

PERPETUATING THE QUEBEC MIRACLE

THE FUTURE OF THE VIDEO GAME INDUSTRY IN QUEBEC

**Report Submitted by *Alliance numérique*
to the Quebec Taxation Review Committee**

October 10, 2014

Dear Committee Members,

The mandate entrusted to you by the Quebec government to study, analyze and reform the Quebec taxation system is important for the future of our society. As a result, Alliance numérique, a major player in the Quebec economy and a representative of the Quebec gaming industry, is keen to participate in the meetings scheduled this fall as part of the *Quebec Taxation Review Committee (Commission Godbout)*, in order to highlight the major economic spinoffs generated by our industry, while ensuring its longevity.

Several years ago, Quebec decided to implement targeted measures to support the emergence and establishment of companies operating in promising niches. Today, with nearly 10,000 direct and indirect jobs in more than 120 companies, a highly qualified workforce and an annual global growth forecast of 7% that will continue over the coming years, the video game industry is in an enviable position and Quebec is well-placed to reap the benefits.

To support its participation in the *Commission Godbout*, Alliance numérique will present a detailed, up-to-date report profiling the video game industry in Quebec, particularly in terms of its significant contribution to our province's economy.

We are convinced that Alliance numérique's involvement in the work of the *Commission Godbout* will help raise awareness of the economic dynamism of the video game sector and demonstrate the benefits for Quebec society of government support for this burgeoning industry, the crown jewel of the digital economy.

We remain at your disposal to provide further details or answer any questions regarding the information presented.

Yours truly,



Martin Carrier

President
Alliance numérique

SUMMARY

- Our Recommendations 4
 - Recommendation 1:** Competitive, Predictible Fiscal Environment, 37.5% MMTC 5
 - Recommendation 2:** Measures Promoting Growth of Startups 5
 - Recommendation 3:** Establishment of Dedicated Fund Supporting Creation of Startups and Development of Quebec Intellectual Property 6
- Profile of Industry: Market, Technologies, Models and Demographics 7
 - Growing Market 7
 - New Ever-Changing Platforms 8
 - New Business Models 8
 - Demographic and Cultural Changes 9
 - Gamification: Networking With Other Sectors of Society 10
 - Government Participation Elsewhere 12
- Development of Quebec Video Game Industry 14
 - Before 1997: Marginal Economic Sector and Few Job Prospects 14
 - 1997-2004 : First Wave 15
 - 2004-2010 : Second Wave 15
 - 2010 – Today: Start of Diversification 16
 - Overview of Quebec Studios 18
- Fiscal Measure With Social and Economic Implications 19
 - Job Creation 19
 - Profitable Measure for Government 20
 - Innovation, Risk and New Franchises 21
 - Attractiveness of Projects and Employers 21
 - Revitalization of Urban Fabric 22
 - Development of Teaching Institutions 22
- Return to Efficient, Profitable Formula 23
- Promote Growth of Small Local Studios 24
- Encourage Creation of Small Studios and Quebec IP 25
- Conclusion 26

INTRODUCTION

Alliance numérique brings together and represents video game companies of all sizes in Quebec. Its mission is to highlight and promote the achievements and contributions of this sector to the media, government decision-makers and the general public. The video game industry employs nearly 9,000 people and comprises about 100 companies, making Quebec an international gaming hub.

Last June, the Quebec government announced a substantial 20% cut in the tax credit program for the production of multimedia titles (MMTC), which fell from 37.5% to 30%.

In the wake of this announcement, Finance Minister Carlos Leitão launched the Quebec Taxation Review Committee, chaired by Professor Luc Godbout. The Committee's mission consists of making recommendations to the government regarding preferred avenues for increasing the efficiency, fairness and competitiveness of the fiscal plan, while ensuring the financing of public services.¹ The Committee invites citizens and interest groups to submit a report that will lead to private and public consultations on taxation issues.

Alliance numérique welcomes the Committee's work and would like to take this opportunity to review the history, present the current situation and highlight the economic contribution of the video game industry. It will make recommendations for perpetuating one of the most unexpected and improbable developments of the past few decades: the emergence of a brand-new sector of high added value. It will therefore propose options that will help ensure the competitiveness of Quebec and take the video game industry to new heights, for the benefit of Quebec society.

In many ways, Quebec has been a pioneer in this field. Today, various lawmakers have followed Quebec's lead and established incentive programs for the video game sector. The Committee's review provides us with a unique opportunity to once again innovate and dictate trends regarding the role of companies and government in a competitive, thriving and constantly changing sector.

Alliance numérique is convinced that Quebec has assets that would promote greater diversification of the current ecosystem. This diversification would be expressed through the development of international studios, the proliferation of Quebec video game studios, the size of companies, the type of productions and the markets targeted. As in 1997, intelligent, adapted government participation will be the catalyst required for this transformation.

Alliance numérique also believes in a Quebec economy firmly focused on the 21st century and confidently facing the challenges of the digital era. Over the past two decades, the groundwork has been laid for rising to these challenges. It is now time to perpetuate the Quebec miracle.

OUR RECOMMENDATIONS

The recommendations of Alliance numérique focus on sustained growth and greater diversification of the Quebec media video game industry. In a rapidly changing business environment, this approach is

¹ <http://www.information.gouv.qc.ca/Pages/Article.aspx?aiguillage=themes&listeThe=3&type=1&idArticle=2206129804>

designed to preserve the results of over 15 years of efforts and capitalize on future market trends. The objectives are therefore to maintain the major studios already in place, remain attractive to other major players looking to expand and promote the emergence and longevity of local companies.

Recommendation 1: Competitive, Predictable Fiscal Environment, 37.5% MMTC

- **Alliance numérique asks the government to maintain a staunchly competitive, stable fiscal environment faced with similar measures elsewhere and consistent with the emphasis on the digital sector.**
- Since salaries constitute by far the largest expenditure for major studios, the MMTC is crucial in corporate decision-making. This measure helps not only attract international leaders and keep them here, but also positions Quebec favorably in the portfolios of these major groups when responsibility for productions is being allocated.
- By absorbing part of the risk, the parent companies will rely on Quebec's teams for the development of new intellectual property (*Assassin's Creed*) or the restart of lesser known franchises (*Deus Ex*, *Far Cry*, *Prince of Persia*). These projects attract and maintain a mobile, coveted workforce in Quebec.
- In addition to job creation, the major studios play a special role in the ecosystem, due to the size of their teams. Unlike SMEs, they have the capacity and structure required to train and monitor the progress of young graduates.
- A stable environment with mechanisms ensuring predictability would position Quebec favorably in the eyes of investors.

Recommendation 2: Measures Promoting Growth of Startups

- **Like Ontario, Quebec should consider support from the Canada Media Fund as private funding.**
- The current calculation method reduces MMTC support for Quebec startups and therefore prevents them from achieving their full growth potential and hiring capacity.
- By increasing the size of teams, these SMEs could produce higher quality titles likely to stand out in a very competitive market.
- **The adjustment of MMTC rules for subcontractors and contractors, more specifically, by making second-level subcontractors eligible.**
- The current rules penalize second-level subcontractors based in Quebec. Changing the eligibility rules would increase the competitiveness of these service providers.

