WAVES
Western AudioVisual Economic Strategy

INTERACTIVE

A Census of Manitoba's Interactive Digital Media Industry

Glossary of key terms

Interactive Digital Media (IDM): Products or provision of services that directly enable users to digitally interact with content and/or other users. These products and services include digital games, e-learning software, virtual reality (VR)/augmented reality (AR)/mixed reality (MR) experiences, mobile apps, digital advertising, and/or the development of web-based applications. Services such as web development are only included if they involve robust interactive elements (beyond the simple display of text and/or images).

Linear Media: Audiovisual content without interactive elements. Such content can take the form of TV series, films, commercial video, web series, or 360 VR experiences.

IDM Revenue: Revenue generated by a company from the sale of IDM products or services, as described above.

GDP Impact: The portion of Manitoba's Gross Domestic/Provincial Product attributable to the economic activity of the IDM industry. The principal contributing factors to this impact are the wages and salaries paid to Manitobans (by IDM companies) and profits earned by IDM companies.

Full-Time Equivalent (FTE) jobs: A standardized employment measure of jobs, based on a standard work-week (in this case, 37.5 hours per work-week).

Fiscal Impact: The total of all taxes paid to Municipal, Provincial, and Federal governments. Such taxes include personal and corporate incomes taxes, consumption taxes, and property taxes.

Executive Summary

In 2012, *The New Media Census*, which was the first examination of the size and nature of interactive digital media (IDM) production in Manitoba, positioned the industry as small, innovative and poised to take advantage of emerging global opportunities. In the five years that have passed since then, the IDM industry in Manitoba has matured, with numerous showcase examples of scalable innovation, and a diverse range of companies offering a variety of products and services to many different consumer and business markets.

Indeed, the IDM industry's growth outlook is extremely positive. However, as the global market for IDM products and services evolves, and as IDM continues to drive innovation and advancement in a multitude of other industries across the global economy, Manitoba's IDM companies will continue to face risks and barriers to maximizing their potential.

Nordicity was engaged by New Media Manitoba (NMM) to profile and develop strategies for the IDM industry in Manitoba as part of a larger project – *WAVES: Western AudioVisual Economic Strategy*. The profile and strategies for the IDM industry are based on an online survey of companies, secondary research and industry stakeholder consultations.

IDM Companies in Manitoba

The IDM industry in Manitoba has been growing. Over the past few years, success stories such as Bold Commerce and SkipTheDishes have created a buzz around the industry's potential, expanded its workforce, and brought significant investment into the province. There is consensus among stakeholders that it will take effort on the part of the whole industry to keep the momentum going and work toward establishing the province as an internationally-recognized IDM hub.

Manitoba's IDM industry is made up of an estimated **67 companies**, verified as active through Nordicity's research. These companies are varied in terms of their size, products and services, as well as the level of company maturity. On average, IDM companies in Manitoba have been in operation in the province for about **seven years**.

In 2016, the median total revenue of Manitoba IDM companies in the survey sample was **$265,000** (rounded to the nearest thousand). However, the distribution of companies by total revenue in 2016 demonstrates the variety of companies operating in the IDM industry, with 20% of companies generating more than $1 million in revenue in 2016, while 23% earned less than $50,000. Indeed, the industry's composition has significantly changed from 2011, when the median revenue was $50,000, and only 5% of companies earned over $1 million in revenue.[1]

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[1] NMM, *The New Media Census,* by Nordicity (October 2012). Results from the 2012 study represent activity in the fiscal year ending in 2011 (noted as 2011 throughout this document). The two studies should not be viewed as directly comparable due to methodological differences – the 2012 study did not extrapolate from actual survey responses, while this study "grossed up" the survey results based on an estimate of the overall size and structure of the industry.

The primary source of this revenue was the sale of IDM products and services – the survey revealed **that IDM sales accounted for 85% of the industry's total revenue** in 2016. The remainder comprised tax credit payments from previous products (10%), other revenue (4%), and revenue from linear media production activities.

Overall, it is estimated that IDM companies in Manitoba completed a total of **2,550 projects** in 2016. The most prevalent project type was digital advertising, accounting for nearly three-quarters (73%) of all projects completed. However, digital advertising comprised only 4% of overall industry revenue, likely due to relatively smaller project budgets. Other unspecified IDM products and services accounted for the largest portion (78%) of revenue in the industry, but only 10% of the volume of projects.

In terms of the primary area of activity, the survey revealed that digital games and publishing is the most common product type in the industry – one in four companies reported that digital games and publishing products and services was the category that generated the highest revenue for them. However, like digital advertising, digital games and publishing made up a small portion of overall IDM revenue in the industry (4%). One in five respondents reported other unspecified IDM products or services as their primary product type, further evidence of the varied and continuously evolving nature of the industry.

Across all product types, **85% of revenue earned by IDM companies in Manitoba in 2016 was from products for which they owned the intellectual property (IP).** The remaining 15% of revenue came from sources other than company-owned IP. In comparison, in 2011, the majority (58%) of revenue for companies was from service-based work, with only 38% derived from original content and licensing.[2]

Digital games and publishing products had the highest rate of IP ownership in 2016, with 96% of the revenue from that product type generated by IP retained by the IDM company. Other unspecified IDM products and services also showed a high prevalence of IP ownership (94%), as did e-learning software development (89%).

Over a quarter (26%) of IDM companies in Manitoba generated revenue from other media production activities (in addition to IDM), including linear media production and/or visual effects/post-production services. The majority (74%) of companies, however, were only active in IDM production and services.

Manitoba's IDM industry primarily serves other businesses. **Business-to-business (B2B) sales accounted for over 71% of overall industry revenue** in 2016 (a slight increase from the 60% of revenue derived from direct and indirect B2B sales in 2011)[3]. An **additional 26% of IDM revenue came from direct-to-consumer sales**. Revenue from government or not-for-profit clients made up a small proportion (4%) of IDM revenue.

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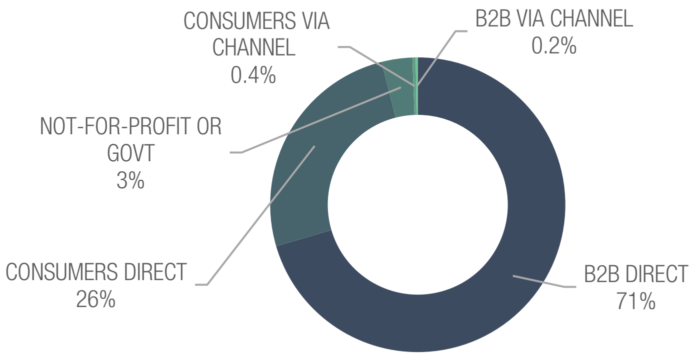
[2] *The New Media Census* (October 2012).

[3] Ibid.

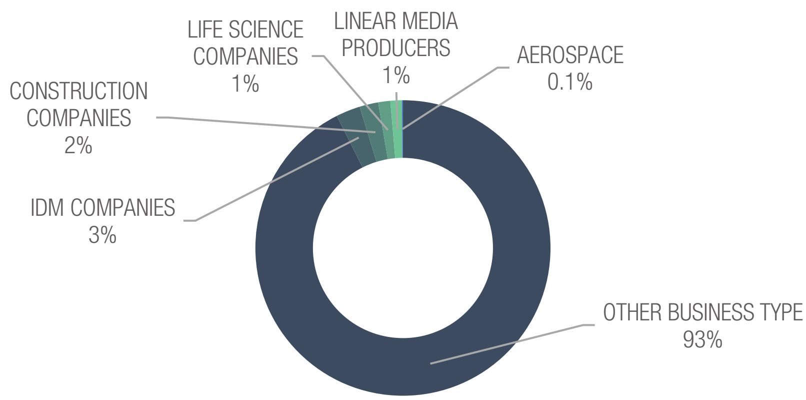
IDM revenue, by customer type



Source: Nordicity WAVES survey 2017
n=37

While B2B sales accounted for the largest portion of industry revenue, there is no indication that there are any specific sectors or industries targeted by Manitoba IDM companies. The majority (93%) of business revenue was reported as having come from a variety of other business types and target industries, reflecting the increasing importance of IDM products and services across different sectors of the economy.

IDM business revenue, by industry



Source: Nordicity WAVES survey 2017
n=27

Manitoba's IDM industry has demonstrated an increasingly strong export focus. According to the results of the survey, **80% of all revenue earned by Manitoba IDM companies in 2016 came from outside of the province** (an increase from 2011, when exports outside of Manitoba were reported to make up only 46% of total industry revenue)[4]. Most (59%) of the export revenue in 2016 came from other parts of Canada, and a substantial amount (32%) from the US.

IDM companies in Manitoba are generally self-financed, and most are not currently looking for expansion capital. However, the industry does show a **high level of optimism and**

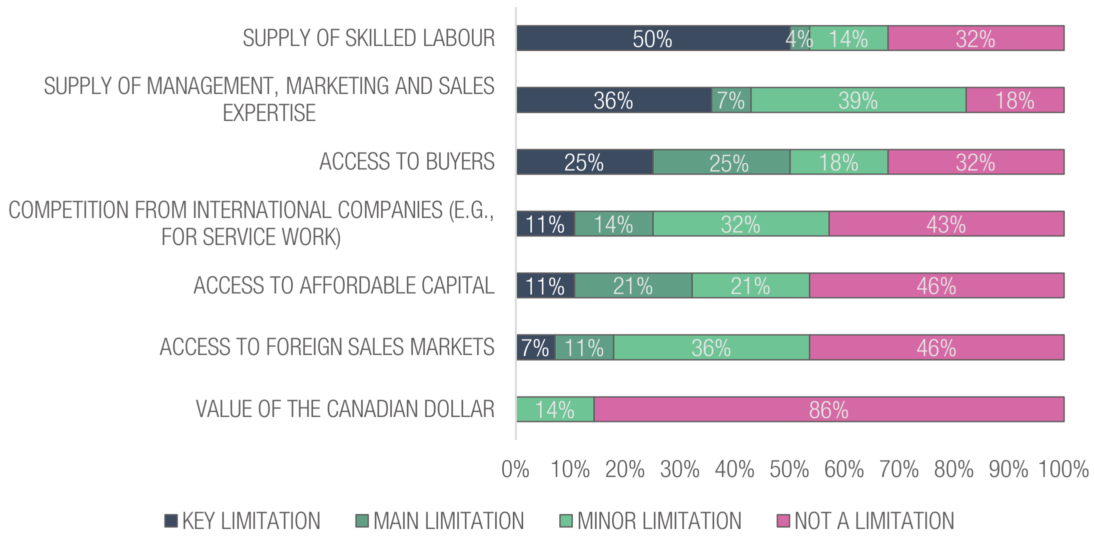
[4] *The New Media Census* (October 2012).

confidence about the future, even more than it was found to have in the 2012 study. Nearly all the IDM companies that responded to the survey reported that they anticipate growth over the next two years. It is expected, based on interviews and survey results, that this growth will be driven in large part by:

- A continued focus on the B2B market;
- Expansion into new territories, particularly other parts of Canada and the US; and,
- Growth in web development, mobile app development and digital games, as well as the emerging area of VR/AR/MR.

The supply of skilled labour, on the other hand, was reported as a "key limitation" by half of survey respondents. Access to talent was confirmed by interviewees as the most urgent challenge faced by the sector; in the face of anticipated growth, it poses a great risk in terms of being able to scale quickly enough to fulfill work once companies have secured it. The supply of management, marketing and sales expertise, which is essential to growing existing business and accessing new markets, was the most common limitation reported by survey respondents. However, this challenge was a "minor limitation" for many companies.

Key challenges faced by IDM companies in Manitoba



Source: Nordicity WAVES survey 2017
n=28

Economic Importance

The expenditures of IDM companies in the course of delivering their range of products and services have a significant impact on Manitoba's economy. Based on survey findings, the total expenditure of the IDM industry in Manitoba is estimated to have been $183 million in 2016. Employee wages and benefits made up a large portion (65%) of this spending, demonstrating the knowledge-intensive nature of the industry. Company profits in 2016 are estimated to have been 5.5%, or approximately $10.6 million in total.

IDM companies in Manitoba generated approximately **$136.9 million in direct GDP** in the province. In total, considering spin-off impacts in the form of increased economic activity among the industry's suppliers and through the re-spending of direct and indirect labour income in other industries, the GDP contribution of the industry was $186.9 million.

GDP impact of Manitoba's IDM industry, 2016

	Direct	Indirect	Induced	Total
GDP	$136.9M	$24.9M	$25.1M	**$186.9M**

Source: Nordicity WAVES survey 2017, Nordicity MyEIA Model and Statistics Canada

In 2016, Manitoba's IDM industry **directly employed an estimated 3,230 full-time equivalent workers (FTEs)**. The total employment impact of the industry was 3,800 FTEs. This figure includes spin-off employment – indirect employment generated for the industry's suppliers, and by the re-spending of wages across the economy.

The company survey revealed that the average annual salary for full-time, salaried employees at IDM companies was approximately **$40,500** in 2016. The total labour income generated by the industry in 2016 was approximately **$150.5 million**.

Employment impact of Manitoba's IDM industry, 2016

	Direct	Indirect	Induced	Total
Labour income	$126.3M	$13.5M	$10.7M	$150.5M
Employment	3,230	320	250	3,800

Source: Nordicity WAVES survey 2017, Nordicity MyEIA Model and Statistics Canada

Much of the employment at IDM companies in Manitoba is full-time (67%) and/or part-time (19%).

Public Support and Fiscal Impact

Manitoba's IDM companies can take advantage of a range of support programs that are designed to help them mitigate challenges and achieve their business objectives. At the heart of this support landscape is the Manitoba Interactive Digital Media Tax Credit (MIDMTC), a refundable corporate tax credit of 40% (up to a maximum of $500,000) on eligible costs associated with the development of an IDM product. Companies use the tax credit to grow their teams, as working capital or reinvest the revenue into company development.

Despite the benefits of the MIDMTC, some stakeholders noted the perceived misalignment between tax credit eligibility criteria and company activities, while others pointed to lengthy waiting periods that dissuade eligible companies from applying.

