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QUESTO PROGETTO È SOSTENUTO DALLA  **Fondazione**
Cassa di Risparmio di Padova e Rovigo

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CHE LO HA SELEZIONATO TRA I MIGLIORI PROGETTI DI RICERCA
PRESENTATI NELL'EDIZIONE 2007/2008 DEL BANDO

KIBS, market extension and knowledge management strategies

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Exploring Knowledge Intensive Business Services
Entrepreneurship, business models and knowledge management strategies
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Outline

- Aim of the paper
- Theoretical background
- Research questions
- Methodology
- Empirical evidence
- Conclusions: managerial implications and future research



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Aim of the paper

The paper aims at

- ✓ Analyzing the relationship between knowledge management strategies of KIBS and their market scope
- ✓ Focus on the role of spatial proximity between KIBS and value network



Literature on KIBS: 3 dimensions

<i>Theoretical dimensions</i>	<i>Former studies</i>	<i>Latter studies</i>
Knowledge	One-directional KN transfer from KIBS to client (O'Farrell & Moffat, 1995)	Complex process of interaction and co-production between KIBS and clients (Bettencourt et al. 2002)
Innovation	KIBS as structures able to support clients' innovation processes through their services (O'Farrell & Moffat, 1995)	KIBS as co-producers of innovation (den Hertog, 2000). KIBS as innovators (Muller & Zenker, 2001)
Spatial proximity	ICT reduces distance relevance (KN codification and online interaction) (Antonelli, 1999)	KIBS service supply is highly distance-sensitive (Knoben & Oerlemans, 2006)



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<i>Theoretical and empirical gap</i>		



Research question

Why by observing KIBS located in a specific regional or sub-regional area, some of them are focused on the **local market**, while others obtain significant rates of their turnover with **clients located outside** the KIBS' area?

Integration of the three perspectives of spatial proximity, knowledge and innovation



Quantitative analysis on KIBS

- ✓ specializing in **design and communication**
- ✓ located in the Veneto Region (North East Italy): a *regional innovation system* (Cooke & Memedovic, 2003)

Survey (phone interviews) carried out in July 2009
155 KIBS interviewed out of 3,014 KIBS (stratified sampling)



Methodology (2)

Two independent groups of KIBS have been identified (dummy variable) based on KIBS' market extension

- **Regional KIBS:** KIBS' market based only on regional clients (N=55)
- **National/international KIBS:** KIBS' market includes also national or international clients (N=97)

Investigation of relationship between KIBS' market extension and knowledge management strategies based on:

- **Knowledge codification**
- **Relational dimension** (knowledge transfer, absorption, co-production)



Market size and business profile (1)

Variables ^a		National / International	Regional	Average sample
Year of foundation (means)		1999	1997	1998
2008 Total turnover (thousand €) (means)	*	284.3	119.7	248.6
Employees (means)	**	3.9	2.1	3.3
Labor turnover (2008 total turnover/2008 total employees)		75.0	51.3	69.8
Sales growth rate (2008/2006)		136.5	103.3	124.1
1st customer (% on total turnover)		38.5	47.0	41.2

^a N. of regional KIBS=55; N. of national/international KIBS=97 (at least 1% of turnover achieved outside Veneto).
T-test was used to test differences in continuous variables, while Chi-square was used for dichotomous variables.
Differences between regional KIBS and national/international KIBS have been tested (* p<0.05; **p<0.01).



Market size and business profile (2)

Variables ^a		National / International	Regional	Average sample
Main competitor at regional level (% of firms)	**	29	55.9	37.8
Main competitor at national/international level (% of firms)	**	48.4	14.7	37.8
No competitors (% of firms)		22.6	29.4	24.5
<i>Start-up process (% of firms)</i>				
- one founder	**	53.6	80	63.2
- group of founders	**	46.4	20	36.8
<i>Business entity (% of firms)</i>				
- Limited company	**	61.9	29.1	50.0
- Sole proprietorship	**	38.1	70.9	50.0

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Characteristics of KIBS' services

% on the total offering ^a	National / International	Regional	Average sample
Fully customized services	84.59	85.27	84.84
Modular services	6.6	3.82	5.59
Standard services with limited customization	5.72	8.18	6.61
Fully standardized services	3.09	2.73	2.96
Total	100.0	100.00	100.00

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Knowledge codification

		National / International	Regional	Average sample
% of employees with master degree (means)		5.12	0	3.19
% of employees with graduate degree (means)	*	24.78	13.07	20.38
Patents (% of firms)	*	11.3	1.9	7.8
Designs or models (% of firms)	**	16.5	0	10.5
Trademarks (% of firms)	*	30.9	16.7	26.1
Exchange of codified knowledge (% of firms)	*	63.9	30.9	51.3

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Relational dimension

		National / International	Regional	Average sample
High interaction with customers	*	62.9	45.5	56.5
Personnel transfer from KIBS to client firm	*	44.3	25.5	37.7
Customers as sources of knowledge		54.6	50.9	53.9
Suppliers as sources of knowledge	*	59.8	41.8	53.9
Systematic collaborations within the value network	*	43.3	25.5	37.0
Sporadic collaborations within the value network	*	56.7	74.5	63.0
Web-based CRM	**	42.3	20	34.4
Groupware		12.4	10.9	11.7
ERP		5.2	3.6	4.5



