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HOSPITALITY AND TOURISM OPERATIONS RESEARCH EVENT
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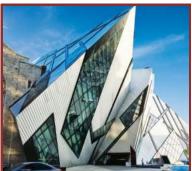
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I. Executive Summary

Introduction

Since its founding in 1912, the **Royal Ontario Museum**, hereinafter referred to as the ROM, has been a cornerstone of North America's cultural landscape, drawing over one million visitors annually. With its vast collection of 18 million artifacts across 40 galleries, Royal Ontario Museum showcases art, culture and nature from around the world and across the ages. As one of North America's most visited museums, the ROM connects the past, present, and future through world-class exhibitions and community outreach. However, the ROM has been slow to adopt

Figure 1: Exterior of the ROM



artificial intelligence technologies, falling behind broader industry trends. With nearly three in four museums across North America now investing in digital transformation efforts to meet evolving audience expectations, the ROM has an opportunity to reposition itself as a leader in innovation. By strategically integrating AI, the museum can expand accessibility, streamline operations, and create more immersive experiences for diverse audiences. This plan outlines the approach to help make this vision a reality.

Research Methods

Primary Methods



Interview with VP

Conducting an interview with ROM VP, Kelly Harper allowed our team to gain insight on company processes, current Al strategies and areas of improvement.

First-Hand Analysis

Visiting the museum firsthand allowed us to simulate a real customer experience. This made it easier to identify flaws and areas of improvement from a customer perspective.

Employee Surveys

40 surveys were distributed to ROM employees to allow us to analyze employee experiences, a critical area for detecting any frequent visitor concerns.

Secondary Methods



Online Reviews

Our team gathered a variety of reviews from reviewing platforms from Google Reviews, Yelp, and Trip Advisor. This was used to identify any key areas of strength and issue in customer experience, allowing us to identify what to improve upon.

Annual Reports and Statements

Our team collected information from the annual statements presented on the ROM's websites. This gave us insight on company statistics such as visitor numbers and financial overview, allowing us to formulate budgets and observe visitor patterns.

S.W.O.T Analysis

STRENGTHS

- · Iconic facility with distinct architecture.
- Strong brand awareness.
- Strong academic and governmental relationships.
- Extensive collection and global reach.

WEAKNESSES

- Parking and venue navigation issues.
- Lack of directional resources.
- Staff capacity is low.
- Lowered visitor numbers.

OPPORTUNITIES

- · Lots of available membership benefits.
- Strong digital presence as collections are easily accessed online.
- The ROM receives a lot of its profit from government support and grants.

THREATS

- Inflation in Toronto lowering discretionary spending.
- Toronto public transportation issues affect visitor access.
- Increased competition.

Key Findings and Conclusions

Findings

Conclusions



Visitors frequently found the venue difficult to navigate and difficult to access with confusing parking.



Preserve and Innovate

Physical infrastructure should be addressed by modernizing systems.



Due to effects of the pandemic and rising inflation, the ROM has had difficulty reaching pre-pandemic visitor numbers.



Accessibility and Audience

Visitor experience must be enhanced. especially new demographics in Canada.



Outdated IT and its lack of Al processes limit the ROMs ability to stay competitive and provide a seamless visitor experience.



Technology and Transformation

Invest in technological advancements and Al to maintain strong digital presence.



Rising competition from direct and indirect competitors puts pressure on the ROM to differentiate itself.



Heritage and Future

Position as a leading 21st-century museum, attracting both local and international visitors



Proposed Strategic Plan



Based on extensive research and findings, we have developed the ROM PATH to Success, a strategic two-year plan designed to modernize the museum, enhance the visitor experience, and address key challenges such as navigation difficulties, limited engagement, and accessibility barriers. At the heart of this plan is the **ROM Explorer App**, a comprehensive digital platform that integrates all proposed AI features into one seamless, user-friendly experience. These features have been organized under **Operation GUIDE**, a framework that ensures the ROM delivers a distinctly 21st-century museum experience.

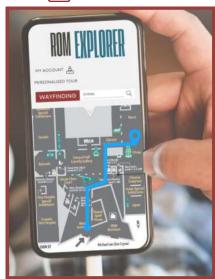


Figure 2: Proposed App Sketch

Objectives of the Proposed Plan



Increase visitor numbers by 25% over 2 years.



Revenue Growth

Increase revenue by **15%** over 2 years.



Accessibility

Achieve a accessibility satisfaction score of 9/10 or higher on visitor surveys.



Brand Outreach

85% proposed ROM Explorer App adoption rate





Guided by Al Tour Guides

The Al Tour Guide will offer personalized, multilingual, and audio tours of the ROM tailored to individual interests, allowing visitors to experience guided tours at their own pace.



Unlock Navigation with Al Wayfinding

The Wayfinding feature on the app will use AI machine learning to provide real-time, step-by-step directions to help visitors navigate the ROM's complex layout with ease.



Inspire with Discovery Mode

The app's Discovery Mode will recommend exhibits and events based on visitor interests. Gamification features, including scavenger hunts and rewards, will make exploration fun and encourage repeat visits.