Recommendation 3: Establishment of Dedicated Fund Supporting Creation of Startups and Development of Quebec Intellectual Property

- **A two-pronged dedicated fund could support both the creation of new local studios and the development/commercialization of truly Quebec intellectual property.**
- A model similar to that currently in place in Ontario (administered by the *Ontario Media Development Corporation*) could serve as inspiration for export and production support. Unlike the Ontario example, supporting the development of new intellectual property by companies headquartered in Quebec would give the Quebec industry an advantage.
- Through this fund, the government could position itself as a partner of local businesses, whether new or already established.
- In addition, this fund could be integrated into entrepreneurship support strategies, in terms of creating both companies and intellectual property.
- An ecosystem hinging solely on major studios may prove risky in case of crisis. Quebec has been relatively unaffected by the problems plaguing the industry, but other governments have experienced major repercussions.
- This same fund would protect Quebec SMEs against possible changes in the Canada Media Fund and would compensate for the private funding (love money, personal savings, risk capital, etc.) that is currently the norm for these companies.
- Due to their agility, small studios are able to detect new market trends and seize new opportunities, mainly in the mobile and social network games field.
- Rapidly available support would help protect the activities of SMEs during delays in payment and funding from other sources.
- Alliance numérique offers to act as special intermediary to lead, together with key partners, the study necessary for establishing this new fund.

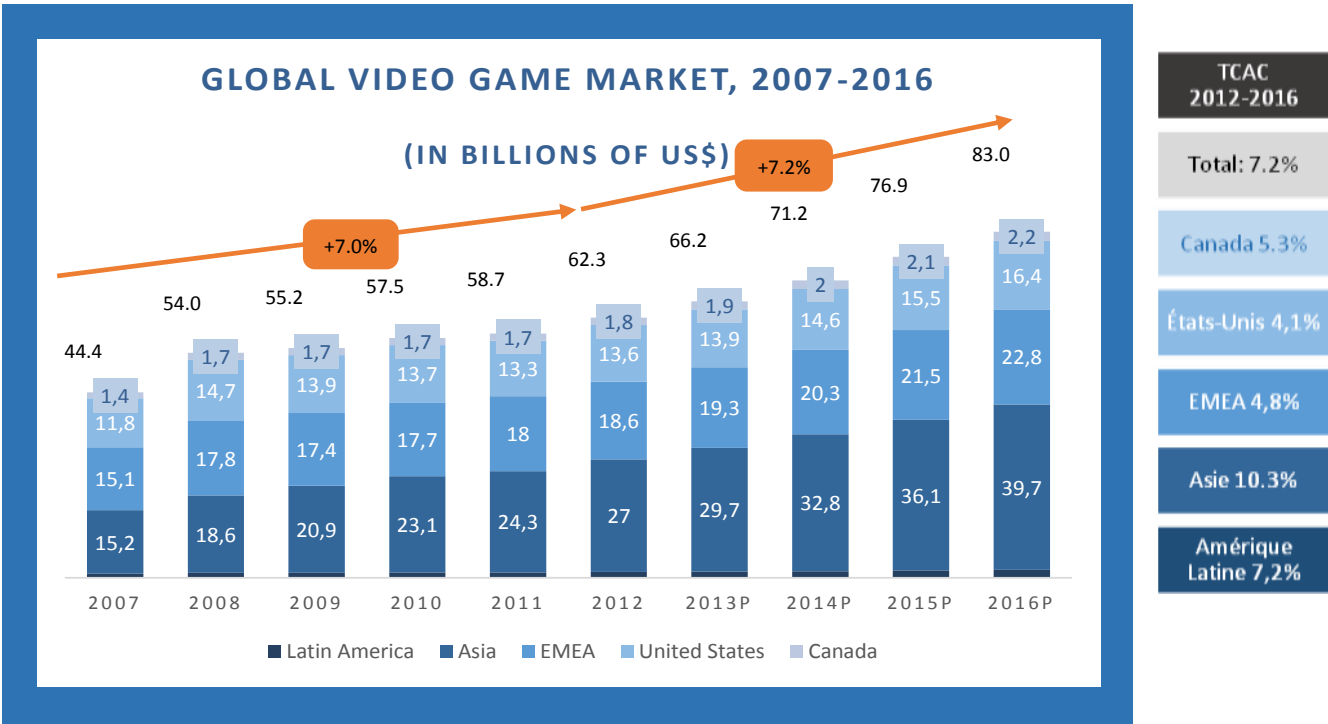


INDUSTRY PROFILE: MARKET, TECHNOLOGIES, MODELS AND DEMOGRAPHICS

Over the past decade, the video game industry has experienced strong growth. Forecasts show that this trend will continue with the appearance of new consoles and the increase in mobile platforms (smart phones and tablets) throughout the world, particularly in emerging countries.

Growing Market

Over the past few years, the video game industry has grown steadily, despite the economic crisis. Between 2007 and 2012, the market posted an increase of 7% and forecasts for 2013 to 2016 point to growth of 7.2%. Today's \$70 billion market should exceed \$80 billion dollars in two years. More specifically, every county in the world will experience growth, ranging from 10.3% for Asia to 4.3% for the U.S., which, at \$13.5 billion, still remains the largest market.²



SOURCE: GLOBAL ENTERTAINMENT AND MEDIA OUTLOOK, 2007-2016, PWC

² PWC, *Global Entertainment and Media Outlook, 2007-2016*.

New Ever-Changing Platforms

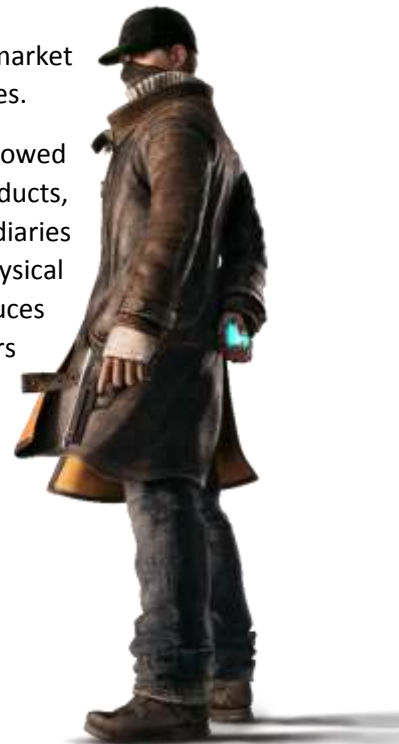
Like other information technology sectors, the video game sector has gone through rapid changes. The arrival of smart phones and a new generation of consoles designed for a wider audience has stimulated sales and expanded the market. Introduced in the mid-2000s, Sony's PlayStation 3 and Microsoft's Xbox 360 both sold 80 million units worldwide³. Launched in 2006 by Nintendo, the Wii sold more than 100 million units. While growth forecasts are lower than for other types of platforms, the console market constitutes 40% of the market.⁴ Moreover, the top three manufacturers launched their next generation consoles last winter.

