

A Framework for the Operationalisation of Build-to-Rent Housing in Johannesburg, South Africa

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Abstract

Build-to-Rent is an emerging long-term housing asset class and alternative housing product that is gaining popularity in the Europe, North America and Australia. Build-to-Rent is a high-end, long-term residential rental product, built and operated by specialist developers for a single institutional owner. This paper uses a summative content analysis approach to identify key stakeholders out of which a framework for the adoption of Build-to-Rent for the middle-income housing market in Johannesburg, South Africa is developed. The model is based on collaborative planning and systems dynamics approaches. A literature review of existing legislative and policy documents forms the basis of a key stakeholders' register within South Africa's existing institutional and legislative frameworks. This is followed by the proposal of the Collaborative-Integrated Operational Framework (CIOF) which may be adopted in order to mainstream Build-to-Rent in the Johannesburg housing sector. The findings demonstrate that there exists a well-established policy environment in South Africa, amenable to the adoption of Build-to-Rent in Johannesburg. The need for a collaborative planning approach, which fosters buy-in from all spheres of government and other stakeholders within the housing sector is further reinforced through the development of this framework.

Keywords

Housing, Build-to-rent, Public-Private Partnerships, Collaborative Planning, Systems Dynamics, and Sustainability.

1. Introduction

According to the United Nations (UN) (2018), 55% of the world's population lives in urban areas with this figure set to increase to 68% by 2050. Although Africa is the least urbanized continent in the world, it is urbanizing at a rate of 3.5% per annum which is the fastest rate of urbanization in the world. Rural to urban migration, into large metropolitan cities, whilst slowing on a global scale from an average of 6.5% in the 1950's to 2.7% between 2010 and 2020, (Cividino et al, 2020) has been on the rise in Asian and African cities.

Boadi et al. (2005) describe how a vicious circle is created in African cities, where inadequate socio-economic development leads to decimation of the natural environment as African urban populations increase. Top-down approaches, which Howe (2018) terms the "grand visions" approach, have thus far seen the exclusion of many low and middle-income earners from Johannesburg's planning processes and housing provision. Muzenda (2020) argues that a kind of tyranny within and between specialists within the urban development sector has resulted in the fragmentation of African cities. The conflict and disparate motives between different stakeholders within the housing sector have led to well-intentioned policies that are still-born and never translate to realized sustainable housing solutions, especially for the urban poor. Another of the characteristics of these fragmented cities, Johannesburg being one, is the proliferation of secured housing estates and single-family homes which only serve to reinforce and perpetuate the spatial segregation created by apartheid-era urban planning policies, (City of Johannesburg, 2019).

For the city of Johannesburg, the housing crisis is dire and has been central to many service-delivery protests within poorer communities. As if the annual service delivery protests are not testament enough to the unsustainable status quo, the City of Johannesburg estimates that its population will expand by 66% by the year 2050 (World Population Review, 2019). What this means is that the city's management and national leaders ought to plan for its long-term sustainability as a matter of urgency. Decisions and strategies must be made today that steer the city towards addressing the challenges of providing safe, affordable, sustainable housing.

This study, therefore, explores the role of Build-to-Rent as an alternative strategy to draw private sector funding into the provision of affordable urban housing. Characterized by the collision of neoliberal and post-apartheid efforts to address the exclusionary nature of housing development, the results of past public-private partnerships have left a lot to be desired due to conflicting agendas. Past housing efforts by both the government, which funds delivery of low-income housing in the city, and the private developers executing these projects, have often resulted in further exclusion (Mosselson 2017). Carbonara et al, (2020) demonstrate the critical role of public-private partnerships in innovation within urban development projects. Alteneji et al (2020) identify several critical success factors such as government support and further demonstrate the need for more research into critical success factors in private-public partnerships within well-defined localities and sectors. This paper explores a different kind of partnership between government and private developers, where the profit motive need not contradict the social and developmental goals of government.

The aim of the paper is to propose a Collaborative-Integrated Operational Framework by which a novel housing approach may be adopted in an integrated and sustainable manner, in order to mainstream Build-to-Rent as an alternative housing approach in Johannesburg. The outcomes of the study will be a stakeholder management register and a proposed operational framework. The hope is that these can form the basis upon which practitioners within the Johannesburg housing sector may implement Build-to-Rent strategies for the city.

