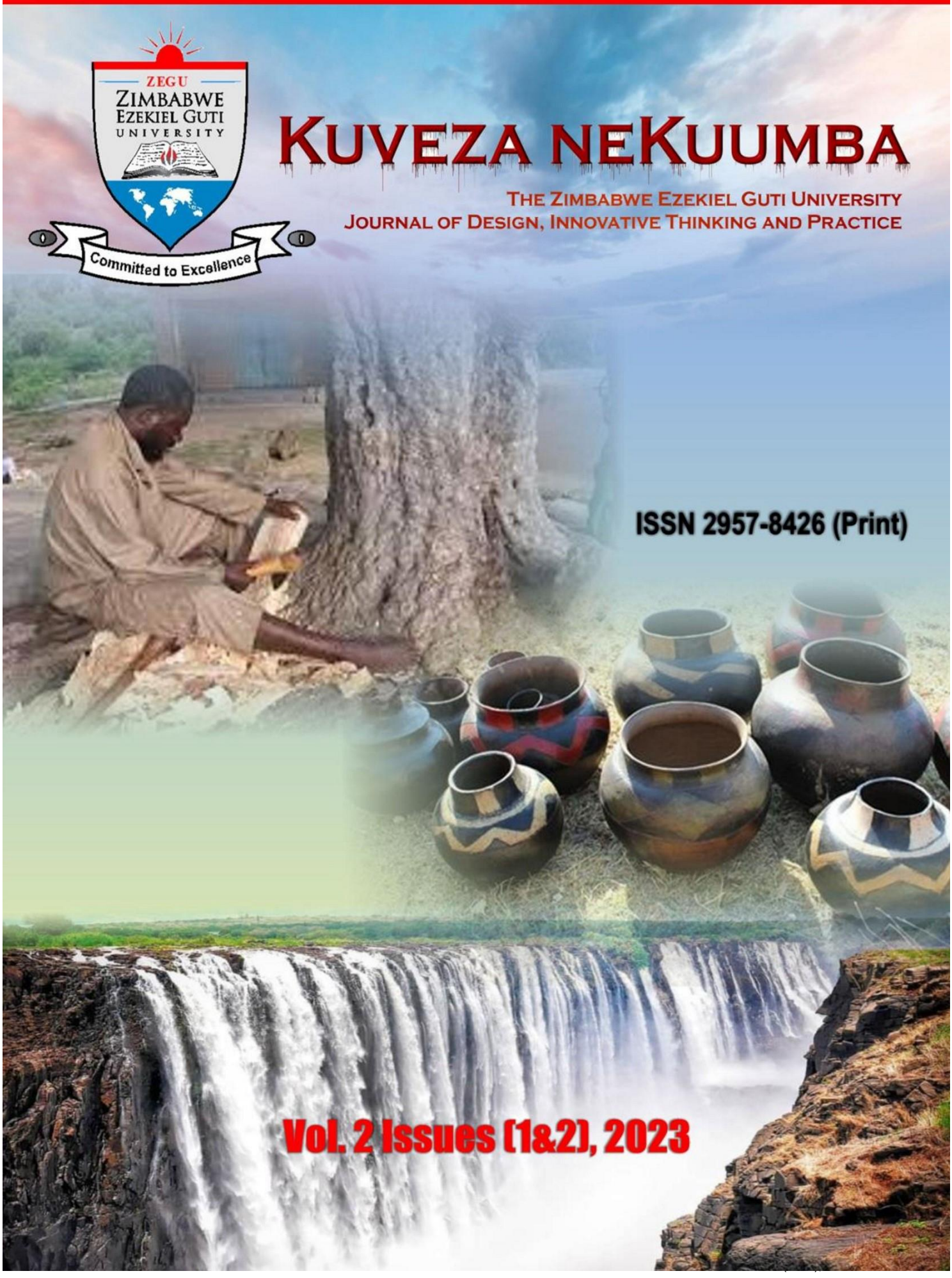
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The purpose of the *Kuveza neKuumba - Zimbabwe Ezekiel Guti University Journal of Design, Innovative Thinking and Practice is* to provide a forum for design and innovative solutions to daily challenges in communities.

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The Gweru City Growth Pattern as An Innovative Governance Issue in Zimbabwe

NYEMUDZAI MLAMBO[1] AND HALLELUAH CHIRISA[2]

Abstract

Urban platforms play a significant role in the development of city resources, addressing social and economic services and the impact on growth and pace of urban systems. Hence, this article sought to explore the historical, dynamic and fluid interactions of these processes to understand motives, drivers, impact and outcomes all designed to drive long-term city development, modernisation and social service provision. The study used mixed-methods approach, employing both qualitative and quantitative methods. The article utilised the Complex Systems Theory to identify regularities at the global scale and enable global comparisons of urban platforms. It examined urban platform governance by outlining various types of public governance and depicting the role of platforms in this context and assessed the relevance of platforms as an emerging form of local public governance by merging theoretical analyses and empirical views from Gweru City. The study revealed that urban platforms concepts and practices can help explain modern growth patterns and pace of cities. The article also provides theoretical arguments and practical frameworks for developing policies for urban innovative development. The work will assist local policy-makers, planners and managers in understanding platform logic in the creation of public value by involving various stakeholders.