The ubiquity of smart phones and online platforms also explains the market surge since the mid-2000s, which is expected to continue. For 2014 alone, the Gartner firm predicts sales of 1.9 billion units, a major market coveted by studios.⁵ Furthermore, online platforms are becoming more accessible by opting for *free-to-play* models, and social media such as Facebook and Google + are providing access to increasingly popular games. We are now witnessing a diversification and omnipresence of technological platforms unparalleled in the history of the industry. This phenomenon will not only boost market growth over the coming years, but also lead to the emergence of new business models.

New Business Models

Technological transformations have generated new business models and facilitated market access, thereby presenting both opportunities and challenges for the sector's companies.

The development of wireless networks and the launch of high-speed Internet has allowed for the digital distribution of video games. Today's consumers can acquire these products, either for consoles, mobiles or PCs, through virtual platforms (stores) without intermediaries such as distributors and retailers, to the extent that last year digital sales exceeded physical sales in the United States. Bypassing manufacturers, distributors and retailers reduces development and distribution costs and increases revenue share for game publishers and developers. However, easy market access leads to fiercer competition, particularly in the mobile games sector where thousands of games are introduced each year.

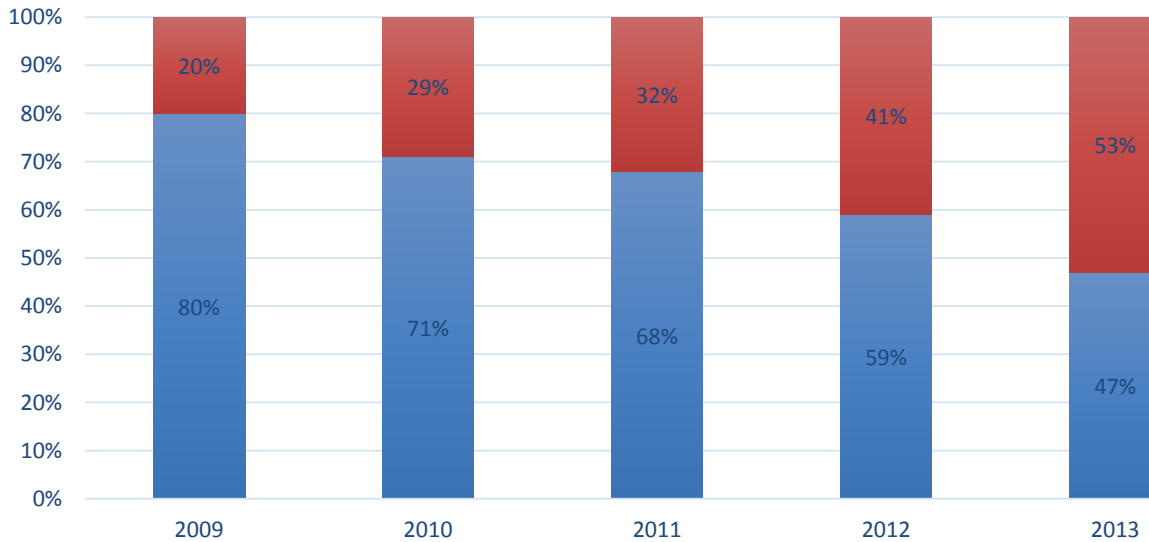


³ <http://www.forbes.com/sites/davidthier/2014/07/10/ps3-ps4-and-vita-sales-hit-a-major-milestone/>,
<http://www.gamesindustry.biz/articles/2013-10-18-xbox-360-reaches-80-million-consoles-sold-worldwide>.

⁴ PWC, *Global Entertainment and Media Outlook, 2007-2016*.

⁵ <http://www.gartner.com/newsroom/id/2791017>

Physical and Digital Sales



SOURCE: ESA, ESSENTIAL FACTS ABOUT COMPUTER AND VIDEO GAME INDUSTRY: 2014

For companies, these new distribution methods and the emergence of mobile platforms and online games present challenges in terms of monetization. Developers and publishers are currently experimenting with the microtransaction-based “free-to-play” model (free download), in order to generate revenues or so-called “mid-range” productions at lower cost for consumers, while providing better graphics quality and game experience. Regarding console or PC titles, developers and publishers offer additional low-cost downloadable content or mobile apps for enhancing or managing the game at any time.

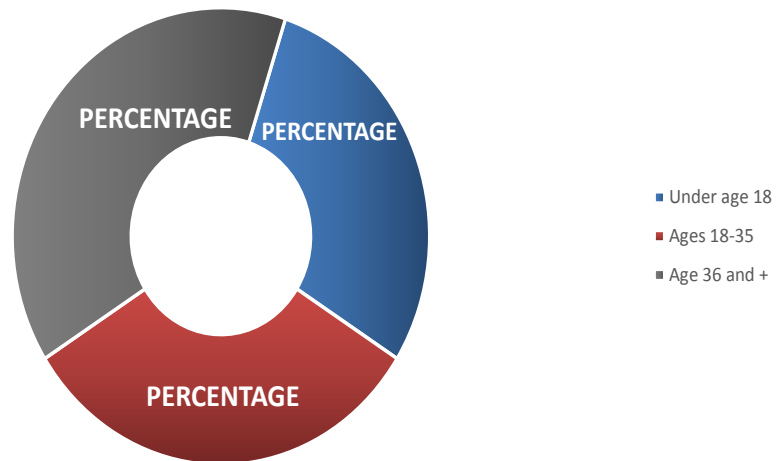
Demographic and Cultural Changes

These new platforms have changed the perception of video games, which were formerly considered entertainment for children and adolescents. On the one hand, mobiles, consoles and tablets are easy to use and accessible to people of all ages, both men and women. On the other hand, games are becoming increasingly diversified, with titles designed for hardcore console players looking for an immersive experience alongside casual games for a wider audience with only a few minutes for entertaining themselves.

The profile of players in both Canada and the United States demonstrates this democratization of video games. In fact, almost 60% of the population are players, nearly half of whom are women, or 46% in

2013.⁶ In addition, all segments of the population devote time to this type of entertainment, to the extent that the average age of today's player is 31.

Distribution of Players Based on Age: 2013



SOURCE: ESA, ESSENTIAL FACTS ABOUT COMPUTER AND VIDEO GAME INDUSTRY: 2014

Video games no longer target only one type of consumer, but offer different gaming experiences for an increasingly diversified audience. This diversification has changed the perception of video games: men and women indulge in this form of entertainment when using public transit, families get together to share the fun of playing and people of all ages are familiar with the most popular titles. The video game has emerged from living rooms into mainstream society.

Gamification: Networking With Other Sectors of Society

While video games remain firstly a form of entertainment, they are being used more and more in other sectors. Gamification, or the application of mechanisms traditionally associated with games (game experience, levels, life points, rewards, etc.), is now emerging in sectors such as marketing, education, health and financial services.

Gamification is increasingly attracting the interest of small and medium-sized businesses, which use these concepts to motivate clients and employees. For example the Spanish bank BBVA applied the principles of gamification to encourage clients to use its online services and Samsung integrated a badge

⁶ ESAC, *Essential Facts about Computer and Video Games*, 2014.

and reward system into its loyalty program.⁷ Since 2011, the *Gamification Summit*⁸ has brought together the main proponents of this trend, including Google, Microsoft and Boeing, to address various concepts related to video games and their application in the business world. Also, in 2011, the SXSW Festival showcased this strong trend with presentations by many promoters and thinkers.⁹ While it already has a strong presence at SXSW¹⁰, Quebec could set itself apart by capitalizing on the networks it has developed over the years and building on its expertise in the gaming experience.

