

MULTIMÉDIA in MONTREAL: an innovative cluster?

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Plan of presentation

- Definition of Multimedia
 - Cluster organization
 - Historical factors
 - Today 's MM reality and factors of success
 - Research to date: main actors
 - Some preliminary results from case study and policy issues
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1-Definition of sector

- CESAM:
 - *«...pour être considérée multimédia, une application doit utiliser simultanément **au moins trois des quatre médias suivants: le texte, l'image, le son et la vidéo.** De plus, cette application doit nécessairement être interactive.*
 - ***L'interactivité** se définit comme une communication bidirectionnelle entre l'utilisateur et le système rendue possible par le biais d'une interface avec un temps de réponse acceptable. L'interface doit, de plus, être facile à comprendre et à utiliser.*
 - *Les mots "nouveaux médias" ou "multimédia" peuvent être appliqués à la fois aux composantes matérielles d'un ordinateur, au système d'exploitation et aux applications logicielles.»*
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Definition (2)

- STRATEGIS:
- «Le multimédia (interactif) peut être défini comme une présentation **interactive**
- d'information **électronique** (numérique) qui incorpore **deux éléments médias ou plus**, p. ex. graphique, texte, animation, vidéo ou son, à des fins de **reproduction**
- **sur un dispositif informatique.** »

Definition of an interactive MM product

- Interactivity
- Content: 2 or 3 of ***text, image, sound and video***
- Numerical support
- seems clear...but sometimes blurry lines : dominant product, change over time (difficult times especially...)





More confusion...if needed:
Application in many sectors

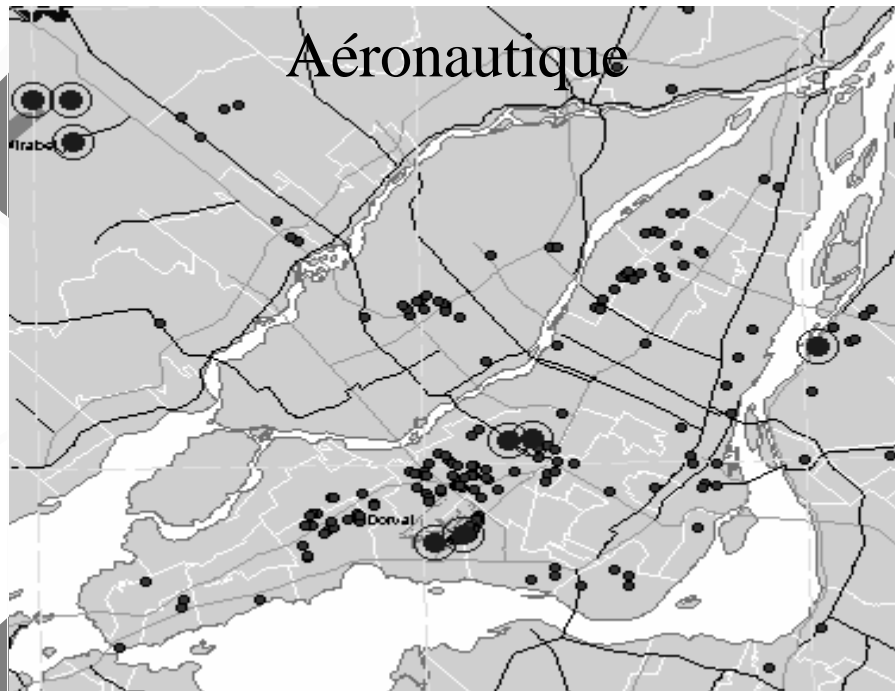
- Entertainment
- Education and training
- Visual animation, arts and culture
- Corporate services (+ + since dotcom crisis)..... **+ more hidden MM workers:**
- Health
- Financial transactions



