



# COVID-19 Pandemic Experience and Imperatives for Physical Planning in Ogun State, Nigeria: A Situation Review

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## Abstract

The profundity into the rising realities of new urban planning that unbundles the fragility of declining and weak concepts of conventional planning cannot be overemphasized in this COVID-19 era. Therefore, the emerging paths for a post-COVID-19 city rest on the ability of urban planning to be resilient in times of pandemics. This paper discusses the COVID-19 pandemic experience in Ogun State, Nigeria and the imperatives for physical planning. The study relied on secondary data sources (journal articles, newspaper publications, government reports, and blogs) and direct observation (primary data source). Findings suggest that the disease is prevalent in informal settlements and COVID-19 exacerbates several shocks in the state. The study makes a case for a new approach to physical planning that calls for the vigorous pursuit of resilience and the preparation of a resilience strategy to guide future city planning.

**Keywords:** COVID-19, Ogun State, Pandemic, Physical Planning, Resilience

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## 1. Introduction


Coronavirus (COVID-19), undebatably, is the most highlighted disease outbreak in recent times. Chakraborty and Maity (2020, p. 1) described it as the “most crucial global health calamity of the century and the greatest challenge that humankind faced since the 2<sup>nd</sup> World War”. This assertion may be connected to a different dimension of impacts imposed by the disease which range from economic, environmental, health, to social and political challenges on the entire human population. Importantly, the transmissible trait of the disease made it a fast-spreading, deadly virus to be concerned (Shereen et al., 2020).

Since the emergence of the coronavirus, researchers have shown considerable interest in exploring different dimensions

of it (Yang et al., 2020). Such research efforts can be adduced for various interests, among which, the prominent interest was to limit the spread of the disease in the short-term, and more importantly, in the long-term, to develop vaccines to prevent the disease. The steps and measures being taken are laudable with the literature demonstrating that research regarding COVID-19 cut across various spheres. One aspect explored is the spatiotemporal attribute of the COVID-19 (Guiliani et al., 2020; Mo et al., 2020; Yang et al., 2020; Alkhamis et al., 2020). According to Guiliani et al. (2020), the spatiotemporal model application would help a great deal to capture estimates of those infected and assist decision-makers to develop health policy interventions. Studies by

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Chakraborty & Maity, (2020); Ali & Alharbi, (2020) have also explored the socioeconomic impacts of COVID-19 on the environment, society and social life.

Some studies also attempted to examine the connection between COVID-19 pandemic impacts and urban planning (Sharifi & Khavarian-Garmsir, 2020; Hamidi, Sabouri & Ewing, 2020; Aiswarya, Angella & Pooja, 2020). Nevertheless, the implications of the COVID-19 pandemic on physical planning in different contexts have not been adequately studied.

This paper discusses the COVID-19 pandemic experience in Ogun State of Nigeria and its imperatives for physical planning. The specific objective of the study is to bring the situation in Ogun State during the COVID-19 lockdown into a discussion, to highlight the policy and planning implications for the post-COVID era in the state. It is assumed that the study would assist the policymakers and physical planners forge a path through urban planning as the state looks ahead into the post-COVID-19 era.

## **2. Literature Review**

The outbreak of coronavirus disease was announced in December 2019 with its first recording in the Wuhan city, Hubei Province, China and since then, its spread was fast into other countries of the world. The disease, caused by a novel coronavirus named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2; Harapan et al., 2020; Li et al., 2020) was regarded as “a highly transmittable and pathogenic viral infection” (Shereen et al., 2020, p. 91), though the mortality rate was not as high of an approximate 2 to 3% (Palacios et al., 2020).