In addition to its commercial applications, gamification also has a place in the health sector. In terms of research, Washington University launched the online game *Foldit*, enticing 46,000 gamers to unlock the secrets of a HIV-fighting protein. This approach made it possible to solve, in 10 days, a problem that scientists had been unable to crack for over 15 years.¹¹ More recently, the same university drew on the support of players to find a remedy for the Ebola virus.¹² On the clinical side, attending medical teams use video games particularly with sick children. For example, the video game *Re-mission* teaches cancer patients the importance of following the treatment plan and developing tactics for managing the side effects of medication.¹³ Lastly, personalized medicine uses games in the mental health field, thereby creating opportunities for research and treatment.¹⁴

The education and training fields rely on gamification for knowledge transfer. Designer Jane McGonigal emphasizes the role of games in learning, mainly by creating an atmosphere conducive to the assimilation of new knowledge and the ability to solve a problem after failure.¹⁵ MIT researchers have also shown the benefits of gamification in problem-solving, teamwork, communication and innovation. According to this group, concepts taken from the gaming experience will form the basis for the most important educational changes since the 19th century.¹⁶ In Quebec, this shift has yet to take place in the educational field, although there are already certain signs, such as the initiative by the insurance company AXA Canada to use the virtual platform AXA City for the training of junior underwriters.¹⁷

⁷ Harvey Schachter, "The serious business of gamification", *The Globe and Mail*, April 20, 2014, <http://www.theglobeandmail.com/report-on-business/careers/management/the-serious-business-of-gamification/article18020562/>. Brian Burke, *Gamify: How Gamification Motivates People to do Extraordinary Things*, Bibliomotion, 2014.

⁸ The *Gamification Summit* presents workshops and conferences three times a year in San Francisco, New York and Los Angeles. The event attracts about 750 participants and 50 speakers from several large and small businesses.

⁹ Nathalie Collard, "La vie, comme un jeu de société", *La Presse*, March 26, 2011. <http://techno.lapresse.ca/jeux-video/201103/26/1-4383474-la-vie-comme-un-jeu-de-societe.php>

¹⁰ <http://www.planetequebec.net/fr/index.php>

¹¹ "Foldit gamers help unlock possible AIDS-fighting protein", *Los Angeles Times*, September 19, 2011, <http://latimesblogs.latimes.com/technology/2011/09/foldit-gamers-help-unlock-aids-fighting-proteins.html>.

¹² Katherine Long, "Gamers helping UW in Ebola research", *Seattle Times*, August 25, 2014, http://seattletimes.com/html/localnews/2024389152_folditebolaxml.html.

¹³ Marian Henderson, *Re-mission, the Video game for Cancer Patients*, October 10, 2009.

¹⁴ Simon McCallum, "Gamification and Serious Games for Personalized Health", *pHealth 2012: Proceedings of the 9th International Conference on Wearable and Nano Technologies for Personalized Health*, IOS Press, 2012.

¹⁵ http://www.ted.com/speakers/jane_mcgonigal

¹⁶ Eric Klopfer, Scot Osterweil and Katie Salen, *Moving Learning Games Forward*, MIT, 2009.

¹⁷ Ellicom "Jeu sérieux et gamification en formation : à vous de jouer!", August 6, 2013.

<http://ellicom.com/blogue/strategies-de-formation/jeu-serieux-et-gamification-en-formation-a-vous-de-jouer/>

Government Participation Elsewhere

In this growth context, governments are seeking to attract companies in order to stimulate the economy and promote employment in a key sector. When the MMTC was introduced in 1997, Quebec was seen as a trailblazer, but the situation has dramatically changed. In Canada, Ontario, Nova Scotia and Manitoba offer tax credits ranging between 25% and 50% for eligible expenses (which sometimes go beyond eligible salaries). These measures are starting to show results. For example, Ontario, which introduced its measure in 2009, saw the number of jobs jump from 500 in 2007 to 1,850 in 2013.

Comparison of Incentive Measures: Quebec and Ontario

	Quebec	Ontario
Program	Tax credit for the production of multimedia titles	Tax credit for digital interactive multimedia products
Credit	Up to 30% (after June 4, 2014 budget)	40%
Eligible Expenses	<ul style="list-style-type: none"> Eligible labour expenditures in Quebec (24%). Bonus for the availability of titles in French (6%). 	<ul style="list-style-type: none"> Eligible labour expenditures in Ontario.
Conditions	<ul style="list-style-type: none"> Taxable corporation with an establishment in Quebec. For specialized companies, at least 75% of commercial activities in Quebec must be related to the production of eligible digital titles. Quebec reduces the amounts available if the company receives support from the Canada Media Fund. 	<ul style="list-style-type: none"> Taxable Canadian corporation (controlled by Canadians or non-residents) with a stable establishment in Ontario. Maximum of \$100,000 of marketing and distribution expenses. Ontario does not penalize companies receiving support from the Canada Media Fund.

The U.S. and Great Britain also offer tax credits to encourage companies to open studios or maintain jobs. The southern U.S. appears particularly active, with Louisiana, Texas, Florida and Georgia providing government support ranging from 20% to 35% for eligible expenses on top of eligible salaries. On April 1, 2014, the United Kingdom established 25% tax credit after a 9% drop in the sector's workforce between 2008 and 2010.¹⁸ This decrease was even more dramatic given that the country recorded about 20,000 jobs in 2002 versus 9,000 today.

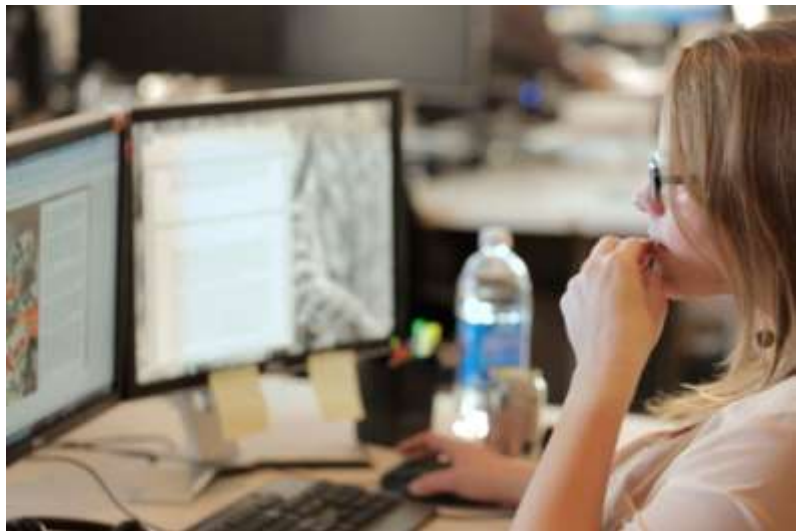
Other forms of support for the industry exist elsewhere in the world. Finland, birthplace of Rovio Entertainment (Angry Birds) and Supercell (Clash of Clans), invests in small studios through the Tekes Finnish Funding Agency for Innovation. Since its inception, the agency has granted 60 million Euros to about 100 video game companies. For its part, Sweden focuses on government-funded research projects

¹⁸ <http://www.digitalspy.co.uk/gaming/news/a286045/uk-developer-workforce-drops-9-percent-in-2-years.html>.

on interactive gaming.¹⁹ Australia relies on the Games Innovation Center (GIC) to promote the country's industry, organize trade missions and develop business partnerships. In addition, a generous 45% R&D credit has made Melbourne one of the international centers of interactive entertainment research. Lastly, Asian countries like Singapore and South Korea have introduced measures to support the marketing efforts of SMEs and give them access to development tools.

