Vancouver Multimedia Cluster Study 2002-2003 study report.

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The team

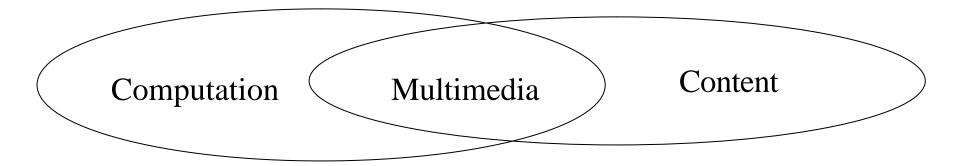
Michelle Petrusevich - case studies and visualization Michael Felczak - research database Shawna Reibling - case studies

Multimedia and clusters

A cluster is defined, some argue, in part by the extent to which they cooperate with others in their value chain (complementarity).

We've defined multimedia as being "between computation and content."

This definition places multimedia firms into a value chain and underlines the extent to which they do cooperate, and in fact *have to* cooperate.



Current status

- 42 interviews completed across four sub-clusters (elearning, animation, games, web/Internet)
- Industry Case Study completed History and Geographic survey
- Partnered in industry-led new media survey 262 responses
- Visualization facilitate understanding within our team, between researchers in ISRN, and with our stakeholder community
- Research database source of "competitive advantage" for our research team manage the data collection process and (now) enhance the data analysis process

Preliminary results (as previously reported)

History:

Multimedia / New media in Vancouver pivots around two significant events - Electronic Arts and "dot com" (boom AND bust).

Geography:

Multimedia / New media is located mainly in the "Yaletown/Gastown" district, with a few other firms in Burnaby. Respondents claim to be here for "the lifestyle".

Size and composition:

As previously reported (May 2002, Quebec City), many small, young firms, #3 in Canada, fast growing, over 600 firms but revenues concentrated in a few. Very strong social network - Wired Women, New Media BC, BC TIA, etc. Good universities and institutes -- mainly source of talent, not IP.

Preliminary results (C&C Matrix)

Is this a cluster (Commonality & Complementarity)?

- Some of the component 'sub-clusters' have these C&C aspects, some have one but not the other, some have neither.
- This may be amenable to <u>a visual representation</u>, useful for analysis and policy making.
- as a whole, I now think that the agglomeration of firms in Vancouver seems to fit a formal definition of cluster *.
- Multimedia in Vancouver is more like a "type II" cluster the entrepot model: global knowledge flows.

(* Although, as Meric pointed out, "clusterness" may not be that important...)

Preliminary results (New Media BC Survey)

- Cooperated with New Media BC to conduct an industry survey in spring 2003.
- Now complete, with 262 responses to an on-line survey (over 700 'invitations' to participate).
- Official report from survey to be released shortly.
- Preliminary analysis suggests that the results will be in line with our previous qualitative research.

Preliminary results (Visualization)

- Clusters and clustering, and especially the role of social capital within a cluster, is a complex phenomena.
- Our experience with communicating and understanding complex phenomena suggests that *visualization* techniques can be very helpful.
- We've studied ways to understand and communicate the Vancouver multimedia cluster using visualization tools. Combined this with related field of social network analysis and the visualization tools employed by that field. Michelle presented the results at an international conference in February, 2003.

Preliminary results (Online research database)

- In order to facilitate our own research, we have created an online research database, accessible through the web and based on "open source" tools.
- We opened the database to other researchers. So far there are 30 people using it, representing six cluster research programs.
- Thanks to input/demand from our colleagues in Quebec, the database now has bilingual data input, questionnaires working toward bilingual user interface (buttons and menus).
- Now can produce reports get the data out as easy as we can get it in.
- Data security and data sharing enabled through access rules, passwords, and encryption.
- More on this in Michael's slides and in your package ask him for a presentation.

