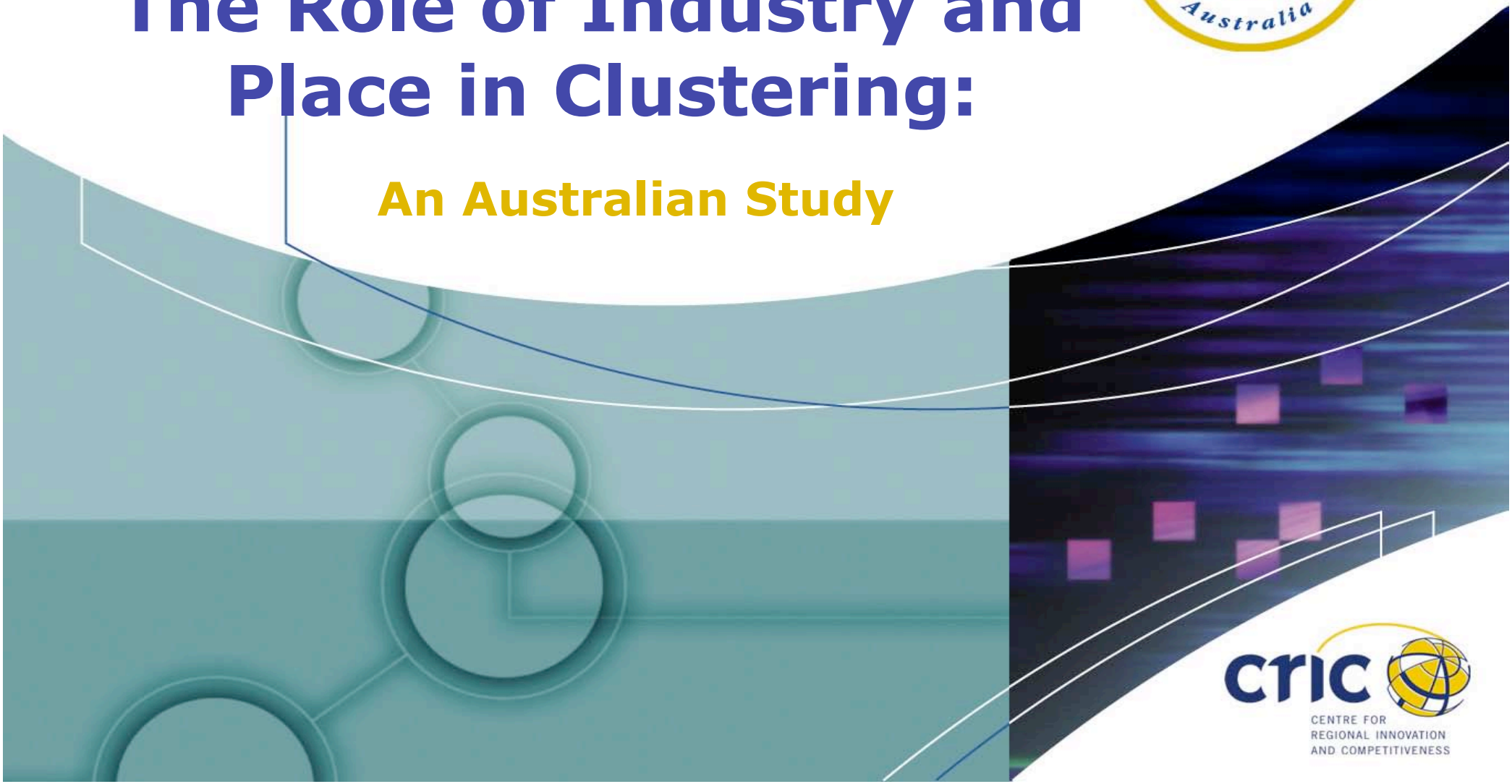
The Role of Industry and Place in Clustering:

An Australian Study



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Introduction

- Clustering in the Australian Wine and Tourism Industries
- Place, Industry and Clustering
- Data and Analysis
- Conclusions

Question

How much do the specific factors describing industry and place matter in the development and working of a cluster?