The video game sector is sensitive to changes in the level of support provided, as reflected by the experience of a few provinces and countries. In Canada, British Columbia boasted more jobs than Quebec, but lost about 1,400 jobs between 2008 and 2012. With its 5,000 jobs, the province now ranks second in the country. While certain studios have downsized (Radical Entertainment, Microsoft, Rockstar Games), others have simply closed their doors (Pixar Canada for example).²⁰ As a result, despite the talent available, the province's lack of competitiveness in terms of tax credits (today at 17.5 %) is cited as the reason for this decline. In Europe, France tallied more than 10,000 jobs in the sector 15 years ago and today counts only 3,000. This decline does not happen overnight, but rather is felt at the end of production cycles of about 2 or 3 years.

To appreciate the extent of Quebec's success and standing in today's video game industry, it is necessary to look at its progress since the implementation of the MMTC. This strategic measure has made it possible not only to attract foreign companies, but also to open up a world of possibility for local talent and creativity. This success is all the more remarkable since it was achieved during a period of strong international growth for the industry and increasingly fierce competition.



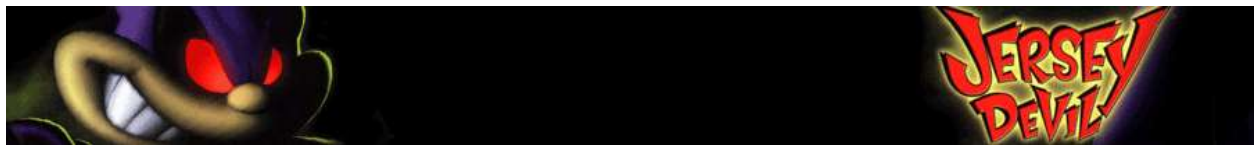
¹⁹ For example: *PlayLab*, *Future Applications Lab*, *VR Lab*, *Interactive Institute*, *Mobility Lab*, etc.

²⁰ <http://bc.ctvnews.ca/vancouver-video-game-industry-in-peril-1.1019375>.

DEVELOPMENT OF QUEBEC VIDEO GAME INDUSTRY

Quebec's success in the video game sector is closely linked to government support, which has helped, firstly, attract major studios and structure a strategic sector, and secondly, create opportunities for young graduates in various fields of study. Therefore, over the past 17 years, the government has laid the foundations for an industry and fulfilled the aspirations of Quebec youth.

Before 1997: Marginal Economics Sector and Few Job Prospects



Before the successive arrival of major studios in the mid-1990s and early 2000s, Quebec counted only a few studios and companies related to multimedia entertainment, but the sector had no structure or particular reputation. The idea that the video game industry could one day become a crown jewel of the Quebec economy was then an illusion. The world's main video game production centers were in the United States, Europe and Japan due to the proximity of manufacturers of gaming platforms, mainly consoles and personal computers. In addition, several console manufacturers (mainly in Japan) had internal studios with substantial financial and human resources for producing the flagship titles (*Super Mario*, *Sonic*, *Zelda*) in their portfolio.

In Quebec, a few small studios opened their doors, notably Megatoon and A2M (today Behaviour). The critical mass required for the establishment of a viable video game sector was sorely lacking. In addition, the productions stemming from these first initiatives did not gain international recognition.

At that time, the chances of young Quebecers making a career in a field basically dominated by American, Japanese and European designers were slim, indeed even non-existent. The few determined types to spurn expatriation had to contend with a lack of experience in video game production or the absence of specific training or a professional network in the field. Without government intervention, the video game ecosystem as we know it today would have remained in the embryonic stage.

1997-2004: First Wave



The implementation of a support program by the government dramatically changed the situation and sowed the first seeds of a dynamic, innovative sector. The arrival of a studio in Montreal allowed Quebec to enter a world that had been previously closed to it. For Quebec talent, a career in this field became possible. The appearance of Ubisoft in 1997, and then Electronic Arts in 2004, forged Montreal's reputation and raised the global profile of Quebec productions. However, it is important to point out that the first steps taken in the industry were limited, since super productions remained the privilege of studios located abroad. Ubisoft began by giving the studio on St. Laurent Boulevard responsibility for children's games, since the company's flagship productions were still taking place in France. During this period, new Quebec studios opened their doors, such as Beenox (2000) and Frima Studio (2003) in Quebec City and Hexacto (2001) in Montreal.

While Canada was emerging from a recession, the arrival of foreign studios and the appearance of new Quebec companies made it possible for new graduates to obtain employment and pursue their professional ambitions in Quebec, despite their inexperience in the video game field. For this first generation graduating from various study programs (film, project management, graphics, theater, translation, etc.), it was a golden opportunity.

During these years, the sector's workforce gradually built up its expertise and know-how. The qualities underlying the reputation of Montreal and Quebec City slowly gained recognition, culminating with the province's first critical and commercial successes.

2004-2010: Second Wave



Between 2004 and 2010, the reputation of Quebec, and Montreal in particular, attracted other foreign companies looking to benefit from a quality workforce and favorable business environment. In 2005, Activision acquired Beenox, making an initial foray into Quebec, while in 2007, Eidos became the first British studio to set up shop in Montreal. The source of foreign firms became more diversified with the purchase of Eidos by one of the largest Japanese firms, Square Enix, in 2009. This diversification of major studios continued with the opening of a THQ studio and the arrival of Warner Bros. at Place Dupuis in 2010.

Studios founded in Quebec experienced further growth with the expansion of A2M, which became Behaviour Interactive and launched its first original IP for the next generation console market. Frima

Studio made an initial Quebec foray into the massively multiplayer online game market with *GalaXseeds* in 2007. In fact, the Quebec studio purchased Humagade, a company specializing in the development of games on consoles and portable phones, thereby opening up a new market niche.

Games created and produced in Quebec continued to make waves on the market, with critical and commercial success like *Assassin's Creed*, the sequels to *Splinter Cell* and *Prince of Persia*, *Army of Two*, etc.