The most direct way of measuring the "return" on public investments in the IDM industry is through fiscal impact in the form of tax revenue. In 2016/17, the Government of Manitoba's expenditure through MIDMTC totaled $1,032,000.[5] About one-third of IDM companies in Manitoba benefitted from MIDMTC in 2016, but the fiscal return to the Province from the industry's corporate income taxes alone (approximately $1.5 million) surpassed the tax credit outlay. The total fiscal impact of Manitoba's IDM industry at the federal and provincial level was approximately $62.8 million, as presented in the table below.

Fiscal impacts of Manitoba's IDM industry, 2016

	Federal	Provincial	Total
Personal income taxes	$21.1M	$14.1M	**$35.2M**
Corporation income taxes	$4.1M	$1.5M	**$5.5M**
Consumption taxes	$5.5M	$10.2M	**$15.7M**
Local property taxes and other fees	$0M	$6.3M	**$6.3M**
Total	**$30.7M**	**$32.1M**	**$62.8M**

Source: Nordicity WAVES survey 2017, Nordicity MyEIA Model and Statistics Canada

Key data points for Manitoba's IDM industry, 2016

	Total
Number of IDM companies	**67**
Number of IDM projects	**2,550**
GDP impact	**$186.9M**
Labour income	**$150.5M**
Employment (FTEs)	**3,800**
Fiscal impact (federal and provincial)	**$62.8M**

Recommended Strategies

Manitoba's IDM industry faces three key challenges:

- The limited labour pool limits expansion and scalability.
- The perception of the industry, internally as well as in target markets, limits the ability of companies to attract investment.
- The markets in which IDM companies compete are numerous, global and highly competitive.

[5] Government of Manitoba, Department of Growth, Enterprise and Trade, *Annual Report: 2016-17*. https://www.gov.mb.ca/jec/reports/pdfs/16_17_get_ar.pdf

Within this context, this report recommends five interrelated strategies to address the existing and anticipated barriers and opportunities facing Manitoba's IDM industry:

1. **Optimize the workforce;**
2. **Capitalize on success;**
3. **Support access to market;**
4. **Align industry support; and,**
5. **Amend the tax credit to be more adaptive.**

The following table (next page) summarizes the key actions and outcomes associated with each strategy.

Strategy	Actions	Outcomes
Optimize the workforce *It is recommended that stakeholders in Manitoba's IDM industry work together to optimize the IDM labour pool, by gathering better data on talent needs and investing in continuous training for all levels of the workforce.* By optimizing the workforce, Manitoba's IDM industry will allow the existing IDM workforce, which is highly talented, to achieve its potential and continue to sustain a growing industry.	Develop an industry-wide mechanism (e.g., web-based tracking system) for identifying and quantifying industry talent gaps, based on data provided by IDM companies about their anticipated needs (specific skills and number of positions). The output of this tool would be shared with training institutions to inform program development. Extend work-placement opportunities for students and new graduates and explore incentives for companies to participate in co-op programs. Implement a structured, multi-level mentorship program. The program should be open to the existing workforce, ranging from new entrants to individuals in senior leadership positions, and match participants with peers in more senior positions or more mature companies, including those from outside of Manitoba.	The industry will better understand and be able to quantify aggregate skills needs. Academic institutions will be better equipped to respond to these needs in a timely manner. Companies will have access to more talent that is job-ready and retained in province. The existing IDM workforce will be able to adapt to industry changes and fill senior-level gaps. There will be lower barriers to growth and companies will be better supported as they scale.

Strategy	Actions	Outcomes
Capitalize on Success *It is recommended that Manitoba's IDM industry identify and celebrate, internally and externally, its successes. Promotion of the companies, products and innovations that have been cultivated in the province should form a central part of the industry's brand.* By capitalizing on success, Manitoba's IDM industry will be in a better position to attract and retain talent and investment to the province.	Develop an industry narrative centred on success stories. Establish a communications strategy for the industry's brand. Engage in targeted in-market promotion of successful Manitoba companies in the form of showcases communicated to key markets, including growth territories in other parts of Canada and the US. Communicate the growth trajectory (positive and negative aspects) to the next generation of entrepreneurs.	Industry self-confidence will be improved. The industry will have increased capacity to compete in the global market for clients, investment and talent.
Support Access to Market *It is recommended that NMM continue to support access to market through existing trade missions, but also expand the program to cover specific markets and sectors that may be the target of individual companies.* By supporting access to market, Manitoba's IDM industry will be better equipped to bring the plurality of products they create to key markets across Canada and around the world.	Continue to support *groups* of IDM companies to access *shared* markets, such as for video games, through trade missions and other forms of outreach. Introduce support for *individual* IDM companies that target *specific* markets, through financial support (e.g., for travel) and professional development and matchmaking opportunities. Proactively identify and support IDM companies to reach new key markets.	The industry will have Increased capacity and global competitiveness. IDM companies will have a better understanding of emerging opportunities.

Strategy	Actions	Outcomes
Align Industry Support *It is recommended that NMM works to ensure that the basket of support programs available to IDM companies work in tandem to help them achieve their business objectives. Support should be coordinated, beginning with alignment of external incentive structures with the needs of the IDM industry, based on NMM's expertise. It should be followed by the development of a strategy for clear communication and a single point of entry for IDM companies to access guidance on the most suitable combination of supports for their product/market/stage of development.* By leveraging NMM's deep understanding of IDM companies to ensure the range of existing industry support speaks to their needs, Manitoba's IDM industry will be able to maximize the impact of programs and investments, support growth and development at all stages of company maturity and be able to identify gaps in the support landscape to more effectively allocate future investments.	Deliver proactive (and customized) guidance to industry on how to maximize use of programs, and understand the relationship among the various incentives; Develop resources for navigating support landscape by company focus and growth stage; Ensure that existing general business supports, such as small business investment or workforce development incentives, are aligned with the needs of IDM companies.	The IDM industry will maximize the impact of existing programs. IDM companies will have access to an efficient, clear and easy navigable continuum of services that support the variety of products and services they deliver, markets they serve, and stage of maturity they are in.

Strategy	Actions	Outcomes
Create an Adaptive Tax Credit *It is recommended that the eligibility requirements of the tax credit be reviewed and clearly communicated to the industry, to ensure all eligible applicants are encouraged to apply. Once clarified, the eligibility requirements should be re-examined and expanded as necessary to reflect the range of IDM products and services being developed in Manitoba.* By creating an adaptive tax credit, Manitoba's IDM industry will benefit from a more future-proof support mechanism that can continue to serve a fluidly-defined industry as it continues to evolve and will support innovation and development in all segments of the industry.	Review definition and communication of eligibility requirements to ensure clarity. Explore an expansion of eligibility requirements to include new types of IDM products, to include service work not currently eligible that otherwise fits IDM definition, as well as products created for internal use.	The industry will have a flexible tool that is more future-proof. Companies will have increased incentives to become more efficient/internally innovative.

1. Introduction

In 2012, *The New Media Census*, which was the first examination of the size and nature of interactive digital media (IDM) production in Manitoba, positioned the industry as small, innovative and poised to take advantage of emerging global market opportunities. The strategies adopted at the time aimed to improve talent availability, promote the industry, help companies access key markets, enable New Media Manitoba (NMM) to better support its stakeholders and contribute to the overall maturation of the industry.

In the period since the publication of *The New Media Census*, the industry has made significant progress toward many of those objectives. The IDM industry in Manitoba has matured. There are numerous showcase examples of scalable innovation, which demonstrate what can be achieved in this emerging hub of IDM activity. It is diverse, both in the types of companies it comprises, the types of products and services delivered by those companies, and the leadership that continues to drive growth and development in the industry.

Indeed, the IDM industry's growth outlook is extremely positive. However, as the global market for IDM products and services evolves, and as IDM continues to drive innovation and advancement in a multitude of other industries across the global economy, Manitoba's IDM companies will continue to face risks and barriers to maximizing their potential. This report aims to understand the current state of and key challenges facing Manitoba's IDM industry, and proposes strategies to ensure the industry is well-equipped to take advantage of the opportunities on the horizon.

1.1 Mandate

Nordicity was engaged by NMM and On Screen Manitoba (OSM) to profile and develop strategies for the audiovisual sector in Manitoba. The resulting project – *WAVES: Western AudioVisual Economic Strategy* – examines, in parallel, the interactive and linear production industries in the province. For each industry, Nordicity set out to explore the following:

- **Market Context:** the provincial, Canadian and global market(s) in which companies operate;
- **Industry Profile:** the size, structures, activities and workforce of companies;
- **Economic Impact:** company expenditures, employment estimates, GDP impacts, and fiscal impacts; and,
- **Strategies for Success:** potential opportunities to sustain and/or stimulate growth in the sector in light of the current and anticipated barriers to success faced by companies.

This report presents the findings and recommendations for the interactive digital media industry.

1.2 Methodology

1.2.1 Data Collection

Nordicity collected data for this study through several means, including an online survey of companies to inform a basic census of IDM company activity in Manitoba. The survey was conducted from April to August 2017 using a platform that hosts all collected data on Canadian-based servers.

Secondary research and interviews with 18 stakeholders representing a range of industry perspectives were also conducted to gain an understanding of the challenges and opportunities facing Manitoba's IDM industry and support analysis and recommendations.

1.2.2 Economic Impact Analysis

Economic impacts, including direct, indirect and induced impacts, were estimated using inputs from the company survey, which were then run through Nordicity's *MyEIA* model.

1.2.3 Recommendations Development

Recommendations for future action were informed by the results of questions asked on the survey, as well as from interviews and strategy planning sessions held in Winnipeg in June 2017 with NMM, IDM companies and other industry partners.

Comparability with Findings from the 2012 New Media Census

As noted above, *The New Media Census* (2012) provided the first snapshot of the IDM (or "new media," as it was referred to in the study) production in Manitoba and examined some of the same aspects of the industry as this report.

Throughout this report, findings are presented in some instances alongside relevant results from the 2012 study, to indicate potential shifts in the industry. The results from the 2012 study represent IDM companies' activity in the fiscal year ending in 2011 (noted as 2011 throughout this report).

However, it is important to note that the **findings of the two studies are not directly comparable**, as there are key methodological differences in the way the two industry profiles were developed.

The most significant difference is that this study considered the survey results as representative of the IDM industry, therefore "grossing up" the results based on an estimate of the overall size and structure of the industry. The previous study treated its survey as a census and did not extrapolate from actual responses.

In addition, there are minor differences in the way some of the survey questions were worded in each of the surveys. These differences are noted in any instance where the results from such questions are presented in relation to one another.

1.3 Document Map

This report begins with a profile of the IDM industry in Manitoba (Section 2). The profile consists of:

- An overview of the industry, including the types of companies it comprises and their output, revenue and contribution to Manitoba's Gross Domestic Product (GDP) (Section 2.1);
- Estimates of employment in the industry, including breakdown of employment by type, compensation levels and talent-related challenges faced by companies (Section 2.2);
- A discussion of investment in IDM in the province, including companies' sources of initial investment capital, their current investment requirements and challenges (Section 2.3);
- Analysis of the availability and effectiveness of public support and training programs, as well as the fiscal revenue generated by the industry (Section 2.4); and,
- Perspectives on the future outlook of the industry, including anticipated growth, and the related drivers of and barriers to that growth (Section 2.5).

The second part of the report (Section 3) proposes five key strategies for success, which have the potential to help the industry seize the opportunities on the horizon and overcome the key challenges faced by companies.

Importantly, these recommendations are directed at the industry as a whole, including NMM and other public-sector support organizations, companies and any other entity with a stake in the ongoing success of Manitoba's IDM industry.

2. Interactive Digital Media in Manitoba: An Industry Profile

The term "interactive digital media" (or IDM) rarely has a clear definition. From jurisdiction to jurisdiction, and year to year, the definition of IDM continues to change and adapt to the realities of company activities and market dynamics. The industry itself continues to evolve, primarily in response to the emergence of new technologies such as virtual reality (VR), augmented reality (AR), and mixed reality (MR). At the same time, IDM products increasingly drive innovation in other sectors of the economy, redefining the definitional boundaries of the industry. However, a coherent definition is a necessary starting point for a profile and strategy of this kind, no matter how fluid or adaptive that definition may be. Drawing clear boundaries around what is and is not IDM serves to inform the development of more effective support mechanisms and focus stakeholder communication and engagement.

Determining the boundaries of what is included in and excluded from any jurisdiction's definition of IDM involves a key decision: either the industry's definition continues to expand to include new areas in which IDM drives innovation. Or, the definition continues to be refined as the types of products and services at the forefront of interactivity evolve.

In the first scenario, with an ever-expanding definition, the size and economic activity of the industry is likely to grow as new areas are subsumed under the IDM umbrella. This demonstration of growth is likely to bring a larger number of stakeholders together, capture the attention of stakeholders (particularly governments) and increase recognition, investment and intervention in the industry. However, interventions for a broadly-defined industry will be inherently less focused and targeted, making it more difficult to ensure specific barriers to growth are addressed. On the other hand, a more bounded definition driven by leading-edge innovation, while easier to explain, reduces the comparability of data over time and makes it more difficult to demonstrate growth, as fewer companies will identify with the industry. It does, however, allow for a more focused approach to designing support mechanisms to address the specific challenges of a more contained (albeit smaller) group of companies, and maintains an industry focus on innovation and forward-looking momentum.

Given the varied nature and relatively small size of the industry in Manitoba, the definition used needs to be broad and inclusive to ensure it reflects the reality of the cluster of companies operating in the province. As described in the sections that follow, Manitoba's IDM industry is made up of a variety of companies, offering a range of products and services to consumers, governments and businesses in all sectors of the economy. Therefore, for the purposes of this study, the IDM industry is defined as **companies involved in the development of products or provision of services that directly enable users to digitally interact with content and/or other users**. These products and services include digital games, e-learning software, VR/AR/MR experiences, mobile apps, digital advertising, and/or the development of web-based applications. Services such as web development are only included if they involve robust interactive elements (beyond the simple display of text and/or images).