Keywords: urban growth, urban innovation and development, urban platform, platform governance

INTRODUCTION

In essence, platforms can be viewed as new forms of urban governance system. Platformisation is a major trend in urban development, with effects spreading across a wide range of urban sectors every day (Heeks and Shekhar, 2020). As argued by Wray and Cheruiyot (2015), there is growing interest among academics and government agencies in developing tools for monitoring and directing urban

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spatial transformation within the city-region. Many cities are struggling to cope with the current magnitude and rate of change and are looking for better management solutions. The creation of environmentally sustainable urban systems involves a complex and interdependent set of social and physical factors that can be comprehended through the application of increasing sophistication models (OECD, 2011).

Urban growth and development have been contentious, with urban poor vying for access to city space against the elite and establishment. As is known, cities are contentious sites of interaction and contestation among social, physical, political and economic entities, making planning and intervening in such systems difficult and thus impeding needed development. Hence, also given that their behaviours are frequently the result (sum total of the parts) of the interaction of their components, urban systems are invariably complex adaptive systems. On one part, mass urbanisation processes are driving rapid expansion of urban systems. On the other, this process is creating contestations and conflict between classes and related interests.

Invariably, the shift to networks, digital technologies and the gig economy, has created issues such as citizen inequality, given the influence of artificial intelligence and automation on jobs now and in the future. Governments could solve the problems by introducing safety nets for people potentially "left behind." This resonates with the current Zimbabwe government's policy of not leaving anyone or region behind. Hence, cities can accomplish this (integrated protection) by implementing policies in four asset categories: infrastructure, people, technology and data (Bollier, 2016).

Explaining the novel concepts and practices, Caprotti *et al*., (2022), argue that platform urbanism was an evolution of smart cities revolution, underpinned by novel, digitally-enabled sociotechnical assemblages that enable new forms of social, economic and political intermediation. Equally, Michel and Schröder-Bergen (2022) focus on praxis of service platforms and the way they use geodata finding that platforms are central actors in a new urban techno-capitalism that are inherently spatial. To explore these emerging ideas, this study‘s focus is on Gweru City growth, innovativeness and integration.

Cuppinia, Frapportib, Pironec (2022) investigated the sociohistorical background for platform economic development to propose a methodological approach linking urbanisation and platformisation in the framework of a more general transformation of capitalist processes. Repette *et al*. (2021) cover both the chances and difficulties for platform urbanism to achieve revolutionary and

disruptive effects on the government and society and the prospects and difficulties for smarter urban development governance using collective information. Because it focuses on Gweru City development pattern as an innovative governance problem in Zimbabwe, the current study is inventive and different.

Most recent literature indicate that urban growth has been primarily driven by urbanisation in the global south (Negendra, 2018). Cities like Paris or Amsterdam, for example, are leading the charge in regulating dark businesses, inspecting, regulating or outright prohibiting their expansion. Datta (2023) looks into the emergence of a digitalising state in the developing world with an emphasis on new governance practices brought about by the information age. As argued by the article, these processes lead to a politics of digitalisation as urbanisation in that digitalisation serves as both a by-product and a creator of local urbanisation. The poorest and most fragile states, particularly those in sub-Saharan Africa and South Asia, face some of the most severe challenges of rapid expansion, including danger, environmental pollution and poverty. To address these issues, creative problem-solving is necessary (Brown, 2015).

If Gweru City is to embrace the concept of "city as platform‖, infrastructure and policies that allow citizens, businesses and technocratic participation, including the electorate, must be encouraged. Cities can become "governance experiments" with open areas for individuals to contribute and assume accountability, where ordinary citizens and civic organisations can explore various and better approaches that help address social needs and stimulating public life. As argued by Adler (2015), individuals ought to be given space and allowed to engage in a constructive manner on their own, without being overly supervised. Platforms can be viewed as hybrids that incorporate aspects of both networks and markets and, to some extent, hierarchies. In the same vein, platforms have some irreducible characteristics that allow them to be perceived as a fourth mode of governance. Today, city governments build and maintain urban platforms to bring together various actors and enable value-added collaboration in service delivery, governance and planning.

Hence, Gweru City should engage citizens in service delivery and citizen engagement in ways that the government does not track and micro-manage, because there are many ways in which citizens want to engage which the government does not allow. Allowing people to experiment and contribute may be one of the most effective ways to generate new ideas and develop innovative projects (Adler, 2015; Bollier, 2016). This underscores the need for research on innovative governance and partnership issues in Gweru City.

STRUCTURE OF THE ARTICLE

The Gweru City growth pattern, as an innovative governance approach in Zimbabwe, is examined in this article. The context of the study will be discussed first. The conceptual framework of the study is highlighted, to be followed by relevant literature review, methodology, findings and discussion, recommendation and conclusion.

BACKGROUND OF THE STUDY

Municipal governments face difficulties because so many traditional systems of city governance, service delivery and management have a very different logic and culture from those spawned by network platforms, hence the need to re-imagine the city as a platform. Traditional modes of representative politics and bureaucratic administration have existed for decades, if not centuries, and are generally intended to exert strict hierarchical control. Since 1980, the Zimbabwean government has cultivated a well-developed worldview and professional culture that values strict rules and regulations. Local authorities should harmonise perspectives and practices with the emerging network culture to promote past-driven innovation. Therefore, Gweru City should be innovative and embrace new technologies to drive growth and development.