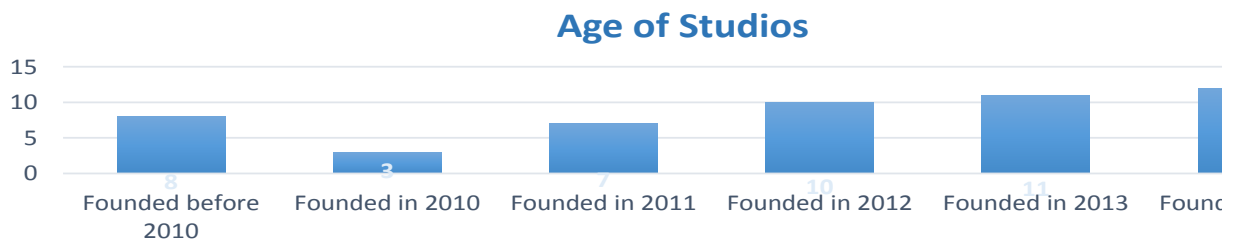
For Quebecers wishing to pursue a career in the industry, opportunities and potential employers abounded. Job growth fluctuated between 60% in 2006 and close to 10% in 2010 during the economic crisis. Job openings in this sector made a career in this field a real possibility, since the companies established in Quebec offered desirable jobs with attractive salary conditions. In addition, local workers were actively courted by studios based in the United States and elsewhere in order to reproduce the quality of Quebec productions. While in the late 1990s, talented, creative Quebecers faced numerous obstacles in pursuing a career abroad, just 10 years later, this workforce was mobile and had the networks and reputation needed to shine on the global stage.

2010 – Today: Start of Diversification



Despite the turbulence experienced by the video game industry elsewhere in the world, Quebec-based studios successfully withstood the economic crisis. The major foreign studios remain well-established and are continuing to expand and produce AAA titles like *Deus Ex: Human Revolution* by Eidos Montréal/Square Enix and *Batman Arkham Origins* by WB Games Montreal.

In parallel with major foreign and Quebec studios, some veterans of the industry are daring to found startups. Using their experience and innovative ideas, these small businesses are gradually diversifying the profile of the industry. These new studios can also rely on financing through the Experimental Stream of the Canada Media Fund. While it is difficult to establish the exact number, a survey initiated by the firm Momentum listed about 50 local video game companies in Quebec. These studios are relatively new in the Quebec ecosystem, 85% having been founded since 2010. Concentrated mainly in Montreal, the studios employ about 400 people and have an average of eight employees.



SOURCE: MOMENTUM R&D, STUDY ON LOCAL EMERGING VIDEO GAMES, 2014

Most local studios have already published games (about 60%), for a total of 131 products based on the Momentum study.²¹ The 21 other studios are currently developing titles or focusing on support and service activities. These new businesses are experiencing their first successes, like the game *Outlast* launched in 2013 by Red Barrels.

Talented Quebecers now have many choices for making their mark in the video game field. They can work with major teams on cutting edge AAA productions, or for smaller businesses striving to achieve recognition. They can develop titles for next generation mobile devices, PCs or consoles. Lastly, they can open their own studio in Quebec or participate in projects abroad.

Today, Quebec is catching up to the pioneers of the industry, the United States and Japan, in terms of their influence on this sector. Without government support, this evolution would have never been possible and we would still be trying to establish a reputation. The next decade points to numerous changes in terms of technology and business models, as well as types of productions and competition from other countries.

Initially revolving around one studio, the Quebec video game sector gradually built its reputation on productions that were medium-scale, but brilliantly created. This evolution had three consequences. First of all, the other foreign firms discovered the talent pool available in Quebec, whether for design, programming or project management, but also Quebec's openness to this industry. Secondly, Montreal studios were given responsibility for super productions (so-called AAA games). Games created and produced here are now among the best sellers and set the industry's quality standards. Lastly, Quebec veterans have developed the confidence to establish their own studios, with a firm determination to penetrate the market.

Studios established in Quebec have survived numerous transformations that have shaken the industry, such as the economic crisis, technological changes and increased competition for the best talent. However competition for attracting both workers and businesses is intensifying. Quebec is now in an enviable position that it must defend. In the current economic context, does it have the luxury of easing up on the accelerator?



²¹ Momentum R&D, *Study on Local Emerging Video Games, 2014*

Overview of Quebec Studios

		Year of Foundation	Number of Jobs
Before 1997	Behaviour	1992	150-300
1997-2004	Ubisoft	1997	3000+
	Gameloft	1999	300-500
	Beenox (Activision)	2000 (2005)	300-500
	Frima	2003	150-300
	Electronic Arts/Bioware	2004	150-300
2005-2010	Hibernum	2005	100-150
	Eidos (Square Enix)	2007 (2011)	500-1 000
	Ludia	2007	150-300
	Budge Studios	2010	50-100
	THQ (closed since 2012)	2010	NA
	Warner Bros.	2010	300-500
Since 2010	Red Barrels	2012	10-50
	Roofdog Games	2012	10-50
	Execution Labs	2013	10-50
	Ankama	2013	10-50

SOURCE: KPMG-SECOR SURVEY, OCTOBER 2014.



FISCAL MEASURE WITH ECONOMIC AND SOCIAL SPINOFFS

The MMTC is the catalyst that attracts international leaders and stimulates the growth of major studios founded here, thereby helping to promote our creativity worldwide. Unlike subsidies to one sole company, this model has generated positive spinoffs in terms of innovation, the development and retention of expertise in Quebec and the urban fabric.

Job Creation

Quebec has an excellent reputation in the industry due to the quality of its workforce and productions, but also to the openness of government to this sector. Canada ranks third globally, surpassed only by the United States and Japan, two pioneers in the field.²²

With nearly 9,000 of about 16,500 direct jobs in Canada, Quebec is now at the forefront, outflanking its two closest rivals, British Columbia (5,150 jobs) and Ontario (1,850 jobs).²³ The province even compares favorably with the United Kingdom, which boasts about the same number of employees. The fact that Quebec recorded only 1,000 jobs in 2002 and has experienced a 10% growth rate since 2009 clearly demonstrates just how far it has come.

Number of Direct Jobs in Quebec

SOURCE: ESAC/NORDICITY, CANADA'S VIDEO GAME INDUSTRY IN 2013, 2013 AND TECHNOCOMPÉTENCES, EMPLOYMENT IN QUEBEC'S ELECTRONIC GAME INDUSTRY IN 2012, 2013.

²² <http://www.nordicity.com/home/newsdetail/id/203>.

²³ ESAC, *2013 Essential Facts about the Canadian Video Game Industry*.

Despite market changes, Quebec has set itself apart from its main rivals through a competitive, stable fiscal environment, the presence of a quality workforce and industry leaders, as well as the popularity of local productions.

The success generated by the MMTC goes beyond the creation of direct jobs, due to its numerous collateral effects. Unlike subsidies targeting one sole company in order to maintain jobs in a given sector or region, this measure helps create fertile ground for the emergence of service providers linked to video game development: creative services, online support, quality assurance and test services, localization services, entertainment services, etc. These companies alone, many of which are Quebec-owned, employ about 700 people.²⁴

Profitable Measure for Government

Supporting the video game sector contributes significantly to wealth creation and generates tangible economic spinoffs for provincial and federal governments. In Quebec, the economic impact related to operating expenditures for video game companies totals \$827 million. More specifically, these companies pay out \$648 million in before-tax salaries and compensation, \$17 million in net revenues and \$161 million in other before-tax revenues, such as employee benefits and profits.