On January 30, 2020, the coronavirus disease outbreak was declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organisation (Li et al., 2020; Lupia et al.,

2020). Since the announcement, thousands of deaths and millions of confirmed cases have been reported globally though there are cases of recovery by the fortunate ones. To better appreciate the level of transmission and how deadly the coronavirus disease is, in the first 50 days it killed more than 1,800 and those infected were over 70,000 (Shereen et al., 2020). The WHO reported as of March 26, 2020, that there were 416,686 confirmed cases and 18,589 deaths which cut across 197 countries, which give credence to the pandemic nature of the diseases. As it went on the epicentre of the pandemic was shifting from Europe and North America to the global south (Mahler et al., 2020; Mahler and Wadhwa, 2020)

Globally, governments have put in various measures like self-isolation for those infected, social distancing, handwashing with soap under running water, use of face mask, avoiding physical contact, lockdown, and even shut down in some cases amongst others to curtail the spread of the disease (Ali & Alharbi, 2020; Badejo, Ogunseye & Olanokanmi, 2020; Chakraborty & Maity, 2020; Lone & Ahmad, 2020; Vincent et al., 2020). While the impact of coronavirus disease is not limited to public health, there have been far-reaching consequences on the economy and society. For instance, the job losses recorded were confirmed to be “all-time high.” An estimate by the World Bank posits that “about 100 million people will likely fall into poverty due to the impact of the pandemic” whereas as much as 49 million would fall into extreme poverty (Wahba et al., 2020).

Alkhamis et al. (2020, p. 159) explored the temporal and spatiotemporal dynamics of the COVID-19 pandemic in Kuwait at a time of its considerable growth and showed that densely populated areas and poor living conditions of the migrant workers resulted in the highest number of significant spreading and clustering events.

Gayawan et al. (2020) also examined the spatiotemporal dynamics of the COVID-19 outbreak in Africa within the first 62 days of the emergence of the disease and results revealed that burdens of the COVID-19 pandemic in Africa varied geographically with individual country's healthcare-related variables. They noted that Western Africa was the region with a significant importation risk, possibly due to limited travel restrictions within the region.

A few studies also explored the impacts of the pandemics on physical planning. In one of them, Aiswarya et al. (2020), discussed the COVID-19 posed challenges to urban planning in sectors ranging from economic, transportation, urban density, public space, food systems, to institutions, brought through spatial measures such as the quarantines, social distancing, and restriction to public space utilization. Cities such as Bogota (Colombia) and Berlin (Germany) deployed initiatives such as the provision of more bicycle lanes to aid mobility. Sharifi and Khavarian-Garmsir (2020) observed that the issues of environmental quality including air quality, meteorological parameters and water quality were dominant in COVID-19 research on cities. However, the socioeconomic impacts, management and governance, and transportation and urban design-related issues have been underexplored. Mouratidis (2021) posited that the COVID-19 pandemic reshaped the relationship between cities and quality of life. Travel, leisure, work, social relationships, residential well-being, emotional responses, and health were the areas that were impacted by the changes in the physical environments of cities. For instance, the stay at homes for longer periods at home during the pandemic affected the people who lived in small, overcrowded and poor-quality residences. Manns (2021) also noted that virtual consultations became the norm during the COVID-19 pandemic as it is the only way to guarantee that planning systems

continues in the UK. However, he stated that due to the technological gap, the COVID-19 crisis brought to the fore a scenario in Northern Ireland where planning applications could not be submitted electronically, thus slowing down processing and issuing permits (Bryson 2020 cited in Manns, 2020).

In Nigeria, the first COVID-19 index case was reported on 27<sup>th</sup> February 2020 (NCDC, 2020). Ever since, there has been a steady increase in the number of confirmed cases (Appendix: Tables A and B). In an attempt to curtail the spread of the coronavirus disease the Federal Government imposed lockdown measures in Lagos State and Federal Capital Territory Abuja, being the locations with most confirmed cases, and Ogun State based on its "proximity to Lagos and the high traffic between the two states". The lockdown was announced on 29<sup>th</sup> March 2020 after an address by the President on COVID-19 and took effect on 30<sup>th</sup> March 2020 for an initial period of 14 days (CNBC Africa, 2020; CSO, 2020). At these three locations, markets, worship centres, schools, restaurants, clubs, recreational facilities were shut down to assure that the spread was brought under control.

In addition, there was a ban on both domestic and international flights. Initially, the ban on flight operations was limited to some countries with a higher number of confirmed cases. Other states of the federation followed suit within their jurisdictions by the imposition of curfews and various measures to contain the spread of the diseases. The lockdown measures imposed untold socio-economic hardship on the citizens. Palliatives were also distributed to cushion the effect of COVID-19 lockdown measures imposed (Badejo et al., 2020).

