Understanding Broadband Adoption in South African Households

Mogendran Naidoo,
Lisa Seymour
Information Systems
University of Cape Town

Presentation Outline

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- Broadband Benefits
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- Conclusion

THE SEACOM NETWORK

- POINT OF PRESENCE (PoP)
- MEET ME POINT (MMP)
- SEACOM NETWORK
- SEACOM PARTNER NETWORK

Defining Broadband

- Technologies that offer > 256Kbps as defined by the South African Department of Communications
- ADSL is the most popular of the fixed line technologies
- 3G/HSDPA is the most popular of the mobile wireless technologies

Household Broadband Benefits

- The infrastructure of the knowledge economy

- new opportunities to work or learn more productively

- contributes to the quality of life, in terms of education, health services and social inclusion
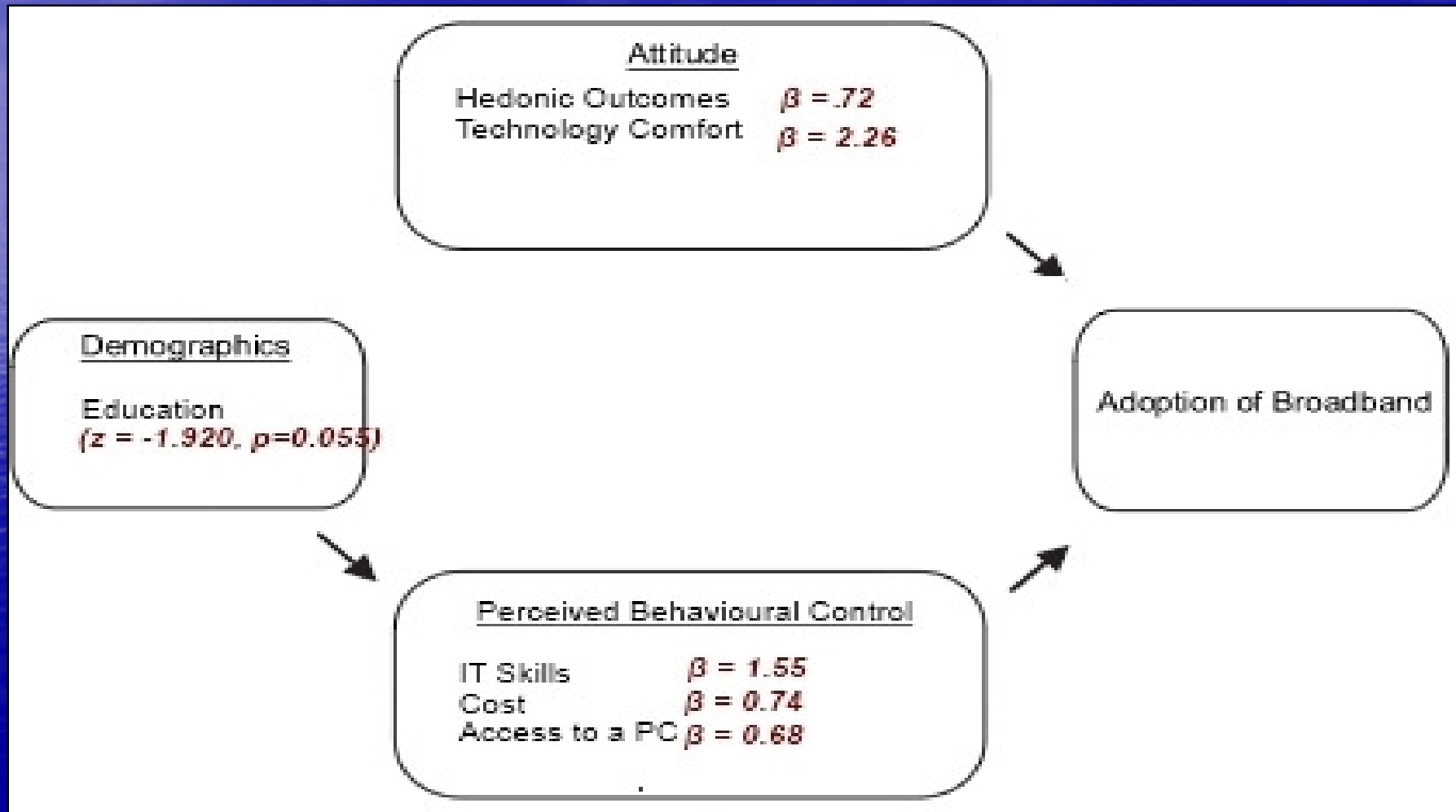
SA context