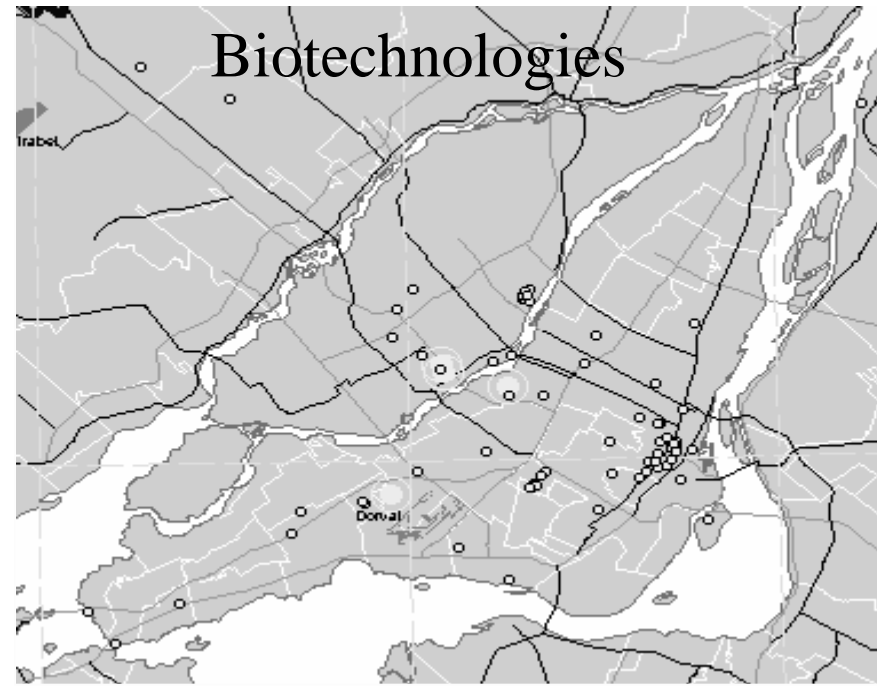
2- Cluster organization

- Geographically proximate group of ((interconnected)) companies and associated institutions in a particular field linked by commonalities and complementarities (Porter)
 - Common culture (Italian district and wine...vs billiard room in office and Thursday night beer culture for Mtl MM!)
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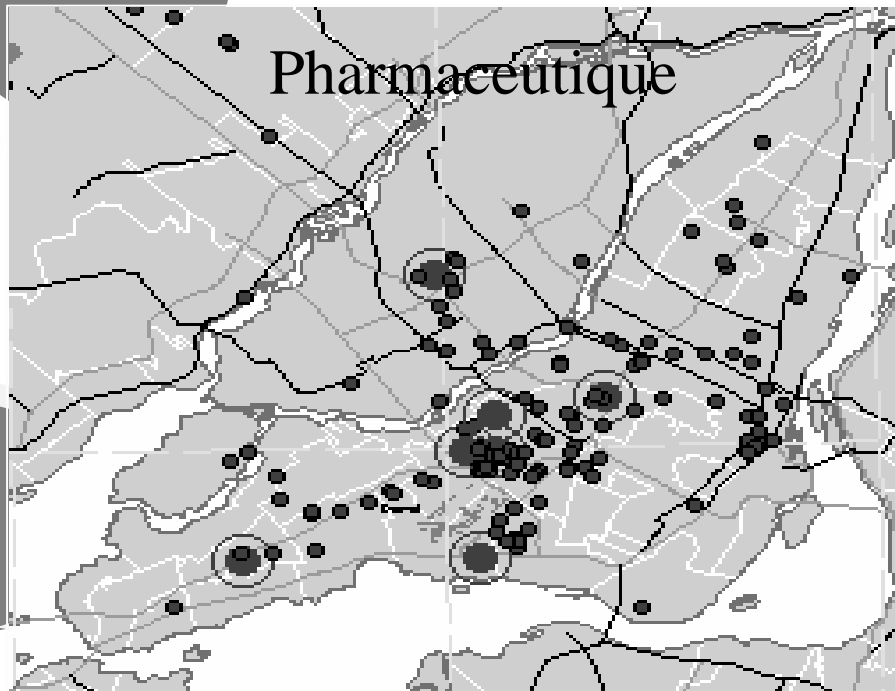
Aéronautique



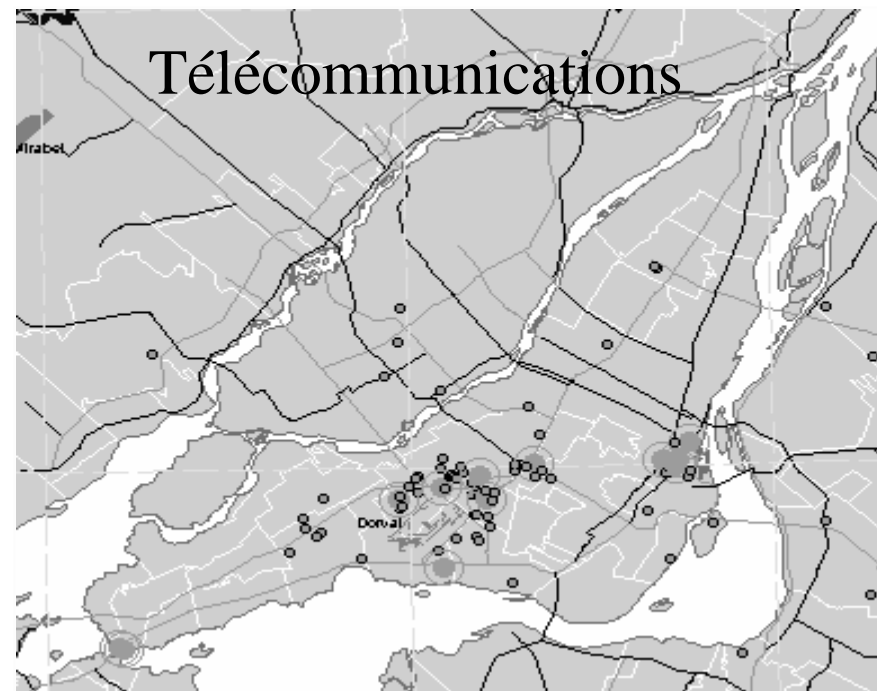
Biotechnologies



Pharmaceutique





Télécommunications





Cluster organization (2)