Moreover, to combat the COVID-19 pandemic impacts, individuals donated money and relief materials to support the Nigerian government. The faith-based

organisations and private sectors, non-governmental organisations, community-based organisations offered citizens various palliative care deliveries to cushion the impacts of the lockdown (Olisa, 2020; Badejo, et al., 2020). The support received by the Nigerians was not limited to within the country. The international community were also magnanimous in terms of donation of funds, relief materials, and building the capacity of the frontline medical personnel and health workers. For instance, the United States supported Nigeria with a whopping sum of \$32.8 million in the global response to COVID-19 with more to come according to the US mission in Nigeria (Olisa, 2020).

The efforts of the government Ministries, Departments, and Agencies regarding COVID-19 diseases were noteworthy. The Nigeria Centre for Disease Control (NCDC) and the Ministry of Health led by the Presidential Task Force on Coronavirus Disease liaised with other stakeholders to ensure that the spread of the COVID-19 diseases was brought under control (NCDC, 2020).

Following the second COVID-19 case reported in Ewekoro, Ogun State on March 9, 2020, the state embarked on the restriction of movement in a bid to contain the spread of the disease. Consequently, on the 18<sup>th</sup> and 19<sup>th</sup> of March 2020, the Ogun State government extended the ban to nightclubs, worship centres, schools, and gatherings of over 50 persons (Punch, 2020). Despite the movement restrictions and ban imposed, it was reported that 20 local government areas (LGAs) accounted for 60% of the COVID-19 cases in Nigeria (UNICEF, 2020; Premium Times, 2020), Ado-Odo/Ota local government area in Ogun State was among them.

In the dense parts of the state, Abeokuta (capital of Ogun State) in particular, there were mixed responses to the lockdown as residents denied the existence of the

COVID-19 and others exhibited optimistic confidence of immunity against the disease. Nonetheless, there was a dip in social and commercial activities, as well as increased police surveillance to enforce lockdown regulations.

Going forward, this paper examines the experiences during the lockdown of the people in Ogun State.

### **3. Material and Methods**

#### **3.1 Study Area**

The study area, Ogun State in the South-West of Nigeria, situated within longitudes 2°45'E and 4°45'E, and latitudes 6°15'N and 7°55'N. It is bounded on the west by the Republic of Benin, to the south by Lagos State and a 20km stretch of the Atlantic Ocean, to the east by Ondo and Osun States, and to the north by Oyo State. It is made up of 20 Local Government Areas.

As of 2005, the population of Ogun State was estimated to be 3.458 million and has been projected to reach 6.24 million by 2025 (Ogun State Government, 2008).

#### **3.2 Study Method**

Information from both primary and secondary sources was used for the study. The secondary sources included journal articles, newspapers publications, blogs and reports. The NCDC website provided daily statistics on total confirmed cases, discharged cases and deaths related to COVID-19 in Nigeria and the Ogun State. The data considered for the study was for the period between 29<sup>th</sup> February and 30<sup>th</sup> September 2020. Further, to complement the secondary data, the study also used direct observations as a primary data collection method. This is because it helps to capture an event in real-time (Yin, 2009). During the total and partial lockdowns in Ogun State, authors were opportune to move around during days when restrictions were relaxed (the alternate days' rules).

In the visits, the authors paid attention to issues related to the compliance with COVID-19 pandemic combating regulations; COVID-19 impact on livelihoods, jobs and businesses; the intensity of businesses during rotation of workdays amongst other

