DIGITAL TRANSFORMATION IN SOUTH AFRICA:
Challenges in the 4th Industrial revolution

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BACKGROUND

Inclusive digital transformation is one of the key strategies governments are adopting to promote inclusive growth in smart societies.

Governments, business & society in the 4th industrial revolution will depend on their ability to embrace the digital revolution.

The 4th industrial revolution has brought many opportunities but developing countries continue to lag behind due to various challenges.

Governments have responded to challenges by developing policies that promote inclusive digital transformation.

There are few academic studies from Africa on digital transformation of governments and societies. The study seeks to close this gap.

Institutional theory is used to frame the study.
PURPOSE & RESEARCH QUESTIONS

The purpose of this study is to:

Explore the challenges confronting the South African government in its bid to achieve its goal of an inclusive digital society as part of its inclusive growth agenda.

The following questions are posed:

1) What policy reforms has the South African government implemented to promote digital transformation for inclusive growth?

2) What challenges are confronting the South African government in promoting digital transformation for inclusive growth?
The following key drivers of the 4th industrial revolution were found:

**Advanced ICTs** such as cloud computing, the internet of things and the internet of services have become prominent in the digitally driven 4th industrial revolution (Zhou, Liu & Zhou; Lom, Pribyl & Svitek, 2016). These demand better connectivity through broadband which is still poor in developing countries.

**Skilled and talented workers** provide the much needed intellectual capacity to drive innovation in the digital and smart era (Abdoullaev, 2011; Scholl & Scholl, 2014). Demand for highly skilled, tech savvy, and innovative workers and citizens is set to increase in the 4th industrial revolution (World Economic Forum, 2016).

**Innovation**: Increase in organisational, product and service innovation will demand that governments invest more in institutional mechanisms for innovation, research and development (Zhou, Liu & Zhou, 2015).

**Policy innovation** promotes innovation and addresses security and personal data privacy concerns through standards, legislation and policies. Policy innovation also addresses skills, education, infrastructure and other needs that might arise due to innovations (Chourabi et al., 2012; Scholl & AlAwadhi, 2016).
METHODOLOGY

An interpretive case study
South Africa was used as a single case study
Triangulation of data collection (interviews, documents, literature)
Thematic content analysis was used for analysing data
DISCUSSION: KEY POLICY REFORMS

National Development Plan 2012
- A long term plan for development which provides a broad strategic framework to guide key choices and actions including inclusive digital transformation

Public Service Corporate Governance of ICT Policy Framework 2012
- Promotes the governance of ICT as an integral part of corporate governance within the public sector in a standardised and coordinated manner

National Broadband Strategy & Policy 2013
- Digital readiness (institutional, environment & regulatory reforms)
- Digital development (infrastructure)
- Digital future (open access wireless broadband)
- Digital opportunity (content, entrepreneurship)

Cyber Security Policy Framework 2015
- Cyber security culture
- Capacity for partnerships to strengthen awareness and enforcement;
- Protection of critical information infrastructure
- Promoting & ensuring a comprehensive legal framework governing cyberspace

Integrated ICT Policy 2016
- Digital transformation of government
- Digital access
- Digital inclusion
THREE PILLARS OF AN INCLUSIVE DIGITAL SOCIETY IN SOUTH AFRICA

INCLUSIVE DIGITAL SOCIETY

DIGITAL TRANSFORMATION OF THE PUBLIC SECTOR
• E-government framework

DIGITAL ACCESS
• Building digital skills, astuteness and capacity
• Promoting trust and security

DIGITAL INCLUSION
• Digital economy
• Financial inclusion
• Digital content, services & applications
DIGITAL TRANSFORMATION OF THE PUBLIC SECTOR

• Digital transformation of the public sector is aimed at increasing efficiency to stimulate economic growth.
• It however remains fragmented and uncoordinated despite significant policy reforms.
• A lack of political leadership, clear responsibility accountability and poor monitoring are some of the barriers identified.
• Regulative mechanisms are compromised by poor leadership to coordinate and direct the resources and activities in institutions for effective implementation.

The presence of regulative institutional mechanisms is not sufficient if these are not effectively...
DIGITAL ACCESS

• The smart society has brought with it many opportunities e.g. e-entrepreneurship, e-health, e-education, e-commerce and e-government.
• In a digital and smart society, digital access by citizens is important in unlocking the potential of the state.
• Access in developing countries like South Africa however remains a significant constraint.
• Affordability of the internet, poor broadband infrastructure especially in marginalised communities such as rural areas means that access still remains a challenge.
• Poor access means that opportunities such as e-entrepreneurship still favour the already advantaged mostly urban citizens with access to connectivity.
DIGITAL INCLUSION

Digital inclusion is about:

- Empowering people through ICTs for the socio-economic prosperity of all people.
- Creating opportunities to benefit everyone including previously marginalised social groups.
- Reducing poverty, promoting equity, equality and social justice.
- Creating new opportunities for digital entrepreneurship.

- Women, the youth and other racial groups in South Africa still remain underrepresented in the mainstream economy due to socio-historic factors.
- A holistic approach is needed in tackling socio-economic and socio-cultural issues that have perpetrated exclusion.
CONCLUSION

The SA government has made significant strides in promoting a digital transformation agenda that supports inclusive growth through policy reforms.

Institutional challenges still remain in the implementation of policy due to:

- Power and politics in the prioritisation and implementation of policies.
- Lack of political leadership support
- Lack of integrated planning
- Lack of trust in government
- Lack of social and political cohesion
- Governance challenges
- Poor monitoring and evaluation