



Building Collaborative Networks for Innovation

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Enhancing the innovativeness of EU food SMEs through the management of strategic network behaviour and network learning performance (NETGROW)

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Outline

- NETGROW facts and figures
- Rationale
 - Need for this research – theory, evidence and policy perspective
 - Why the food sector (EU and Ireland)?
- Research objectives and approach
- Stakeholder involvement

NETGROW Facts and Figures

- EU FP7 Project, Budget €3.5 million
- Overall aim: develop a better understanding of.
 - (a) the preferences and behaviours of ***companies in networks*** in particular focusing on how these preferences explain behaviour and ultimately performance.
 - (b) the functioning and performance of different types of ***networks***, leading to the development of strategic management tools for companies and policy makers
- Start 1 May 2010: Finish 30 April 2014
- Coordinated by University of Gent: Partners in 9 countries

Broad definition of networks

- competitors, customers, suppliers, knowledge centres and others
- formal and informal linkages
- MNCs and SMEs

Theory

- Strategic management
 - Resource Based View (RBV) of the firm
- Network theory
 - Gaining access to resources “external” to firm (financial resources, skills, information, markets and technologies)
 - Achieve economies of scale without dis-economies of size
 - Enhances social capital
- Innovation theory
 - Networking important for diffusion of innovation
 - Networking reduces uncertainty in innovation
 - Concept of open innovation

Empirical evidence

- Networks and quality
- Kearney & Abdul-Nour (2004)
 - Strategies to improve quality level by LF through networking relationship between SME suppliers
 - Exchange of real best practice instead of theoretical advice from consultants for example
 - Complexity level of different networks
 - Strategic networks
 - Helping networks
 - Contact networks
 - Personal networks (Collectif, 1999)

Empirical evidence

- Networks and firm performance
- Watson (2007)
 - +ve relationship between formal networks and firm survival, growth but not ROE
 - Informal associated with survival
 - Network range associated with growth
 - Network intensity associated with survival

Empirical evidence

- Networks and innovation
- Zeng *et al* (2010) 137 Chinese SMEs (SEM)
 - Sig +ve relationship between innov perf and
 - inter-firm cooperation (most sig + impact),
 - cooperation with intermediary institutions,
 - cooperation with research organisations (govt agencies NS)
 - “Vertical and horizontal cooperation with customers, suppliers and other firms plays a more distinct role in innovation process than horizontal cooperation with research institutions, universities or colleges, and government agencies”

Empirical evidence

- Food networks and marketing-led decision making
- Gilmore *et al* (2006)
 - Food distribution channel UK (qualitative 2 year study of 12 SME owner/managers within the same channel)
 - More sophisticated marketing-led decision making by SME owner/manager who was proactively networking and utilising marketing network

But...

- Gaps in literature re relationship between networking and innovation (Pittaway *et al*, 2004)
- Costs:
 - Zhao and Aram (1995) networking costs (time & finance)
 - Watson (2007) optimal level of resources devoted to networking (number and frequency)
- Particular groups of companies lack the skills necessary to benefit from networks and network support (Vermeire & Gellynck, 2007)
- Therefore further research needed and strategic management tools and support required, particularly for SMEs

Policy perspective

- Lisbon objectives and LT EU level KBBE strategies
- European paradox re quality of basic science vs ability to translate it into innovative breakthroughs
- EU innovation policy to stimulate cooperation between public and private stakeholders
- Enterprise development policies – specific focus on SMEs
- “Cooperation and alignment among the different partners in the innovation cycle is required for innovation to occur most effectively” (ETP Food for Life)



“By creating innovation networks and facilitating knowledge exchange across Europe we can create a greener and healthier future. It is integral to economic growth that we work together to link skills, pool resources and help create the foundations of new enterprises and innovations”.

SciTechEurope, Science Conference 2010

Why Food (EU context)?

- Important sector:
 - largest manufacturing sector in the EU
 - annual turnover of approx. €965 bn
 - largest employer in EU
 - employment 4.4 million
 - Net positive trade balance (Exports €58.2 bn: imports €57.1 bn)
- But barriers to innovation
 - R&D 0.37% of sales
 - Large proportion of SMEs (49% turnover, 63% employment, 99% of 280,000 companies)
- Low level of NPD success, share of world market decreasing

Why Food (Irish context)?

- Significant contributor to the economy
 - Largest indigenous industry
 - €7 bn exports
 - €24 bn GNP, 9% GDP
 - 41,000 direct employment (2nd largest direct employer)
 - Regionally dispersed
- Low levels of innovation (0.2-0.3% sales)
- Large proportion of SMEs (90% of 700 manufacturing cos.)
- Need to reposition product range, potential for further growth through innovation

Why Food (Irish Context)?

- DAFF (2004) *Report of the AgriVision 2015 Committee*
- DETE (2006) *Strategy for Science, Technology & Innovation 2006-2013*
- Forfas (2009) *Sharing our Future: Ireland 2025*

Collaboration & Networks

- Enterprise Strategy Group, (2004) *Ahead of the Curve: Ireland's Place in the Global Economy*
- Forfas/EI/Expert Skills Group on Future Skills Needs, (2005) *SME Management Development in Ireland*
- The National Competitiveness Council, (2009) *Driving Export Growth: Statement on Sectoral Competitiveness*

Research objectives

- Obtain understanding of success factors and barriers to network learning, its antecedents and contribution to innovation
- Describe attributes of networks and their levels which contribute to effective network learning
- Define optimal network design
- Develop analytical tool for evaluating network learning performance
- Enhance competencies and skills of food SMEs, network organisations and policy makers through development and launch of networking learning toolbox

Rsch & development components

- At two levels
 - focal company
 - the network
- Research: Literature review, secondary data, brainstorming sessions, Delphi technique, web-based survey using adaptive conjoint analysis, discussion groups, in-depth interviews with network participants, etc.
- Development component: development, market-testing and launching

Stakeholder buy-in

- Ireland:
 - FDII, IEA, Ballyhoura Development Ltd.
- Others: European networks, food SMEs, food industry development agencies, regional development agencies, network organisations (e.g. food and drink federations)



Thank You

QUESTIONS Welcome

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