Next steps - the coming year

- More interviews, to complete our coverage of the computer-enabled film and television animation businesses.
- Refine and complete the regional case study of new media, integrate the New Media BC survey, and provide analysis.
- Develop an operational definition of clusters based on commonality/complementarity and test it on our cluster, within our cluster on sub-clusters, and compare across local clusters and between different regions on an industry and a regional basis. Use more visualization illustrate theory and data.
- Continue to enhance the online research database and invite more participants.

Observations

We had a day-long discussion with people in Industry Canada yesterday.

Through the course of that, I took notes on what some of those comments might mean to the multimedia cluster in BC.

Indulge me...

Hans' points

Are we a cluster? What about interaction?

Interaction in the multimedia industry in Vancouver is very high, both within the cluster as a whole (for example, we have an organization that is very active, New Media BC), and within the sub-clusters (for example, the E-Learning special interest group).

Hans' points (2)

Are we a cluster? What about knowledge?

- What about knowledge stocks and flows? Is there a local champion who can spin off companies and re-absorb them when they become desirable targets? Yes, Electronic Arts (largest game company in the world).
- Do we have a source of knowledge that is transferred to industry? Not in terms of formal IP transfers. Yes, in terms of talented people (universities and Emily Carr, special institutes like VFS)..
- Is there a local champion who symbolizes the benefits of being in this industry? Yes, Electronic Arts. This "buzz factor" can't be underestimated as it draws people into the business, galvanizes the imagination of those who might not have seen themselves as capable of doing it -- but when someone from Burnaby can do it, well so can I!

Hans' points (3)

Are we a cluster? What about talent?

- What about talent stocks and flows? Multimedia personnel are highly trained and come from local universities.
- A good test is the "second job" test -- can people get another job if they have a falling out with their first employer? Yes. And, significantly, there is room at the top for senior people.
- Multimedia firms are also very demanding customers of local specialty services, ranging from technical (e.g., computer equipment, networks) to services (intellectual property, grant writers, licencing, and accounting).

Hans' points (4)

Are we a cluster? What about knowledge in the form of specialized tools?

While many multimedia firms are using foreign products, there are enough examples of indigenous tools, either developed or adapted, to support this as a legitimate option for the members of the industry (e.g., the SVG graphic standard). There is a real benefit here of being an industry in which "soft" tools (software) are important.

Examples of why we are a cluster

- The dot.com bomb -- the industry is still standing (reeling, perhaps, but still standing).
- The local boy makes good and does it again -- WebCT is sold, and the principals are back with a new company.
- The spinoff factory -- Electronic Arts was too rigid/big for a member of the team, he went off and founded his own company (Radical), which EA recently bought back.

Jorge's aerospace example

Jorge Niosi commented that the aerospace cluster doesn't have a strong internal buy and sell practice -- they buy and sell internationally -- but they do share a labour pool. New media in BC is similar to this. They don't compete or even supply each other, but they like to work alongside each other.

Jorge's comment about the value in diversity

A cluster benefits -- as Jorge pointed out -- from internal diversity. Not all your eggs in one basket. The multimedia sector in Vancouver has benefited from this, as it has several components:

e-learning

animation

gaming

web content/applications

A cluster test

Can the cluster survive the failure/closure of a major player? In the case of MPR in Vancouver, Novatel in Calgary, and MIL in Ottawa, the failure of a major player was actually the catalyst for many other companies and may in fact been the impetus for growth.

A questionable policy objective, but an interesting observation...

Clusters vary

Someone mentioned the Utterback model of innovation life cycles.

Clusters vary in their proximity to end consumers at a particular period in time. The analysis, and expectations, of the cluster, therefore, need to be adjusted to take that into account.

Where does policy fit?

Multimedia industry is affected by different kinds of policies. Clearly they are affected by industrial policy. But they are also strongly affected by cultural policy (in film and animation, for example), and educational policy (in e-learning initiatives).

Multimedia firms are desperate for tax equity/subsidy equity -- across regional jurisdictions and between the different nations... mostly U.S. vs Canada.

Thank you

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See you in Vancouver in 2004!