



Digitalization is a journey.

TOOLKIT #1

Ontario Museum Digitalization Index (OMDI)

OMDI Assessment, Benchmarking, and Roadmap Tool

Ontario Museum Digitalization Index



Digitalization is a journey.

Introduction:

George Brown College (GBC), the Ontario Museum Association (OMA) and Toronto History Museums developed three toolkits as part of a collaborative research project lead by primary researcher Karen Sinotte with support from the Natural Sciences and Engineering Research Council of Canada (NSERC).

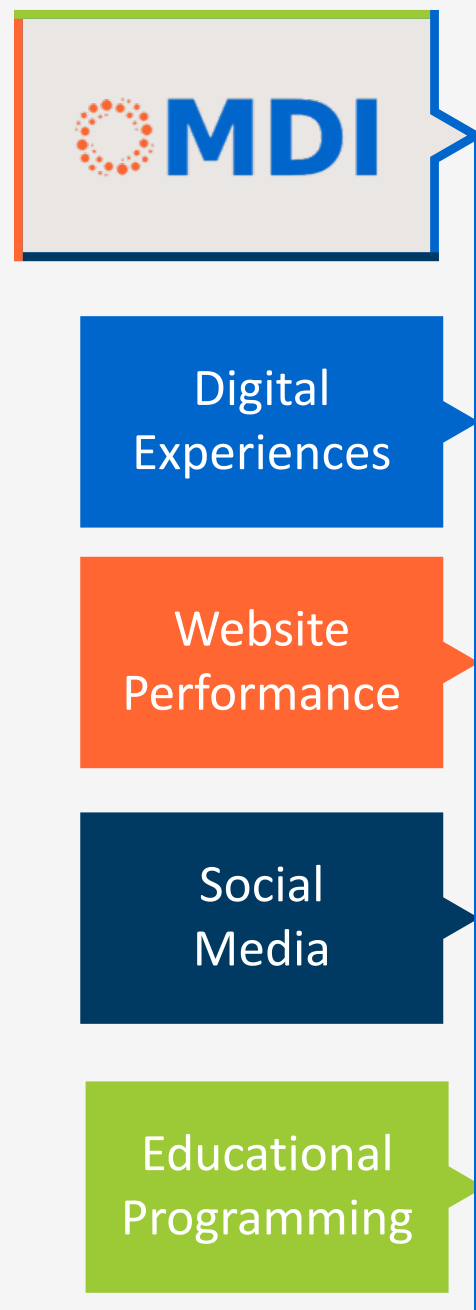
Toolkit #1 is an interactive tool that provides museums with a simulated score on the Ontario Museum Digitalization Index (OMDI). In using this toolkit, museum professionals will be able to:

1. Assess a museum's digital effectiveness and develop a simulated OMDI score.
2. Understand how the OMDI score was developed.
3. Know the digital characteristics of similar and higher-scoring museums.

The aim is to help museums in Ontario better able to assess their current state of digitalization and to use the attributes of more highly-digitized museums as a vision to support their planning for digital success.

Instructions:

The simulated OMDI score is measured using four components: digital experiences, website performance, social media presence, and educational programming. Instructions are provided for each component. Please ensure that you save this fillable form if you plan to complete it in stages or would like to refer to it later.



Ontario Museum Digitalization Index

Digital Experiences

Introduction

"Digital experiences" refers to the use of digital technologies by a museum to enhance and enrich visitor experiences in-person and online. Based on their literature review, the research team identified 45 digital experience types and categorized them into one of three levels on the digital continuum: digitization, digitalization, and digital transformation.

Digitization

Digitization is the conversion of analog content into a digital format. The digitization of an exhibition, for example, would involve converting text, images, or sound to a digital format (PDF, JPG, MP3, others). Digital experiences in this group present digital content in the simplest way with minimal interaction.



Downloadable Activities



Online Gallery



Video Activities



Digitalization

Digitalization is the use of digital technologies and data to impact how work is done, transform interactions between visitors and organizations, and create new revenue and value-producing opportunities. Digital experiences in this group are typically more data-driven and require some hardware and software support.



Virtual Tour



Podcast



Museum App



Digital Transformation.

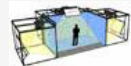
Digital transformation is the integration of digital technology into all areas of an organization, resulting in fundamental changes to how the organization operates and delivers value. Digital experiences in this group are typically the most data-driven, require both hardware and software support, and often integrate emerging trends.