- Specialized inputs such as labour: refers to industrial district aspect: accent on competent labour, talent...(strength for Mtl, from film to MM: good techs)
 - Presumed increased capacity to innovate due to proximity access to labour, knowledge, creativity...(will see extent of cooperation...)
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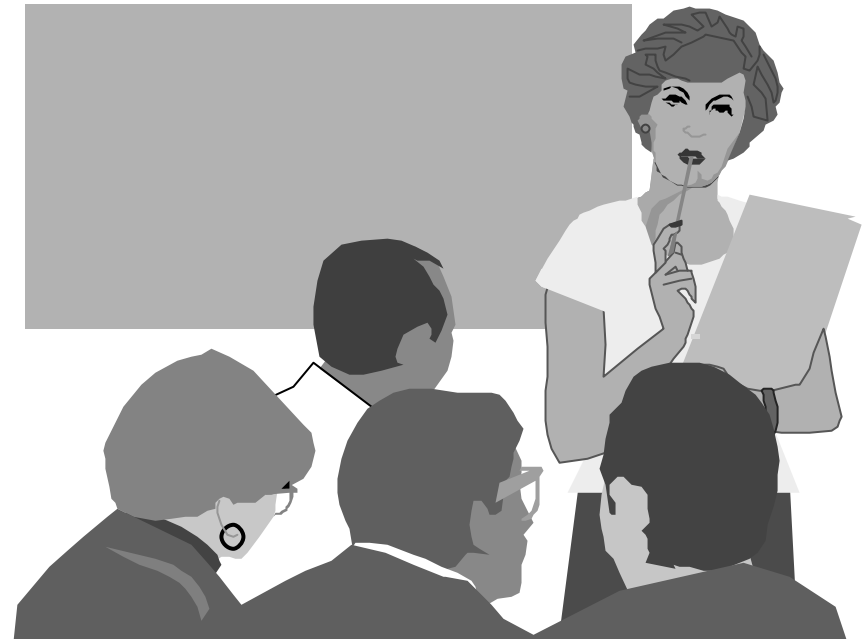
Factors of innovation

(Tremblay, Klein, Fontan, 2002; 80 interviews-cies)

- 72,5 % labour is most important
- 63,8 % personal interactions
- 58,8 % networks of information
- 31,3 % proximity of similar enterprises
- 27,5 % regional organizations
- 22,5 % business associations
- 18,8 % local associations
- 16,3 % local services

Influence of local milieu (cluster actors): yes, for only 30 out of 80

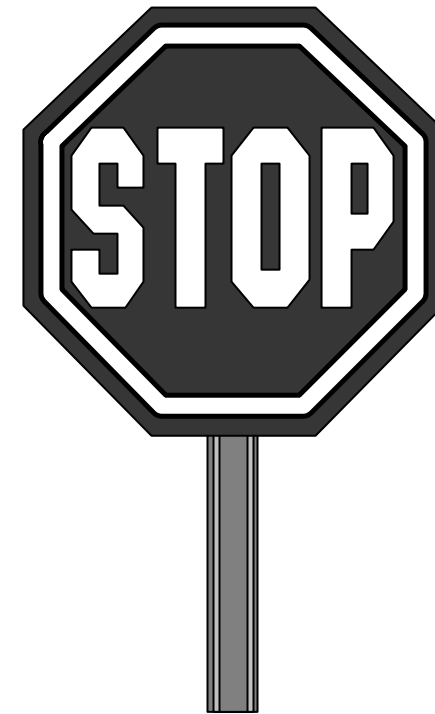
- 40 % expertise
- 36,7 % networking
- 23,3 % financing
- 16,6 % creation of infrastructures
- 6,7 % services offered
- (Tremblay, Klein, Fontan, 2002)



Obstacles to innovation

(Tremblay, Klein, Fontan, 2002)

- 87,5 % see obstacles:
- 44,3 % : labour (+
aéro et télécoms)
- 35,7 % costs (+
pharma =40 %)
- 27,1 % available
technology
(+télécom.=44 %)
- 24,3 % internal
organisation and
market
- 12,9 %reglementation
(+ pharma: 20%)





Effect of proximity on innovation ?

- perception of the phenomenon (no precise measure of distance). Q36H : ***Est-ce que la proximité d'entreprises connexes a une influence sur la capacité d'innover ?***
- Two out of 3 firms consider that proximity does NOT influence their capacity to innovate...we have also been brought to question the local dimension... vs higher level networks and exchanges

A few correlations: proximity and innovation

(Tremblay, Klein, Fontan, 2002)

- Those who think that proximity of other firms favours innovation also think that personal interactions and networks favour innovation.
- Those who have relocated closer to their labour pool, market or clientele also think that proximity favours innovation
- **+ relational proximity than geographical proximity**

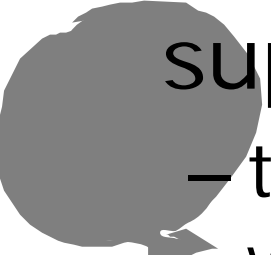



3- Historical events which mark the MMcluster creation (MTL)

- « Tony de Peltrie »: Star character !
- Soft Image and Discreet Logic: glamour of film blends with MM
- Creation of a few icons: Mia the mouse...and others in edutainment
- Attraction of important pillar companies with global reach: Ubisoft
- Development of some world connexions (but recent slowdown brings back to home !