2.1 IDM Company Activity in Manitoba

The IDM industry in Manitoba has grown and matured over the past few years. Success stories such as Bold Commerce and SkipTheDishes have created a buzz around the industry's potential, expanded its workforce, and brought significant investment into the province. There is consensus among stakeholders that it will take effort on the part of the whole industry to keep the momentum going and work toward establishing the province as an internationally-recognized IDM hub.

SkipTheDishes

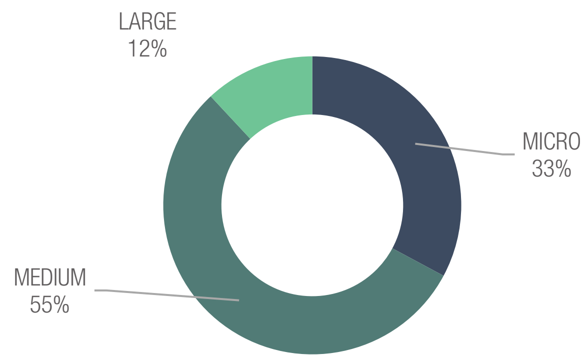
Serving over 50 cities across Canada and the US and planning to continue its rapid expansion across North America, SkipTheDishes has made its mark on the food delivery service industry by developing a leading-edge platform and focusing on smaller, underserved markets. SkipTheDishes was founded only five years ago, but it now serves as proof that innovation and rapid growth in IDM can, and does, happen in Manitoba.

In December 2016, the company was acquired by UK-based food delivery giant JustEat for an initial consideration of $110 million, with an additional offer of up to $90 million contingent on financial targets. In 2017, the company was ranked fifth on Deloitte's Fast50 list. Also in 2017, co-founder and CEO Josh Simair was named to list of Canada's Top 40 Under 40.

About IDM Companies in Manitoba

Manitoba's IDM industry is made up of an estimated **67 companies,** which were verified as active through Nordicity's research. As shown in Figure 1, just over half (55%) of these companies are medium-sized, with somewhere between five and 99 employees. An additional one-third (33%) are micro-sized, with fewer than five employees, while 12% are large companies with 100 or more employees.

Figure 1: Manitoba IDM companies, by size[6]

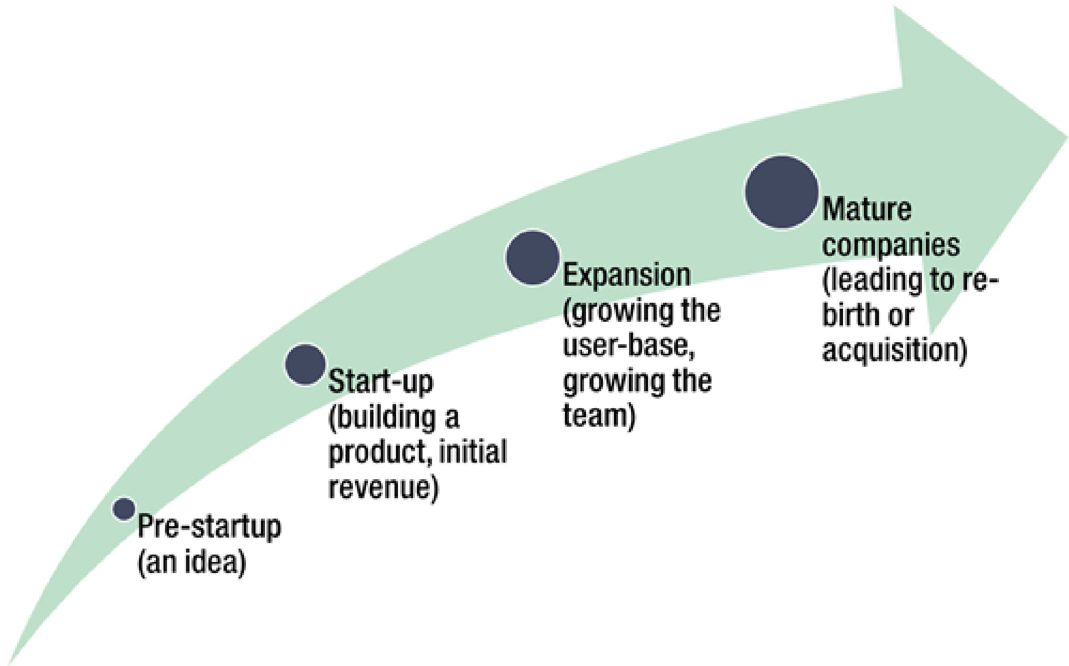


Source: Nordicity WAVES survey 2017
n=67

[6] Micro: Fewer than 5 employees; Medium: 5-99 employees; Large: 100 or more employees.

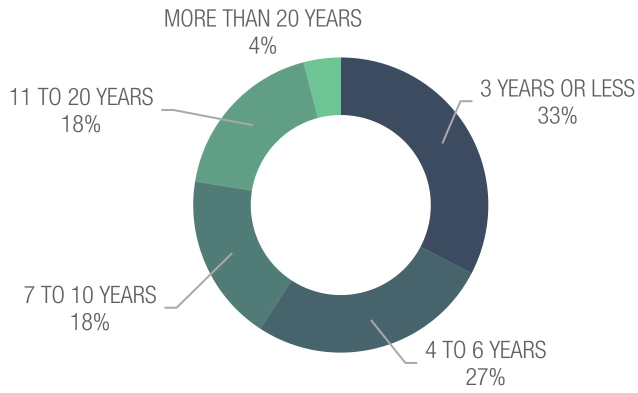
The IDM industry in Manitoba is highly varied, both in terms of the products and services companies develop, and levels of company maturity. The industry includes large app development companies, small independent video game companies, interactive web development service firms, and everything in between. Serving a wide range of clients, including consumers, governments and other businesses, IDM companies in Manitoba are spread across the IDM maturation curve, from the pre-startup ideation and development phase to companies that are mature and potentially ready to explore new growth opportunities or exit (see Figure 2).

Figure 2: Interactive digital media industry, company maturation curve



The company survey revealed that, on average, IDM companies in Manitoba have been in operation in the province for just under seven years and that the majority (90%) generated revenue in 2016. The industry, however, comprises companies at varying levels of maturity, with one-third (33%) of them having been in operation for three or fewer years, 27% established four to six years ago, and 22% having been in the industry for over 10 years. Figure 3 shows the relatively even breakdown of IDM companies by number of years in operation.

Figure 3: Manitoba IDM companies, by number of years in operation



Source: Nordicity WAVES survey 2017
n=49

Bold Commerce

Established in 2012, Bold Commerce is a leader in the development of Shopify apps and provision of professional services including custom solutions for online stores. A company that was started by four founders has now grown to a team of more than 100.

Within less than a year of its first app release – "Product Upsell" – Bold Commerce was hired by Microsoft to develop an app for Windows 8. Before long, the company had evolved into a full-service eCommerce agency. As it continued to expand its services, offering online store owners social media PR management, search engine optimization and enterprise services, the company saw increased recognition from its peers and the industry.

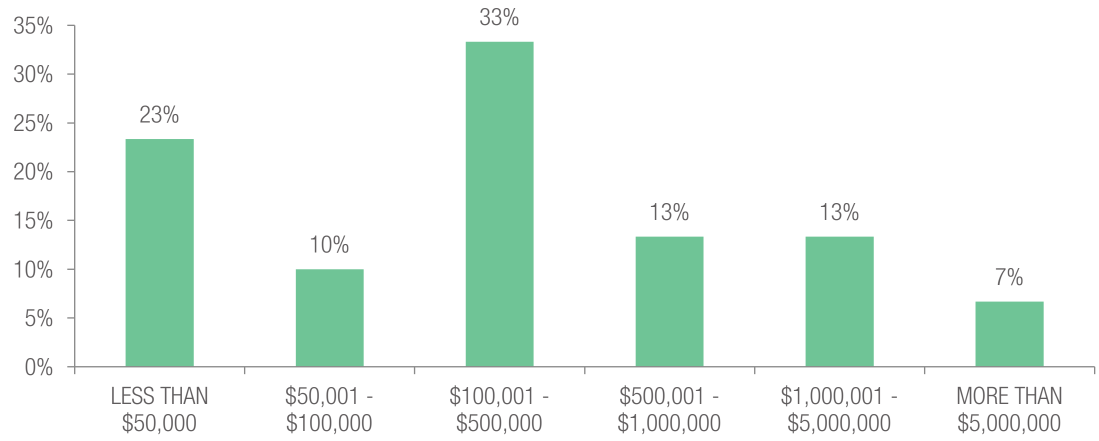
In 2016, Bold Commerce was included in Startup 50's list of Canada's Top New Growth Companies and was named as one of Canada's Top Small and Medium Employers. In 2017, the company was named as a finalist for the Ernst and Young Entrepreneur of the Year award, as well as being ranked 12th on Deloitte's Fast50 list.

As mentioned in the introduction to this section, the IDM industry in Manitoba continues to expand beyond media production to encompass a variety of product types and target clients. As other industries and sectors begin to incorporate interactive digital products into their value chains, and as those interactive digital products become more central to the activity of companies operating in those industries, the IDM industry begins to absorb new types of products (and eventually, companies) into its fold. In some cases, a transition from another industry to IDM that is driven by the evolution of products and services can be challenging. Some stakeholders pointed to the need for training and support for company leaders who find themselves in this position, having to quickly learn and respond to the dynamics of a new industry and new business models.

IDM Company Output and Revenue

In 2016, the median total revenue of Manitoba IDM companies in our survey sample was $265,000 (rounded to the nearest thousand), representing an increase from 2011, when the median revenue per company was only $50,000.[7] As noted above, 10% of surveyed companies indicated they did not earn any IDM revenue in 2016. Figure 4 shows a breakdown of company respondents by revenue category.

Figure 4: Distribution of IDM companies in Manitoba, by total IDM revenue



Source: Nordicity WAVES survey 2017
n=30

The distribution of companies by total revenue in 2016 demonstrates the variety of the industry, with some companies generating tens of thousands of dollars of revenue, and others having revenue figures in the millions. Indeed, one in five (20%) IDM companies in Manitoba generated more than $1 million in revenue in 2016. At the lowest end of the range, nearly a quarter (23%) earned less than $50,000. In 2011, only 5% of IDM companies in Manitoba reported earning over $1 million in revenue, while 56% earned less than $100,000[8] (as compared to only 33% in 2016).

The primary source of company revenue in 2016 was the sale of IDM products and services – the survey revealed that IDM sales accounted for 85% of the industry's total revenue. The remainder comprised tax credit payments from previous products (10%), other revenue (4%), and revenue from linear media production activities (see Figure 5).

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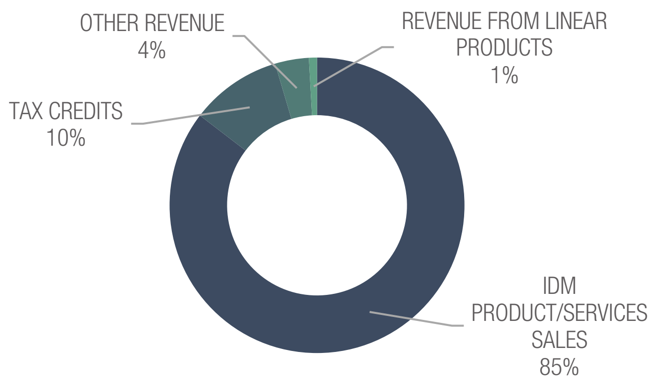
[7] NMM, *The New Media Census,* by Nordicity (October 2012).

[8] Ibid.

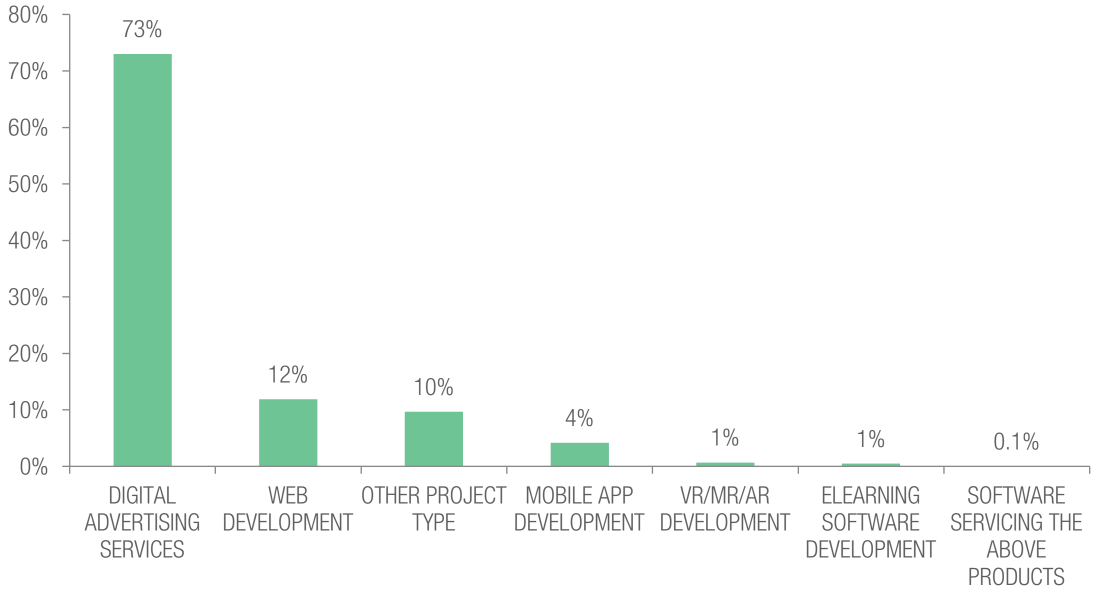
Figure 5: Revenue by source



Source: Nordicity WAVES survey 2017
n=30

Manitoba's IDM companies also offer their clients a variety of products and services. Overall, it is estimated that IDM companies in Manitoba completed a total of 2,550 projects in 2016. The most prevalent project type was digital advertising, accounting for nearly three-quarters (73%) of all projects completed (see Figure 6).

