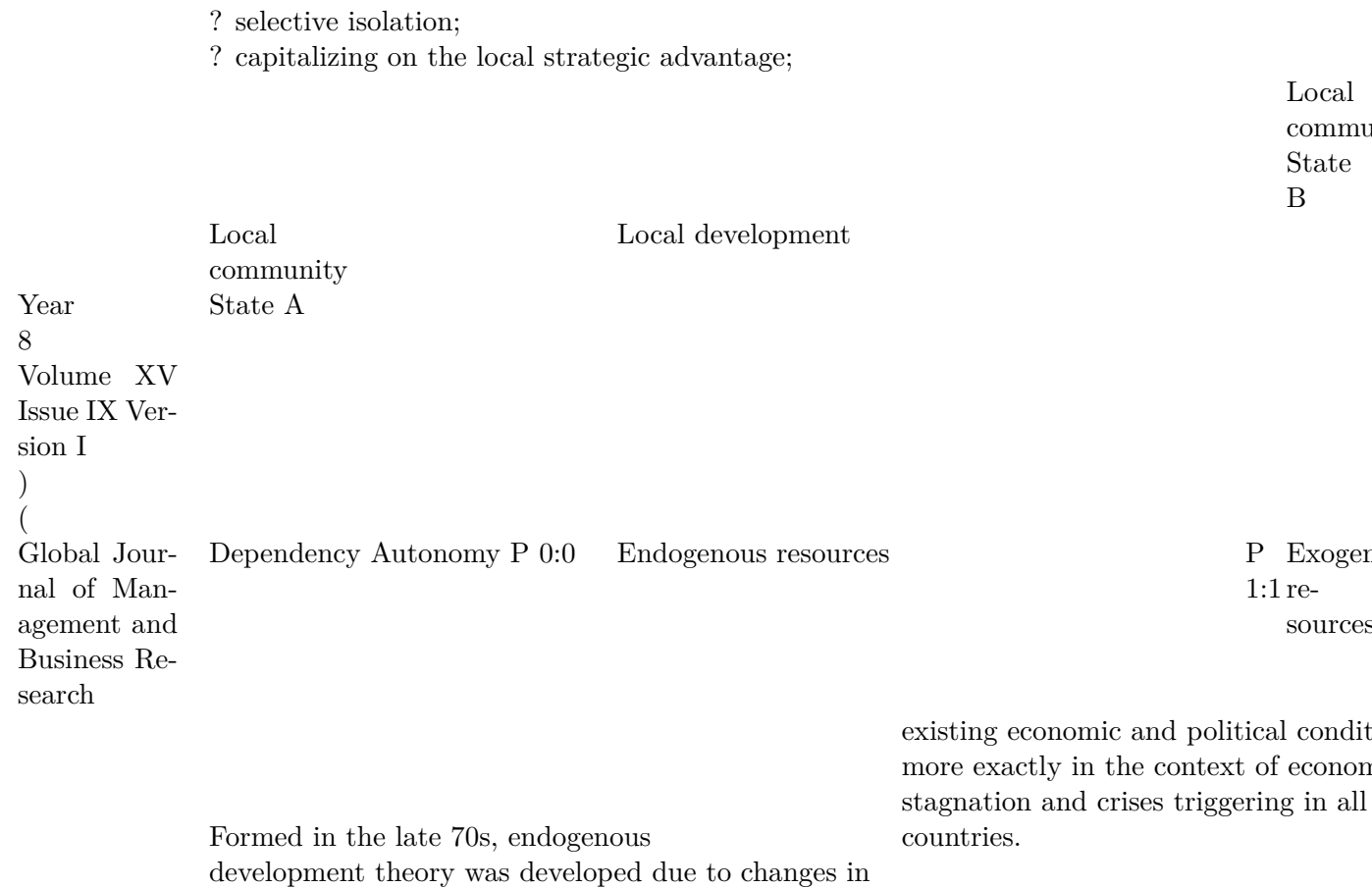
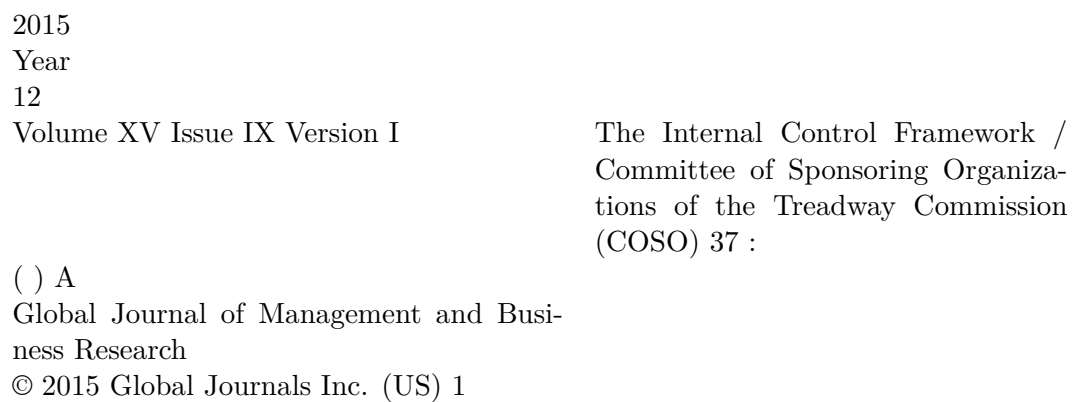


Figure 3: 7

Figure 4:



[Note: ? 37 Presented in METHODOLOGY FOR IMPLEMENTATION OF INTERNAL STANDARD CONTROL "RISK MANAGEMENT", Ministry of Public Finances, January 2007.]

Figure 5:

Very high	5	I	5 4 3	10 8 6	15 12 9	20	25 20 15
High	4	M				16	
Moderate	3	P				12	
		A					
Low	2	C	2	4	6	8	10
Very low	1	T	1	2	3	4	5
		0		PROBABILITY			
			1	2	3	4	5
			Very low	Low	Moderate	High	Very high
							Year 2015
							( )

13. Nicolae V., Daniela Lumini? a Constantin, Regional and Urban Economics Basics, Editura Oscar Print, 1998.

14.

Figure 6: A

277 In these circumstances the minimum risk theory becomes applicable, as a source of local development. 1 2 3  
278 4

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<sup>2</sup>Alina Proftroiu, Sorina Racoviceanu, N ?ar?lung? ( 2008), Local economic development, Editura Economic? p. 8. 12 C. Dumitric? (2008), "Analysis of the actors involved in regional development process" in the volume "Innovativeness-foreign direct investments relationship -European challenges and opportunities", Institutul de Economie Na?ional?, Editura Universitar?, p. 61. © 2015 Global Journals Inc. (US)

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<sup>4</sup>W.Christaller ( 1966), Central Places in Southern Germany, translated by C.W. Baskin, Editura, Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 24 D. Jula ( 1996), Regional economy, Universitatea Ecologic? Bucure?ti.



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