Why broaden the definition of innovation?

Fred Gault, UNU-MERIT, the Netherlands

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Outline

• If statistical measurement is to support
  • the development of innovation policy
  • the monitoring and evaluation of implemented innovation policy
• then
  • measurement of innovation must be made in all economic sectors
• Measurement of innovation in an economic sector includes measurement of the *linkages* to all other economic sectors
• The policy implications of the broadening of the definition of innovation
Economic sectors and systems

• Sectors
  • System of National Accounts (SNA 2008)
    • Corporations
      • Financial
      • Non Financial
    • General government
      Plus Public enterprises
    • Household
    • Non-profit institutions serving households
    • Rest of world
  Business sector
  Government sector
  Public sector
  Household sector
  NPISH sector
  ROW sector

• Systems
  • Actors
  • Activities
  • Linkages
  • Outcomes (jobs and growth?)
  • Impacts (wellbeing?)

(“Think systems, not technologies” www.nap.edu/24699 )
Innovation for measurement purposes since 2005

• An innovation is the *implementation* of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations (OECD/Eurostat 2005, para 146)

• A common feature of an innovation is that it must have been implemented. A new or improved product is implemented when it is *introduced on the market*. New processes, marketing methods or organisational methods are implemented when they are brought into actual use in the firm’s operations (OECD/Eurostat 2005, para 150)
A generalised definition

• An *innovation* is the implementation of a new or significantly changed *product or process*. A product is a good or a service. Process includes production or delivery, organisation, or marketing processes.

• A new or significantly changed product is *implemented* when it is *made available to potential users*. New or significantly changed processes are implemented when they are brought into actual use in the operation of the institutional unit, *as part of making product available to potential users*.

• Consequence
  • Firms, public sector institutions and households that make new or significantly changed products available to potential users, at no cost as well as at economically significant prices, are innovative institutions.
  • This could lead to two sets of innovation statistics – zero cost and economically significant cost.
  • More surveys.
Outcomes

• Internationally comparable definitions of innovation for all SNA sectors

• Support for policy development in the Public and Business sector, and for monitoring and evaluation of implemented policies

• Stimulus for more analysis of innovation in all SNA sectors and the interactions between them
  • Linkages within sectors and between institutions in different sectors become new indicators (in addition to being the basis for non-linearity of innovation systems)
Restricted innovation

Are intentions realised?

• So far the focus has been on inferring the activity of innovation using internationally agreed definitions to support measurement

• Policy interest goes beyond just innovation to consider
  • Sustainable, green, responsible, pro-poor, inclusive … innovation
  • Jobs and growth, global challenges, …

• Impact of technologies and practices
  • AI, the Cloud, the digital economy, mutual distributed ledgers, new materials, robots, …

• To measure this ‘restricted’ innovation requires additional surveys, including social surveys, conducted at different times

• Additional time scales require a longer term measurement perspective
Conclusion

• Innovation happens in all economic sectors
• Definitions of innovation are not standard outside of the Business sector
• Much work has been done on public sector and household innovation
  • Definitions need to be standardised
  • Broadening the definition is a step in this direction
• Policy in all sectors can impose restrictions on the definitions of innovation and this must be accommodated by the measurement community
• Measuring innovation in all sectors and the linkages between sectors supports analysis of the innovation system and provides a basis for policy development and for monitoring and evaluating implemented policy
• More

www.oecd.org/sti/008%20-%20BS3%202016%20GAULT%20Extending%20the%20measurement%20of%20innovation%20.pdf