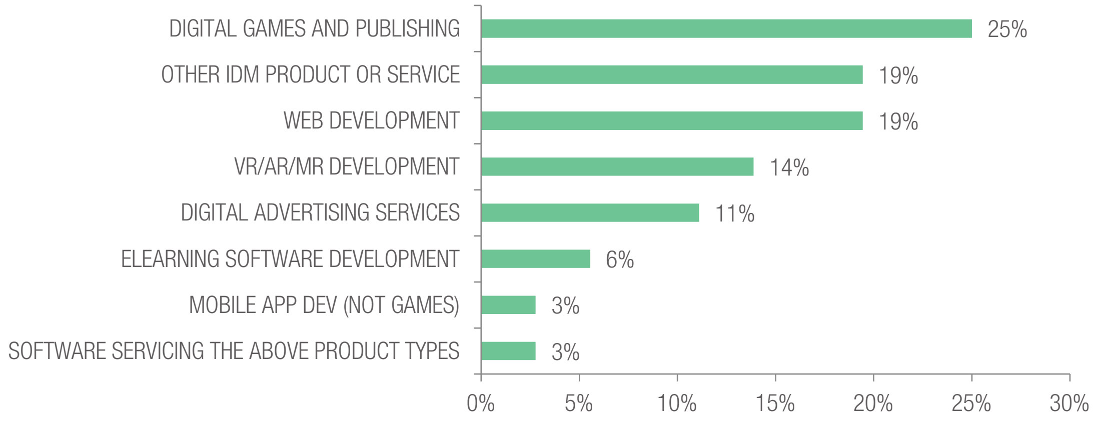
Figure 6: Projects completed by IDM companies in Manitoba, by product type



Source: Nordicity WAVES survey 2017
n=35

Figure 7 measures the highest revenue category for each company in the sample and plots the number of companies in each category under this rubric. The most prevalent primary product type was digital games and publishing, reported as the highest revenue generator in 2016 by one in four IDM companies responding to the survey (see Figure 7). The fact that other IDM products or services ranked second-highest as a primary product type – reported by nearly one in five companies – is more evidence of the varied and continuously evolving nature of the industry.

Figure 7: IDM companies in Manitoba, by primary product type (highest revenue)

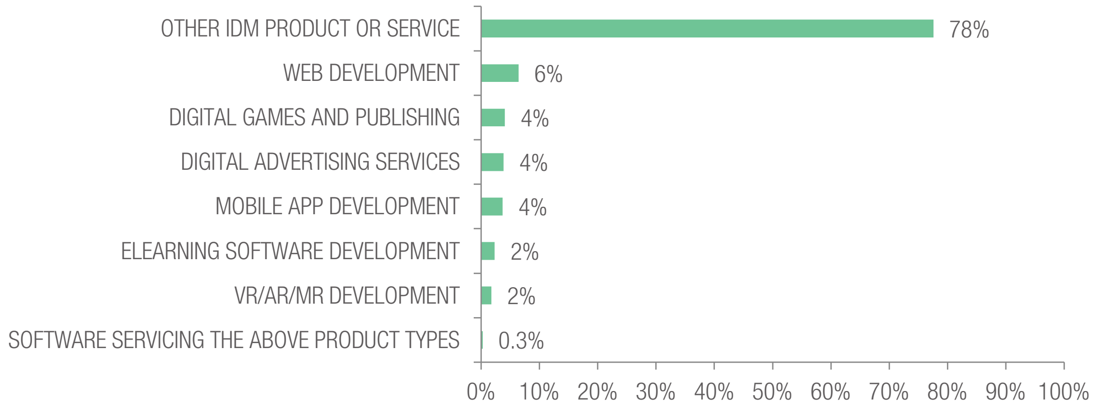


Source: Nordicity WAVES survey 2017
n=36

Digital advertising services was the highest revenue category for only 11% of companies (Figure 7), despite having by some margin the largest number of completed projects (Figure 6). This finding implies that digital advertising is a secondary source of revenue for a lot of firms, or that the average size of such projects is far smaller than for other project types. Indeed, a breakdown of the industry's revenue breakdown overall, as shown in Figure 8, shows that digital advertising only makes up around 4% of total industry revenue.

Digital games and publishing, which was the primary product for a quarter of IDM companies (Figure 7), also made up a small portion of overall IDM revenue in the industry (4%, as shown in Figure 8), suggesting that it is likely the focus of smaller IDM companies in the lower revenue range. Other IDM products and services, again, appear to account for a large portion of sales in the industry.

Figure 8: IDM revenue, by product type

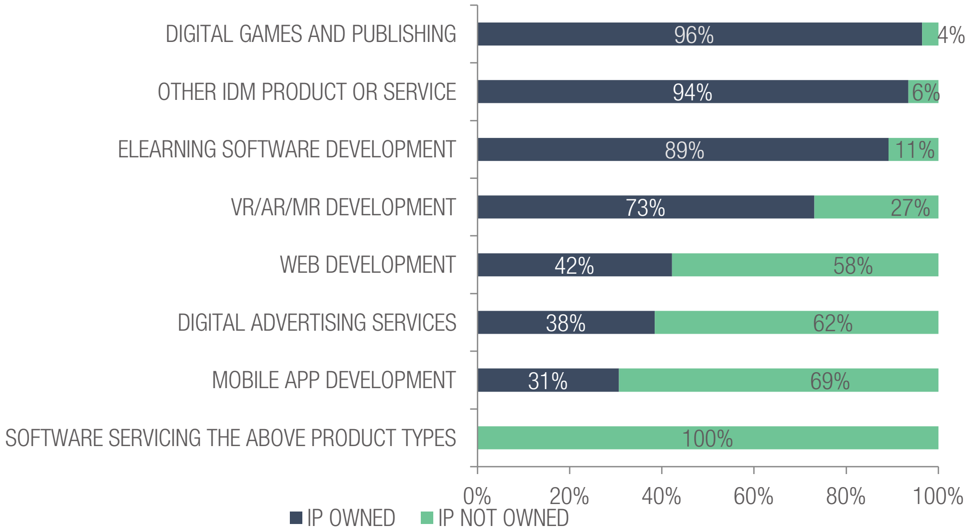


Source: Nordicity WAVES survey 2017
n=30

Across all product types, 85% of revenue earned by IDM companies in Manitoba was from products for which they owned the intellectual property (IP). The remaining 15% of revenue came from sources other than company-owned IP. In comparison, service-based work made up the majority (58%) of revenue for IDM companies in 2011, with only 38% derived from original content and licensing.[9]

As shown in Figure 9, digital games and publishing products had the highest rate of IP ownership, with 96% of the revenue from that product type generated by IP retained by the IDM company. Other IDM products and services also showed a high prevalence of IP ownership (94%), as did e-learning software development (89%).

Figure 9: IP-ownership breakdown of revenue by product type



Source: Nordicity WAVES survey 2017
n=30

IP retention is essential to the ongoing development of any IDM cluster, as it enables companies to protect and continue to reap the benefits of their innovation. However, Manitoba's IDM industry also comprises many companies that provide IDM services (e.g., web development, digital advertising, mobile app development) to clients who in turn retain the IP. There is a perception among stakeholders that the IDM industry is centred around more conventional interactive products, such as digital games and mobile apps, and emphasizes IP ownership rather than reflecting the entirety of activities undertaken by IDM companies. In some cases, this perception prevents eligible companies from accessing key support programs and engaging with their IDM peers.

Over a quarter (26%) of IDM companies in Manitoba generated revenue from other media production activities (in addition to IDM) in 2016, including linear media production and/or visual effects/post-production services. The majority (74%) of companies, however, were only active in IDM production and services.

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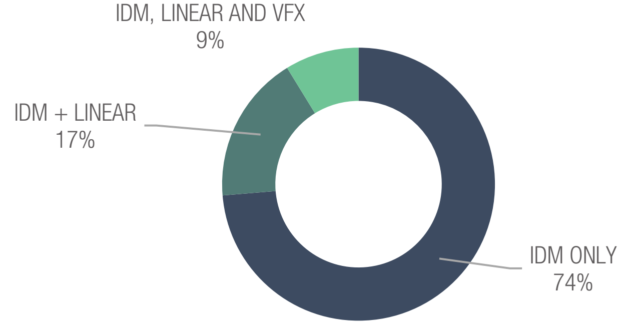
[9] *The New Media Census* (October 2012).

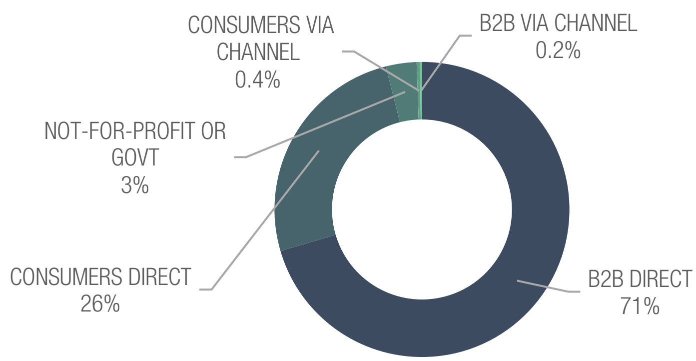
Figure 10: IDM companies in Manitoba, by media production activities



Source: Nordicity WAVES survey 2017
n=57

Manitoba's IDM industry primarily serves other businesses. Business-to-business (B2B) sales accounted for over 71% of overall industry revenue in 2016, with nearly all generated through business clients directly (Figure 11). The proportion of 2016 revenue from B2B sales represents a slight increase from 2011, when 60% of industry revenue was derived from direct and indirect B2B sales. [10] An additional 26% of IDM revenue in 2016 came from direct-to-consumer sales. Revenue from government or not-for-profit clients made up a small proportion (4%) of IDM revenue.

Figure 11: IDM revenue, by customer type



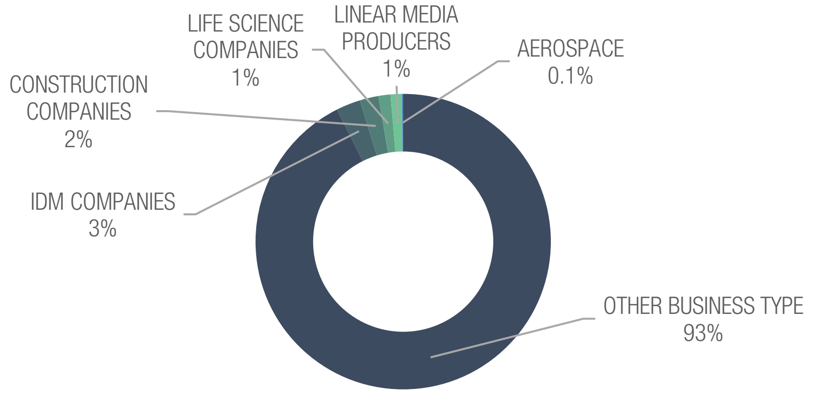
Source: Nordicity WAVES survey 2017
n=37

While B2B sales account for the largest portion of industry revenue, there is no indication that there are any specific sectors or industries targeted by Manitoba IDM companies. Figure 12 shows that client industries such as construction, life sciences and aerospace each make up a small portion of IDM revenue for companies in Manitoba. Some respondents indicated revenue from linear media producers, and 3% of revenue came from work for other IDM companies. The vast majority (93%) of business revenue, however, came from a variety of other business types and target industries, reflecting the increasing importance of IDM

[10] Ibid.

products and services across the different sectors of the economy. It is important to note that this figure describes the total revenue earned by the industry overall; as such, it may not speak to the experiences or earnings profile of the average IDM company in Manitoba.

Figure 12: IDM business revenue, by industry

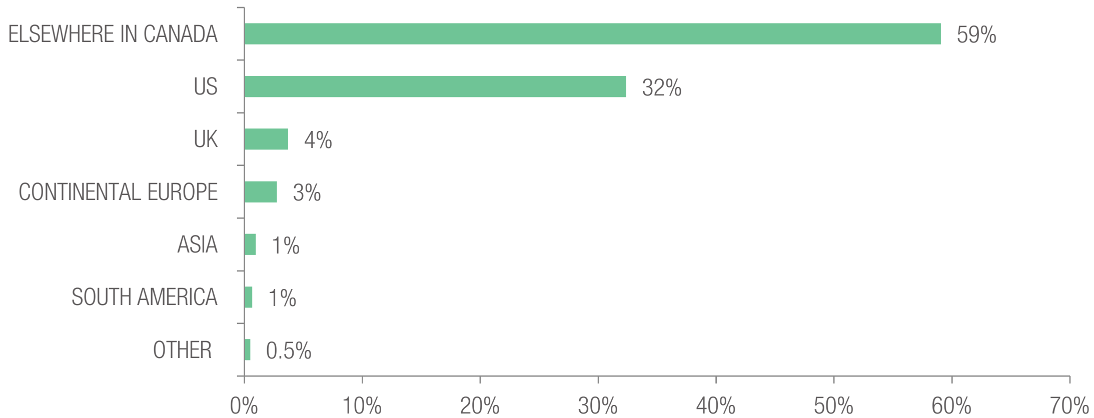


Source: Nordicity WAVES survey 2017
n=27

Manitoba's IDM industry has demonstrated an increasingly strong export focus. According to the results of the survey, 80% of all revenue earned by Manitoba IDM companies in 2016 came from outside of the province, an increase from 2011, when exports outside of Manitoba made up 46% of total revenue.[11]

As shown Figure 13, most (59%) of this export revenue came from other parts of Canada, and a substantial amount (32%) from the US.

Figure 13: Percentage of total IDM export revenue, by jurisdiction



Source: Nordicity WAVES survey 2017
n=29

The IDM industry's export focus is expected to continue into the near future, particularly through expansion into the US and elsewhere in Canada (see Figure 25 in Section 2.5).

[11] *The New Media Census* (October 2012).

However, as discussed further in Section 2.3, there is significant room for improvement of the industry's recognition and confidence in international markets that could serve as a barrier to maximizing its potential in this area.