Approach

- Part of a broader study.
- Quantitative and qualitative data are used to examine the impact of industry and place in a study of the wine and tourism industries in Western Victoria, Australia.

Clustering in the Australian Wine and Tourism Industries

Share common attributes :

- Geographic co-location
- Economic, social and resource assets
- Supply and demand complementarity.

Differences

- Complementarity varies considerably from one region to another.

- Wine and tourism industries differ in the way they cluster.

Qualitative Findings

- The wine industry operates more like a cluster that the tourism industry.
- Wine-tourism collaboration or development, stems mainly from wine based enterprises.
- The impact of these effects is partly influenced by location.

Place, Industry and Clustering

- The role of industry and place on clustering activity.
- Theoretical perspectives
- Quantitative findings

Proposition

Industry type explains clustering better than place but place may have a moderating effect.

Clusters and Place

An economic geographers perspective

- A chaotic concept (Martin & Sunley, 2002)
- Based on spatial agglomeration of economic activity and the growing salience of the region in the global economy
- Provides a 'brand' identity

Clusters and Industry

Marshall's perspective

- Industrial districts–development of ancillary industry
- 'Industry' knowledge, customised product and processes
- Cultural fit
- Common processes and business models

Clusters, Industry and Place

Porter perspective

- industry specific and
- place specific
- dynamic effects created by interaction of industry and place

Clusters and Clustering

- Outcome verses processes.
- Conditions that successfully drive clustering behaviour and processes.
- Collaboration and adoption of competitive practice through benchmarking.
- How are these influenced by location and place?

Cluster Drivers

CLUSTER DRIVERS	Place	Industry	Interaction, industry & place
Knowledge collaboration	*	***	**
Knowledge spill-over	**	*	***
Skilled Labour	**	*	***
Specialised capital	*	***	**
Supply of materials &components	**	*	***
Asset infrastructure	***	*	**
Social infrastructure	***	***	***
Co-specialised producers	*	**	***
Co-specialised consumers	**	**	***
Competition	*	***	*
Local resources	***	**	**
Chance events	**	**	*
Government support	***	*	***

* average importance ** important *** very important

The Study

- Three regional case studies in Western Victoria (185 enterprises in total).
- There are international wine makers and tourism providers in each area.
- There is significant and sustained economic growth.
- Both industries have been a focus for regional growth initiatives.

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Methodology

- Case study
- Qualitative –interviews
- Quantitative -questionnaire
- Focus on clustering and collaboration within clusters and between clusters

Data and Analysis

- Survey questions on competition, co-operation, collaboration, skill and knowledge transfer
- Factor analysis revealed four underlying factors
- Analysis of variance (ANOVA) of mean factor scores – difference for industry/place or both

Clustering Factors

- NETWORK - businesses working closely to gain skill/knowledge/ information
- AWARCOMP - awareness of what others are doing
- CO-OP - co-operative interdependence between businesses
- MUTUAL – sources of skill and knowledge from within industry

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Results

Significance levels of F ratios in ANOVAs of the four factor scores

	NETWORK	AWARCOMP	CO-OP	MUTUAL
REGION	**0.218**	**0.010**	**0.122**	**0.255**
INDUSTRY	**0.003**	**0.017**	**0.045**	**0.350**
INTERACTION	**0.673**	**0.018**	**0.306**	**0.020**	
EXPANDED VARIATION	0.025	0.000	0.057	0.032

Findings

Significant differences by clustering factor between:

- Industries
  NETWORKS AWARCOMP CO-OP
- Place
  AWARCOMP

Other variables that might explain clusters:

- Size of business (turnover)
- Years in industry
- Number of other similar businesses in region

Added as covariates to ANOVA model

Do not change main conclusion

Conclusion

Our analysis in this study indicates that –

Cluster behaviour is affected more by the industry the business is in than the place it is in.

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