

Technology Innovations to Improve Service Delivery:

A Case Study of the Innovation Partnership for Rural Development Programme (IPRDP)

Presented by:

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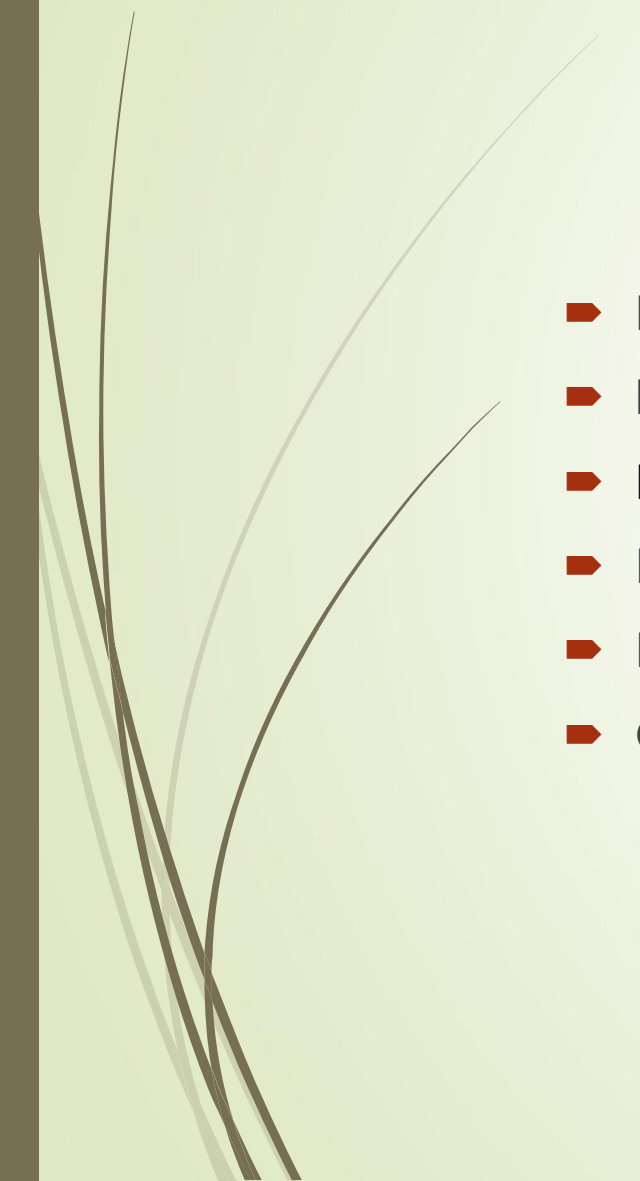
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Presentation Outline

- ▶ Purpose of the Paper
 - ▶ Introduction and Background – literature review
 - ▶ Definition and Concept of “Innovation” in service delivery
 - ▶ Research Design and Methodology
 - ▶ Research Findings
 - ▶ Conclusion
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Purpose of the Paper

- ▶ The objective of the study is to use a case study approach to understand the enablers/barriers of using technology and innovations to improve service delivery in municipalities and rural areas, based on the Innovation Partnership for Rural Development Programme (IPRDP) case study.
- ▶ The paper argues that the lack of coordination of policy instruments from various stakeholders remains a key barriers for the uptake and adoption of technology innovations to improve service delivery.
- ▶ The paper notes that improving the delivery of basic services using innovation requires a systems approach, multi-stakeholder effort and a coordination of enabling policy instruments.
- ▶ However this requires institutional coordination across different actors and stakeholders in order to create an enabling atmosphere for effective uptake of innovations to improve service delivery in municipalities.



Introduction and Background

- ▶ This article **firstly**, examines the **definition and the concept** of “Innovation” in the context of basic service delivery, **as examined from literature review**.
- ▶ **Secondly**, we **examine the enablers and barriers** for the uptake of innovations for service delivery in the context of municipalities from the Innovation Partnership and Development Programme (IPRDP) case study.
- ▶ **Lastly**, we reflect (findings) on the **perspectives of different stakeholder institutions** in respect of tools required to **enable innovation uptake** to improve the delivery of basic services.