And the rest of the story...:

- Institutions and Government support:
 - tradition of excellent tech-savvy workforce leads to development of more formal training programs and institutions: INIS, NAD, UQAM, Concordia (Hexagram)
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Québec government

- Creation of City of Multimedia: 15 % credit for each job created in City (not outside)...a lot of IT software jobs however...
- Tax credit for job creation...but more important: cash flow advances on tax returns to come

4-Innovation in MMclusters?

- Innovation in MM SMB 's is more a process of « polennisation » than of large R& D labs: ideas circulate in the cluster and foster innovation
- Innovation is a process of cognitive learning (Dosi, Freeman, Nelson and Winter...)
- « Learning by doing, using, sharing », ... in the firm, network or sector leads to innovation and creativity

Difference with large firms



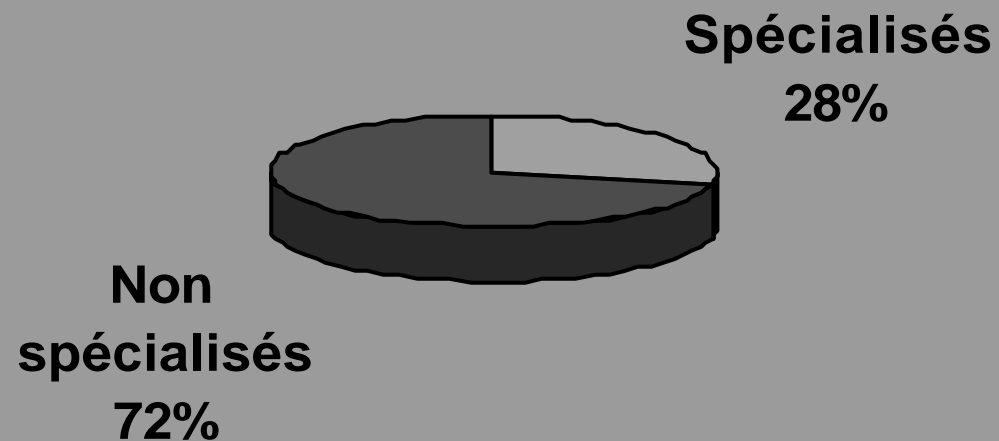
- **life cycle and more division of labour**
(including international division of labour
in large firms: Ubisoft and Cognicase...):?