2. Literature Review

Build-to-Rent is a product based on a growing appetite by private institutional investors to benefit both from the capital appreciation of the homes built and the cashflow income generated through long-term rental income. Investors would cash in on the capital appreciation at the end of the investment term which is usually after 10 to 20 years. However, practices in the United States and the United Kingdom indicate that many institutions may choose to remain invested beyond the 20-year horizon (Nethercote 2019). A key feature of Build-to-Rent is the larger scale of the private residential developments which generate economies of scale that allow developers and investors to earn attractive returns.

Brill and Durrant (2020) identify the tension between private developers and government as well as the necessarily supportive policy context as being the key determinants in the successful implementation of Build-to-Rent in London. In Australia, Pawson et al. (2019) successfully argue that Build-to-Rent can profitably deliver affordable housing for the New South Wales market. Such lessons from the developed world form the basis for this research as in each instance, the authors demonstrate the first steps in the Build-to-Rent journey being an acknowledgement of the need to tailor the Build-to-Rent product for the local context and the inclusion of the relevant government institutions from the conceptual onset.

Build-to-Rent is still in its infancy as a property sub-sector. However, key roles required for a successful Build-to-Rent strategy can be extrapolated from the successes of a country such as the United Kingdom where Build-to-Rent and the development of Private Rental Stock (PRS) have become a critical part of the government's affordable housing strategy. These roles can be broadly categorised and aligned with the pillars listed by the United Nations (UNDP 2018). Enablers include various levels of government whose task is to create an enabling environment for viable development impact funding. Whilst some barriers still exist in South Africa, the country is considered one of the most progressive in terms of legislation, especially where construction, banking and housing are concerned. Impact investors include a growing number of pension funds that are answering the call to ethical, socially responsible investing in South Africa and across the globe.

Lastly, intermediaries in the form of skilled professionals who have the specialised knowledge to connect impact investors to investees and navigate the complex process of achieving comparative to superior returns whilst achieving the social and environmental targets set out, form the final piece of the Build-to-Rent puzzle (Rogaris and Young, 2020).

2.2 Global Experiences of Build-to-Rent

In the United States of America (USA), Build-to-Rent has now been in operation for at least 20 years. It is also referred to as Multi-Family Homes in that country. As a well-established asset class in the USA, Build-to-Rent constitutes an estimated 25% of all institutional property investment which is worth \$2 trillion in total (Altus Group, 2018). This positive uptake of investment into Build-to-Rent has also spread to Europe, where Build-to-Rent now constitutes 14% of investment into real estate. Australia and New Zealand are also seeing a rapid increase in investment into Build-to-

Rent which has become a topical subject in all real estate and urban housing discourses. The United Kingdom (UK) however, has seen the fastest growth in the Build-to-Rent sector with investment nearing the 50-billion-pound mark. (Altus Group, 2018).

As of October 2018, there were 131 855 Build-to-Rent homes completed or in the process of construction in the UK. A further 64 320 homes were in the pipeline, awaiting planning approval (Donati, 2018).

Build-to-Rent started off as an initiative by private developers in the UK and grew to be accepted as a social and affordable housing approach adopted by the British Ministry of Housing, Communities and Local Government, whose website now provides various guidelines and toolkits to assist Build-to-Rent developers, (UK Government, 2108).

In transitional countries, what can be observed are iterations of Build-to-Rent that have been customised to suit local conditions and challenges to an even greater extent. One example of this is in Hong Kong, China where a residential development by Vanke, one of the country's largest private property developers, has set the tone for future Build-to-Rent projects. The site of the development was previously a village, of 47 500 square metres.

The land where the village is located was owned by the residents who moved elsewhere due to the rapid urbanisation of Hong Kong (Sun, 2020). By its definition, as presented in this study, Build-to-Rent in the developing world seems to be non-existent. Although various rental models exist with many alternative funding and operational structures, such the rent-to-buy models, none seem to meet the criteria of "a privately-developed, professionally-managed, purpose-built, long-term rental housing product owned by a single institutional entity." Very little academic research on Build-to-Rent seems to have been carried out, especially within the African continent or South Africa specifically. What do exist are guidelines and policies that seek to highlight the significance of rental housing, and the critical role it plays in providing affordable, good quality, sustainable urban housing. Such studies include the work of Gilbert (2008) which points out the amenability to localization that rental housing presents, the many forms it can take but most importantly, debunks many myths which a lot of governments have used to justify their neglect of rental housing as a sector.