The other challenge faced by city governments is to find new ways to navigate the transition to "platform governance", that refers to network-based modes of interacting with citizens and co-producing services (Boiller, 2016). Political, economic, technological and cultural barriers are impeding Gweru's urban growth and innovation. To address these issues, entrenched institutional structures must be examined and revamped. Yet another issue affecting Gweru City‘s growth is that there are frequently knots within the city structure that must be untangled to leverage collaboration. To make matters worse, many cities have limited resources, resulting in serious inequalities for thestate's citizens as more prosperous cities become more networked and "smarter", while poorer cities fall behind (Herrera, 2015; Boiller, 2016).

Furthermore, governments resist change because they do not believe they can fail, leading them to act in a conservative, cautious manner. Governments may find it difficult to innovate when their roles are so critical and so many different constituencies rely on them. Facilitating change within government is one of the most difficult challenges (Verhulst, 2015). Gweru City lacks innovation due to government's slowfooted, less strategic decisions. However, local governments are very different types of organisations serving very different functions. Despite the fact that most governments recognise the need for adaptation, they are

affected by politics. But, it is more difficult for them because three political parties (the Zimbabwe African National Union-Patriotic Front (ZANU-PF), the Movement for Democratic Change-Tsvangirai (MDC-T) and the Citizens' Coalition for Change (CCC)) run local governments and must negotiate agreements among themselves. Apparently, they disagree on many issues leading to poor service delivery.

As argued by Repette *et al*. (2021), the consequential disruptions force governments and societies to seek ways for their cities to become more humane, ethical, inclusive, intelligent and sustainable. Cities should embrace and implement the concept of City-as-a-Platform with the hope of providing innovative approaches for addressing the disruptions.

THEORETICAL FRAMEWORK

THE COMPLEX SYSTEMS THEORY

It is now well acknowledged that the urban system is extraordinarily complicated. Urban planners and other decision-makers involved in urban administration and construction have widely adopted von Bertalanffy's 1968 Systems Thinking. Systems Thinking is concerned with complexity, accuracy and an all-encompassing strategy. To understand "synergy", "interdependence", "interconnections", and change in one aspect that affects the evolution of an organisation's behaviour, this systems approach seeks to explain these concepts. As argued by von Bertalanffy (1968), real systems are responsive to, and engage with, their environments to emerge with qualitatively new qualities, leading to ongoing evolution.

This article examines urban growth as a system, specifically a complex system, revealing the universal and distinct characteristics that it shares with and differentiates from other complex systems (Cheng, Masser and Ottens, 2003). Physical expansion or change in space (transition from non-built-up to urban), and functional changes, or changes in major activities, are components of urban development. As a result, urban growth should be understood in terms of space and activity. As an open system, urban growth creates a new dynamic system that imports a variety of regulation/decision-making, investment from higher organisations, external investors, residents and managers (*ibid*.). The spatial dimension, new development density (population density or land conversion) decreases non-linearly with distance from the city centre and sub-centres all have an impact on urban growth.

For the purposes of this article, urban systems are defined as systems that are a part of a larger urban or metropolitan environment. A system is defined as a complex whole, a collection of things that work together as a mechanism or an interconnected network. Thus, urban systems are defined as a collection of components, subsystems and agent systems that interact to form a complex whole in urban environments. The complex whole includes city residents, service providers, planners and other interested parties. The design, operation and continuous improvement of such systems are difficult due to the nature of urban systems being complex adaptive systems (Batty, 2013).

Complex adaptive systems are multi-component systems that interact non-linearly, self-organise and constantly respond to their environments (Portugali, 2006). Because complex adaptive systems are ever-changing, they are difficult to operate, manage or predict. Cities and urban systems are more interconnected today than ever before and are also vulnerable to both technological and social disruptions. Urban systems interact in a variety of ways and frequently deal with a rapidly changing environment. Cities are the sites of numerous social, physical, economic and political interactions. Urban areas are forming systems and structures that frequently deal with functions and processes in the same space and time, causing them to interact in complex ways (Preiser, 2018). The interconnection of various systems necessitates the development of new methods for comprehending the effects (Moustaid, 2019).

The difficulty is that urban systems are complex adaptive systems because they are the site of interaction between many social and physical components (Barthelemy *et al*., 2013). The interactions of such agents frequently result in difficult-tounderstand dynamics. The realisation that cities are dynamic networks of people and information, rather than a physical environment, is shifting the focus of city planning from a 'place' to a space of interactions of networks and systems of various morphologies (Portugali, 2006; Raghothama *et al*., 2017).

The perception of cities and their subsystems as complex systems with non-linear relationships, self-organisation, emergence and ever-changing dynamics, has given rise to a new science of cities (Portugali, 2012; Batty, 2013). Cities are dynamic and ever-changing due to their evolving nature. The interconnection of the constituent subsystems of urban systems frequently poses policy challenges. The consequences of changes in one subsystem frequently spread beyond its boundaries. This makes planning and designing city subsystems and aspect systems difficult. Stakeholders often plan from the perspective of a subsystem and try to achieve their goals in an environment where other stakeholders have different goals, values and experiences (Vogler *et al*., 2017:717).