In millions \$	Quebec		
	Direct Effects	Indirect Effects	Total Effects
Total added value including	701.2	125.5	826.6
Before-tax salaries and compensation	588.5	59.9	648.3
Net revenues of individual companies	7.8	9.5	17.2
Other before-tax revenues	104.9	56.1	161.0
In person-years			
Jobs	8,750	1,323	10,073

SOURCE: KPMG-SECOR, *THE VIDEO GAME INDUSTRY: AN ECONOMIC ENGINE FOR QUEBEC*, 2014

In terms of revenues, the Quebec government received \$145 million in taxes and other contributions related to the industry's activities, broken down as follows:

- \$73 million in taxes on salaries and compensation;
- \$38 million in sales taxes and other specific taxes (excise duties);
- \$30 million in contributions for the Fonds des services de santé (employers and employees);
- \$4 million in taxes on corporate revenues.²⁵

For Quebec, the decision to support the video game sector has proven profitable for the government due to the favourable results for public finances. However the positive effects of the MMTC go well beyond job creation and tax revenues.

²⁴ KPMG-SECOR, *The Video Game Industry: A Economic Engine for Quebec*, 2014

²⁵ KPMG-SECOR, *The Video Game Industry: A Economic Engine for Quebec*, 2014

Innovation, Risk and New Franchises

Within major international firms located in Quebec, the MMTC integrates into very special dynamic of innovation and new intellectual property development. Due to the major costs and the time required for producing console titles and marketing new franchises, the observed trend is to focus on titles familiar to consumers. While they require technological expertise in order to deliver a high-quality product, these titles draw less on creativity, for which Quebec productions are known. In other words, they can be produced elsewhere without any obvious impact for the consumer.

Far from keeping these companies on life support, the MMTC encourages innovation and the emergence of new franchises capable of penetrating the market. In fact, since the labour costs (by far the highest) are partially absorbed, parent companies accept the risk involved and tend to put their trust in Quebec-based teams. *Assassin's Creed*, created and produced by Ubisoft Montreal, represented a major risk for the company at the time. Today, the combined sales of this franchise have surpassed 73 million copies.²⁶ The company relied on its Quebec studios for *Watch Dogs* (2014), another original creation for next generation consoles. Another example is the relaunch of the *Deus Ex* series by a Montreal team from Square Enix, a risky bet due to this franchise's lack of visibility among the general public.

A stable, predictable MMTC of 37.5% helps create a competitive business environment and allows the architects of major studios to create brand-new or re-imagined intellectual property. It also helps Quebec-based managers convince the editorial committees of parents companies to invest in the development of these titles and produce them here, thereby encouraging these companies to draw on Quebec's strengths: creativity and talent.



Attractiveness of Projects and Employers

The production of original, innovative titles is a factor in attracting and retaining workers and is closely related to the ability of studios to produce these titles in Quebec. In search of the best talent, studios focus on ambitious, prestigious projects to lure a quality, but increasingly mobile workforce. Indeed, the nature of projects influences decisions regarding the choice of employer or workplace. While this reality applies to the veterans who built the industry in Quebec, their reputation visits upon the entire workforce, who can realistically pursue a career elsewhere in Canada or abroad. The absence of professional networks and the language barrier are now things of the past.

In addition to the nature of projects, the size and type of employer influences career paths. In fact, workforce mobility can also be seen in the choice between major studios and large-scale teams or independent studios of more modest means. While the former may offer stability and the opportunity to specialize, the latter offer versatility and a limited hierarchy.

The diversification of the ecosystem, through both the maintenance of multinational studios and the emergence and growth of local businesses, is the foundation for the proliferation of potential products

²⁶ <http://ca.ign.com/articles/2014/04/21/assassins-creed-franchise-sales-exceed-73-million>.

and employers. The increasingly diverse expertise developed over the past two decades is more likely to remain, thereby preserving an important asset for the future growth of the industry in Quebec.

Revitalization of Urban Fabric

The video game industry is at the heart of the recent revitalization of two now dynamic neighborhoods. Before the arrival of Ubisoft in the late 1990s, the Mile-End district of Montreal was in decline following the closure of several textile plants. With the influx of a young, creative workforce, the neighborhood underwent a profound transformation, with empty premises making way for SMEs, restaurants, cafés and a host of boutiques. Accordingly, in 2008, the City of Montreal launched a \$9.8 million project for the revitalization of the area of St-Viateur Est aimed at increasing the population, establishing an urban infrastructure and protecting local assets.²⁷



The previously underprivileged neighbourhood of St-Roch in Quebec City began its metamorphosis in the 1990s, as a result of initiatives taken by Quebec City. Substantial public and private investments were dedicated to this revival, with \$450 million in the form of corporate tax credits, new builds and other urban developments.²⁸ During the 2000s, studios such as Beenox, Frima and Ubisoft decided to set up shop here, expanding the commercial offering and promoting social diversity. Today, other projects are awaiting completion, including the Le Diamant theater complex and the renovation of the Gabrielle-Roy Library.

Development of Teaching Institutions

The importance of video games in the Quebec economy has led to the development of several post-secondary training programs. Due to the variety of jobs required for the production of video games, employers look for both scientific and artistic expertise. As a result, Quebec now offers 45 college and vocational courses and 16 university courses that may lead to a job in the industry. In addition, companies and educational and research institutions are joining forces in order to train the next generation and promote innovation.²⁹ Lastly, the first innovative partnerships marrying technology and art are beginning to emerge, as evidenced by the collaboration between Ubisoft and the National Theater School in the area of motion capture training.³⁰

In this context, the major studios are extensions of teaching institutions, mainly through internships, but also through the training they offer new graduates. These major companies have



²⁷ <http://www.newswire.ca/en/story/317471/investissement-de-9-m-dans-les-infrastructures-urbaines-la-ville-de-montreal-revitalise-le-secteur-saint-viateur-est>.

²⁸ Quebec City, The revitalisation of the Saint-Roch neighbourhood in Quebec City: an example of innovation.

²⁹ For example, the industry works closely with the National Animation and Design Centre, Université du Québec à Chicoutimi and Cégep de Jonquière in the area of animation training. In terms of research, Ubisoft has formed partnerships with Université de Montréal and Université Laval. Lastly, Concordia University created the TAG (Technoculture, Arts and Games) research centre: an interdisciplinary collaboration platform for research/creation in game studies and design, digital culture and interactive art.

³⁰ <http://ent-nts.ca/fr/actualites/nouvelle/ubisoft-et-lecole-nationale-de-theatre-sassocient-pour-le-developpement-de-la-releve-locale-en-capture-de-mouvements/>

the teams and size required to accommodate new workers and acclimatize them to the video game industry.

The possibility of making a career in this field encourages young people (particularly men) to stay in school due to the attractiveness of this sector and the favorable job prospects resulting from the growth of the industry in Quebec. In fact, the vast majority of workers in the sector have a post-secondary education and more than half hold a university degree, mainly in production management programming and production support. The prospect of earning an average salary of over \$67,000, or 52% higher than all industries in Quebec, also encourages young Quebecers to stay in school.