4-Firms, employment and actors in Montréal MM

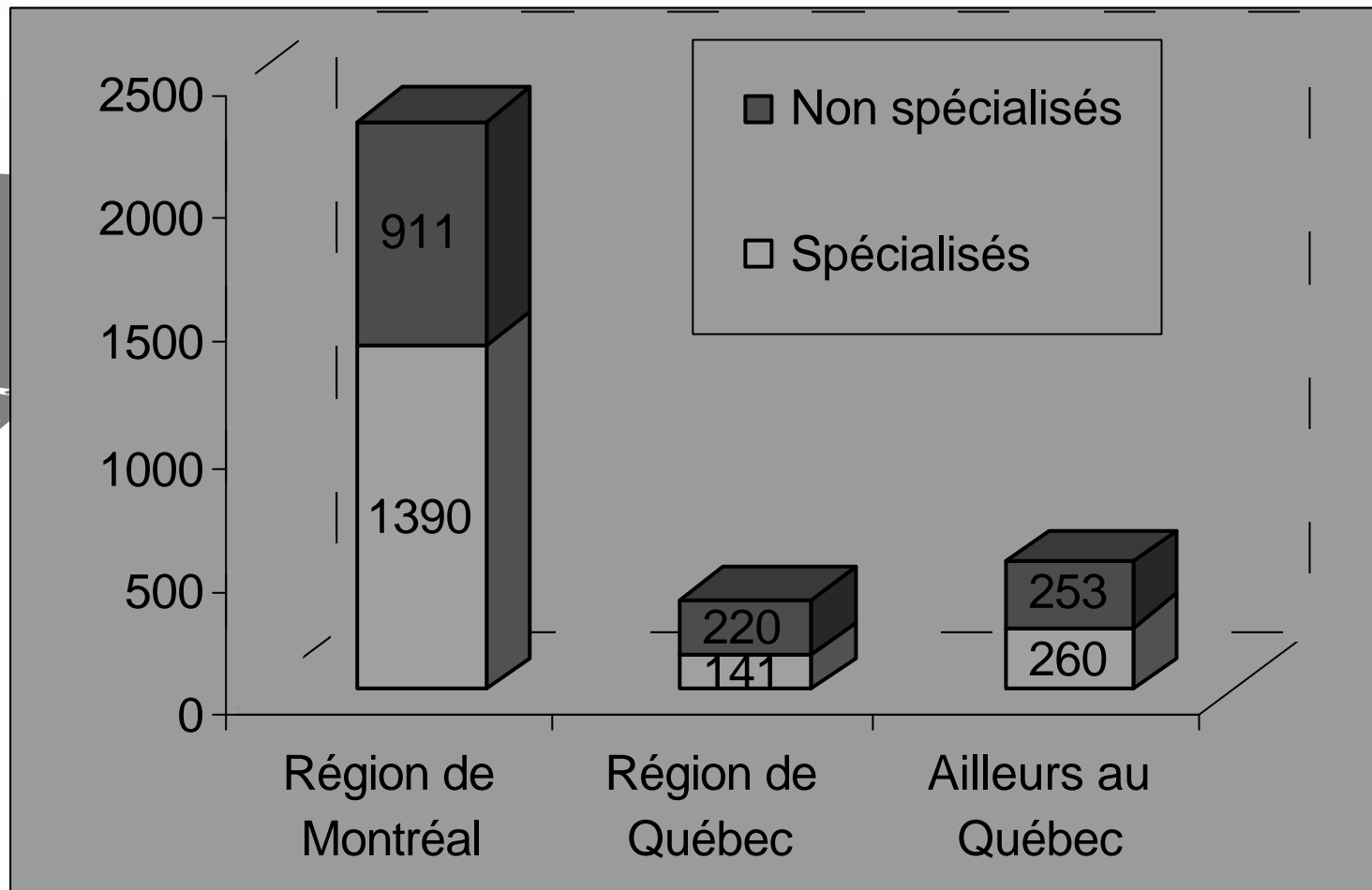


Number of employees in QC: surprising stats!...but meaning of specialized?