The non-uniformity of stakeholders' incentives, values and objectives makes city planning even more difficult. Furthermore, top-down planning approaches have frequently failed because cities and their constituent systems are selforganising, reacting to new information, rather than being planned from the top-down (Portugali, 2012; Barthelemy *et al.*, 2013; Batty, 2013). Cities are no longer isolated, as populations and city systems can respond to national or international trends (such as climate, economic growth, political situations, migration and technological effects) (Glaeser, 2013). The complex system theory is relevant to this study because it helps explain the city and urban dynamics, growth and innovativeness.

LITERATURE REVIEW

Urban platform research is still in its infancy (Caprotti, *et al*., 2022). The phrase ―Cities as Systems within Systems of Cities" was first used by Berry in 1960, as referenced in Boiler (2016). Platformisation, in the opinion of Repette *et al*., (2021), is an essential element of sound governance. Zoning, spatial planning and the provision of public services like housing, educational, recreational and medical facilities, are all under the purview of local governments. Barns' (2020) account of platform urbanism is a comprehensive examination of how data circulates in various forms as it is created, aggregated, processed and redistributed.

An "Urban Platform" is the actualised application of a logical architecture or design that connects (integrates) data flows within and across city systems and uses cutting-edge technologies (IoT/sensors, cloud, mobile, analytics, social media, etc.). These technologies provide the building blocks for cities to quickly transition from dispersed operations to predictive effective operations and novel ways of engaging and serving city stakeholders (EIP-SCC, 2016).

Cities are challenging places to live. They are forces for societal and economic advancement (Metropolis International Institute, 2009). This has both good and terrible effects. On one hand, cities expand as people move there in quest of greater quality of life options, such as the ability to make more money, learn new things, have access to medical care and other services and build relationships. They can act as focal points for future economic expansion and global rivalry and be the keepers of present and emerging cultures. They are also acknowledged by the international community as focal locations for tackling the biggest issues in environmental sustainability and economic and social growth (Metropolis International Institute, 2009; Villesendevenir, 2010;).

The term "city data" refers to information held by any organisation, whether it is a government agency, a utility company, a business, or a not-for-profit organisation, that affects the local populace and the operation of the city in some manner. It may be static, almost-real-time, or real time in the future, and practical or descriptive. Additionally, as individual citizens produce more data in the future, this data can also be regarded as city data (with proper consideration for privacy and a strong trust framework) (EIP-SCC, 2016).

As argued by Boiller (2016), the shift in mindset toward "the city as platform" is having far-reaching consequences in almost every aspect of local administration, governance, urban planning, trade and business, public transit, public safety and health cultural and social life and democratic citizenship. Citizen participation, through networks, is required to reduce bureaucracy. Cities should develop policies to ease the transition to new types of open-platform administration and governance. In other words, cities can use digital and network technologies to solve urban problems, co-create different initiatives and raise public awareness more directly in the city's work and play by tapping the expert knowledge of its many stakeholders and residents. Cities use the open data, crowdsourcing and urban prototyping to improve both government services and the enjoyment of city life.

Furthermore, city officials are typically more directly accountable to politicians and city councils than to individual citizens. This is a major issue because political decisions override everything. However, in a networked environment, this mentality can not only result in poor service, but it can also undermine the city's "brand" — its image, goodwill and culture — and fuel citizen frustration, anger and cynicism. The best way for governments to address this issue is to focus on users and make interactions more convenient and seamless (Pahlka, 2015; Boiller, 2016). For example, the process of obtaining city permits could be streamlined by making it available online or through digital platforms. People with special interests in traffic or city parks may receive text notifications on their smartphones on a regular basis. In practice, the mayor and councillors are feared by the city staff and citizens. This affects service delivery.

The Gweru City Council current systems' shortcomings are well illustrated by city government websites that hardly communicate anything. Cities are failing to redesign and rebuild their information and administrative systems. Some documents are simply scanned and posted as PDFs on the Web; they are not searchable or cross linkable (Pahlka, 2015). Users searching for a specific piece of information will be frustrated, if not completely stymied, due to the poor navigation. Palacios and Kaufmann (2022) concentrate on two issues relating to

delivery platforms and urban government. The first difficulty is from the use of algorithmic management and the optimisation of their workforce that allows for a fast-paced work environment and increases occupational risk for their employees. The second difficulty is brought on by the platforms' geographical presence in cities.

Platforms, rapid growth and pervasiveness in daily life undoubtedly provide issues for urban government. As a result, thinking about a digitally enabled urban future where sustainable development retains the social feature. Urban platform research is important because it shows that while most local administrations are not very smart, cities are. In Zimbabwe, most municipal governments lack accessible, responsive websites or data centres say via social media links. Instead of using computers, citizens communicate with government through smartphones. A city's "brand image" and perceived personality are significantly impacted by citizens' technological interactions with city government, as smarter politicians and city managers are aware of.

To address urban governance problems, there is need for reimagining urban governance and administration which entails a variety of new municipal institutions, new attitudes about the proper role of government and political leadership that seek to facilitate and empower rather than dictate and control (Boiler, 2016). Gweru City should see things differently, and a new culture should emerge. Residents of Gweru should be given the opportunity to form the government that they need and deserve (Pahlka, 2015; Boiller, 2016).