As an asset class, Build-to-Rent is only now taking root in developed countries. More research should emerge within the next five to ten years, as Build-to-Rent grows in popularity and becomes common practice, first in pioneering African countries such as South Africa and then in rest of Africa. Murray (2020) highlights the importance of avoiding traditional government subsidy approaches to affordable housing as these have tended to only increase the profit margins for private developers whilst the intended beneficiaries never attain the affordable housing intended for them. As Brill and Durant (2020) demonstrate, the adoption of Build-to-Rent in the UK fashioned after the American approaches, has successfully established Build-to-Rent as an affordable housing asset class.

2.3 The South African Context: Legislative and Policy Framework

The following is by no means an exhaustive list of all regulations, legislation and policies affecting Build-to-Rent as a long-term rental product for Johannesburg. Rather it is an introductory compendium of the key legislation and policies. Much more detail and other laws and policies can be identified in a more exhaustive study, especially at the point of actual implementation of a pilot Build-to-Rent housing project.

The Department of Human Settlements and the Housing Act of 1997

The rental housing sector in Johannesburg, within which a Build-to-Rent product would be launched, is governed by various legislation which has an impact on the conceptualization, development and operation of all rental housing products (SA Govt, 1997). Through a comparison, of the Build-to-Rent model against other existing housing products, Build-to-Rent can most closely be compared to Social Housing and Student Housing.

The similarities with Social Housing lie in the fact that both are long-term rental products that are developed and operated by specialist developers and property managers. The level of customer service and centralized provision, operation and maintenance of other amenities necessary for a wholesome city-living experience is where the similarities with Student Housing lie.

On a national level, a Build-to-Rent would require endorsement by the Department of Human Settlements (DHS) whose mandate is derived from Section 3 of the Housing Act, 1997 (SA Govt, 1997). The DHS is obligated to consult

provincial and local municipalities to ensure a sustainable national housing development process. The mainstreaming of novel concepts such as Build-to-Rent for Johannesburg would therefore lie squarely within the DHS's ambit.

Details of other methods by which the DHS ought to fulfil its mandate include: Setting of national policies, norms and standards; Housing delivery goals and Performance monitoring on a provincial level. Importantly, this too includes the responsibility to promote consultation of various role-players within the housing delivery chain. This would include innovative private developers and private, institutional funders, who play a critical role in the delivery of a successful Build-to-Rent product.

The Sectional Titles Schemes Management Act

Although Build-to-Rent is developed as a long-term asset which the single institutional owner would only dispose of after a period of 10 to 20 years, it is critical that this exit from the investment is well-planned. It is often the case that the single institutional owner of a Build-to-Rent product would sell the rental homes to another institutional owner or developer. However, given the nature of the South African market, it would be prudent to sell the rental homes to individual owners on the open market at that point. It is also equally important to enable the sale of the units to multiple institutional owners, should that be what the market demands. In order to do this, each rental home must be sectionalised through the establishment of a sectional title scheme.

This is a legal process which also involves the input of a land surveyor, professional property manager and property valuer who then draft the sectional scheme and determine the participation quota for each of the rental units. These participation quotas become the basis for the determination of levy contributions, where the multiple homes end up in the ownership of various individuals or indeed various institutional entities, (SA Govt, 2011). These processes are governed by the Sectional Titles Schemes Management Act of 2011 (Act 8 of 2011). The act enables the setting up of body corporate organizations to govern the affairs of common property areas within a sectional title scheme and the establishment of advisory councils and products. Linked to this would be the Community Schemes Ombud Services which makes provision for an independent body to mediate and resolve disputes regarding the administration of finances in a community scheme. At the point of exit, all compliances with this act would have to be in place as reassurance to buyers.