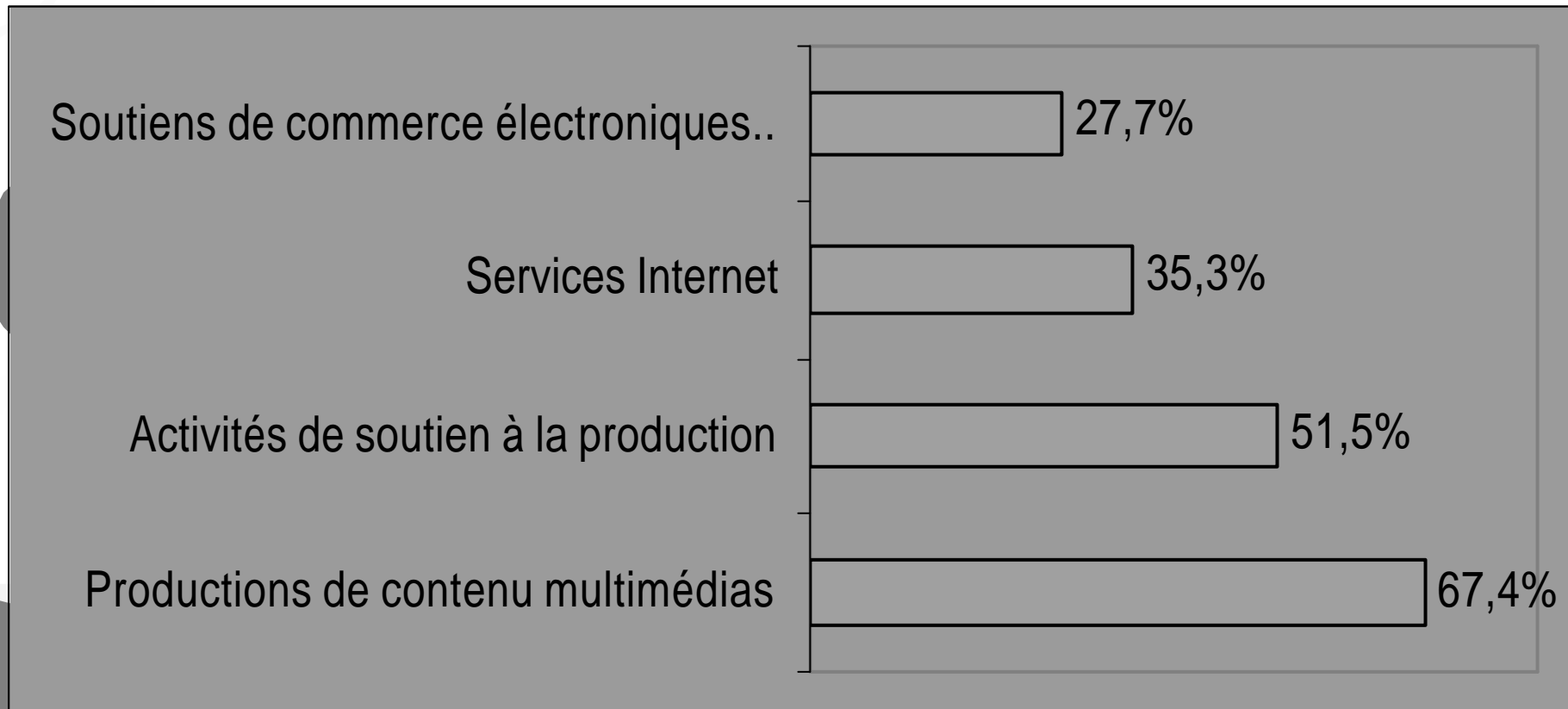
Nombre d'employés total 88 382



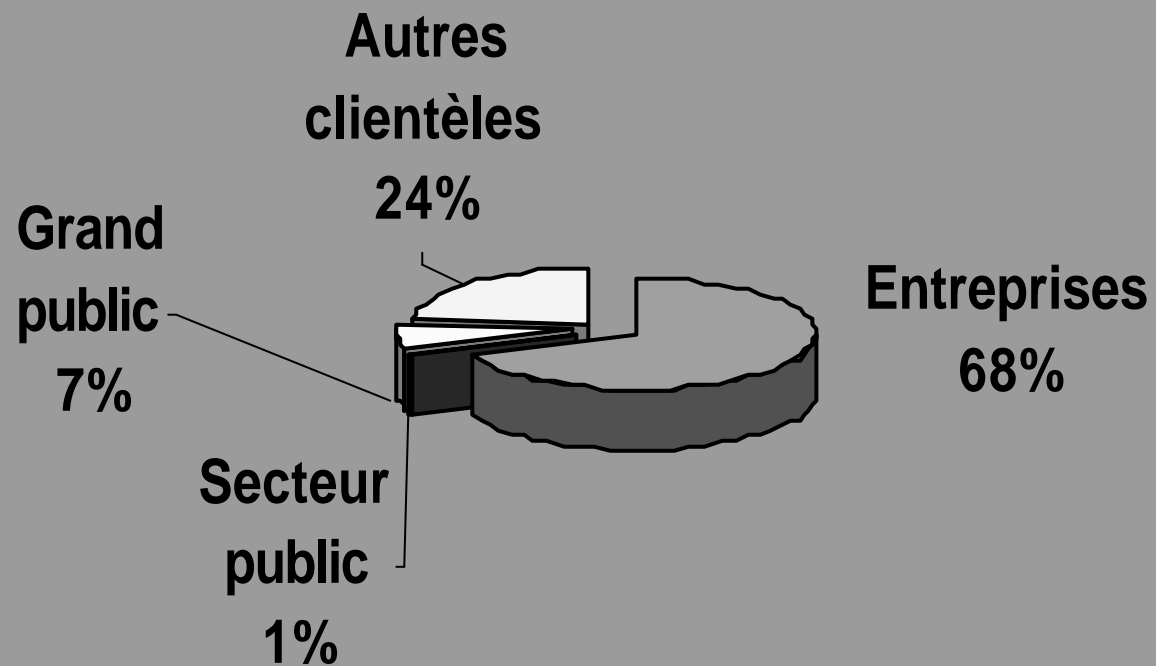
Number of firms in Québec



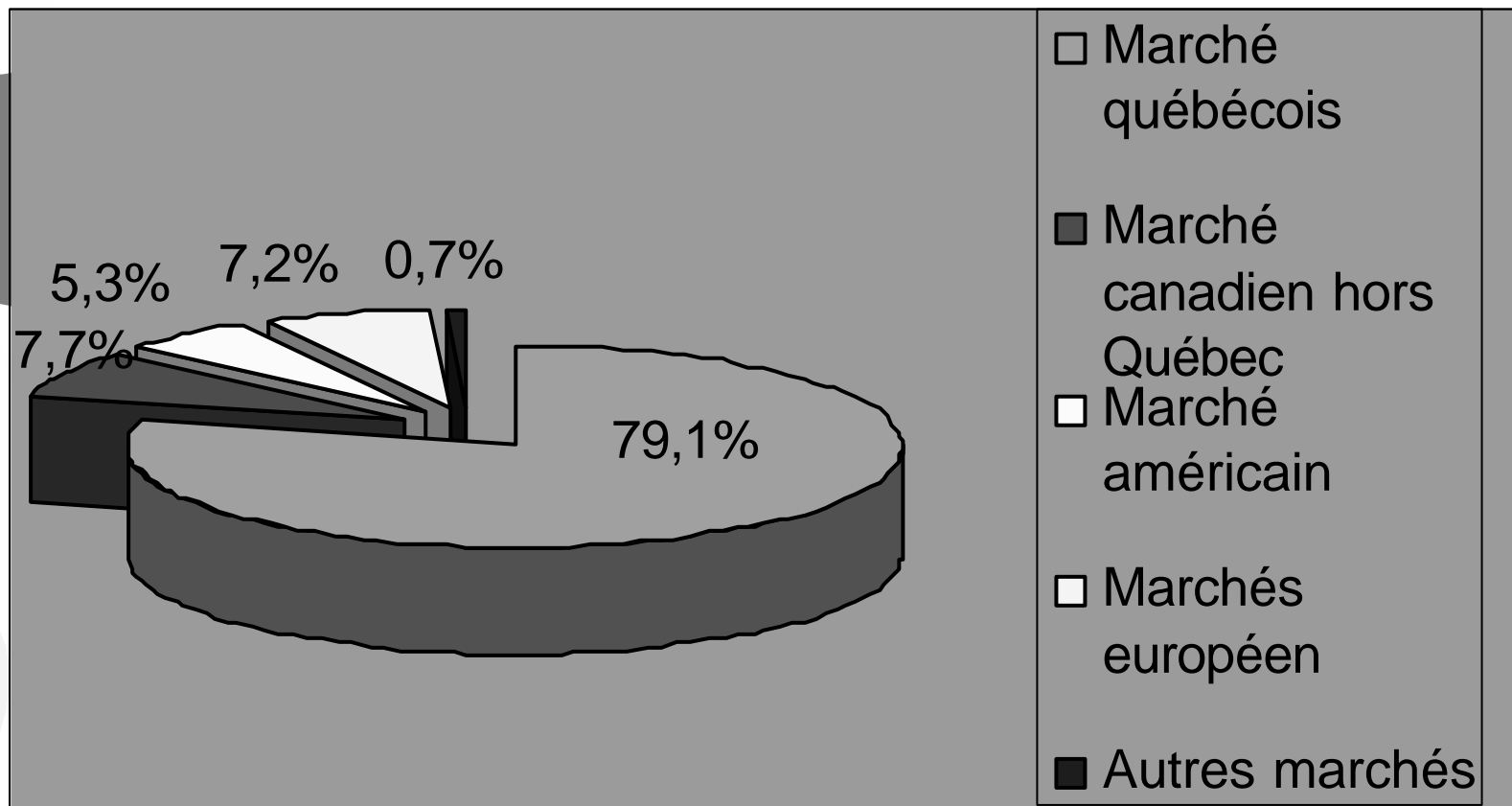