RETURN TO AN EFFICIENT, PROFITABLE FORMULA

In light of its numerous effects, the MMTC plays a supportive role that goes beyond subsidizing only one company. This measure is not only cost-effective for the government, but also contributes to the Quebec social fabric in many ways. For this reason, the government should return the MMTC to the competitive, stable and predictable level of 37.5% in order to continue benefitting from its direct and indirect spinoffs.

Recommendation 1: Competitive, Predictable Fiscal Environment, 37.5% MMTC

- **Alliance numérique asks the government to maintain a staunchly competitive, stable fiscal environment faced with similar measures elsewhere and consistent with the emphasis on the digital sector.**
- Since salaries constitute by far the largest expenditure for major studios, an MMTC is crucial in corporate decision-making. This measure helps not only attract international leaders and keep them here, but also positions Quebec favorably in the portfolios of these major groups when responsibility for productions is being allocated.
- By absorbing part of the risk, the parent companies will rely on Quebec's teams for the development of new intellectual property (*Assassin's Creed*) or the restart of lesser known franchises (*Deus Ex*, *Far Cry*, *Prince of Persia*). These projects attract and maintain a mobile, coveted workforce in Quebec.
- In addition to job creation, the major studios play a special role in the ecosystem, due to the size of their teams. Unlike SMEs, they have the capacity and structure required to train and monitor the progress of young graduates.
- A stable environment with mechanisms ensuring predictability would position Quebec favorably in the eyes of investors.
- In light of examples outside Quebec (British Columbia, France, Great Britain), a decrease in the MMTC could lead to a gradual erosion of the number of jobs in the video game sector and the loss of our best creative talent to the competition.

PROMOTE GROWTH OF SMALL LOCAL STUDIOS

While there is no denying the positive effects of the MMTC on major studios and the Quebec economy, this measure must be adjusted to promote the creation and growth of small studios. This is necessary for the increased diversification of the industry in Quebec and in light of market changes and measures in place elsewhere in North America.

The implementation of the Experimental Stream of the Canada Media Fund in 2009 breathed new life into the first wave of small local studios. However, these companies cannot benefit from the MMTC, since the government considers CMF grants as public funding. In comparison, Ontario feels that this financial support comes from private sources. This situation deprives Quebec startups of crucial funding for hiring new employees and developing new projects. Moreover, the MMTC does not apply to contractors and subcontractors (testing, localisation, etc.) hired by Quebec small businesses. Therefore, this high-growth sector is at a disadvantage compared to the international competition.

Recommendation 2: Measures Promoting Growth of Startups

- **Like Ontario, Quebec should consider support by the Canada Media Fund as private funding.**
- The current calculation method reduces MMTC support for Quebec startups and therefore prevents them from achieving their full growth potential and hiring capacity.
- By increasing the size of teams, these SMEs could produce higher quality titles likely to stand out in a very competitive market.
- **The adjustment of MMTC rules for subcontractors and contractors, more specifically, by making second-level subcontractors eligible.**
- The current rules penalize second-level subcontractors based in Quebec. Changing the eligibility rules would increase the competitiveness of these service providers.

ENCOURAGE CREATION OF SMALL STUDIOS AND QUEBEC IP

In addition to adjustments to the MMTC, the establishment of a two-pronged dedicated fund aimed at supporting the establishment of new local studios and the developments/production of intellectual property would increase the momentum of diversification. It would also encourage the growth of studios headquartered in Quebec through the creation of a new titles and franchises.

Quebec would therefore have it two ways. On the one hand, the fund promotes the creation of new studios capable of promptly seizing new opportunities in a constantly changing market. It would also address MMTC payment delays of about 18 months. These delays threaten the survival of small studios, which must retain their employees and contend with very short production cycles. Moreover, it would reduce the risks associated with possible changes to the CMF. On the other hand, the government stimulates the growth of Quebec-owned studios through innovation and creativity.

Recommendation 3: Establishment of Dedicated Fund for Supporting Creation of Startups and Development of Quebec Intellectual Property

- **A two-pronged dedicated fund could support both the creation of new local studios and the development/commercialization of truly Quebec intellectual property.**
- A model similar to that currently in place in Ontario (administered by the *Ontario Media Development Corporation*) could serve as inspiration for export and production support. Unlike the Ontario example, supporting the development of new intellectual property by companies headquartered in Quebec would give the Quebec industry an advantage.
- Through this fund, the government could position itself as a partner of local businesses, whether new or already established.
- In addition, this fund could be integrated into entrepreneurship support strategies, in terms of creating both companies and intellectual property.
- An ecosystem hinging solely on major studios may prove risky in case of crisis. Quebec has been relatively unaffected by the problems plaguing the industry, but other governments have experienced major repercussions.
- This same fund would protect Quebec SMEs against possible changes in the Canada Media Fund and would compensate for the private funding (love money, personal savings, risk capital, etc.) that is currently the norm for these companies.
- Due to their agility, small studios are able to detect new markets trends and seize new opportunities, mainly in the mobile and social network games field.

- Rapidly available support would help protect the activities of SMEs during delays in payment and funding from other sources.
- Alliance numérique offers to act as special intermediary to lead, together with key partners, the study necessary for establishing this new fund.

CONCLUSION

Less than 20 years ago, the first seeds of a video game ecosystem were sown. By establishing competitive tax measures, Quebec was able to gain a foothold in a thriving industry that was able to withstand the vagaries of the global economy. The MMTC, combined with Quebec talent, is largely responsible for this success. Government support motivated international leaders like Ubisoft, WB Games and Eidos to risk establishing major brands in Quebec, and the quality of local teams motivated these companies to give them responsibility for flagship titles. In addition, Quebec studios like Behaviour and Frima increased the size of their teams in order to establish themselves in the industry. Today, we see a large number of *startups* emerging and carving out a market niche.

Montreal and Quebec have built an enviable reputation within the industry. The first major influencers from Quebec studios are starting to make their mark and shape the future direction of the industry. Government decision-makers in Singapore, Helsinki, Austin and Toronto are taking note and want to follow our example. This reputation gives Quebec a definite advantage, but it still remains fragile. While keeping an eye on the competition, perpetuating the Quebec miracle means maintaining the MMTC at the competitive, stable and predictable rate of 37.5%, coupled with innovative measures promoting the growth and emergence of new companies of all sizes, new business models, technological changes and special workforce dynamics.

The coexistence of different firms helps protect the sector against market upheavals, changes in consumer behavior and increasingly rapid technological developments.

The current model has proven its worth. The 37.5% MMTC is profitable and internationally competitive. Smaller studios are going through a transition period and financial support that is better adapted to their reality will really help them take flight.

Considering the achievements of the past 15 years, the anticipated growth of the global market over the next decade and new trends, the video game industry has the potential to be the biggest contributor to Quebec's economic growth in the next 10 years. Alliance numérique firmly believes that this industry is well worth supporting.

We hope that the Quebec Taxation Review Committee will recognize not only the significant economic and social spinoffs generated by measures supporting the video game industry, but also the opportunities offered by a sector that is becoming increasingly diversified and experiencing substantial growth.