At the same time, many stakeholders shared that Manitoba, and particularly Winnipeg, provides an advantageous location for operating an IDM business. The relatively lower cost of labour (discussed further in Section 2.2), the Central Time Zone, the competitiveness of exporting with a low Canadian dollar, and generous incentives and support programs (discussed further in Section 2.5) provide the industry with key competitive advantages against international competition. While in-person meetings with key decision-makers in other jurisdictions can be costly, the borderless nature of the work (including accessibility of both infrastructure and clients) makes it easy to do business from anywhere.

IDM Industry Profits and Economic Impact

As shown above, IDM in Manitoba is a dynamic and wide-ranging industry. The expenditures of IDM companies while delivering their range of products and services have a significant impact on Manitoba's economy. Based on survey findings, the total expenditure of the IDM industry in Manitoba is estimated to have been $183 million in 2016. Employee wages and benefits made up a large portion (65%) of this spending, demonstrating the knowledge-intensive nature of the industry. Company profits in 2016 are estimated to have been 5.5%, or approximately $10.6 million in total.

IDM companies in Manitoba generated approximately **$136.9 million in direct GDP** in the province. In total, considering spin-off impacts in the form of increased economic activity among the industry's suppliers and through the re-spending of direct and indirect labour income in other industries, the GDP contribution of the industry was $186.9 million.

Table 1: GDP impact of Manitoba's IDM industry, 2016

	Direct	Indirect	Induced	Total
GDP	$136.9M	$24.9M	$25.1M	**$186.9M**

Source: Nordicity WAVES survey 2017, Nordicity MyEIA Model and Statistics Canada

IDM Company Activity in Manitoba | Key Takeaways:

- There are an estimated 67 IDM companies operating in Manitoba at varying levels of company maturity, with 90% earning revenue.
- Just over half (55%) of these companies are medium-sized, with somewhere between five and 99 employees; one-third (33%) are micro-sized, with fewer than five employees; and, 12% have more than 100 employees.
- The most prevalent primary IDM product type is digital games and publishing, reported as the highest revenue generator in 2016 by one in four companies.
- In 2016, the median total revenue of Manitoba IDM companies was $265,000.
- One in five (20%) IDM companies in Manitoba generated more than $1 million in revenue in 2016, while nearly a quarter (23%) earned less than $50,000.
- Manitoba's IDM industry primarily serves other businesses (71% of revenue from B2B sales).
- The industry has demonstrated a strong export focus – 80% of all revenue earned by Manitoba IDM companies comes from outside of the province, mostly from other parts of Canada and the US).
- The operational expenditures of IDM companies in Manitoba generated approximately $136.9 million in direct GDP in the province, and a total (including indirect and induced impacts) of $186.9 million in GDP for the provincial economy in 2016.

2.2 Talent, Employment and Education

In 2016, Manitoba's IDM industry **directly employed an estimated 3,230 full-time equivalent workers (FTEs)**. The total employment impact of the IDM industry was 3,800 FTEs. This figure includes spin-off employment – indirect employment generated for the industry's suppliers, and by the re-spending of wages across the economy.

The company survey revealed that the average annual salary for full-time, salaried employees at IDM companies was approximately **$40,500** in 2016. The total labour income generated by the industry in 2016 was approximately $150.5 million. The breakdown of the IDM industry's employment impact at each level is shown in Table 2.

Table 2: Employment impact of Manitoba's IDM industry, 2016

	Direct	Indirect	Induced	Total
Labour income	$126.3M	$13.5M	$10.7M	$150.5M
Employment	3,230	320	250	3,800

Source: Nordicity WAVES survey 2017, Nordicity MyEIA Model and Statistics Canada

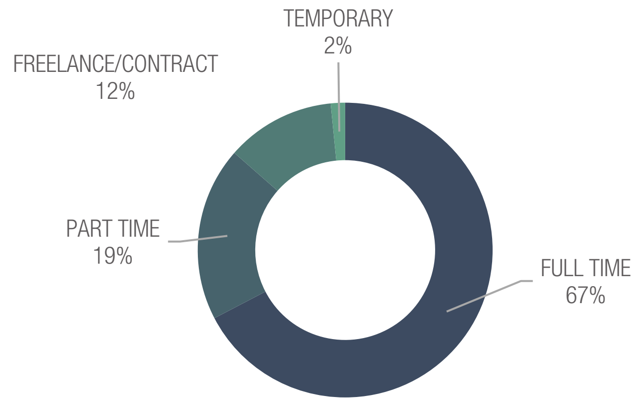
Much of the employment at IDM companies in Manitoba is permanent – 86% of employment reported in the survey consisted of permanent full-time or part-time positions, falling only slightly below the proportion among the overall workforce in the province (88%[12]). Of those permanent IDM positions, over three-quarters were reported to be full-time. In comparison, 81% of employed Manitobans worked full-time in 2016.[13]

Survey respondents reported that approximately two-thirds (67%) of current positions at their company were full-time positions, with an additional 19% being part-time. Freelance and contract positions made up only 12% of positions at companies.

[12] Statistics Canada, Labour force survey estimates (LFS), CANSIM Table 282-0080, 2016. Statistics Canada defines a permanent job as one without a pre-determined termination date and a temporary job as one ending on a predetermined date or upon completion of a project.

[13] Statistics Canada, Labour force survey estimates (LFS), CANSIM Table 282-0002, 2016. Statistics Canada defines a full-time employee as a person who usually work 30 hours or more per week at their main or only job, and part-time as working less than 30 hours per week at their main or only job.

Figure 14: Total employment by job status



Source: Nordicity WAVES survey 2017
n=36

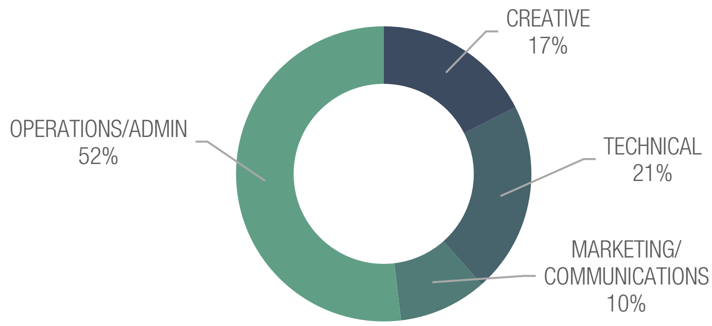
The IDM workforce can be categorized into four broad groups: creative, technical, operations and administration, and marketing and communications. Table 3 presents a selection of job titles, by level of seniority, across these categories (as reported by survey respondents).

Table 3: IDM positions, job titles

	Junior	Intermediate	Senior
Creative	Junior Artist, Junior Designer, Coordinator	Artist, Designer	Art Director, Lead Designer, Chief Creative Officer, Creative Director, Design Director, Lead Artist, Lead Designer, UX/UI Designer
Technical	Junior Developer, Junior Programmer, Inter, Web Assistant	Developer, Programmer	Chief Technology Officer, Technical Lead, Senior Web Developer, Lead Developer, Lead Programmer, Senior Analyst, VP Engineering
Marketing/ Communications	Assistant Marketer, Sales and PR Staff	Marketing Manager; Marketing Specialist	Director of Sales; Chief Marketing Officer; Director of Business Development; Lead PR Manager; Sales Manager
Operations/ Administration	Junior Account Manager, Junior Business Developer, Bookkeeper, Junior Project Manager, Office Manager, Project Coordinator, Junior Technical Support Specialist, Recruitment, Logistics and Live Support	Project Manager, Account Manager, Business Developer, Manager of Production, Producer; Team Lead, Technical Support Specialist	Chief Executive Officer, Partner, Director, General Manager, Lead Producer, President, Production Supervisor

Just over half (52%) of the employment across Manitoba's IDM industry in 2016 was reported to be in operations and administration roles, which as noted in the table above include support staff. The remainder, as shown in Figure 15 below, is split among technical (21%), creative (17%), and marketing and communications (10%) positions.

Figure 15: Total employment by job type



Source: Nordicity WAVES survey 2017
n=36

Marketing and communications positions are most likely to be full-time, with some (15%) contract/freelance work happening in that area. Operations and administration positions are nearly all permanent, on a full-time (61%) or part-time (35%) basis. The highest incidence of contract/freelance work is seen in creative roles, accounting for nearly one-third of positions. Table 4 presents the breakdown of employment at IDM companies by job type and status is further detail.

Table 4: IDM employment, by job type and job status

	Creative	Technical	Marketing/ communications	Operations/ admin
Full-time	65%	78%	81%	61%
Part-time	3%	2%	1%	35%
Temporary	1%	2%	3%	1%
Contract/freelance	31%	17%	15%	3%
Total	100%	100%	100%	100%

Source: Nordicity WAVES survey 2017
n=36

The survey results showed that average annual salaries in the IDM industry in Manitoba range from $36,900 for a junior creative position to $75,000 for a senior marketing and communications role. As noted earlier in this section, across all categories and levels of seniority, the mean average salary for full-time staff in the industry was $40,500, comparatively lower than is seen in other jurisdictions. For example, a recent report on the impact of IDM in Ontario reported an average salary of $52,400 among IDM employees in that province, and senior positions at an average of $89,000.[14] The average IDM salary in Manitoba is also lower than the average annual earnings across all industries in Manitoba

[14] Interactive Ontario, *Measuring Success: The Impact of the Interactive Digital Media Sector in Ontario*, by Nordicity (February 2017).

($46,200).[15] The relatively lower salary ranges (and expectations) serve as a competitive advantage for Manitoba's IDM companies, keeping labour costs lower than their national and global counterparts. The breakdown of average salaries across various employment categories and levels of seniority is shown Table 5 below.

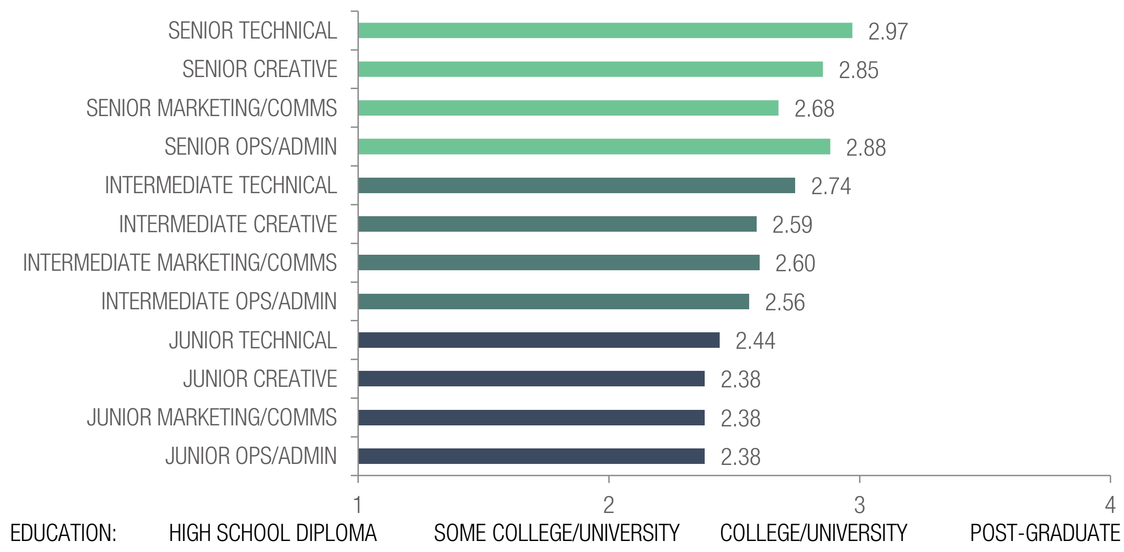
Table 5: Average salary by employment category and level of seniority

Average salary	Senior	Intermediate	Junior
Creative	$62,400	$46,900	$36,900
Technical	$68,400	$51,500	$37,400
Marketing/ communications	$75,000	$50,600	$38,800
Operations/ administration	$69,200	$45,600	$38,100

Source: Nordicity WAVES survey 2017
n=29

Across all types of positions and levels of seniority, Manitoba's IDM professionals are highly educated, with a high prevalence of college/university degrees. The company survey revealed that among full-time employees at IDM companies, an estimated 68% have a college or university degree, higher than the province-wide prevalence of college or university degrees (47%).[16] Senior roles and technical positions have, on average, the highest level of education. The survey results showing the average level of education by job type and seniority are shown in Figure 16 below.

Figure 16: IDM workforce, average level of education by job type and seniority



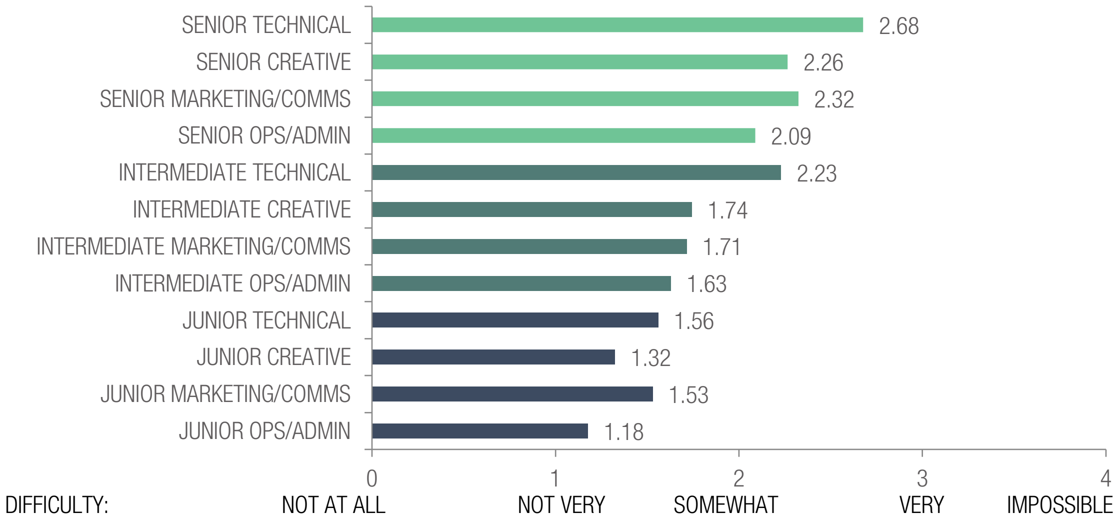
Source: Nordicity WAVES survey 2017
n=34

[15] Statistics Canada, CANSIM, table 281-0027.