Poorly organised city departments can be remedied, for example, through collaboration among city departments. Transparency in city government would presumably aid in addressing some of the issues that cities face. However, as several participants pointed out, transparency does not always result in the kind of changes that are hoped for. The threat of transparency can be debilitating if the disclosures are politically damaging in the first place (e.g., a failed information technology experiment, data revelations about unequal services in different neighbourhoods). Cities should not embrace open data systems and open network platforms that are prone to exposing administrative failures or embarrassing political decisions. If there is a lack of transparency, the performance of information systems and city agencies is politically irrelevant. Failures in infrastructure and poor agency coordination provide their own political justifications for action. As a result, Zimbabwean city governments should be evaluated based on their performance in network-based administration and governance.

Urban platform studies also discuss the operating mechanisms of innovation systems, with Markatou and Alexandrou (2015) noting that a small-scale innovation system must consider not only economic factors, but also the full range of societal challenges. Yang *et al*. (2019) investigated the relationship between industrial development, urban expansion and the development of urban innovation from the standpoint of industry-city integration.

Nonetheless, there is still a lack of research in understanding the operational model of the urban platform, that has different goals that can also be in conflict, such as city internal operation. This builds on Leszczynski's (2020) observation that platform urbanism is incomplete and prone to malfunctions because of organisational issues, yet it is these malfunctions or
'glitches' that allow resistance and innovation to materialise. Such a mess made by urban planners would be a welcome counterbalance to the oligarchical land centralised power structures that critics have observed. Embracing the incoherence and messyplatform urbanism, while powerful and potentially inequitable, may be a helpful step in creating new and more vibrant urban spaces and services versus publishing public data (Boiler, 2016).

There is a gap in literature as local authorities are mandated to be transparent and embrace digitalisation to improve service delivery. Platform governance is the in-thing in the 21st century. Cities should use information technology to develop the tools and environments. Governments and citizens can work together to develop public spaces, new educational programmes, modes of transit, public safety measures and other services (Boiller and Brown, 2016). O'Reilly (2016) argues that we tend to think of government as doing things, but it should also be thought of as a platform that allows things to happen.

METHODOLOGY

In this article, the mixed methods research approach and case study method were used. The study gathered information by sending Likert Scale questionnaires to 30 council officials (quantitative) and conducting interviews with five department heads (qualitative). The convenience sample size of 35 participants was used in this study, allowing the researcher to establish and maintain a good rapport with all the interviewees and achieve saturation. The population of this study includes all urban local authorities in Zimbabwe. The Gweru City Council in Zimbabwe's Midlands Province was the study's target population.

In this study, qualitative data was collected using purposeful sampling, specifically interviews, and the sampled participants were relevant to the research

questions. Managers were specifically chosen for their extensive knowledge of the organisation's urban growth problems, plans and future projects. Separate quantitative and qualitative analyses were carried out. The researchers combined quantitative and qualitative data and results to analyse both data sets (Creswell and Clark, 2011).

The researchers made certain that participants could decline or participate in the study and withdraw from it temporarily or permanently, without explanation. Free and informed consent was required for this study. As a result, the researchers‘ main ethical concerns were reducing the risk of unforeseen harm, confidentiality by protecting interviewee information and confidential information, honesty by not fabricating, falsifying or misrepresenting data and effectively informing interviewees about the purpose of the study and participants freely participating or withdrewing from the research at any time, reducing the risk of exploitation (Melham, Moraia, Mitchell *et al*., 2014).

The study is based on interviews with council heads of department and officials. Gweru City Council has experienced rapid urbanisation from 1980.T here are two local authorities in Gweru, namely Gweru City Council and Vungu Rural District Council. Rural-urban migration has resulted in the population increasing to 350 000.

RESULTS

This article produced several key findings and discussed Gweru's urban platforms.

EXISTENCE OF URBAN PLATFORMS IN GWERU

As revealed by the findings of the qualitative study, current knowledge on urban platforms is generally low in Zimbabwe local governments. As argued by data collected, 39.7% of respondents generally agreed, 20.7% strongly agreed, while 31% disagreed and 8.6% strongly disagreed. Evaluation of the interviews showed that staff were unsure of what is useful and what is not on urban platforms, attesting to the general ignorance about the frameworks.

TYPES OF URBAN PLATFORMS

The City officials interviewed agreed that *there are generally no platforms for the participation of the informal sector in the development of the City of Gweru.* Vendors are selling at undesignated places and this results in them harassed by municipal police. This scenario means that the people in the informal sector are not participating in the development of the city because of lack of platforms.

URBAN GROWTH

The majority of the respondents (79.4%), agree and strongly agree that the City has expanded, as opposed to 20.7% who disagree. One head of department said, ―The City is expanding at an alarming rate for example, Mkoba has 21 villages and there are new suburbs that resulted in population increase.‖ In low density suburbs, there are new suburbs like Hertfordhsire

Park, Tatenda Park, Umsungwe Park, Southview Park and

Daleyford just to mention a few. This indicates that the city is expanding into peripheral areas.

During the interview process, Gweru City officials also emphasised the importance of urban population structure and cultural quality. A reasonable population structure, in other words, can effectively control unemployment, reduce urban social instability and promote urban social development. Local governments should embrace urban platforms to improve and address issues related to urban growth

URBAN INNOVATION AND DEVELOPMENT

Drawing on research findings thirty (30) respondents disagree that there are innovative activities taking place in the city, 23 agree and five strongly agree. This is because of lack of knowledge on urban platform issues. Research findings clearly established that knowledge on urban platforms is limited.