Augmented Reality



Virtual Reality

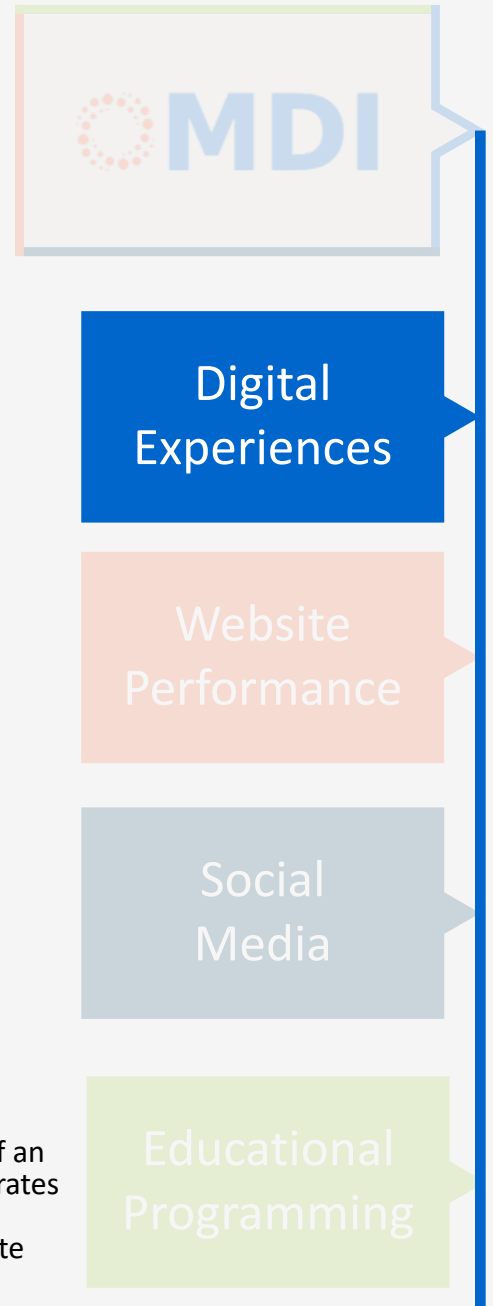


Immersive Experience



Instructions:

Identify and count the unique digital experiences offered by your museum. Input those values into the following three pages and then select **Assess**. The PDF form will generate a digital experiences index score and provide some insight about that score.



Ontario Museum Digitalization Index

Digitization Experiences	Count
Archives and Special Collections. <i>Browser-based digital inventory of curated and unique materials (high resolution scans, photos, etc.).</i>	
Audio Exhibit. <i>Audio used as the primary component of the exhibit.</i>	
Audio Guide. <i>Narrated explanations, information, and insights about an exhibit.</i>	
Audio Tour. <i>Self-guided audio tour.</i>	
Blog. <i>Content curated by the museum to share stories, insights, and resources beyond operational details.</i>	
Activities/Resources for Download. <i>Downloadable activities, primarily aimed at children such as colouring books, puzzles, etc.</i>	
Multimedia Video. <i>Visual presentation combining various media elements.</i>	
Online Collections. <i>Browser-based digital inventory of museum collections (high resolution scans, photos, etc.).</i>	
Online Lectures. <i>Virtual presentations delivered through digital platforms like zoom.</i>	
Photo/Virtual Gallery. <i>Curated collection of images with some degree of descriptions .</i>	
Video Activities. <i>Recorded video lessons or activities with less degree of editing or production (typically on YouTube or Facebook).</i>	
Video Gallery. <i>Curated collection of videos.</i>	
Virtual Exhibit. <i>Digital presentation that recreates or showcases collections, artifacts through online platforms</i>	
Digitization Experiences	
Digital Transformation Experiences	

Ontario Museum Digitalization Index

Digitization Experiences	
Digitalization Experiences	Count
Game. <i>A game featured with the museum directly related to its programs, exhibits, or its collection.</i>	
Interactive Lessons. <i>Audio used as the primary component of the exhibit.</i>	
Interactive Map. <i>Maps with pins featuring historical information.</i>	
Museum App. <i>A mobile application designed for a specific museum or hosting specific museum content.</i>	
Online Shop. <i>Online shop selling museum merchandise, gift, or art pieces.</i>	
Playlist. <i>A curated selection of audio tracks accessible through a streaming platform to accompany a specific exhibit.</i>	
Podcast. <i>An audio program or series that provides informative and engaging content related to museum collections, history, interviews, or other storytelling.</i>	
QR Code. <i>Scannable QR Codes that bring users to a specific webpage.</i>	
Simulator. <i>Interactive device designed to replicate real-world experiences.</i>	
Touchscreens. <i>Display with an interactive feature and visual content.</i>	
Virtual Field Trips. <i>Live-online presentations to classrooms, touring the facilities, museums .</i>	
Virtual Programming. <i>Pre-recorded virtual museum programming (typically videos on YouTube or Facebook).</i>	
Virtual Tours. <i>Self-navigated or pre-recorded walk-through of the museum or exhibition.</i>	
Visitor Device. <i>A portable tool such as a smartphone or dedicated device, with interactive features and information resources.</i>	
Digital Transformation Experiences	