- Low internet penetration 10% in 2010
- 103rd in world broadband speed rankings *(MyBroadband, 2011)*
- SA is losing ground to Botswana, Zambia etc *(Balancing-Act, 2010).*
- Broadband adoption 1.4% (fixed line) and 7.7% (mobile) in 2010
- Semi-privatised and state owned Telkom for fixed lines

Research Method

What factors affect a South African consumer's decision to adopt broadband?

1. Interviews with 16 respondents
2. Proposed framework (18 factors)
3. Pilot questionnaire to 20 households
4. Survey of 177 households
   - Cronbach Alpha and Confirmatory Factor Analysis
   - Logistic regression

Resultant Model [5 factors]

Attitude

Hedonic Outcomes $\beta = .72$
Technology Comfort $\beta = 2.26$

Demographics

Education
$(z = -1.920, \rho = 0.055)$

Adoption of Broadband

Perceived Behavioural Control

IT Skills $\beta = 1.55$
Cost $\beta = 0.74$
Access to a PC $\beta = 0.68$

Comparison with similar studies

Study	South Africa (This study)	Malaysia (Ooi et al., 2011)	India (Dwivedi et al., 2008)	Pakistan (Dwivedi et al., 2007)	UK (Dwivedi & Irani, 2009)
Respondents (R^2)	177 (0.5-0.7)	172 (not stated)	48 (0.49)	237 (0.36)	358 (not stated)

1. Technology Comfort

- Consumers found more comfort in broadband than older technologies
- *"But it is easier now because you just plug the modem in and you go"*
- The dominant factor in South Africa with only India also showing significance

2. IT skills

- Skill was a significant factor in predicting broadband adoption and influence by education
- " *"I think in the context of South Africa you need to educate the kids from the primary school level on how to use the computer."*
- This was also significant in the UK and Malaysia but not in India

3. Cost

- The price of line rentals, modem costs and the prices of bandwidth caps are too high for many to acquire broadband services

- *"Even with Telkom's recent price cuts which may make it more affordable to certain people I don't think it's worth it yet."*

- Cost is more of a concern in emerging countries with the factor being one of the top 3 in India and South Africa.

4. Hedonic Outcomes

- The entertainment potential of the Internet
- *I started using it to get updates on sports scores and now I can watch live clips of sports. I can also make video conference calls...*
- Hedonic Outcomes of broadband is a significant predictor in emerging countries but not in the UK

5. PC Access

- Consumers believed that if they did not have a PC or their PC does not meet the minimum requirements to access the Internet, they would less likely adopt broadband
- This was not tested in other country studies

Contribution

- Relevant factors affecting broadband adoption is SA have been confirmed
- The mixed method approach proved valuable as new factors emerged and a richer understanding of existing factors was obtained.
- The predicted variation was also higher

Seacom impact
(Mybroadband, 2012)

- The SA government has stated that the Information and Communication Technologies (ICT) industry is key to the country's development; however, regulations and policies have not always supported this stance (Francis, 2010)

This means nothing if we still have to use Helkom to get our DATA to our third party ISP's then to SEACOM. And if telkom is your ISP, enjoy the old SAT3 line ;)

5 hours ago

Like

Conclusion & Way Forward

- Studies in this area have only been able to show 50% of the variation

- Education and IT training is crucial to increasing Broadband adoption

- If the cost of broadband and personal computers don't decrease, South African broadband adoption will remain well below other countries.

- These findings need to be considered by government, Internet Service Providers (ISP), business consumers and public organisations

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