PLATFORM GOVERNANCE

From the interviews, city officials revealed that the city should be autonomous and that stakeholders should be involved in governance issues. Platforms introduce new components to the field of public governance. Platform governance implementation by local authorities is affected by a lack of finance. The findings showed that 50% of the respondents strongly agree that platform governance is the way to go, whereas 39.7% agree that platform governance does affect city growth, and only 10.3% indicated that they disagree with this. This indicates that platform governance should be regarded as a form of governance by local authorities. The study also revealed that some local authorities are implementing platform governance at a very slow pace.

URBAN DEVELOPMENT AND LEADERSHIP

From the interviews with city officials, it was gathered that the city lacks dynamic leadership, hence poor service delivery. Another factor affecting urban platforms

is ineffective leadership as argued by respondents. A lack of dynamic leadership, as argued by the council officials interviewed, has an impact on urban platforms. A good leader ensures that urban platforms are well-organised and data is secure. "Lack of dynamic leadership manifests itself in inexperienced leaders and leadership failure," argued some interviewees.

URBAN PLATFORMS AND CITIZEN PARTICIPATION

According to the study, only 30 out of 35 respondents concur that a lack of community involvement has an impact on urban platforms. This is since public participation in decision-making has improved service delivery. Communities are conscious of this. To provide better services, municipal governments should involve the community. When addressing problems with service delivery, rapid city growth and mass urbanisation, this is of utmost significance.

The study found that local governments launched awareness campaigns by hosting consultation meetings with residents to involve them in urban platforms. Residents have the chance to contribute to discussions about urban platforms and participate in decision-making processes at consultative meetings. Since residents have no trust in government, they are unwilling to pay for the services that councils provide. The situation led to poor service delivery.

The interviewees revealed that there is a lack of engagement of citizens in development issues. Platform urbanism offers a unique opportunity for urban planners by creating a new sociotechnical canvas for urban development. This study revealed that in Gweru City citizen, e-participation was found to be positively associated with the clearance rate of urban service requests, though the magnitude of the effect varies between different types of city services — there was more involvement in complex problems compared to simple routine services.

DISCUSSION

TYPES OF URBAN PLATFORMS

City fathers and managers should come up with policies that incorporate informal traders since they play a critical role in the development of the city. As argued by Boiler (2016), there is need for the inclusion of urban informality in the development of the city to take advantage of the development potential of informal activities. Participation of various groups in city development will create a shared vision of the city, and it will help to bridge the democratic gap between the city and civic society and bring cities closer to the realities of urban life (Watson, 2007). This inclusive governance will foster a civic culture and a transition to an inclusive city (Menegat, 2002). This ushers in a shared vision of

the city, that may result in cost-sharing between the city and its citizens. In some cities, physical planning approach does not result in an inclusive city because it is always disconnected from the realities on the ground (Chigwenya and Simbanegavi, 2020). There are various types of urban platforms. The various digital platforms such as Google, Facebook and Amazon, and urban platforms such as Uber, have thus been manifested in other countries like the USA (Barns, 2020). Some of these digital platforms are being utilised by Gweru City.

URBAN GROWTH

In Zimbabwe, the City of Gweru is among cities that have been, and are still, experiencing lateral urban growth due to the existence of undeveloped land in the urban fringes (Matsa *et al*., 2021).The population of Gweru City is growing year by year, and has an estimated population of around 350 000 (National Statistics, 2022). As a result, it is critical that Gweru City residents be made more comfortable and improve their wellbeing. In this regard, several pillars are required, including energy, mobility and ICT, among others. ICT contributes to the digitalisation process, that is one of the city's urban transformation strategies. The three-tier inter-operability concept helps local authorities to avoid loss. Furthermore, it encourages the development of entrepreneurship programmes to develop new services with the goal of making cities more liveable (Hernández *et al.*, 2019). An urban platform is a crucial facet in promoting transparency and openness of urban data.

Many cities are unable to manage the current scale and rate of change and are searching for better management solutions (OECD, 2011). As argued by the Head of the Engineering Department, the city is expanding at an alarming rate, necessitating the creation of a GIS database that includes Google maps and cadastral maps. Urbanisation is the physical growth and change in the extension or intensity of urban areas because of local and global change, including the movement of people from rural to urban areas. Gweru City is surrounded by rural areas, hence the increase in urban population. With the expansion and integration of various technological and communication networks, the nature of urban governance has become increasingly complex. As a result, leadership, community engagement and new perspectives on decisionmaking systems have become critical to managing urban growth (Commission 2 Report, 2011).

As a result, new urban efficiencies, products,and services for city dwellers are possible. Users can then access an open access digital services delivery platform via a smartphone or laptop, all the way up to digitally enhanced infrastructures like responsive public spaces, intelligent transportation systems, or smart energy

infrastructure. The city becomes a permanent platform for interaction, offering each user a unique mix of services. Furthermore, by empowering users to create their own solutions and services, a more inclusive and bottom-up model of social and economic development will be created, while local dynamics will be accelerated.