Knowledge profile of national KIBS

Distinctive traits	Variables
Knowledge transfer, absorption and co-production	<ul style="list-style-type: none">• Interaction with customers• Personnel transfer from KIBS to client• Suppliers as sources of knowledge• Systematic collaborations within the network• Web-based CRM
Autonomous production of knowledge and innovation	<ul style="list-style-type: none">• Patents• Designs or models• Group of founders
Knowledge codification	<ul style="list-style-type: none">• Employees with graduate degree• Patents• Designs and models• Trademarks• Exchange of codified knowledge• Web-based CRM

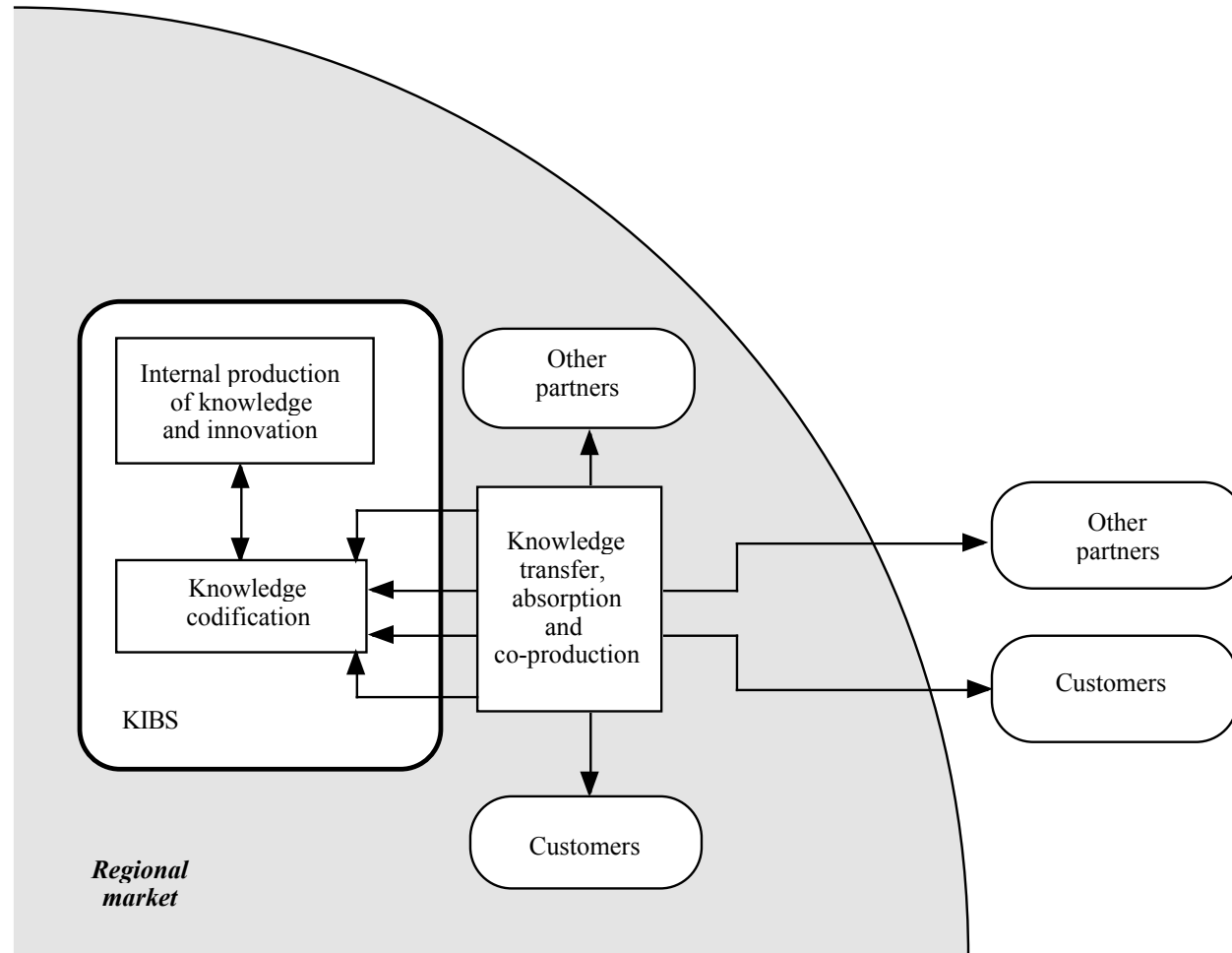


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A knowledge-based model of national KIBS



Authors' elaboration



Managerial implications

- Market extension is related more on entrepreneurship than on KIBS' age
- Knowledge management strategies influence KIBS' performance in terms of size and market extension, not growth
- Variety of sources of knowledge (beyond clients)



Limitations and future research

Paper based on quantitative approach

Future research directions:

- ✓ Qualitative research (2 focus groups, 15 case studies - *forthcoming paper*)
- ✓ Comparison among KIBS specialization (design, ICT, professional firms) and impacts on market extension (*forthcoming paper*)
- ✓ Cross-regional and country analysis