Introduction and Background

- ▶ **Literature reveals** that there is a general lack of understanding of what public innovation is (Bloch and Bugge (2013); Matei and Bujac (2016); Biljohn (2017); Vikers et al. (2017)) The problem of public sector innovation being poorly understood, is not a problem unique to South Africa.
- ▶ The concept “innovation” suggests alternative methodologies of production, characterised by efficiency, effectiveness, and better quality products and public services (National Planning Commission, 2011);
- ▶ The term “capacity to innovate and capabilities to innovate” are often used interchangeably in the literature. OECD (2006: 44) defines public sector capacity as the ability of individuals and organisations to “...perform functions, solve problems and achieve objectives...”
- ▶ Similarly, Lewis and Richard (2014) define capabilities as asset of skills, resource and functional competencies individuals and organisations accumulate over time to perform certain duties.
- ▶ A critical ingredient to develop capacity, identified by leading scholars in innovation studies is learning (Lundvall & Lema, 2015). Through learning, public sector organisations and officials can develop the capacity to advance their ability to deliver public services efficiently and effectively.
- ▶ The presence of leadership skills in the organization have been acknowledged as an important factor for the innovation capacity of public sector organisations and officials.

Introduction and Background

- ▶ There are several barriers for innovation uptake in public service delivery, lack of indicators to measure innovative technology uptake to improve service delivery is identified as a barrier (Lonti & Gregory, 2007; Micheli & Neely, 2010; Lewis & Triantafillou, 2012). existing indicators and have often rendered them insufficient (Lonti and Gregory, 2007; Micheli and Neely, 2010; Lewis & Triantafillou, 2012).
- ▶ Kattel (2013) argues that it is difficult to measure innovation in the public sector as it is difficult to clearly see the benefits of activities that are attributable to innovation interventions in the public sector
- ▶ Biljohn (2017) states that the use of social innovation to improve service delivery by the local government seems to be lagging, citizens to involved in co-design, co-production and co governance of public services through innovative models;
- ▶ Oyelaran-Oyeyinka (2014), in reviewing state and innovation policies in Africa, recognizes that its attainment is not particularly easy. Lundvall and Lema (2015) among other authors, have identified that; a way in which the public sector can advance their ability to deliver public services efficiently and effectively is through learning;
- ▶ a complex multi-level exercise that should bear collaborative learning and collaboration amongst stakeholders operating in the same space is recognized as essential by Stanislawski and Lisowska (2014); Osborne et al (2012) contends that innovation in the public sector requires multiple actors and inter-organisational nature involved in the delivery of basic services to act together with inclusiveness and an inclusive approach to adopt innovation to solve societal problems.
- ▶ The South African Public Sector Innovation Manifesto by the CPSI already commands that learning be embraced by public servants to adopt behavior of a creative caliber (CPSI, 2009).

Introduction and Background (continued)

- ▶ **Technology innovation plays** a critical role in the **socio-economic development of countries around the world**. This is more so in the context of a globalised world, where technology innovation has become the primary driver of socio-economic development;
- ▶ There is increased pressure of **local government responsibility as the lowest sphere of government, to provide the most comprehensive responses to societal problems**, faced by communities (Dirie n.d.: 256). However, there are **any barriers for innovation in the public sector institutions responsible for service delivery**;
- ▶ There are at **least three main factors that** affect public sectors' **capacity to learn and innovate**; and these are important indicators of innovative capacity (Lundvall & Lema, 2015).
- ▶ First is the **governance structure**, which is the environment in which municipalities are located. **Political and administrative context, legal culture of the public sector, state and government** traditions are all possible variables that can affect the level of innovation capacity of public sector organisations and their officials (Lewis & Richard, 2014). Capacity and capabilities in public sector organisations are sometimes seen in a negative light, as they are often associated with the **routinisation and path dependency** (Garud & Karnøe, 2001).
- ▶ Bourgon (2010: 207) lays these difficulties at the door of **conventional public administration and governance theories**, which were not designed for the public service delivery complexities of the 21st century. These conventional public administration and **governance theories appear to be lacking a consideration of a more prominent role for citizens** in public service delivery.
- ▶ Biljohn (2017) argues that there is a prominent lack of **local citizen participation in the social innovation process** in the local government. He adds to his argument that this **inclusion is imperative in improving local government service delivery** since citizens know the problems that affect them at first hand they are therefore in a better position to propose valuable solutions