The Estate Agency Affairs Act and the EAAB

The Estate Agency Affairs Act of 1976 (Act 112 of 1976) establishes the Estate Agents Fidelity Fund which is relevant to the collection and administration of all rental payments and deposits. The act also sets out the duties of estate agents including processes for rental collection and sound accounting practices. Most importantly, this act necessitates the establishment of the Estate Agency Affairs Board (EAAB), (SA Govt, 1976). The EAAB will be critical in determining how the Build-to-Rent product will be designed as operated. The developer and operator of a Build-to-Rent product for Johannesburg would have to be conversant with and qualified in terms of the requirements for registered estate agents and their experienced principals. At the heart of it, Build-to-Rent is a rental product and would therefore be governed by the existing structures and legislations as captured in the EAAB's mandate. The mandate of the EAAB is to: Regulate and promote a professional standard of conduct by estate agents in protection of the public interest; issue fidelity fund certificates where applicants qualify; set the standard and curriculum of training for estate agents; investigate complaints lodged against registered estate agents and overall management of the fidelity fund. The EAAB then becomes critical, as there is a need for specialized training with a key focus on hospitality, green technology, property technology and long-term client retention. These are key elements which the estate agents who will be letting and managing the Build-to-Rent homes would require.

The Rental Housing Act

The Rental Housing Act of 1997 (Act 107 of 1997) has to do with the sustainable provision of rental housing and outlines the role of government across all spheres, national, provincial and local. The amendment of 1999 (Act 50 of 1999) introduced housing tribunals which serve to make determinations in disputes and whose rulings carry the same weight as an order of the magistrate's court (SA Govt, 1999). This legislation and its amendments were developed in response to rampant unlawful evictions and seizures of household goods which many landlords resorted to where tenants failed to pay their rent. A further amendment in 2007 (Act 43 of 2007) expands the rulings of the housing tribunals in terms of applicability to other clauses in lease agreements. Compliance with this Act will be central to sound rental management practices and the protection of the tenants' rights within the Build-to-Rent housing schemes.

The City of Johannesburg's Inclusionary Housing Policy

The City of Johannesburg's housing efforts are guided by the city's inclusionary housing policy. This was developed in order to address the segregated spatial character of the city, the isolated placement of human settlements and in order to reduce the affordable housing backlog (CoJ, 2019).

Where housing is planned in an area identified by the city authority for inclusionary housing, developers are required to comply with the requirements to apportion 30% of the residential development for affordable housing (CoJ, 2019). However, the requirements can be negotiated with the city based on a project-by-project basis. The threat to Build-to-Rent raised by setting such quotas is that where 30% of the rental units are specified as affordable housing, the profit margins are reduced which could potentially render the projects non-viable.

Private developers usually work against tight deadlines, therefore it is best for this policy to be made a key consideration during site selection, as negotiations with the city may take longer than the development program may allow. The path of least resistance would therefore be to identify only sites that do not form part of these predetermined districts.

The Johannesburg Spatial Development Framework

The City of Johannesburg's Spatial Development Framework (SDF) addresses the challenge of spatial inequality, resultant from the apartheid era segregationist planning approaches. The SDF targets five major issues in seeking redress for this spatial inequality (CoJ, 2019). These are damage to the natural environment, urban sprawl and fragmentation, mismatch of housing demand to supply, spatial exclusion and disconnection and wasteful residential densities.

Importantly, the SDF also identifies opportunities within the city by targeting locations that have the highest potential for effecting significant positive impact as a whole. The premise of the SDF is a polycentric pattern of spatial development. Both of these aspects tie well into the Build-to-Rent approach, as it targets areas with existing or potential places of employment to allow walking distance from places of residence to places of employment. The green aspect of Build-to-Rent together with the provision of varying typologies of rental homes also lends itself to high impact in terms of social integration across middle- and higher-income brackets.

3. Research Methods

The literature review and stakeholder analysis portion of this research was inspired by the use of summative content analysis by Shaw, (2020) in a ethnographic study of the effectiveness of these methods in market research. This paper makes use of secondary data sources and a review of existing legislation and policies in order to identify critical role players or stakeholders within the Johannesburg housing sector. The methodology is guided by Kindermann's (2020) approach to summative content analysis as a tool for the construction of hypotheses and is summarized in Figure 1 below.

Thereafter, a Collaborative-Integrated Operational Framework is presented based on the stakeholder interactions mapped between the identified stakeholders. This framework incorporates the principles of collaborative planning according to Healey (1998), as well as mapping of interactions according to the techniques of Forrester's (1997) systems dynamics approach. An integrative approach is adopted in order to review and coalesce all of the findings for each of the objectives. Gaps and areas for further research will be identified and discussed as part of the results and concluding chapters. The study is limited by the availability of housing policy documents and legal statutes that offer enough detail to be analysed for the purposes of developing a Build-to-Rent housing product.