[16] Statistics Canada, 2011 National Household Survey.

Survey results and consultations confirmed that access to appropriately-skilled talent is a key challenge for IDM companies in Manitoba. Figure 17 shows the degree of difficulty in securing qualified personnel for positions, by job category and level of seniority.

Figure 17: Difficulty in securing qualified talent, by job type and seniority



Source: Nordicity WAVES survey 2017
n=28

As illustrated above, technical positions are difficult to fill at all levels of seniority, as compared to other job types. Senior technical talent is particularly difficult to secure, although the shortage of senior technical talent is a global issue, and not one that is unique to Manitoba. IDM companies in Manitoba face comparatively fewer difficulties in finding junior professionals overall, with those in operations and administrative positions presenting the least amount of challenge in terms of recruitment.

However, Manitoba's IDM industry faces the additional challenge, in competing globally for technical talent, of attracting IDM professionals to move to Manitoba from other jurisdictions, due to lifestyle factors such as cold weather and distance from other large urban centres. Retention can also be a challenge, as a perceived lack of opportunities can result in a "brain drain" to larger IDM hubs such as Vancouver or Toronto.

For companies looking to scale, the talent shortage in the province poses a key risk. With skills requirements that are different from company to company (given the range of products and services) and rapidly evolve with technological advancements, new graduates do not always have the specific combination of skills required by companies. Therefore, despite the availability of junior talent, onboarding new entrants can be costly and risky. The ability of training institutions to respond to these challenges is hindered by two factors:

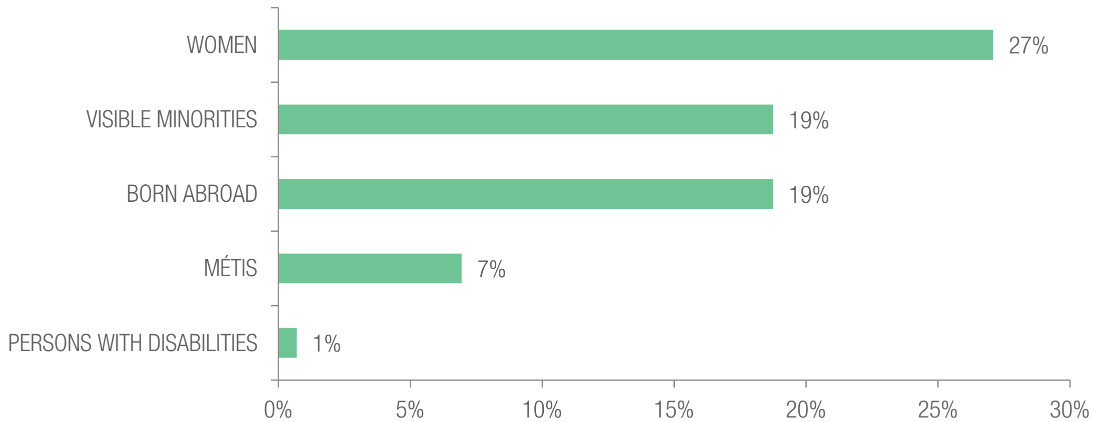
1. Changes to programs and courses often take time to implement, although in some cases continuing education or college programs are more quickly adaptable.
2. More importantly, even if changes could be made promptly to training programs, institutions would need to be aware of the specific needs of the industry to be able to respond accordingly.

In other words, changes to programs should be informed by an evidence-based understanding of aggregate industry needs to contribute to narrowing the talent gaps. However, such information is not currently available.

Some stakeholders also shared a perception that given the difficulty in attracting talent to Manitoba, there may be opportunities to better access potentially untapped pools of talent within the province. For example, more targeted engagement of Indigenous and newcomer communities could help to resolve the issue. There are existing initiatives in the province that can serve as models for replication or opportunities for collaboration, including the Indigenous Initiation program delivered by the Information and Communication Technology Association of Manitoba (ICTAM) and the Manitoba Start program administered by Immigrate Manitoba. In addition, as IDM companies mature and become better known outside of the industry, there is a higher potential to draw talent with relevant skills from other sectors and expand the existing/known talent pool.

Manitoba's IDM industry benefits from diversity in leadership. As shown in Figure 18, among owners represented by company responses to the survey, 19% were identified as visible minorities, compared to 13% across Manitoba's total population. Similarly, the percentage of owners that were born outside of Canada (19%) was higher than the proportion of immigrants across the province (16%).[17]

Figure 18: Owner demographics (% of total number of owners who are in each demographic)



Source: Nordicity WAVES survey 2017
n=31

Women, on the other hand, were under-represented among reported company owners – 27% of the owners reported in the survey were women, much lower than the proportion of women in the province's general workforce (48%) and population (51%).[18] Interviews revealed that in addition to being under-represented, women leaders in the industry faced more difficulty in accessing opportunities and investments.

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[17] Statistics Canada, 2011 National Household Survey.

[18] Ibid.

The survey also revealed under-representation of Aboriginal and Metis people among IDM company owners – of the total number of company owners represented by survey respondents, there were no Aboriginal owners and 7% Metis owners, compared to the combined 17% of the province's population who are Aboriginal/Metis. Persons with Disabilities (PwDs) were also under-represented, with 2% of owners identified as PwDs, as compared to 16% across the province's population (aged 15 and older).[19]

Ensuring gender parity and overall diversity in the workforce was also highlighted as a challenge by interviewees. It is a challenge that is sidelined by the overarching talent shortages discussed in this section but could also present opportunities for expanding the available IDM talent pool in Manitoba.

Talent, Employment and Education | Key Takeaways:

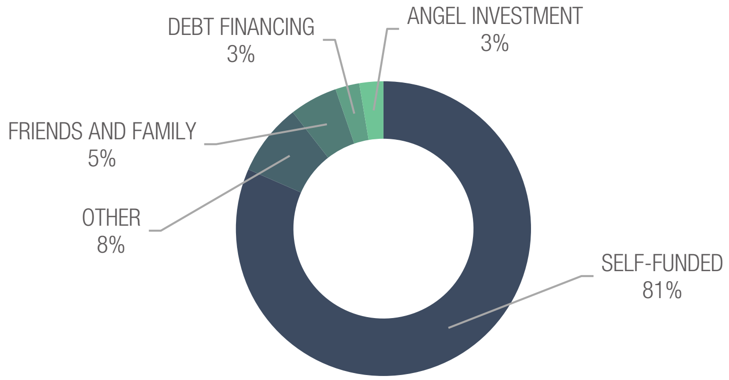
- In 2016, the total employment impact of the IDM industry was 3,800 FTEs with an estimated $186.9 million of labour income.
- Much of the employment at IDM companies in Manitoba is permanent, whether full-time or part-time, and over half of those employed in the industry occupy operations and administration positions.
- Average salaries in the IDM industry in Manitoba range from $21,000 for a junior creative position to $61,000 for a senior technical role, with an overall average of was $51,700,
- Across all types of positions and levels of seniority, Manitoba's IDM professionals are highly educated – an estimated 68% have a college or university degree
- Senior technical positions are hardest to fill, (a global issue), and the talent shortage in the province is a barrier to scalability for many IDM companies.

[19] Statistics Canada, 2011 National Household Survey.

2.3 Investment in IDM in Manitoba

IDM companies in Manitoba are generally self-financed. When companies were asked about initial investment capital, 81% reported that their own money was the principal source (see Figure 19).

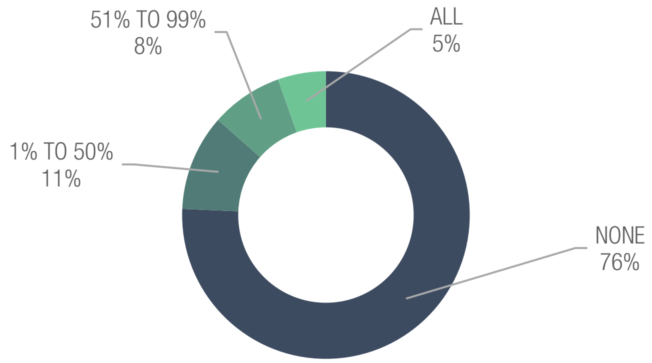
Figure 19: Principal source of initial investment capital



Source: Nordicity WAVES survey 2017
n=37

Given the high rate of self-financing, it is not surprising that international investments do not make up a large portion of total investment in the industry. As shown in Figure 20, only one in four companies reported having raised any investments from outside of Canada, and only 5% of companies that did tap into international investments did so exclusively.

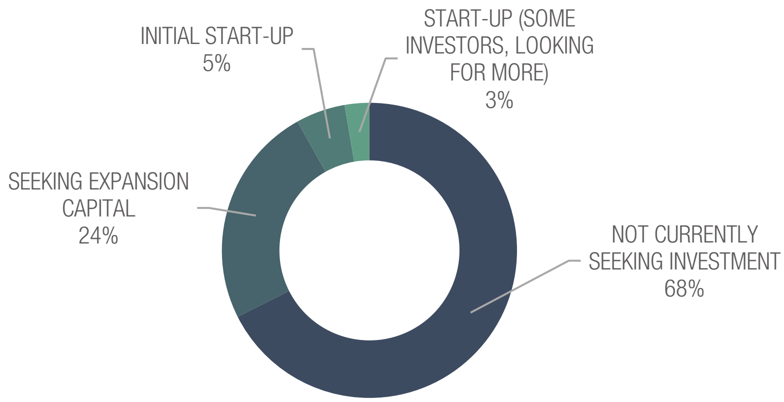
Figure 20: Percentage of investment raised internationally



Source: Nordicity WAVES survey 2017
n=38

Most (68%) IDM companies in Manitoba are not currently looking for additional investment. However, about one in four (24%) are currently seeking expansion capital. A much smaller portion are in their initial startup phase (5%) or have some startup investors and are looking for more.

Figure 21: Current investment stage



Source: Nordicity WAVES survey 2017
n=38

Interviews revealed that whether they are actively seeking investment or not, many IDM companies in Manitoba prefer strategic partnerships that can enable access to new markets and opportunities, with financial resources and investments being a relatively low priority. However, many also feel that the perception of the industry has the potential to hold it back from expansion and growth. Despite recent success stories, the lack of recognition of Manitoba as an IDM hub both by prospective investors and by the industry itself, limits companies' access to investment and strategic partnerships. The successes can serve as models for emerging IDM companies that are looking to scale and can also be showcased internally as well as internally to demonstrate the potential of Manitoba's IDM industry.

Investment in IDM in Manitoba | Key Takeaways:

- IDM companies in Manitoba are generally self-financed, and not currently looking for expansion capital.

2.4 Public Support and Training Landscape

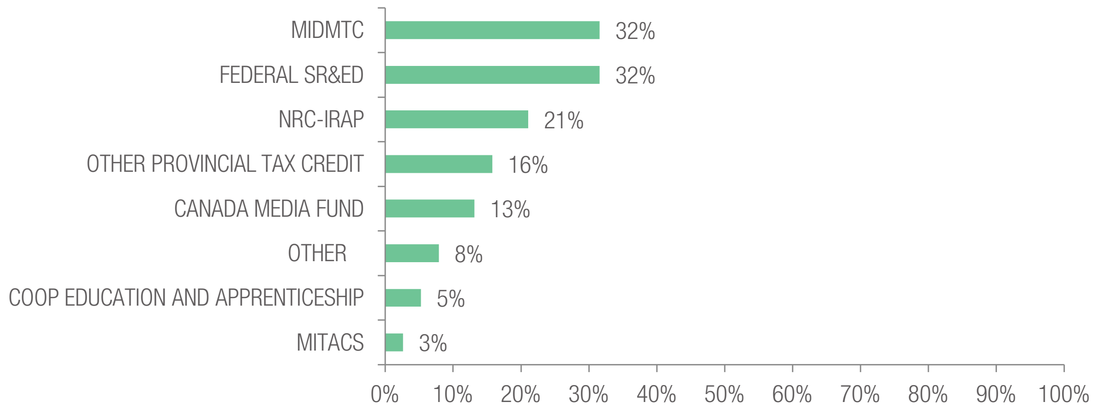
Manitoba's IDM companies can take advantage of a range of support programs that are designed to help them mitigate challenges in growing their businesses and achieve their business goals, including the Manitoba Interactive Digital Tax Credit and a range of other sources of public support.

Manitoba Interactive Digital Tax Credit

One of the key pillars in the support of the IDM sector is the Manitoba Interactive Digital Media Tax Credit program (MIDMTC), a fully refundable corporate tax credit with two rates: 35% of eligible labour costs for companies not primarily based in Manitoba but who pay at least $1 million over a single corporate tax year to employees in a Manitoba-based studio, and 40% of eligible labour costs associated with the development of an eligible IDM product for qualifying Manitoba-based companies.

Companies can use the tax credit to grow their teams, as working capital or reinvest the revenue into company development. Accordingly, the MIDMTC can help companies grow their businesses and leverage other sources of revenue. Currently, the tax credit is only applicable to a portion of the IDM industry. As is described in Figure 22, an estimated 32% of IDM companies in Manitoba accessed the MIDMTC in 2016.

Figure 22: Percentage of companies that have accessed support programs



Source: Nordicity WAVES survey 2017
n=38

In 2016/17, the Government of Manitoba's expenditures through MIDMTC was $1,032,000.[20] In the same year, the wider IDM industry in Manitoba generated over $32 million in tax revenue for the Province. Although the tax credit does not account for all of the provincial support offered to the IDM industry in Manitoba, it nonetheless shows that IDM is an industry that generates significantly more tax revenue than it receives in public support.

