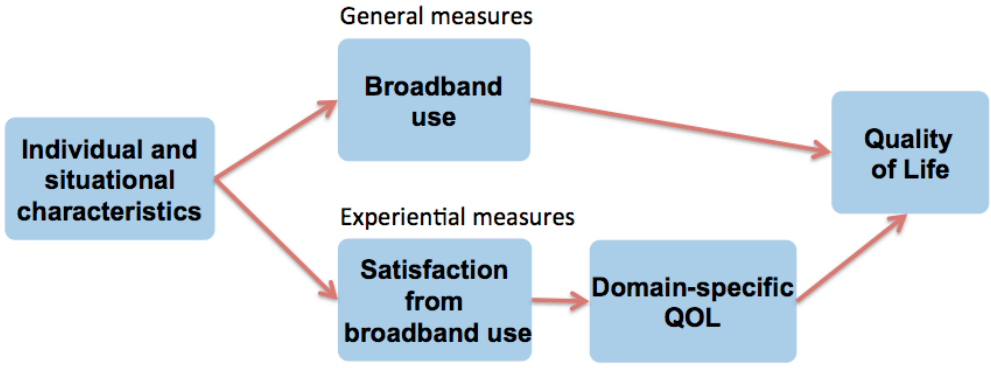
Measuring Broadband Progress: A Quality of Life Approach

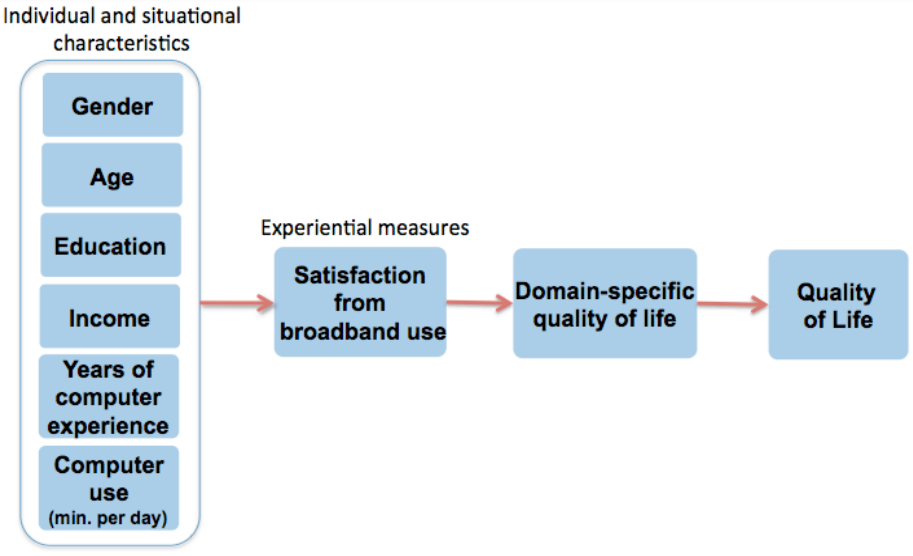
POLICY BRIEF

In recent years, there has been an increasing use of broadband in everyday life activities. In addition, broadband policy has begun to shift its focus from building infrastructure to promoting broadband use and anticipating transformational benefits of broadband. However, there are limited theories, methods, measures, and data to assess positive or negative life changes from broadband use. Since broadband is viewed as a major public policy tool to improve people's lives and to create a society in which people have an equal opportunity to succeed in their lives, research that conducts formative and summative studies of broadband use and its impacts on people's life is valuable towards the design and evaluation of broadband policy decisions and broadband promotion initiatives. This brief offers a research framework with experiential broadband use and consequences on quality of life as measures of broadband progress in a society. The research framework can support both cross-sectional and longitudinal research design. The method emphasizes the integration of quantitative and qualitative data to develop a richer understanding of broadband use and its impacts. A cross-sectional study of computer and Internet use and impacts on quality of life in the context of community technology centers is used to showcase the research framework and the study approach.