Field of activity



Clientele distribution: + business



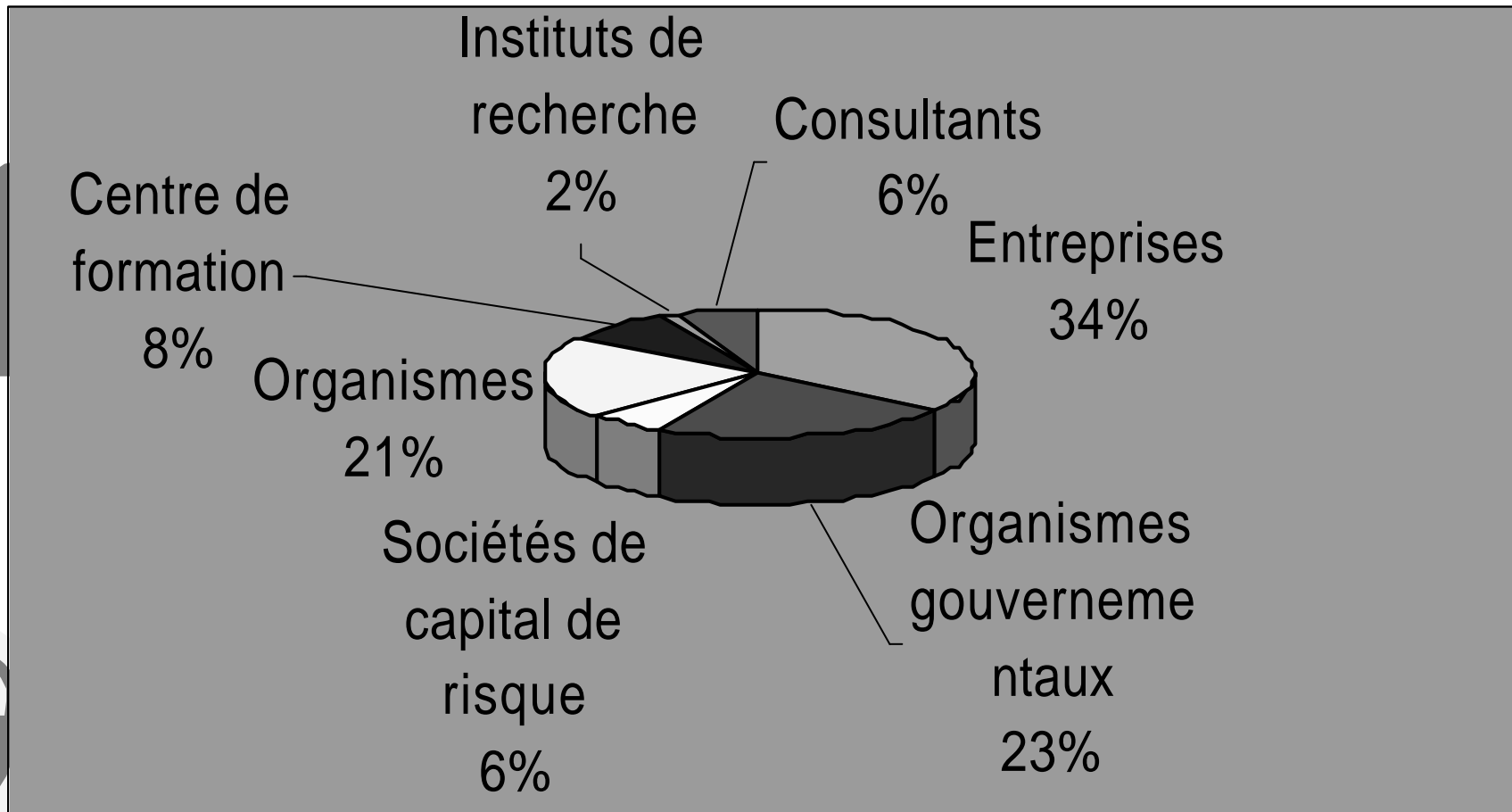
Distribution of sales: + Québec, global link is missing!