Ontario Museum Digitalization Index

Digitization Experiences	Count
Digitalization Experiences	
Digital Transformation Experiences	
3D Scanning. <i>Digitally capturing the physical details of an artifact (including size, shape, and texture) and creating a three-dimensional (3D) replica in a digital format. 3D scans can be used, for example, as part of a digital collection or for creating a physical replication.</i>	
Artificial Intelligence. <i>Uses artificial intelligence in some capacity (can be a kiosk, virtual chatbot, etc.).</i>	
Augmented Reality (AR). <i>An exhibit that makes use of AR technology, projecting 3D images into real-life space.</i>	
GPS Location Tracking. <i>Apps/Experiences that use GPS location as a primary feature to provide a personalized experience .</i>	
Immersive Experience. <i>Integration of multi-sensory elements and interactive technologies to deeply engage visitors. Requires both hardware and software support.</i>	
Virtual Reality. <i>An exhibit using headsets or other devices, allowing users to interact with and navigate through the simulated space.</i>	

Ontario Museum Digitalization Index

Website Performance

Introduction:

A website can provide a museum with a stable and controlled environment that serves many purposes:

- Provide visitor and event information.
- Provide access to online collections and digital experiences.
- Promote school and other educational programs.
- Promote memberships and encourage donations.
- Promote visitor engagement and community building.





The research team measured the website performance of 434 small and medium Ontario museums using five metrics:

- Total visits
- Bounce rate
- Visit duration
- Pages per visit
- Traffic share

Instructions:

Using any free or paid website traffic checker, input the values for your museum into the chart below and then select **Assess**.

The research team used data from Similarweb.

Website Performance	Value
 Total Visits. <i>Sum of all visits on desktop and mobile from the last month.</i>	
 Bounce Rates. <i>Average percentage of visitors who view only one page before leaving the website.</i>	
 Visit Duration (in seconds). <i>Average duration of time spent on the website.</i>	
 Pages per Visit. <i>Average pages per visit.</i>	



Ontario Museum Digitalization Index

Social Media

Introduction:

Social media platforms enable museums to:








- increase visibility and reach.
- promote collections, exhibitions, and events.
- promote visitor engagement and community building.
- share educational content.

The research team measured the social media presence of 631 small and medium Ontario museums across seven platforms using two metrics:

- Presence of a profile that is managed by the museum
- Total followers/subscribers

Instructions:

Indicate if your museum manages a page/profile for this social media platform and the number of followers/subscribers and then select **Assess**.

Social Media Platform	Profile	Followers
 Facebook. <i>Dominant platform with diverse demographics.</i>		
 Instagram. <i>Popular for visual content, storytelling, and engaging with audiences.</i>		
 X (Twitter) <i>Valuable for real-time updates, news, and conversations.</i>		
 YouTube. <i>Ideal for sharing video content including virtual tours, interviews, and educational material.</i>		
 TikTok. <i>Short-form video content and a mostly-younger audience.</i>		
 Pinterest. <i>Useful for showcasing collections and DIY projects.</i>		
 Flickr. <i>Ideal for sharing high-quality images.</i>		



Ontario Museum Digitalization Index

Educational Programming

Introduction:

Educational programming includes educational programs for schools and other educational programs that help people to learn specific knowledge or skills. School programs are designed specifically for school children and are based on the Ontario curriculum. Other educational programs are designed for and open to the public.

Museum educational programming is predominantly offered in-person (67%). Digitalization has enabled some museums to offer educational programming in hybrid formats and online formats.