#### 4. Results and Discussions

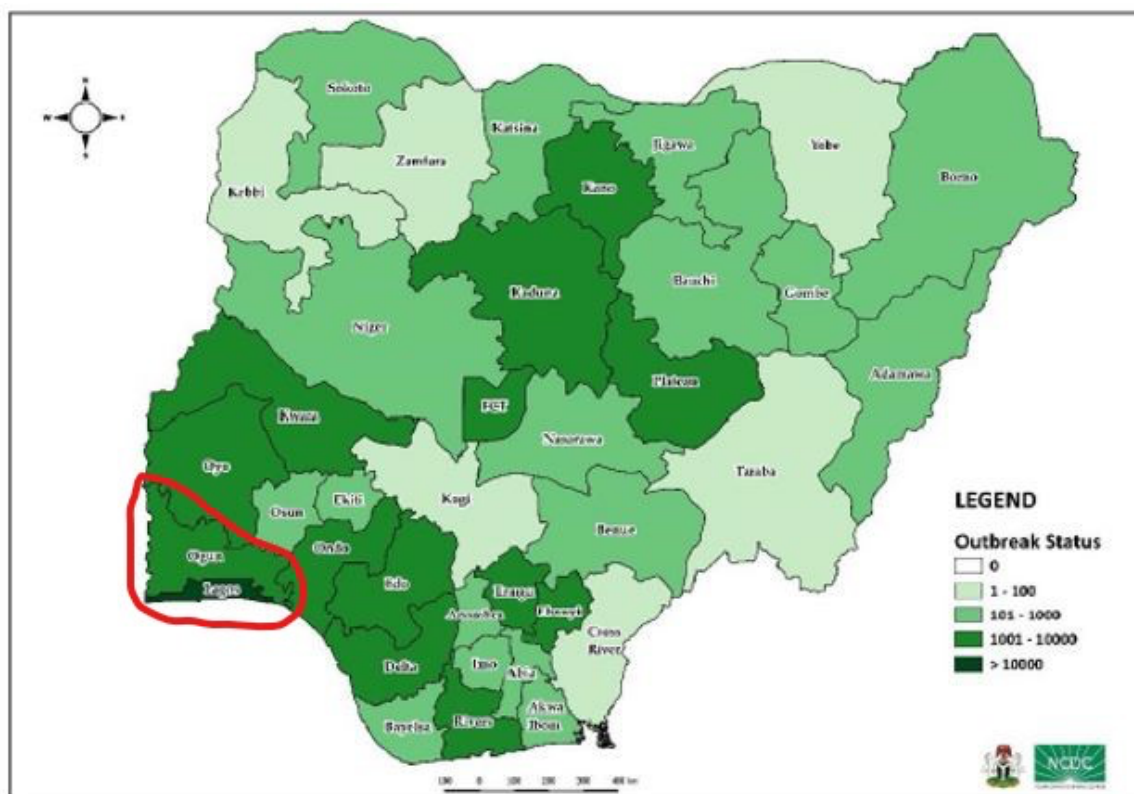
The exponential growth in the number of confirmed cases of coronavirus disease in Nigeria cannot be denied. Still, those discharged after recovery was the desired news. Of concern, however, is that despite the various guidelines and lockdown measures executed across the states of the federation, the number of cases was increasing although the number of deaths was seen as marginal (1,112 deaths as of 30<sup>th</sup> September 2020) compared to nations such as South Africa with less population to Nigeria with deaths recorded put at 16,734 at the same time.

Besides, Lagos State has the highest number of confirmed cases, while Ogun State belongs to the next category of states which recorded a considerable number of active cases (Figure 1 – the two states are circled with Ogun State to the North of Lagos State). Subsequently, the results gathered were discussed.

#### 4.1 Compliance with COVID-19 Guidelines

The Ogun State governor expressed low confidence in the level of compliance of the citizens with COVID-19 prevention regulations, stating a show of utter disregard for precautionary guidelines, international practices, and safety measures, especially during the period when the lockdown was relaxed (Wahab, 2020). One aspect that deserves mentioning was transportation and mobility.

Figure 1. Nigeria Map Showing 36 States and FCT Affected by COVID-19 As of 30th September, 2020  
Source: NCDC (2020)



The Ogun State Government released transportation guidelines (AutoReportNG, 2020) which stipulated a total ban on interstate travels, compulsory use of face masks, seating capacity for taxi cabs as 3 passengers; 7 passengers for 18-seater buses, and 2 passengers for Tricycles.

Regarding transportation and mobility, we observed obvious violations against the cessation of movement at the earliest stages of the lockdown, with commercial vehicles still operating; carrying more than the stipulated number of passengers. Residents also moved around especially in the evenings because the security surveillance was flexible in the evenings.

It was also observed that for the commercial vehicles, when in contact with security officials they drop a few passengers and asked them to join passing the security check. Some drivers courageously compensated the security officials at the checkpoints. This points towards the Governor's speech on the smuggling of people in and outside the state in disregard of the interstate border closure (Wahab, 2020).