Introduction and Background (continued)

- ▶ **Gathering from literature**, for the public sector to increase public sector innovation and achieve an improved status of basic services It is imperative that the public sector increases its innovation capacity and capability by; sharpening the government structures, that support innovation, strengthening leadership and smoothing relationships with local citizens. Further, they ought to acknowledge the uniqueness of each beneficiary Municipality, keep at heart the Batho-Pele Principles, open themselves up to learning and adopt new innovative models, discontinue outdated policies and approaches and ensure that the culture of routinisation and path dependency is terminated.

Concept of “Innovation” in the delivery of basic service

- **Biljohn links citizen involvement and participation** in co-designing public services and in implementing such innovations with local government as lacking. He defines **this citizen participation in co-creating new services as “social innovation”**
- **Grimm et al. (2013:450)** argue that depending on the research field or policy area, the concept of social innovation has assumed a **variety of distinct but related meanings**, which can be both a strength and a weakness of social innovation. In addition, the fact that social innovation comprises a variety of activities may also be considered either a strength or a weakness in terms of conceptualizing it.
- **Grimm et al. (2013:448)** further state that the **challenges in conceptualizing social innovation** (about which there appears to be at least some form of consensus, namely that it **can be both a process and an end in itself**) are the result of the fact that social innovation is under-theorized.
- **According to Biljohn (2017) in the SA context public administration and governance policies do not provide an appropriate policy framework for the implementation of social innovation to improve public services.** This is seen as a lagging area. However, this does not prevent governments and local governments from using social innovation for improved service delivery.

Concept of “Innovation” in the delivery of basic service (Continued)

- But how is innovation in the context of basic services conceptualized in the South African context?
- The use of **innovation for development** refers to **social innovation becoming a means to an end and to it being process-oriented**. *Hart et al. (2014:s.n)* state that this means social innovation should have **a social purpose and should involve social actors such as the poor, civil society, as well as the public and private sectors**.
- *Hart et al. (2014:s.n)* suggest that for the concept of **social innovation** to be understood and for it to **have an impact** in South African communities, **certain policy actions should be considered (Hart et al. 2014:s.n)**.
- It therefore appears that the **vagueness and ambiguity regarding the conceptualisation of social innovation has become prominent in the South African context** in light of current theoretical underpinnings (*Murray et al. 2010:3; Grimm et al. 2013:437*).


Concept of “Innovation” in the delivery of basic service

- ▶ According to Biljohn (2017) three schools of thought can be identified in terms of how social innovation can be utilised to improve public service delivery.
- ▶ In the **first school of thought**, social innovation is **goal-oriented** and is used to **address societal problems** (OECD 2014; Mulgan 2006:146; Pol and Ville 2009:880; Hart *et al.* 2014:s.n). When social innovation is used in this way, it results in the delivery of public services in order to address specific societal problems (Grimm *et al.* 2013:438).
- ▶ In the **second school of thought**, social innovation is **used as a process** to address societal problems (Mumford 2002:253; Chalmers 2012:19; Hart *et al.* 2014:s.n). When **social innovation is used in this way, it results in collaborations, relations, self-organisation amongst actors and social relations**, all with the goal of addressing societal problems. These relations result in social innovation being process-oriented, which might alter the flow of authority and resources in a social system.
- ▶ In the **third school of thought**, social innovation is used both as a goal and as a process to address societal problems (Bouchard 2012:49; Grimm *et al.* 2013:438). When social innovation is used in this way, it serves a dual purpose which not only involves finding solutions, but also building relationships in order to find such solutions. Though this dual purpose is considered as separate by the first two schools of thought, it can be concluded that **the goal of the dual purpose** is to address societal problems, regardless of whether the use of **social innovation results in the use of services** or in a process that **entails relations and collaborations to find solutions to these problems.**