[20] Government of Manitoba, Department of Growth, Enterprise and Trade, *Annual Report: 2016-17*. https://www.gov.mb.ca/jec/reports/pdfs/16_17_get_ar.pdf

When combining the federal and provincial fiscal impacts, Manitoba's IDM industry generated was approximately $62.8 million in tax revenue in 2016. The breakdown of the industry's fiscal impact is presented in Table 6.

Table 6: Fiscal impacts of Manitoba's IDM industry, 2016

	Federal	**Provincial**	Total
Personal income taxes	$21.1M	$14.1M	**$35.2M**
Corporation income taxes	$4.1M	$1.5M	**$5.5M**
Consumption taxes	$5.5M	$10.2M	**$15.7M**
Local property taxes and other fees	$0M	$6.3M	**$6.3M**
Total	**$30.7M**	**$32.1M**	**$62.8M**

Source: Nordicity WAVES survey 2017, Nordicity MyEIA Model and Statistics Canada

Other Sources of Complementary Public Support

Many IDM companies also benefit from other federal financial incentive programs for research, development and innovation, including the Scientific Research and Experimental Development Tax Incentive Program (SR&ED) – accessed by 32% of companies – and, the National Research Council-Industrial Research Assistance Program (NRC-IRAP) – accessed by 21% of companies. These programs have allowed companies to expand teams and reduce the risk of experimentation.

The financial support provided at the federal and provincial level is complemented by the programs and services delivered by NMM. Stakeholders reported that the training programs offered by NMM have been highly beneficial in terms of creating new IP, building up the technical workforce in the province, and taking new products to market. These programs have enabled Manitoba companies to connect with global leaders learn more about high-priority topics (e.g., accessibility, project management), and generally stay up to date with their peers in the IDM industry. NMM also provides support for market access, through trade delegations to markets and events (e.g., Game Developers Conference).

IDM companies also have access to other provincial, industry-agnostic programs. For example, the Canada-Manitoba Job Grant subsidized employee training, and has the potential to reduce the risks of onboarding junior employees – companies can apply for up to $10,000 for each current or prospective employee. IDM companies can also benefit from product development, marketing development and commercialization support through the Commercialization Support for Business (CSB) program. However, interviews revealed that in some cases, the industry is not always aware of the range of public support available and companies do not have access to the guidance needed to navigate the landscape and find the right combination of resources. In other cases, more general incentives do not always align with the business models prevalent in the IDM industry.

Public Support Training Landscape | Key Takeaways

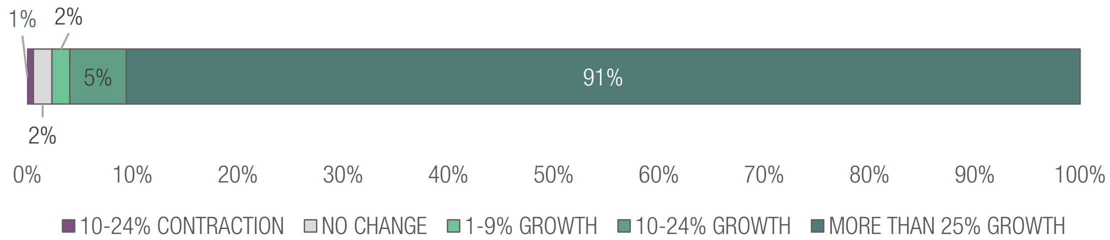
- The Manitoba Interactive Digital Media Tax Credit (MIDMTC) was accessed by nearly a third (32%) of IDM companies in Manitoba inn 2016.

- Other federal and provincial support programs are also beneficial to the industry, although the support landscape can be difficult to navigate.
- The Government of Manitoba expended just over $1 million through the MIDMTC in 2016/17.
- In return, the IDM industry in Manitoba had a fiscal impact of $62.8 million in 2016.

2.5 Future Outlook

IDM companies in Manitoba have a high level of optimism and confidence about the future. Nearly all the IDM companies that responded to the survey reported that they anticipate growth over the next two years. Figure 23 takes the total pool of IDM revenue as a base, then divides that pool by the revenue growth projection categories. Under this view, 91% of the revenue involved in the IDM industry is attached to companies that expect their revenue will grow by more than 25% over that time, and an additional 5% expect somewhere between 10 and 24%. Less than 1% of revenue is found at companies that expect any contraction over the next two years at all. It is expected, based on interviews, that this growth will be driven in large part by continued B2B sales.

Figure 23: IDM companies in Manitoba, by future revenue outlook



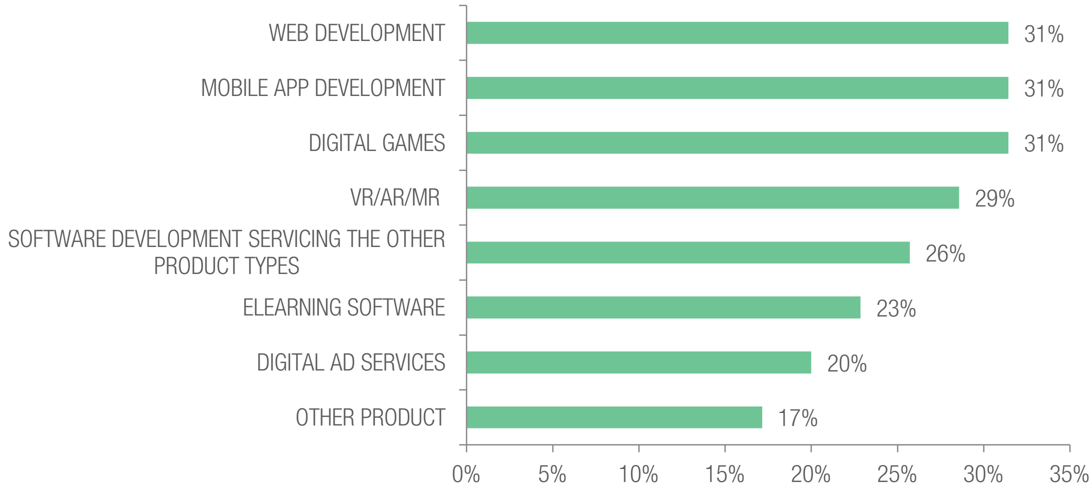
Source: Nordicity WAVES survey 2017
n=27

The level of optimism among Manitoba IDM companies has increased over the past five years. In the 2012 study, the majority (87%) of companies reported that they anticipated *some* growth, only 37% projected that this growth would exceed 25%.[21]

Survey respondents reported web development, mobile app development and digital games to be key areas of focus over the next two years. The emerging VR/AR/MR space was also reported (by 29% of companies) as an area of focus over the next two years. Exploration in VR/AR/MR is considered a longer-term, more speculative but necessary investment by many companies within the context of ongoing technological advancement in a yet unproven market. This direction nonetheless demonstrates the industry's commitment to remaining innovative, and its appetite for risk in an ever-evolving marketplace.

[21] *The New Media Census* (October 2012). As noted in text, Figure 23 shows revenue outlook based on the *proportion of overall industry revenue* in 2016 represented by the respondent company. The results from the 2012 study are *not weighted by revenue* and represent the proportion of companies responding to the survey. The comparable (i.e., unweighted) proportion of companies anticipating 25%+ growth in the next two years is 70%.

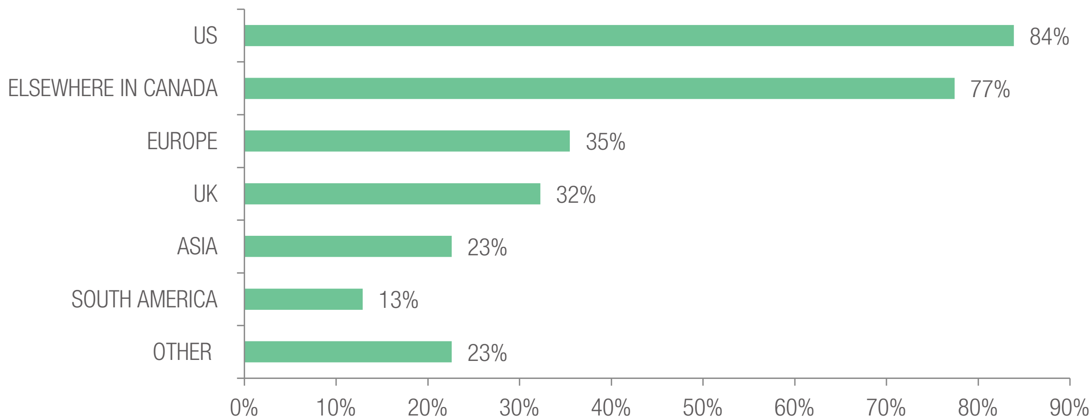
Figure 24: IDM companies in Manitoba, by product focus area over the next two years



Source: Nordicity WAVES survey 2017
n=35

The industry also anticipates a continued focus on export markets, including through further expansion into the US and elsewhere in Canada. As shown in Figure 25, 84% of companies noted the US as a target jurisdiction for expansion over the next two years. In fact, these results demonstrate a greater degree of interest in growth in the US as compared to 2011, when 57% of companies reported an interest in expanding in that country.[22]

Figure 25: IDM companies in Manitoba, by service expansion into new territories over the next two years



Source: Nordicity WAVES survey 2017
n=31

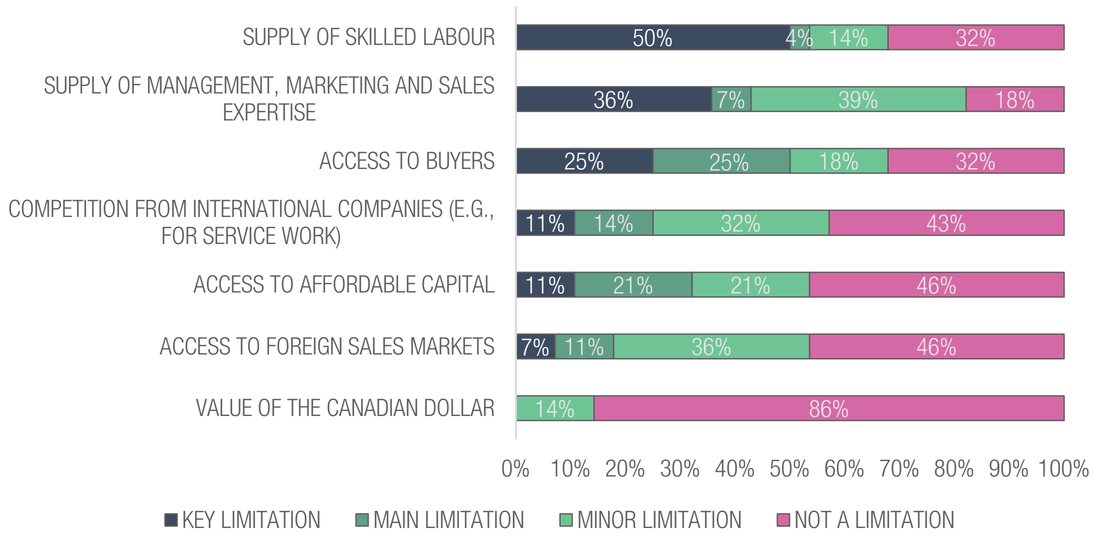
Stakeholder interviews further confirmed that the US is a key area of opportunities for the industry, particularly due to the competitiveness of the Canadian dollar and the cost

[22] *The New Media Census* (October 2012).

advantages afforded to IDM companies in Manitoba. Expansion into these new territories will continue to reflect the industry focus on the B2B market, as noted by interviewees.

As the above results demonstrate, there is a high level of confidence across the IDM industry in Manitoba, not only in terms of growth potential overall, but also in the penetration of new, global and highly competitive markets. However, IDM companies face several key barriers to realizing this growth potential, as shown in Figure 26.

Figure 26: Key challenges faced by IDM companies in Manitoba



Source: Nordicity WAVES survey 2017
n=28

The supply of skilled labour was reported as a "key limitation" by half of survey respondents. Access to talent, which was confirmed by interviewees to be the most urgent challenge faced by the sector; in the face of anticipated growth, it poses a great risk in terms of being able to scale quickly enough to fulfill work once companies have secured it. The supply of management, marketing and sales expertise, which is essential to growing existing business and accessing new markets, was the most common limitation reported by survey respondents. However, this challenge was a "minor limitation" for many companies.

Future Outlook | Key Takeaways:

- Manitoba's IDM industry anticipates significant growth in the coming years.
- This growth will be primarily driven by a focus on established as well as emerging product areas and a continued focus on export markets.
- The most significant barrier to growth will be supply of skilled labour in Manitoba.

3. Strategies for Success: Recommendations

As the previous sections have outlined, Manitoba's IDM industry faces three key challenges:

- The limited labour pool limits expansion and scalability;
- The perception of the industry, internally as well as in target markets, limits the ability of companies to attract investment; and,
- The markets in which IDM companies compete are numerous, global and highly competitive.

This section outlines five inter-related strategies to address the existing and anticipated barriers and opportunities facing Manitoba's IDM sector:

1. **Optimize the workforce;**
2. **Capitalize on success;**
3. **Support access to market;**
4. **Align industry support; and,**
5. **Amend the tax credit to be more adaptive.**

In presenting each strategy, the following six elements will be discussed:

- **Background:** The rationale behind the strategy, and a summary of the key findings from the research and consultations that led to its identification as a potential approach for supporting the development of the IDM industry in Manitoba.
- **Objective:** The eventual end state(s) that the strategy aims to ultimately achieve for the industry.
- **Key Elements:** The steps that need to be taken to achieve the objective, in terms of actions and activities.
- **Outcome(s):** The expected results of the strategy, both in terms of the outputs achieved through program delivery (e.g., x number of events) and the immediate and intermediate results for the industry.
- **Implementation Considerations:** A discussion of the practicality of the strategy, the resources required for its implementation, a proposed timeframe for its roll-out, and approaches to its communication to stakeholders.
- **Success Criteria:** Based on the objective and outcomes outlined above, definition of what success means and criteria by which it can be measured.