URBAN INNOVATION AND DEVELOPMENT

Urban innovation systems can also be viewed as complex systems composed of many interconnected sub-systems and artifacts, meaning that the boundaries of an urban innovation system must be clearly defined before studying the factors that influence such a system. Hou *et al*. (2009) expand urban innovation to six elements by including knowledge innovation ability and environmental innovation ability. Chen and Xu (2009) examine the innovation experiences of innovative cities in a variety of countries, concluding that urban innovation systems comprise three basic elements: innovation subject, innovation resources and innovation environment.

The social factors that influence urban innovation and development are included in the social system. Population, policy and social structure all constrain the social system. When analysing the relationship between social organisations and human activities, culture, scientific level and traditional habits must all be considered. These elements are inextricably linked to the innovation and development of cities and urban centres.

The Internet of Things (IoT) is a concept for connecting various sensors to the Internet. Using big data analytics with applications in smart cities. it has the potential, at least theoretically, to improve urban services, while reducing resource consumption (Boiler, 2016). There is also literature that takes a more critical or realistic approach, claiming that building large-scale smart city IoT platforms remains empirically challenging, and challenges of how to solve residents' privacy rights . As argued by Barns (2020), platforms play a growing strategic role in the daily lives of cities by facilitating subject matchmaking, whether for mobility, accommodation, shopping, or even dating, thereby expanding data ecosystems of users, producers and consumers.

Cities' administrative levels are analogous to geographical locations and thus represent different resources. Indeed, most cities with a higher administrative level have better transportation, better infrastructure and more physical openness. These benefits have encouraged a variety of other factors. At the same time, the central government tends to allocate more resources to the capital, municipalities

directly managed by the central government, and cities specifically designated in the regional or national governmental plan when promoting the development of local governments. Accumulation encourages urban innovation and development (Cartier, 2011; Wei, 2015).

Provinces and autonomous regions favour province capitals and capital cities in this context because they are preferred locations for capital investments and other economic and social support mechanisms (Peng *et al*., 2016; Cainelli *et al*., 2021). Culture plays an important strategic role in a city's development, with the cultural environment both supporting and leading innovation and development (Lazzeroni *et al*., 2013). Furthermore, cities with a high concentration of cultural assets and cultural industries are more likely to stimulate the vitality of innovative entities and generate new ideas, resulting in greater innovation capacity. In Zimbabwe, Gweru's innovation and development have benefited from its rich, central location and cultural diversity, creating a supportive and enabling innovation environment (Gu *et al*., 2016).

To achieve the desired effects, the platform model emphasises the collection and co-development of actors' outputs, information transparency, user orientation and the role of the platform's own facilitation and integration tasks (Anttiroiko, 2016; Bollier, 2016). The city's task is not to do everything itself, such as providing in-house services or favouring regime politics, but rather to create conducive conditions for the activities of government, markets, businesses and the third (civil society) sector (Thornton, 2016). The city government must continue to facilitate and orchestrate collective action, and provide tools and ensure public value (Millard, 2018).

Haveri and Anttiroiko (2021) argue that one plausible way to think about platform governance is as a hybrid in the sense that: its rules and the platform creator's internal governance are based on hierarchy; its open-access orientation and the gathering of large masses of users together through matchmaking functions bring it closer to the market mechanism; and, the connections between the platform creator, producers and the wider ecosystem, resemble network logic. In terms of fundamental forms of governance, platforms appear to be market-like networks or network-like markets. Nonetheless, the integrating socio-technical locus is a platform with a distinct function. It manifests itself as a facilitated collaborative space capable of dealing with audience building, matchmaking and other forms of distributed social action and connecting with larger business, service and innovation ecosystems (Ansell and Gash, 2018).

Platform governance conditions ensure the extension of rulebased digital interaction systems across diverse sites, selves, sensors and situations. These rule-based conditions are "ambient" in the sense that they are not visible to users, who are encouraged to create their own value, content and services in exchange for underlying data (Barns, 2020).

Localised arrangements related to urban development, local public services, innovation, and/or citizen participation are referred to as urban platforms. Urban platforms use modern technologies to integrate actors within and across city systems and improve interaction between them. They are frequently initiated, governed or supported by public sector organisations, most notably city governments (Hodson *et al*., 2021).

Educational institutions in Gweru City have a significant impact on the city's ability to innovate (Huang *et al*., 2014; Luca and Margherita, 2016) and a city with a high density of educated residents is more conducive to regional economic growth (Glaeser, 1998; Armeanu *et al*., 2017). Hence, the education structure of the population has a significant impact on urban innovation and development, thereby stimulating the spirit of innovation, that is unquestionably conducive to the generation of new ideas and the development of new technologies. Urban innovation and development are critical drivers of innovation system performance at both the regional and national levels (Ari-Veikko, 2016; Lauer and Liefner, 2019; Deng and Chen, 2020).

Urban development and innovation are complex and dynamic processes that necessitate long-term planning, rather than short-term interventions. This process is dependent on governmental entities providing and coordinating supporting mechanisms and appropriate regulations and controls. Cities with high quality social governance often have a higher quality of innovation and development (Liu *et al*., 2017).