It is difficult to identify or formulate a theory about housing as housing is a product of various other theories and practices at work in the urban environment. These include economics, sociology, public health, and planning. As such it is often only possible to postulate a theory about housing as opposed to formulating a theory of housing (Ruonavaara, 2018). Approaches that were considered in light of this were those that bear a keen focus on stakeholder engagement through the planning process, as would be required for the successful roll-out of any Build-to-Rent housing strategy. These theories are transitions management, design thinking and collaborative planning. Having considered these, collaborative planning seemed the most appropriate theoretical approach due to its focus on representativeness and power (Raynor et al. 2017). The list below is a summary of those principles as postulated by Healey (1998) upon

which the framework is based; Participation in Spatial Planning, Stakeholder Consultation, Placemaking Driven by Science and Expert Inputs, Promotion of Local Competency and Provision of Resources for Collaboration.

In order to arrive at the Collaborative-Integrated Operational Framework for Build-to-Rent housing, a literature review of key existing housing policies and legislation was conducted. A summative content analysis approach is taken with the outcomes being the key stakeholder register and an understanding of the critical processes within the sector. These are then used to develop a basic causal loop diagram in the fashion of Forrester's (1997) systems dynamics theory. Feedback from the interactions is then organized according to the headings of a standard (Strength Weaknesses Opportunities and Threats (SWOT) analysis.

This feedback is then intended to inform future policies, legislation and business decisions of all other stakeholders. In so doing, the proposed approach ensures continuous improvements and welcomes innovation in the housing sector. Figure 1 below summarises the methodology adopted in order to arrive at the proposed Collaborative-Integrated Operational Framework.

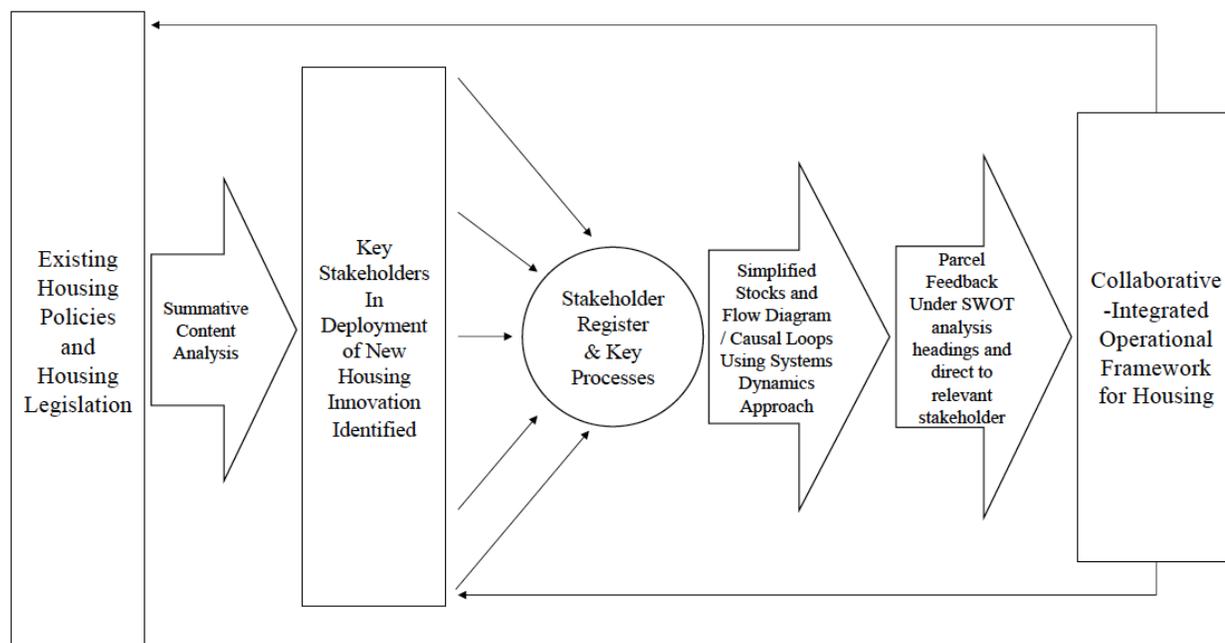


Figure 1: Methodology for Developing a Collaborative-Integrated Operational Framework for Housing
Source: Author, (2020)