3.1 Optimize Workforce

Background:

Many IDM companies in Manitoba anticipate significant growth over the next two years (see Figure 23 in Section 2.5). This growth follows a period of maturation in the industry that has resulted in the establishment of several anchor companies. The current talent pool is highly skilled and entrepreneurial, with considerably lower salary expectations relative to competing jurisdictions. Yet, there are key talent-related issues that have and will continue to limit the potential for growth for the industry. Indeed, as shown in Figure 26 in Section 2.5, the supply of skilled labour emerged from the survey as the top barrier to growth for IDM companies in Manitoba.

New entrants to the industry pose a two-fold challenge: (1) as companies begin to scale, many find that they do not have access to a large enough talent pool to sustain their growth, and (2) the talent pool that is available often does not have the right combination or level of skills required to fill open positions, and so the onboarding and internal training required on the part of companies can be costly as well as risky.

Both issues relate to a need for better alignment between training institutions and industry. Program changes, however, take time to implement, although colleges have somewhat more flexibility in that regard. At the same time, industry needs can rapidly change and there is currently no data available on the specific skills and aggregate volume of talent required by Manitoba IDM companies. Availability of such data would enable the IDM industry to better track their talent needs. Academic institutions, in turn, can make evidence-based program decisions.

The talent gap in Manitoba extends beyond new entrants. In fact, there is an even wider gap when it comes to senior talent – a global challenge in the IDM industry, and not one that is unique to Manitoba. However, the small size of the IDM industry in Manitoba (relative to competing jurisdictions) as well as lifestyle factors (e.g., weather, small urban centre) make it difficult for companies to attract and retain senior-level talent from other jurisdictions. In an effort to upskill their existing staff, some companies have established internal training programs. The model of continuous training in the industry, to prepare the existing talent pool to fill more senior positions, may be an effective way to address the gap, whether through expanded in-house training programs to the rest of the industry, finding ways for academic institutions to support these training efforts, or establishing more structured forms of mentorship at all levels of seniority.

The need to continuously update skills and capabilities reaches the most senior levels for Manitoba IDM companies. The survey showed that the supply of management expertise (along with marketing and sales, as shown in Figure 26) was a key limitation in companies' ability to achieve growth. At this particular stage of industry development in Manitoba, as companies continue to mature and grow, or as companies that are active in other industries find themselves entering the IDM space, founders, CEOs and other senior personnel need leadership training, mentorship and other resources to develop their own skills to meet the growing demands of their role.

It is recommended that stakeholders in Manitoba's IDM industry work together to optimize the IDM labour pool, by gathering better data on talent needs and investing in continuous training for all levels of the workforce.

Objective

By optimizing the workforce, Manitoba's IDM industry will allow the existing IDM workforce, which is highly talented, to achieve its potential and continue to sustain a growing industry.

Key Elements

1. Develop an industry-wide mechanism (e.g., web-based tracking system) for identifying and quantifying industry talent gaps, based on data provided by IDM companies about their anticipated needs (specific skills and number of positions). The output of this tool would be shared with training institutions to inform program development.
2. Extend work-placement opportunities for students and new graduates and explore incentives for companies to participate in co-op programs.
3. Implement a structured, multi-level mentorship program. The program should be open to the existing workforce, ranging from new entrants to individuals in senior leadership positions, and match participants with peers in more senior positions or more mature companies, including those from outside of Manitoba.

Expected Outcome

This is a high impact recommendation, which will contribute to the following outcomes:

- The industry will better understand and be able to quantify aggregate skills needs;
- Academic institutions will be better equipped to respond to these needs in a timely manner;
- Companies will have access to more talent that is job-ready and retained in province;
- The existing IDM workforce will be able to adapt to industry changes and fill senior-level gaps; and,
- There will be lower barriers to growth and companies will be better supported as they scale.

Implementation Considerations:

This is a high effort recommendation, which will require the following:

- A coordinating entity, such as NMM, to oversee the design, development and implementation of recommendation elements;
- Industry cooperation, to ensure that the data gathered is reflective of the aggregate needs of IDM companies in the province; and,
- Investment in the development of platforms and programs.

Success Criteria

The effectiveness of this strategy can be assessed in terms of companies' ability to scale as necessary and their overall satisfaction with the quality (i.e., availability of the skills needed) and quantity of talent in the province. The tracking mechanism recommended above would allow for ongoing measurement of the workforce needs of companies as well as their ability to meet those needs in a timely manner (e.g., through tracking number of days from posting to hire).

3.2 Capitalize on Success

Background

Since the release of *The New Media Census* in 2012, there have been numerous stories of growth, expansion and innovation in Manitoba's IDM industry, such as SkipTheDishes and Bold Commerce. More than ever before, the elements of an IDM "hub" are in place in Manitoba, and it is time to communicate the stories that best exemplify this evolution to the entrepreneurs, workers and companies that are in the province, or may be considering it as a home.

However, there remains limited recognition of the industry's recent successes, not only among global peers and markets, but also within the industry itself. This self-perception and concurrent lack of recognition has hampered confidence levels, both on the side of companies seeking investment and potential investors. Although IDM companies in Manitoba are generally not at a stage where they are seeking investment (see Figure 21 in Section 2.3), access to strategic partnerships would serve to enable access to new markets and opportunities. The perception of a small, dormant industry also serves as a barrier to securing such partnerships, as well as attracting talent to sustain growth, as prospective entrants into the workforce may see limited opportunities within the industry.

It is recommended that Manitoba's IDM industry identify and celebrate, internally and externally, its successes. Promotion of the companies, products and innovations that have been cultivated in the province should form a central part of the industry's brand.

Objective

By capitalizing on success, Manitoba's IDM industry will be in a better position to attract and retain talent and investment to the province.

Key Elements

1. Develop an industry narrative centred on success stories.
2. Establish a communications strategy for the industry's brand.
3. Engage in targeted in-market promotion of successful Manitoba companies, in the form of showcases communicated to key markets, including growth territories in other parts of Canada and the US.

4. Communicate the growth trajectory (positive and negative aspects) to the next generation of entrepreneurs.

Expected Outcome

This is a high impact recommendation, which will contribute to the following outcomes:

- Improved industry self-confidence; and,
- Increased capacity to compete in global market for clients, investment and talent.

Implementation Considerations:

This is a high effort recommendation, which will require the following:

- Marketing investment and program development (e.g., mentorship);
- Ongoing identification of new success stories; and,
- Strategy (and additional human resources) to promote success stories to audiences/markets where they will have the most impact.

Success Criteria

The success of this strategy can be assessed in terms of the industry's (and anchor companies') recognition among industry peers and in other jurisdictions. Brand recognition can be tracked through periodic surveys of the industry. The effectiveness of in-market promotion can be measured through tracking of investments, talent, clients and strategic partners attracted by companies that are showcased in target markets.

3.3 Support Access to Market

Background

Access to markets was reported as a key barrier to growth for IDM companies in Manitoba (see Figure 26 in Section 2.5). Many of the companies that anticipate growth over the coming years do so in markets (often new markets) outside of Manitoba and indeed, outside of Canada. At the same time, IDM companies in Manitoba (and around the world) are experimenting with new products and services for markets that are still being defined, and for clients who may not yet understand their own needs.

In targeting these markets and aiming to connect with and educate potential consumers and clients about new products and services, IDM companies benefit from some existing support programs, including NMM's organization of trade delegations to markets and events (e.g., Game Developers Conference). While current programs have been highly effective, they typically benefit groups of companies that are targeting the same markets. Manitoba's IDM industry, however, is expanding to new types of products and services that serve heterogenous and continuously evolving markets. In fact, a significant growth opportunity exists at the intersection between IDM and other sectors, such as health, education or financial services.

The Access to Festivals and Access to Markets programs, delivered by On Screen Manitoba, have been particularly effective in supporting linear media producers' business development activities nationally and internationally. The self-directed program is distributed through an adjudicated application process and serves as a useful example of a mechanism for supporting expansion into specific markets, as determined (and justified) by the beneficiary. Given the range of products and potential target markets, Manitoba's IDM companies would also benefit from proactive guidance and information to supplement any financial support for accessing these new markets.

It is recommended that NMM continue to support access to market through existing trade missions, but also expand the program to cover specific markets and sectors that may be the target of individual companies

Objective

By supporting access to market, Manitoba's IDM industry will be better equipped to bring the plurality of products they create to key markets across Canada and around the world.

Key Elements

1. Continue to support *groups* of IDM companies to access *shared* markets, such as for video games, through trade missions and other forms of outreach.
2. Introduce support for *individual* IDM companies that target *specific* markets, through financial support (e.g., for travel) and professional development and matchmaking opportunities.
3. Proactively identify and support IDM companies reach new key markets.

Expected Outcome

This is a <u>high impact</u> recommendation, which will contribute to the following outcomes:

- IDM companies will have increased capacity and global competitiveness; and,
- IDM companies will have a better understanding of emerging opportunities.

Implementation Considerations

This is a <u>high effort</u> recommendation, which will require the following:

- Continued delivery of effective programs;
- Design, development and implementation of expanded program elements; and,
- Development of new knowledge about opportunities in target markets as well as the establishment of new connections in those markets, both by industry and by the support organizations delivering programs.

Success Criteria

The effectiveness of this strategy can be assessed in terms of the ability of IDM companies to establish themselves in new and emerging markets. Beneficiaries of existing and new access to market programs should be consulted to track successful business transactions that result for supported market access, as well as connections that do or have the potential to result in strategic partnerships and other future opportunities.

3.4 Align Industry Support

Background

The IDM industry in Manitoba has access to specific support mechanisms, such the MIDMTC and NMM training and market access programs. IDM companies can also access a plethora of more general innovation, commercialization and other business support programs offered by the provincial and federal governments. However, given the variety of companies, products and services, and stages of maturity that exists in the industry, some stakeholders shared that it can be challenging for companies to identify the best combination of support programs that are suitable to their goals at their respective stages of development, or even know the support programs for which they may be eligible. Interviews also revealed that some of the more general, industry-agnostic programs incentives are not always reflective of IDM business models.

As the Province continues to develop, deliver and refine programs that support business and product development, there is a need to ensure that the programs are responsive to the needs and align with the dynamics of the IDM industry, especially as the industry continues to evolve, so that IDM companies can take advantage of these programs.

It is recommended that NMM works to ensure that the basket of support programs available to IDM companies work in tandem to help them achieve their business objectives. This coordination should begin with an alignment of external incentive structures with the needs of the IDM industry, based on NMM's expertise. It should be followed by the development of a strategy for clear communication and a single point of entry for IDM companies to access guidance on the most suitable combination of supports for their product/market/stage of development.

Objective

By leveraging NMM's deep understanding of IDM companies to ensure the range of existing industry support speaks to their needs, Manitoba's IDM industry will be able to maximize the impact of programs and investments, support growth and development at all stages of company maturity and be able to identify gaps in the support landscape to more effectively allocate future investments.

Key Elements

1. Deliver proactive (and customized) guidance to industry on how to maximize use of programs and understand the relationship among the various incentives.
2. Develop resources for navigating support landscape by company focus and growth stage.
3. Ensure that existing general business supports, such as small business investment or workforce development incentives, are aligned with the needs of IDM companies.

Expected Outcome

This is a medium impact recommendation, which will contribute to the following outcomes:

- The IDM industry will maximize the impact of existing programs; and,
- IDM companies will have access to an efficient, clear and easy navigable continuum of services that support the variety of products and services they deliver, markets they serve, and stage of maturity they are in.

Implementation Considerations

This is a medium effort recommendation, which will require the following:

- Cooperation among support entities;
- Additional human resources to enable more proactive outreach to the industry and track company satisfaction with programs; and,
- Development of resources/guidance material.

Success Criteria

The effectiveness of this strategy can be assessed in terms of the uptake of support programs by IDM companies, the level of company satisfaction with support programs, and the ability to use feedback to continuously improve the suite of programs available to the industry.

3.5 Create an Adaptive Tax Credit

Background

As noted in Section 2, the nature of the IDM industry in Manitoba requires an inclusive definition of IDM, and the types of companies and products that are encompassed by the industry. However, if it is the case that the boundaries of the industry continue to expand, then it is necessary that key support programs continue to reflect that that expansion.

It is recommended that the eligibility requirements of the tax credit be reviewed and clearly communicated to the industry, to ensure all eligible applicants are encouraged to apply. Once clarified, the eligibility requirements should be re-examined and expanded as necessary to reflect the range of IDM products and services being developed in Manitoba.

Objective

By creating an adaptive tax credit, Manitoba's IDM industry will benefit from a more future-proof support mechanism that can continue to serve a fluidly-defined industry as it continues to evolve and will support innovation and development in all segments of the industry.

Key Elements

1. Review definition and communication of eligibility requirements to ensure clarity.
2. Explore an expansion of eligibility requirements to include new types of IDM products, to include service work not currently eligible that otherwise fits IDM definition, as well as products created for internal use.

Expected Outcome

This is a high impact recommendation, which will contribute to the following outcomes:

- Flexible tool that is more future-proof; and,
- Increase incentives to become more efficient/internally innovative.

Implementation Considerations

This is a high effort recommendation, which will require the following:

- Legislative and administrative changes; and,
- Resources to communicate requirements to the industry.

Success Criteria

The effectiveness of this strategy can be assessed in terms of an increase in uptake, as well as the overall economic activity of the IDM industry in Manitoba, which in turn will result in a better return on the Province's investment in the industry.

3.6 A Combined Approach

The five strategies outlined above are designed to be mutually supportive. For example, updating the tax credit criteria to be more adaptive and exploring market access programs will require coordination among support entities as well as communication to the industry. In turn, adequate access to talent will be essential to fulfilling the increased industry activity resulting from improved support programs and the promotion of the industry by celebrating its successes.

These strategies, in combination, serve to address the barriers that stand between Manitoba's IDM companies and the opportunities facing them in the continually expanding global market for their products and services. Mitigating these challenges has the potential to drive innovation in Manitoba, both within the industry itself and across all other sectors of the economy and enable competitiveness and advancement in a multitude of other industries across the global economy.