PLATFORM GOVERNANCE

Platform governance, defined by Gorwa (2019) as a concept that refers to the layers of governance relationships structuring interactions between important parties in today's platform society, captures the expanding body of work addressing the political effects of digital platforms (governance by platforms) as well as the difficult challenges that platform company governance presents. Platforms take part in individual, userlevel administration (Gillespie 2015). Platform governance is a strategy that calls for knowledge of technical systems (platforms) and appreciation of the platform businesses' inevitably global operating environment. However, it also acknowledges the other side of the

equation: that these private "governors" (Klonick, 2017) are themselves subject to governance on all fronts, and that their conduct of governance is directly informed by local, national and supranational mechanisms. As noted by digital media scholars, platforms are fundamentally political actors that make significant political decisions while engineering what has become the global infrastructure of free expression. Platform governance describes the technical, design, and policy choices that affect a large worldwide network of internet users.

URBAN DEVELOPMENT AND LEADERSHIP

Because of the findings, dynamic leadership is essential in capturing digitally enabled urbanism. Good leadership assists organisations in achieving their goals, thereby achieving a higher quality of innovation and development.

Urban Platforms and citizen participation

There is need for platform urbanism that engages more concretely with citizens' situated needs and participation. Platform governance describes the technical, design and policy choices that affect a large worldwide network of internet users. Each urbanite can be viewed as a human sensor, capable of reporting on their city experience via content-sharing platforms such as Flickr, Twitter, Facebook or Wikipedia. This provides a unique perspective on how citizens navigate their surroundings, shedding light on points of attraction or spontaneous migration. The crowd transforms into a distributed network of sensors that enables understanding of the city's dynamic patterns and citizens' experiences (Appl. Sci., 2022). Digitally controlled circuitry and virtual operating systems are transforming urban space into an open living lab.

Importantly, urban platforms can function independently of the city government. Velsberg, Westergren and Jonsson (2020) focus on the concept of "smartness" in the context of service provision, reflecting the public sector's desire to become more agile and resilient when implementing novel technologies such as the IoT, that is also central to urban platforms. Cities have wrong organisational structures. At the urban level, there is need for the development and spread of digital platforms (Cuppinia, Frapportib, Pironec, 2022:2666-3783). Cities should be unlike those of the past. Cities must be creative. Platform urbanism may look to the future high-tech city, but it is already embedded in, and dependent on, the ubiquitous digital systems that pervade the landscape (Wiig and Masucci, 2020). Future cities should be distinguished by a patchwork evolution of interconnected devices and disorganised service accessibility, exacerbated by the emergence of exclusive platform capitalism spaces amid continuing under-investment in neighbourhoodbased civic infrastructure, systems and environments (*ibid.*).

The widespread availability of Internet access, mobile devices and big data is altering the fundamental nature of city life, at least for businesses and the majority of individuals. It is less clear that municipal governments are getting accustomed effectively to the changing landscape, let aloone demonstrating innovation capability in deploying new tech services and infrastructure to foster economic development, citizen participation and the improvement of bureaucratic processes. Verhulst (2015) explains that cities can now employ four asset classes, or tools: people, data, infrastructure and technologies, that can interact in more fluid, mutually supportive ways than before. The interconnectivity of these factors, amongst many others, is triggering many people to consider cities as platforms rather than just places. Data is far more abundant and shareable, especially now that new infrastructures such as broadband, cloud computing, and Wi-Fi, are commonplace. Because of these developments, many new types of communications, "gig economy" markets and social habits have emerged. The concept of cities as platforms represents a significant shift in how cities may operate (Boiler, 2016).

Gweru City should be creative. Hirshberg (2015) contends that a network connected city is more than just a network of communications and sensors. It is an aspiration of city governments "engaging in acts of co-creation with citizens‘" It represents a vision of city councils "engaging in acts of cocreation" with citizens. It is about acts of democracy, city care and ownership, and even acts of collaboration between urban centres: how do you network and get smart together? How do we as a network learn and grow? Adler defines a smart city as one that is self-aware, and at first, this meant making local administration more equipped and intelligent from a top-down control standpoint (Adler, 2015, cited Boiler , 2016).

CONCLUSION AND ECOMMENDATIONS

Because of mass urbanisation processes fuelling the rapid expansion of urban systems, urban platforms play a crucial role in the development of cities. Urban systems are inevitably complex adaptive systems. Competition and conflict between classes and related interests are being exacerbated by urban development. To comprehend the motivations, drivers, impact and outcomes all intended to propel long-term city development, modernisation and social service provision, this article examined the historical, dynamic and fluid interactions of these processes.

The Complex Systems Theory allowed for comparisons of metropolitan platforms across the world and the identification of patterns at the global level. Platforms can be thought of as hybrids that combine elements of markets,

networks and, to a certain degree, hierarchies. Platforms, on the other hand, have a few unavoidable qualities that make it possible to think of them as a fourth method of governance. To bring together different actors and allow value-added collaboration in service delivery, governance and planning, city governments create and maintain urban platforms.

Urban platform management should be included in the mission and vision of all local government initiatives. Urban platform management training workshops should be held, with satellite imagery, GIS hardware and software, and the digitisation of analogue and urban platforms included. City managers should introduce a regular (at least annual) and cross-functional review of the forward plans for exploiting city data, ensure value is evidenced from urban platforms and manage city stakeholders (society, science, SMEs) to maximise innovation at local value. Cities should provide a city data asset that can be exploited by others and, indeed, capabilities to accompany the asset operational considerations.

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