4. Results and Discussions

The identification of stakeholders for a Build-to-Rent housing project must be conducted with a keen awareness not only of the existing regulations and housing policy, but also of the city-level housing policies and initiatives. In addition to this, support from national and provincial government is key as the housing sector in Johannesburg is not only well regulated, but also steeped in a history of unequal access and spatial segregation as a result of apartheid-era planning policies. The method by which this support can be garnered involves extensive engagements with government, civil society, and non-governmental organizations. In so doing, demonstration of those aspects of socio-economic and spatial inequality that Build-to-Rent as a housing approach can alleviate would be facilitated.

The stakeholder register presented in Table 1 below is not intended to be an exhaustive one. However, it is derived from the review of existing structures in the literature review section of this paper. The register is intended as a first effort and demonstration of how the collaborative approach to the introducing Build-to-Rent into the Johannesburg housing sector might be carried out. The register may form the basis of an actual stakeholder register at the point of implementation of a pilot Build-to-Rent development in Johannesburg. At that point, the register may be expanded and edited to suit the unique conditions for a particular site, where for example, multiple private landowners may be included as part of the engagements and negotiations in the project scoping phases.

Stakeholder Management Register				
Name	Project Role	Importance	Major Concerns	Relationship Owner
City of Johannesburg	Planning Authority	Critical for Approvals	Red Tape	Development Managers
National Department of Human Settlements	Housing Policy	Sustainable Policies and Equity	Slow Pace of Change	Development Managers
Estate Agents Affairs Board	Leasing and Administration of Rentals	Professional Operation of BTR	No BTR-specific Training Available	Property Developer
National Home Builders' Registration Council	Building Standards and Quality Control	Safety and Quality of Housing	Bureaucratic Red Tape	Development Managers
South African Property Owners Association	Institutional Owners' Rights and Representation	Owners' Education, Training and Rights.	Openness to Institutional Owners of Housing	Private Developer
South African Council for the Project and Construction Management Professions	Professional Conduct of Project Team and Other Professionals	On-time And Cost-Effective Construction	Adaptability to a New Housing Product	Development Managers
Private Developers	Construction and Operation of BTR	Development, and Management of BTR	Few Experienced BTR Specialists	Project Sponsors
Institutional Funders	BTR Project Sponsors	Private Funds for Affordable Housing	Require Guaranteed Returns on Investment	Development Managers
Department of Cooperative Governance and Traditional Affairs	Inter / Intra – Governmental Coordination and Communication	Consistency in Government Policy and Processes	Bureaucratic Red Tape	Development Managers
The Housing Development Agency	Activism and Research	Community Advocacy	Resistance From Some Stakeholders	Development Managers
South African Revenue Authority	Tax Authority	Tax Compliance	Complex Valuation of BTR as an Asset	Private Developer
Social Housing regulatory Authority	Regulation of Similar Long-term Rentals	Existing, Adaptable Processes	Past Negative Perceptions of Low-Income Rentals	Development Managers
Green Building Council of South Africa	Green Technology Certification	Environmental Sustainability	High Costs of Certification and Technology	Development Managers
Consumer Council of South Africa	Protection of Tenant Rights	Social Sustainability and Justice	Developing Consumer Education on BTR	Government / End-Users
Community Schemes Ombud Services	Regulation of Sectionalised Housing Schemes	Holds Owner Accountable for Common Areas	Single Owners May Not Wish to Sectionalise Title Deeds	Development Managers

Table 1: Proposed Stakeholder Management Register for Build-to-Rent Housing in Johannesburg

One of the key findings based on Table 1 above, is the need for a central, project planning and project management role to coordinate and combine all efforts between the various parties. This role is described in the register as that of the “Development Manager.” This is a term borrowed from the Professional Consultants Services Agreement (PROCSA) matrix. The PROCSA contract is a standard form of contract used within the built environment in South Africa, where professionals such as architects, engineers and own planners are appointed to undertake projects. Within the PROCSA matrix, the Development Manager is envisioned as an experienced project manager with technical knowledge that spans the Quantity Surveying, Town Planning, Architectural and Engineering Professions. This individual can be an employee of the project funders or of the private developers. This role also has a strong financial planning and reporting capability, making this the most important role to ensure buy-in from all stakeholders, in addition to identifying sites and building bankable business cases for Build-to-Rent which can attract institutional investors.