Research Design and Methodology

- ▶ **The study is underpinned by Interpretivism paradigm comprising of primary and secondary qualitative data from:**
 - ✓ Desktop research; (Project documents, reports, policy documents)
 - ✓ Individual interviews (10 key informants for in-depth interviews: (Municipal senior managers; infrastructure managers involved in the IPRDP)
 - ✓ Focus group discussions participants selected purposively from 27 DM where IPRDP was piloted; other stakeholders included CSIR, DWS, WRC
 - ✓ **Data Analysis**
 - Thematic Analysis
 - Content Analysis
 - Contextual Analysis




Research Findings and Interpretation (Continued)

- ▶ There are a plethora of enablers and barriers for the adoption of innovative technologies to improve service delivery in government and municipalities.
- ▶ These include: (1) limited capacities at local level to implement innovative services delivery through cost-effective measures;




Research Findings and Interpretation (Continued)

- (2) lack of technical capacity in municipalities, dedicated persons to champion and drive innovation;
- 3) challenges in terms of integration of technology and innovation in the delivery of basic services and municipal business processes;
- (4) lack of adequate innovation enabling policy instruments; and
- (5) lack of access to appropriate and validated innovative technology solutions by municipalities.



Research Findings and Interpretation (Continued)

- ▶ Innovations that is not tested and certified could lead to instability in communities, as these may be perceived as unfit and as poor services.
- ▶ Innovation piloting is perceived as an additional, unfunded mandate, especially in municipalities with constrained financial resources;
- ▶ Innovation that is not integrated into municipal planning performance targets and integrated development plans (IDPs);
- ▶ In some instances, the demonstration of technologies to improve service delivery has been implemented without proper feasibility studies to understand the pre-legal requirements and regulatory constraints that may be necessary before implementation.
- ▶ Similarly, technology demonstrations take place without determining and configuring the role of municipal officials and other community stakeholders in sustaining its implementation beyond project funding




Research Findings and Interpretation (Continued)

- ▶ In the technology demonstration of the IPRDP, for example, high staff turnover, lack of political buy-in and resignation of key personnel hindered the project's implementation. Thus, the selection of technologies to be implemented in service delivery should be carefully considered;
- ▶ Evidence and experience from the IPRDP indicate that some of the service delivery technologies were not strategically selected from a cost-benefit analysis perspective;
- ▶ Innovation technologies need to be aligned with community priorities in a manner that would address community empowerment and socio-economic opportunities;
- ▶ In many instances where the IPRDP innovations for service delivery were implemented, development outcomes such as employment, social health benefits and sustainability plans were not incorporated into the project design right upfront.
- ▶ However, these could have been maximised, if the socio-economic impact factors were incorporated into the project plans from the beginning.

Research Findings and Interpretation (Continued)

- ▶ Innovation for service delivery interventions should be clearly designed and framed to enhance and align with other municipal flagship programmes,
- ▶ Clearly monitored and evaluated through key performance indicators, and performance measurements that bring various efforts and contributions of stakeholder into the programmes;
- ▶ Most municipalities that participated in the IPRDP did not co-invest in technology demonstrations in their jurisdictions. This has left the technology innovation project prone to cancellation, as and when the municipalities felt the innovation projects were preceded by other prioritise and service delivery programmes;
- ▶ Community involvement through public participation could have been done more efficiently, in order to allow community members to influence the design and selection of technologies that are community interfacing ;
- ▶ The lack of community involvement in the design of and selection of technologies could translate into the poor social acceptance of these technologies, which in the end, could block projects

