Creating Digital Opportunity

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The dynamics of innovative and competitive digital ecosystems in Canada: Digital gaming in Quebec

P. Cohendet, D. Grandadam, HEC Montréal Mosaic
1997: the starting point

- The Government of Quebec sets up a Tax credit for the Production of Multimedia Titles to foster the development of the video game industry and certain distribution platforms:
  - Titles intended for commercialization (excluding vocational training titles): 30% (24%) of labor costs + 7.5% (6%) of labor costs if in French language version
  - Other titles: 26.25% (21%) of labor costs

- French developer Ubisoft is the first company to benefit from this new measure and opens a studio in Montreal...
Then

GAME DEVELOPERS

ANIMATION AND 3D
Now

GAME DEVELOPERS

OTHER SUPPORT

SERVICE PROVIDERS
# The main studios

<table>
<thead>
<tr>
<th>Studio</th>
<th>Established in</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour Interactive</td>
<td>1992</td>
<td>150-300</td>
</tr>
<tr>
<td>Ubisoft</td>
<td>1997</td>
<td>+3000</td>
</tr>
<tr>
<td>Gameloft</td>
<td>1999</td>
<td>300-500</td>
</tr>
<tr>
<td>Beenox (Activision)</td>
<td>2000 (2005)</td>
<td>300-500</td>
</tr>
<tr>
<td>Frima</td>
<td>2003</td>
<td>150-300</td>
</tr>
<tr>
<td>Electronic Arts/Bioware</td>
<td>2004</td>
<td>150-300</td>
</tr>
<tr>
<td>Hibernum</td>
<td>2005</td>
<td>100-150</td>
</tr>
<tr>
<td>Eidos (Square Enix)</td>
<td>2007 (2011)</td>
<td>500-1000</td>
</tr>
<tr>
<td>Ludia</td>
<td>2007</td>
<td>150-300</td>
</tr>
<tr>
<td>Budge Studios</td>
<td>2010</td>
<td>50-100</td>
</tr>
<tr>
<td>THQ (closed since 2012)</td>
<td>2010</td>
<td>-</td>
</tr>
<tr>
<td>Warner Bros.</td>
<td>2010</td>
<td>300-500</td>
</tr>
<tr>
<td>Red Barrels</td>
<td>2012</td>
<td>10-50</td>
</tr>
<tr>
<td>Roofdog Games</td>
<td>2012</td>
<td>10-50</td>
</tr>
<tr>
<td>Ankama</td>
<td>2013</td>
<td>10-50</td>
</tr>
</tbody>
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...
Quebec and video games in 2015

- More than 130 companies
- 10,850 full-time employees (up 19% since 2013)
- $1.14 billion in annual expenditures
- $66,200/year average salary for full-time employee
- 32 years old average age of employee
- Also the most important “Guilde” of independent game developers in the world (75 studios, 700 employees)

Source: ESAC (2015)
Hypothesis

The main impact of the public policy (initiated in 1997) is the building of a rich ecosystem in video games in Montreal that articulates three main layers:

- The “upperground”
- The “middleground”
- The “underground”
Ubisoft Montréal

• Founded in 1997
• Grew from 50 employees in 1997 to more than 2700 employees in 2015
• More than 85 games developed from 1997 to 2015
• About 20 products developed in // per year (among which 2 to 3 “blockbusters”)
• Brands: Prince of Persia, Tom Clancy’s Rainbow Six, Tom Clancy’s Splinter Cell, Assassin’s Creed, Far Cry, Just Dance, Watch Dogs…
Ubisoft: A project-led organisation driven by communities

- **CEO**
- **Finance**
- **HR**
- **Production & process**
- **Artistic/creative direction**
- **Marketing & Sales**
- **R&D**

- Intensive knowledge flows, under project constraints
- ‘Loose’ knowledge flows
- Knowledge flows inside a community
- Accumulation of specialised knowledge
- Creative slack
Ubisoft: The central role of communities

Internal communities:
Script writers, Game-designers, 2D/3D Graphic artists,
Sound designers, Software Programmers, QA and Testers,
Network Managers, Project Managers, etc.

Communities of users:
Hardcore gamers,
Casual gamers,

Communities of professionnals:
Historians, Architects, Musicians,
Graphists, Designers, Urbanists,
Ubisoft: beyond the traditional system

• Ubisoft can be viewed through the classical lens of cooperative agreements and contractual schemes between **formal** entities (system of innovation)

• However, the essence of the dynamics of the firm, lies in its capacity to articulate its formal hierarchical structures with diverse informal communities and collectives. The generative dynamics of the firm emerges out of these continuous **interactions between the formal and the informal** (“ecosystem of innovation”)

The Ubisoft local ecosystem

“Montréal is our R&D lab”
Yannis Mallat (Ubisoft Montréal director)

- Access to the “fertile soil of Montreal”, is orchestrated by the different communities that cross the “porous” boundaries of the firm.

- The hierarchy delegates some of the core competences to these communities, that not only “tap in” the fertile soil, but also contribute to nurture it.

- The core of this local ecosystem is the “middleground”, representing common local platforms of interaction facilitating different forms of creation and exchange of knowledge between diverse communities…
Underground, middleground, upperground

Source: Cohendet, Grandadam & Simon, 2010
Components of the middleground

**Places**: the realm of near, intimate, and bounded relations, physically established

**Spaces**: the realm of far, impersonal, and fluid relations, cognitive constructions.

**Projects**: engage local communities in conversations and work together

**Events**: open the small local worlds to new global influences.
An example of the middleground of Montreal

“Société des arts technologiques” (SAT)
UBISOFT Montréal: The local creative ecosystem

Hierarchical structure of the firm
- Divisions, departments, projects, etc.

External relationships

Video game cluster
(cooperative agreements, contractual schemes, etc.)

Hierarchical structure of the firm

Tapping into the Middleground
Creative districts of Montréal
(Quartier des spectacles, de la vie, Quartier Saint-Viateur Est, Cité du multimédia, du commerce électronique, Technoparc Montréal, etc.)
Third-places and festivals: SAT, TOHU, Jazz festival, Circus festival, Fantasia, etc.
Collectives: Alliance Numerique, Allied properties
Financial angels: National School of theater, Mutek (festival of digital music)
Etc.

Middleground of digital/cultural activities

Nurturing the Middleground
Hot Fridays/Cool Tuesdays
500 new ideas
Game Jam
Compétition Academia
Ubisoft rooftop events
Internal galleries
Ubi-Days
Mile-end open doors
Etc.

Underground
Theoretical perspectives

**Ecosystems** = result from the interactions between the “formal” and the “informal” exhibiting “self generating” dynamics, power of attraction, resilience (Wolfe, 2010; Crespo et al., 2013; Boschma, 2015) → Mediation by digital platforms.

**Middleground** = common platform co-created by competing firms, and diverse stakeholders, to build new institutional arrangements, share human competence pools, build trust, design new markets, etc. (“components for community infrastructure for innovation”, as suggested by Van de Ven & Garud, 1989) → Nucleus of new digital developments.
Thank you!

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