PROPOSED BROADBAND USE AND CONSEQUENCES ON QUALITY OF LIFE FRAMEWORK



JUSTIFICATION: A CROSS-SECTIONAL STUDY OF COMPUTER AND INTERNET USE AND IMPACTS ON QUALITY OF LIFE



Broadband Use and Quality of Life:
A Cross-Sectional Study of Computer and Internet Use among Community Technology Center Users

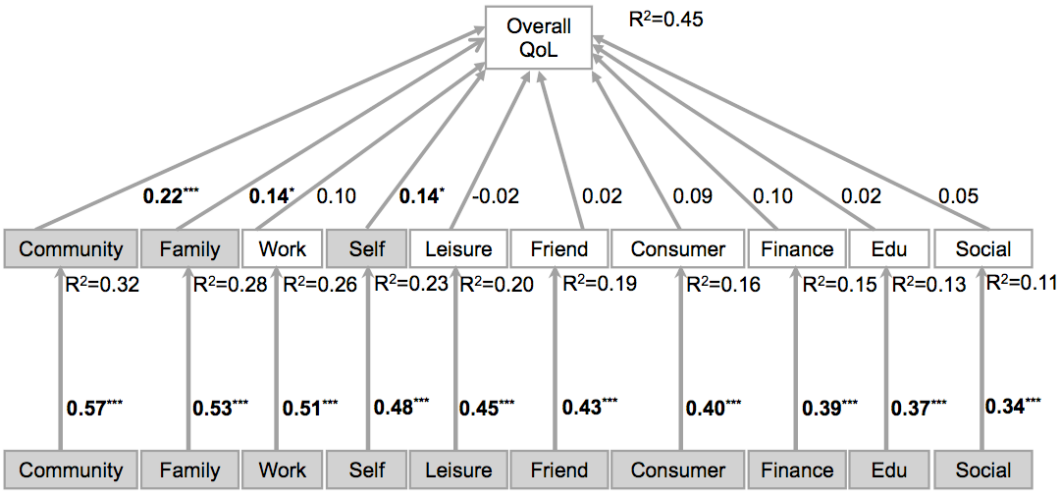
Key Findings on Patterns of Use:

- There are five different motivations underlying computer and Internet use: *researching, relationship building, knowledge sharing, leisure and entertainment, and self-actualization*.
- The top five activities with the highest satisfaction are from the work and education life domains. These involve using Microsoft Word to write report for work, using the Internet to find information related to work, using the Internet to research for information for class work, using the Internet to do self-learning, and using Microsoft Word to write class reports.
- A number of participants ranging from 22% to 36% have never used computer and Internet to support activities in the consumer, social, and finance life domains. This may be because electronic commerce related activities are not well established in Thailand, which is a country under study.

Key Findings on the Influence of Individual and Situational Characteristics on Satisfaction from Computer and Internet Use:

- Age is the strongest predictor of satisfaction from computer and Internet use. Younger individuals are more likely to have statistically significant higher satisfaction in work, education, family, friend, consumer, leisure, social, finance, and community life domains.
- Higher educated individuals have statistically higher satisfaction from computer and Internet use in work, education, and leisure domains.
- Individuals with lower income experience higher satisfaction from their computer and Internet use with statistically significant results in work, education, finance, and community life domains
- Individuals who use computer more (measured by minutes used per day) have statistically higher satisfaction from computer and Internet use in work, family, friend, and self life domains.

Key Findings on Consequences of Computer and Internet Use on Quality of Life:



Note: The highlighted constructs are those that demonstrate positive significant effects. For example, the results suggest that satisfaction from computer and Internet use related to community activities has significant positive effect on quality of life in the community life domain. Domain-specific quality of life from community, family and self life domains has significant positive effects on the overall quality of life.

The significance levels are: † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

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