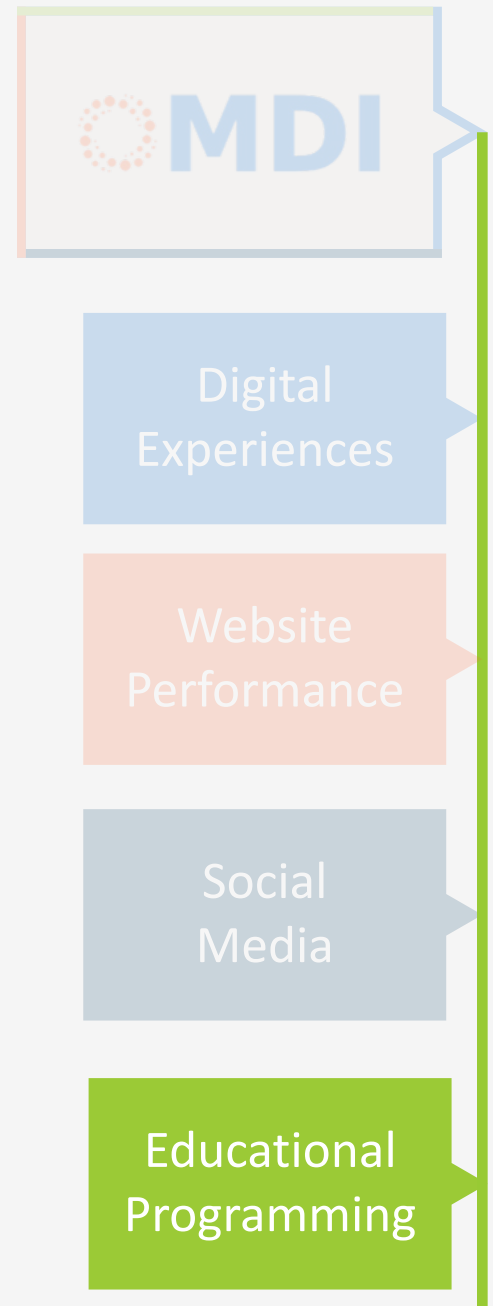
In-person programs include lessons and workshops; guided tours and field trips; curriculum-based programs; professional development for educators; and special exhibitions and events.

Online programs include virtual seminars, lessons, and workshops; virtual guided tours and field trips; online-curriculum-based programs; online professional development for educators; downloadable resources and activities; and self-guided virtual exhibitions.

Instructions:

Identify and count the school and other educational programs offered by your museum in person, in hybrid formats, and online. Then select **Assess**.

Educational Programming	Count
School Educational Programming:	
In-person	
Hybrid	
Online	
Other Educational Programming:	
In-person	
Hybrid	
Online	



Ontario Museum Digitalization Index

OMDI Museum Clustering

OMDI Museum Clustering.

Cluster analysis, a data mining method, helped to classify the 631 small and medium-sized Ontario museums into groups called clusters. Cluster analysis can reveal associations and structures that were not apparent in the data but are sensible and useful once found. Using the component scores, four clusters were defined:

- Digital Novices
- Digital Explorers
- Digital Innovators
- Digital Other

Instructions.

After completing all four sections, select the Assess button at the top right of this page. A simulated OMDI score will be generated.



	Count of S&M Ontario Museums	Digital Experiences Score	Website Performance Score	Social Media Presence Score	Educational Programming Score	OMDI
Digital Innovators	93	222	110	340	268	235
Digital Explorers	148	138	149	144	144	144
Digital Novices	162	125	197	1	67	98
Digital Other	228	1	3	44	26	18
Your Museum						

Ontario Museum Digitalization Index

Digital Innovators

Museums in this segment are characterized by their strong digital presence and engagement. They lead in providing robust digital experiences, active social media engagement, and comprehensive educational programs. They are predominantly located in urban areas and have significant funding and membership support.

These museums are at the forefront of digital innovation, using technology to enhance visitor experiences and educational outreach.



OMDI Scores: **

- Average OMDI Score: 234
- Digital Experience: 221
- Social Media: 339
- Websites: 110
- Educational Programs: 268



Immigrants in Canada from 0 to 5 years :*
5km: 43%
40km: 93%



School proximity:
5km: 21%
40km: 8%



Population Size: 3M



Seniors*
5km: 29%
40km: 75%



Urban Museum Centres:
Toronto (16), Ottawa (11), London (8)



Rural vs Urban
Urban: 91%
Rural: 9%

Firmographics:

- CMOG Funded: 7.6%
- OMA Member: 7.5%
- OHS Member: 2.4%
- Has a Scored Website: 6.5%
- Has a Strategic Plan: 5.4%
- Has One or More Educational Programs: 7.9%

*The values of: Population around Museums Personas, Canadian in Canada from 0 to 5 years, Seniors are based on 1570 respondents of survey.