Based on the many challenges that may be experienced during the project life cycle of the pilot project as well as subsequent Build-to-Rent housing developments, the stakeholder register ought to be kept as a live document that is reviewed, monitored, and updated, with previous revisions archived as a record of the changing project dynamics. On a greater scale, the template must also be updated to reflect changing local, provincial, and national government policies and directives. Lastly, the stakeholder register ought to also be open to iteration based on the evolution of the proposed operational framework and feedback from the various stakeholder engagements as well. These feedback loops are reflected on a very high level, in Figure 2 below and discussed in greater detail in the following section.

5.2 Collaborative-Integrated Operational Framework for Build-to-Rent Housing

Based on the outputs from the stakeholder register for Build-to-Rent implementation, there seems to be a pressing need for the sharing of information between role players to address the critical housing challenges such as backlogs, slow turnaround times, spatial segregation, and customer satisfaction. The model Collaborative-Integrated Operational Framework proposed in Figure 2 below, is therefore rooted in Healey's (1998) collaborative planning approach, whilst adopting elements of Forrester's (1997) systems dynamics approach to relationships in complex interactions. The proposed framework also includes a feedback channel which addresses historic challenges as well as real-time feedback. This becomes information that triggers the constant improvements which private developers will need in order to build the pilot housing development and successfully pitch for subsequent developments in a sustainable manner.

The feedback channel sees information classified under headings of a standard SWOT (strengths, weaknesses, opportunities, and threats) analysis. This may be a way to analyse information in order to determine the appropriate recipients for the various types of feedback. Such deliberate focus on information sharing, stakeholder consultation and engagement are in keeping with the principles of collaborative planning. Where opportunities and threats are listed, there is room for further investigation in order to find solutions and alternative approaches that could strengthen the case for Build-to-Rent as an impactful approach. These would become action and discussion points for private developers and local government, for example, but not necessarily for the end users or tenants.

Lin and Shayo (2012) proposed a systems dynamics model that incorporates supply chain performance, information sharing and collaboration for use in dynamic, fast-changing environments. The supply chain principles are most applicable to this proposed framework, as housing provision in Johannesburg is backlogged, due to what is essentially a shortage of supply that is exacerbated by a challenging housing supply chain. Supply chain theory also not only focuses on customer satisfaction, product design and after sales support but also on end-of-life disposal, all of which are critical components of Build-to-Rent.

Figure 2 below illustrates the proposed Collaborative-Integrated Operational Framework for Build-to-Rent in the context of the South African housing market, with specific reference to the city of Johannesburg. Central to the framework is a basic influence diagram adopted from Lin and Shayo (2012) with, for instance, the "desired shipment rate" replaced with the "required housing delivery rate."