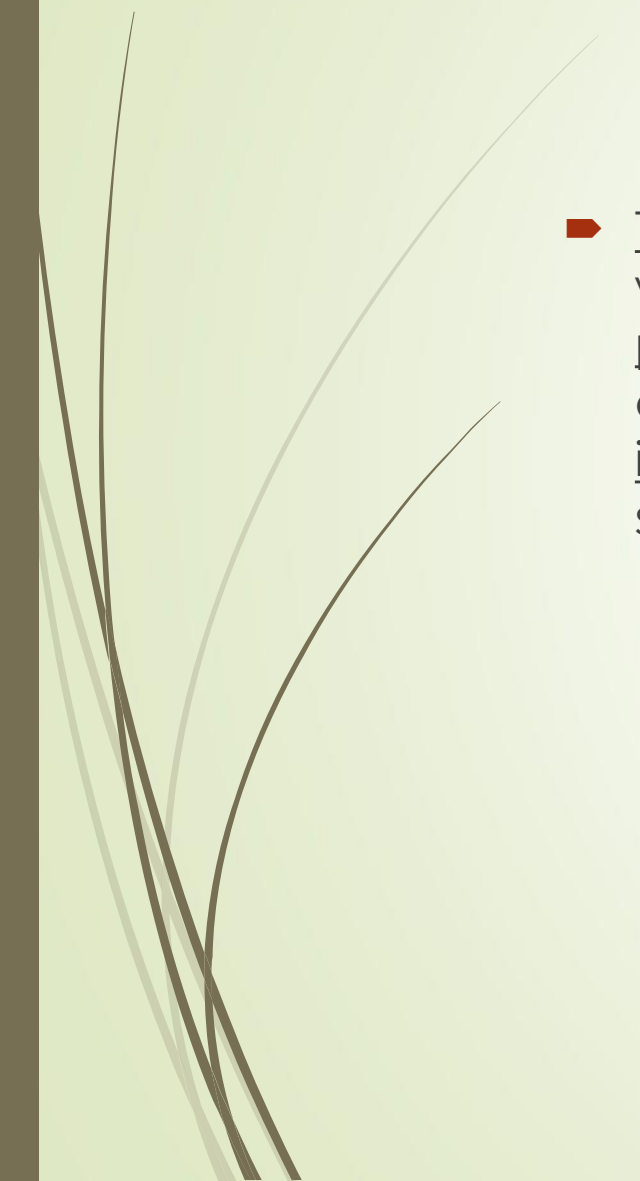


Research Findings and Interpretation (Continued)

- ▶ Lack of norms, standards, and certification “for fit for purpose” of innovation as well as proper decision support tools around the procurement of technologies was seen as a major factor where municipalities have shown a preference in some technologies over conventional service delivery approaches;
- ▶ Lack of technical support in municipalities, or training programmes designed to influence municipal officials to think innovatively, and to carry out repairs and maintenance on the demonstrated technologies;
- ▶ A number of public sector entities and institutions are developing innovation uptake policy support instruments, but most of these instruments are not coordinated and aligned.



Conclusion

- ▶ There is also a need to improve innovation awareness, skills and capacity within the public service. This entails including innovation as a module in public sector induction and encouraging and rewarding innovation by officials and service delivery authorities, particularly municipalities to introduce mechanisms to measure innovation readiness and maturity for service delivery lead departments and municipalities.
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Conclusion

- ▶ **The aim of this study** was to examine how innovation can enhance service delivery in rural contexts;
- ▶ **Findings of the study demonstrate** that there is a need for an innovation for service delivery policy framework that would streamline various tools and stakeholder effort necessary to create a coordinated enabling policy environment for innovation;
- ▶ Factors to be considered in such a framework include procurement and innovation acquisition, deployment, licencing, and accreditation mechanisms. Innovation uptake to improve service delivery, clearly, cannot be the function of a single department;
- ▶ Rather, it requires a systems approach and broad participation of various stakeholders and policy instruments.