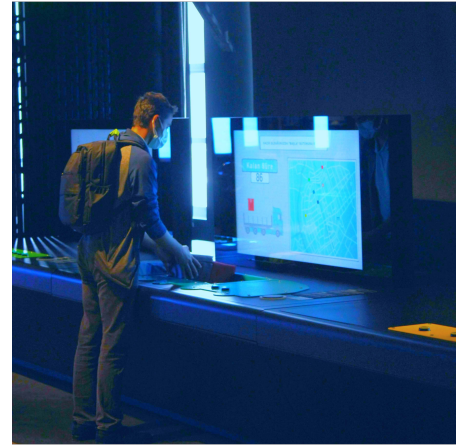
**OMDI Scores: average = 100.

Ontario Museum Digitalization Index

Digital Explorers

Museums in this segment have moderate digital engagement. They offer digital experiences and are active on social media, though not as extensively as Digital Innovators. These museums are also mostly urban but have a mix of rural presence. They receive some funding and have membership in professional associations.

Digital Explorers are actively working on improving their digital capabilities and are on a journey toward greater digital integration.



OMDI Scores: **

- Average OMDI Score: 143
- Digital Experience: 149
- Social Media: 144
- Websites: 137
- Educational Program: 144



Immigrants in Canada from 0 to 5 years :*
5km: 40%
40km: 95%



School proximity:
5km: 21%
40 km: 12%



Population Size: 2M



Seniors*
5km: 32%
40km: 83 %



Urban Museum Centres:
Toronto (13), Kingston (11),
Hamilton (6)



Rural vs Urban
Urban: 79%
Rural: 21%

Firmographics:

- CMOG Funded: 8.2%
- OMA Member: 1.9%
- OHS Member: 3.2%
- Has a Scored Website: 13.2%
- Has a Strategic Plan: 3.8%
- Has One or More Educational Programs: 9%

*The values of: Population around Museums Personas, Canadians in Canada from 0 to 5 years, Seniors are based on 1570 respondents of survey.

**OMDI Scores: average = 100.

Ontario Museum Digitalization Index

Digital Novices

Museums in this segment are beginning to explore digital tools and strategies. While they maintain informative and engaging websites, their overall digital engagement, including social media activity and educational programming, is moderate to low. These museums are primarily urban and represent a large population. They have less funding and fewer memberships in professional associations compared to Digital Innovators and Explorers.

Digital Novices have significant room for growth due to their high proximity to schools.



OMDI Scores: **

- Average OMDI Score: 97
- Digital Experience: 125
- Social Media: 1
- Websites: 196
- Educational Program: 67



Immigrants in Canada from 0 to 5 years :*
5km: 44%
40km: 93%



School proximity:
5km =28%
40km = 55 %



Population Size: 6M



Seniors*
5km: 34%
40km: 79 %



Urban Museum Centres:
Toronto (29), Ottawa (9),
Kingston/Hamilton (5 each)



Rural vs Urban
Urban: 82% Rural:
18 %

Firmographics:

- CMOG Funded: 4.0%
- OMA Member: 1.3%
- OHS Member: 2.5%
- Has a Scored Website: 20.6%
- Has a Strategic Plan: 2.9%
- Has One or More Educational Programs: 4.9%

*The values of: Population around Museums Personas, Canadians in Canada from 0 to 5 years, Seniors are based on 1570 respondents of survey.

**OMDI Scores: average = 100.

Ontario Museum Digitalization Index

Digital Other

Museums in this segment have minimal digital engagement. They have the lowest scores in digital experience, social media activity, and educational programming.

These museums may be urban or rural, but have the highest rural presence among the segments. They lack funding, strategic planning, and professional memberships, indicating substantial areas for development.

Digital Other museums are in the early stages of digital transformation and require significant support to enhance their digital capabilities and overall engagement.



OMDI Scores: **

- Average OMDI Score: 18
- Digital Experience: 0.6
- Social Media: 43
- Websites: 2
- Educational Program: 26



Immigrants in Canada from 0 to 5 years :*
5km: 64%
40km: 95%



School proximity:
5km: 30%
40km: 25 %



Population Size: 2M



Seniors*
5km: 46 % 40km:
87 %



Urban Museum Centres:
Toronto (30), Ottawa (12),
Hamilton (7)



Rural vs Urban
Urban: 75 %
Rural: 25 %

Firmographics:

- CMOG Funded: 4.3%
- OMA Member: 0.0%
- OHS Member: 3.5%
- Has a Scored Website: 26.8%
- Has a Strategic Plan: 1.9%
- Has One or More Educational Programs: 2.4%

*The values of: Population around Museums Personas, Canadians in Canada from 0 to 5 years, Seniors are based on 1570 respondents of survey.

**OMDI Scores: average = 100.