For the residents, the financial implications took a toll on them due to the significant increase in the cost of transportation for both short and long-distance trips. These compelled many residents in the state to adopt cycling and walking as means of transportation, especially for short trips.

#### **4.2 The Public Health System**

In the beginning, there was wide displeasure on the level and management of quarantine and contact tracing by the health authorities in the state owing to the news that 104 out of 108 cases originating from a company in Sagamu on the 11<sup>th</sup> June 2020 (Olatunji, 2020). With the state taking a top-three position as of April 2020, the state's public health system had shown competence that was seen the state drop 5 places (late in July) in the state ranking of

active cases and retained this position for a few months.

#### **4.3 Socio-economic Impact of the Coronavirus**

The lockdown was intended to promote social distancing and restrict the movement of potential contacts. However, there were unintended consequences. These include loss of livelihood for those who rely on petty/small scale businesses. There were no statistics to this, but the loss of jobs might have run into hundreds. The cost of local foods increased due to the interstate travel restrictions and closure of borders in the country. For instance, authors observed at the Lagos-Ogun border along the Lagos-Abeokuta expressway heavy-duty vehicles bringing agricultural products to markets in Ota and raw materials to industries in Ota were made to be in long queues for several hours despite those involved in essential duties were allowed to commute.

With the closure of main markets, there was a proliferation of makeshift markets as many street corners provide everyday essentials and food items. In fact, many households in various areas resulted in petty trading. In addition, the growing disparity, poverty, and vulnerability of residents in the state were laid bare during the lockdown period with residents of informal settlements in search of basic amenities despite social distancing regulations.

#### **4.4 Civil Unrest**

The hardship brought by the lockdown resulted in a spree of civil unrest across states in Nigeria. In a bid to fight hunger, the lockdown triggered a violent revolution from the poor, who engaged in robbery. Robbery attacks occurred in locations such as Ifo, Ijoko-Ota, Iju-Ota, Sango-Ota, Adiyan, Agbado, Winners, and Oju-Ore areas of Ogun State.

This spurred a community response as they organized their own security, engaging in

neighbourhood watch, bonfires, and vigilante duties to protect their neighbourhoods. On April 13, the Ogun State government made arrests of over 150 armed robbers causing this unrest during the lockdown (Zita, 2020).

#### **4.5 Rotation of Workdays**

The Ogun State government released further measures at containing the spread of COVID-19 with the state directing Ministries, Departments and Agencies as well as 20 Local Governments to draw up rosters to ensure that 20% of staff across all cadres work daily, thus ensuring that most staff come to work once a week, just as teachers in public primary and secondary schools are to proceed on vacation immediately (Business Day, 2020). Into the months, as working days were Mondays, Wednesdays, and Fridays. Subsequently, authors observed that as soon as the lockdown was lifted, workers resumed fully to their workplace with stringent COVID-19 measures being in place but the enforcement fizzles out with time. During the early period of this rotation, a reduced density of businesses and workers fading at the centres in Abeokuta were observed.

#### **4.6 Palliatives during Lockdown**

With the lockdown eased, Ogun State residents expressed divergent views on the need or otherwise for continued lockdown.

“Responding was an artisan, Mr Kunle Idowu, who said that the lockdown should not be revisited, lamenting the hardships he and his family experienced while it lasted. Furthermore, the government did little or nothing to alleviate suffering during that period. The palliatives promised were either too small or nothing came from it. So, we cannot go through that harrowing experience again” (Blueprint, 2020).

The reduced government effort towards supporting the people during lockdown caused people to move out of their

residences to fend for themselves and family, especially those who lived on daily wages. With such agitations, the compliance from these people was low, coupled with the nature of their jobs which warranted the use of their mouths and hands often, as the use of masks and gloves or sanitisers may be impediments to their work processes.

### **5. Policy and Planning Implications**

The current epidemic raises profundity to rethink the planning implications of lockdown in the city; examining how well the city has fared with a weaker health system compared to that of developed nations.