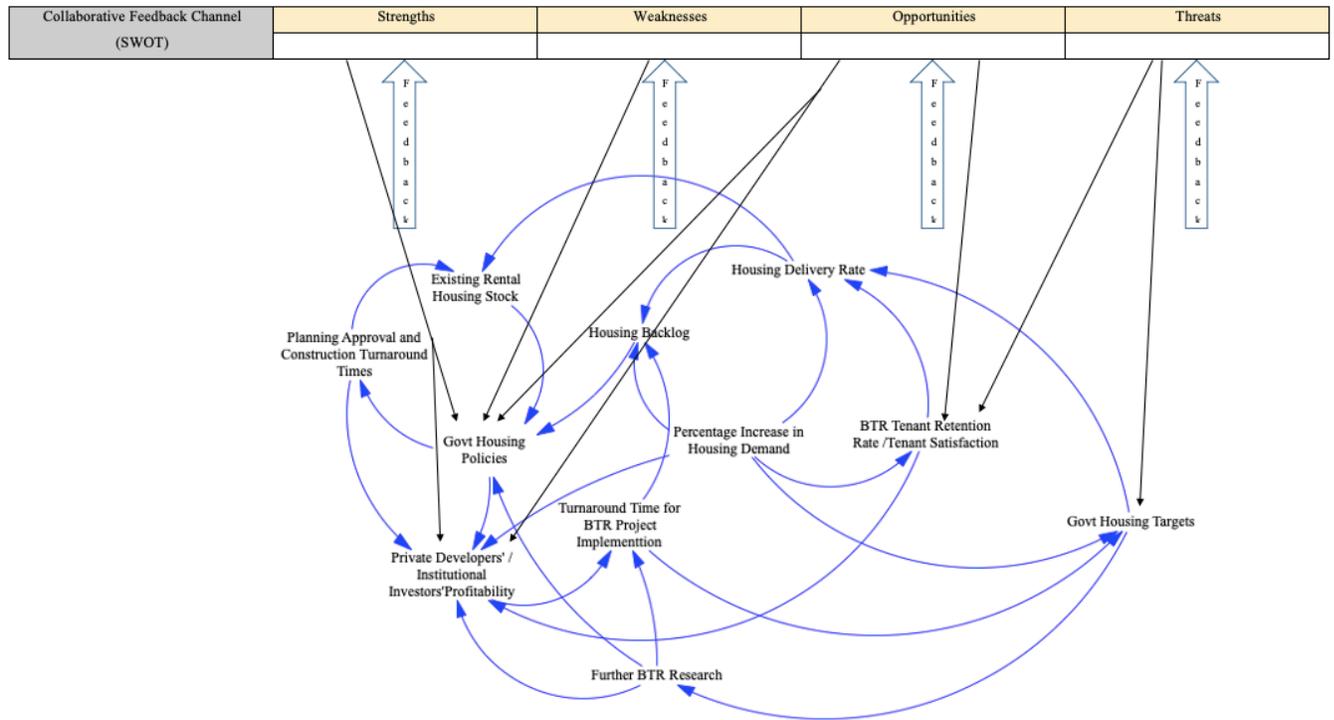


Figure 2: Proposed Collaborative-Integrated Operational Framework for Build-to-Rent Housing Implementation
Source: Author, (2020)

The proposed Collaborative-Integrated Operational Framework, though simplified, is an attempt to capture the complex, integrated nature of the various roles involved in the delivery of Build-to-Rent housing. Further studies can be conducted to expand the model to include other aspects omitted here, such as pricing, economic factors, contingency loops to deal with administrative delays and so forth.

6. Conclusion

As an initial exploration of Build-to-Rent as a housing approach and concept for application in the specific context of Johannesburg, South Africa, this study has successfully exposed who the critical role players in the city’s housing sector are. Additionally, the study proposes a framework which could inform the possible first steps in designing, building, and operating the first ever Build-to-Rent housing development for Johannesburg.

A critical component of the Collaborative-Integrated Framework, which is highlighted both in the methodology of and the framework itself, is the processing and parcelling of feedback. Where feedback is categorized and distributed according to a SWOT format, there is a platform for continuous improvement and collaboration. Although not sufficient to overhaul existing institutional structures and processes, this aspect of the Collaborative-Integrated Operational Framework may be one solution to the siloed, compartmentalized approach to housing delivery. The nexus between the many government departments and private actors in the housing sector is often where many of the challenges and delays emanate from. Any inefficiencies which in the past resulted from a lack of transparency between stakeholders and government agencies can be addressed through careful implementation of this framework.

The Collaborative-Integrated Operational Framework is to be applied specifically to individual housing strategies or approaches. In this case, the framework was applied to Build-to-Rent as housing approach which may be deployed in Johannesburg. As a result of this open collaboration and holistic view of each housing strategy, key processes can be prioritized, and problems quickly diagnosed and addressed. All the lessons taken from each project and program rollout can become the inputs for future policies, legislation, and business strategies.

Areas of further study include research on a possible stakeholder engagement plan which maps out in further detail, the different types of feedback and what the appropriate communication platforms would be for each. If successfully implemented, this approach may form the basis for future attempts to introduce innovative alternative approaches to addressing various other challenges in different sectors such as infrastructure and health in South Africa.

The stakeholder register presented here is one that can be applied in other areas of study based on a thorough review of existing literature, legislation, and policy documents. Although the framework that was developed as a result of this requires additional refinements, many of which will be based on feedback from actual implementation, this is a sufficient first step in an exercise which essentially seeks to map a comprehensive path towards the localization of a global housing concept.

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Biography

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