5-Actors or players in MM



Number of interviews to date (50)





Governments

- Federal govt
 - Téléfilm : Programme MM (+ +)
 - Développement économique Canada
 - Patrimoine Canada
 - Conseil national de recherche du Canada (PARI : plus dans TI, logiciels)
 - Banque de développement du Canada
 - Office national du film (animation électronique)

Provincial Govt

- Société de développement des entreprises culturelles du Québec (+)
- Ministère des Finances (Crédits, Cité)
- Emploi-Québec
- Ministère de la Culture et des Communications
- Ministère de l'Éducation
- Investissement Québec
- Société générale de financement
- Conseil régional de développement





Municipal Govt

- Major Interest : space in the MM City (from decline of the Faubourg des Récollets to the Multimedia City)
 - Service de développement économique et urbain of the City of Montreal



Intermediate institutions

- Associations

- Alliance NumériQc (réunion de + asstns)
 - Réseau interlogiq
 - Regroupements des producteurs de multimédia
 - Association des professionnels en intranet
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Educational institutions

- College level
 - CÉGEP
 - Institut national de l'image et du son
 - Centre Nad
 - ICARI
- University programs in MM, creative computer arts..
 - UQAM, Concordia...and Hexagram



Local development organizations

- Corporation de développement économique et communautaire Centre-Sud-Plateau-Mont-Royal
- Service de développement de Ville-Marie
- insertion of youth with govt program in MM : Centre entreprise et d'incubation de Montréal (CEIM) and Cyber Cap

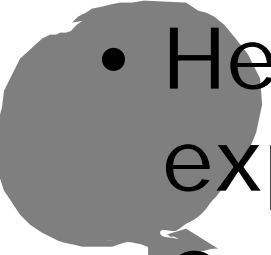



Financing

- Funds
 - Fonds développement Bell
 - Fonds Telus
 - Fonds d'investissement de la culture et des communications
- Risk capital
 - Inno-centre
 - Innovatech
 - Techno-cap

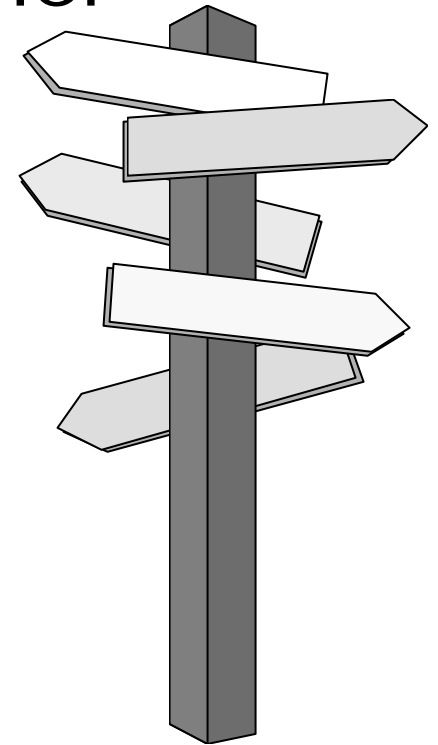


Research Institutes

- Centre de recherche en informatique de Montréal (CRIM)
 - Hexagram (recherche et expérimentation en Art et technos)
 - Centre d'expérimentation et de développement des technologies en multimédia
 - Musilab
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Other

- Société des arts technologiques
- Technocompétences (sectoral committee which brings together large telecom firms, anda few SMBs)






Some characteristics of firms

- Majority of local firms (Ubisoft=exception)
 - Small firms (less than 20 employees)
 - Hire local labour force; lots of mobility, labour poaching in MM City...less since dotcom crisis
 - Established large companies remain...and a few stable success stories (Mia, Kukova, Sarbacan...)
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6-Preliminary observations

Elements of a cluster	Intensity
Concentration of firms	strong
Sectoral collective ID	strong
Interfirm relations	weak
Venture capital and angel investors	strong
Labour pool and HR	strong



Some preliminary results from case study and policy issues

- Little interaction between firms per se, but cooperation between workers and strong mobility in sector (at least until recently...)
- Québec govt policy in MM was clearly oriented towards cluster creation, but MM exists in and around MM city because of attraction factors on Montreal: competitive and creative workforce





Questions:

- Is innovation based on proximity ? + relational than geographical (i.e. not limited or stronger in MMCity)
- Not so much MMCity per se that matters as a « place » as Montreal as a diverse, animated, metropolitan region (workers and business views)
- « does place matter ? » more or less...vs « knowing whom and why » -although they stem from place...)



Effect of dotcom crisis

- Crisis appears to be source of more cooperation to face international competition (not so much on local markets): Development of consortiums for sales abroad
 - Transformation of business over time: and ++ with crisis: sometimes less prestigious and innovative products (corpo web sites)
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Policy issues

- Competition dominates on local market, + + with recent crisis: need for more marketing support, international market knowledge, etc.
- Québec : desire for MM support in govt educational markets (as for books)
- Better information and coordination of programs