Ogun and Lagos States relationship goes beyond socio-economic ties as the cities perform complementary functions. Yet, the inefficient physical planning in the states has made them dysfunctional and disconnected, especially in a bid to curtail the pandemic. People work in Lagos and live in Ogun State due to the lower cost of living. Adjoining peri-urban corridors like Sango-Ota, and Mowe-Ibafo are constantly witnessing a rapid influx of residents who are moving away from the expensive and bustling life that Lagos offers. For instance, the housing rental in Lagos is not affordable to a majority of its workers (Salako, 2009). The failure of the Ogun State government to effectively link its urban spaces and monitor its borders is still an impediment to physical planning, and more recently in responding to the COVID-19 pandemic. The failure to integrate this urban space with effective monitoring permits the easy smuggling of people in and outside the state despite the ban on interstate travel. Hence, makes the containment of epidemics such as the COVID-19 difficult at the regional level.

The COVID-19 pandemic will leave lasting marks on the design aspect of planning in the state. With the significance of parks and public spaces explicitly being mentioned

during this COVID-19 as key aspects of the environment, modifications towards public space design in the city are likely to be propagated and hence should be prioritized. The city of Vienna has organized its infrastructure in line with social distancing principles through maze designs for a crowd-free public park.

The pandemic has sparked density issues, which further strengthens the anti-density discourses. The studies revealing that cities are more vulnerable to disease outbreaks than rural areas is unquestionable. It is projected that more than two-thirds of the global population would be living in cities by 2050 (UNDESA, 2014). Hence, the assessment of urban planning practices about ideologies such as smart growth, compact city and transit-oriented development is timely. However, with the COVID-19 pandemic, vulnerability is still very high as social distancing is more challenging in urban environments. With palliatives being distributed in public spaces, it exposed our lack of readiness going forward to a post-COVID-19 city as they were done with little or no compliance to social distancing regulations. Therefore, it is vital to examine the issue of densification at public gatherings in the positions of palliative distributions.

The tiers of government (federal and state) in the country responded to the pandemic through several containment measures, but the difficulties of implementing these measures and their compliance was noticeable. A majority of the populations in the state were battling to contend with physical and social distancing guidelines because they reside in uncertain conditions with inadequate room and the poor water supply, sanitary facilities that worsened the environmental and personal hygiene of their households.

The transportation situation in the state raises the question. Transportation was weakening COVID-19 containment, as the commercial transport operators were

choosing to ignore public health recommendations for a daily wage. However, given the situation in Ogun State, it may be a pathway to achieve sustainable transportation. The COVID-19 pandemic could be an opportunity to embrace non-motorised transport, especially since residents of Ogun State used to walk in the wake of the lockdown and afterwards? Hence, this could be an opportunity to prioritize the 'Walkable City' concept, commensurate with pedestrian infrastructure upgrades.

In adopting such ideologies, the question is, what feasible approaches can be adopted, given the cultural and socio-economic appropriations of public space. Streets can be designed to adapt to the social distancing norm, sidewalks can be prioritized, with the transportation sector looking like a weak link, bike lanes can be a more salient characteristic of the transportation system. In New Zealand, it funded the pop-up bike lanes, geared towards widening sidewalks during the lockdown. This has been termed "Tactical urbanism" a concept aimed at taking road space from cars overnight and giving it to people on foot and on bicycles to keep workers moving safely during lockdown (Reid, 2020). All of these needs to be factored in the design and policy formulation for a post-COVID-19 city to yield better health outcomes.

## **6. Conclusion and Recommendations**

The study revealed that COVID-19 exacerbates environmental, economic, and social issues in the state. The spate of civil unrest, increased transportation costs, loss of livelihood, inaccessibility to basic facilities and services and poverty are some of the issues identified in the study. The post-COVID-19 city challenges all professionals in the built environment to adopt dynamic zoning regulations, which will further transcend functional autonomy for social distancing in cities. Contact tracing of the disease was difficult given the increasing number of cases, but the



spread can be mitigated through proactive urban planning provided resilience is efficiently integrated with planning decisions, designs, and policies.

Hence, COVID-19 presents urban planning with the opportunity to do things differently. This opportunity requires that urban planning incorporate resilience

qualities while aligning and leveraging on the Sustainable Development Goals (SDGs).

To the urban planners in Ogun State whose duty is to ensure efficient land development and management, the key issue is how to mitigate the spread of pandemics and prepare the city for impending shocks.

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