Deliver Enhanced Accessibility

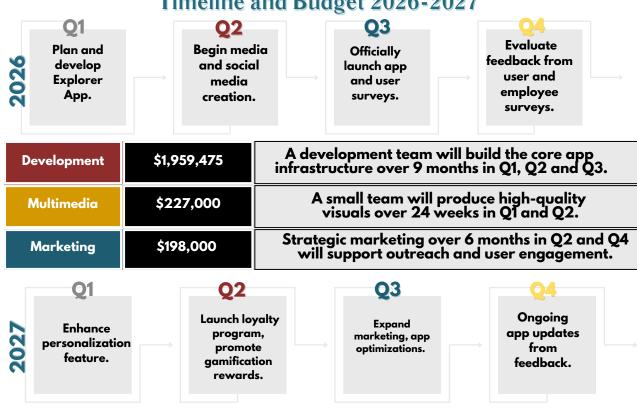
The ROM Explorer App will break down language and accessibility barriers. Improved signage will ensure the museum is welcoming to visitors of all abilities.



Engage and Build Loyalty

The ROM Explorer Loyalty Program will reward visitors for participating in challenges or attending events, fostering long-term engagement.

Timeline and Budget 2026-2027



Return On Investment

Ongoing technical support, updates, and system

monitoring will occur throughout the fiscal year.

Invested: \$2,842,275 Returned: \$7,816,256 **ROI: 175.7%**

\$458,600

Maintenance

II. Introduction

A. Description of Business or Organization

Since the turn of the 20th century, the Royal Ontario Museum (ROM) has stood as the heart of entertainment in the bustling city of Toronto, Ontario. In 1912, a small group of Torontonian

art aficionados envisioned a museum in the world-renowned city. With funding from the the university of Toronto and the Federal government, a sanctuary for world culture, natural history and art was born.





Figure 3: Birds Eye View of ROM

Today, located in the heart of the city on Queens Park, the ROM is home to over 18 million items and 40 galleries, occupying 214,000 square feet. Their feat of attractions garners over one million visitors annually, earning the title of Canada's most visited museum, and one of the top ten museums in North America. The ROM is also the country's preeminent field research institute, with a diverse range of experts who help to fulfill the ROM's mission to transform lives by helping people understand the past, make sense of the present, and come together to shape a shared future. Adhering to this mission, the museum houses specimens from the intersecting worlds of art, culture and nature from around the world and across time featured in 40 gallery and exhibition spaces. Alongside this, the ROM hosts a multitude of community events, exhibitions, and immersive experiences, offering a variety of avenues for the public to immerse themselves in the museum. Interested visitors can purchase general ticket admissions, reserve group tickets for corporate events with a guided tour, arrange school visits, or become a ROM member, where they can enjoy benefits, such as member events and exchange weekends, enjoy previews of select exhibitions and gallery openings, and discounts at the museum and with ROM partner organizations. Appealing to all ages, the ROM offers a PA day camp and Saturday club for children, providing supervised educational activities, along with ROMKids Junior, an early learning tour gallery. ROM After Dark is a 19+ themed after-hours event series, featuring curated music, visual arts, pop-up performances, and distinctive food and drink, designed for adults looking for a fun, art-driven night out.

Looking to the future, the ROM is committed to ensuring everyone can experience its diverse collections. They envision a museum with greater access for visitors of all abilities and economic backgrounds, as well as students, new Canadians, and others who may not otherwise have the opportunity to visit the museum. They aspire to be universally recognized as one of the **foremost cultural institutions** as they expand the boundaries of knowledge.

Figure 4: ROM Exhibit

B. Description of the Target Market

As a concrete figure in Toronto's tourism scene, the ROM has reached through Toronto's vast population, and tourists to the city from around the world, nationally and internationally. Situated on one of the busiest streets of the city, they attract a wide array of consumers. Through methods such as postal code analysis, exit interviews and marketing e-lists, the ROM is able to gather a substantial amount of information on their visitors.

		Table 1:	<u>Toronto Target Market</u>
Demographics	Psychographics	Geographics	Behaviorgraphics
Toronto is the 4th largest city in North America, with three million residents. The median total household income in Toronto is \$84,000, and the city continues to have a higher rate of low income than Canada. DEMOGRAPHICS	Toronto residents have a heavy reliance on public transit (TTC), cycling, and walking in urban cores. Several post-secondary schools and graduates, and 64% of Toronto residents have a post-secondary education.	Toronto is the capital of Ontario, Canada. Located on the northwestern shore of Lake Ontario, forming the border between Canada and the United States. Major highways, a Great Lakes port, and Canada's largest international airport, Toronto Pearson.	96.5% of Canadians report regular internet use. Toronto's best-known neighborhoods, Chinatown and Kensington Market, feature a mix of shops and restaurants that reflect the city's multicultural diversity.

As a key landmark in Toronto's downtown core, the ROM appeals to a diverse audience. In 2021, Toronto's downtown had a population density of 16,608 people per square kilometer, making it the second-most densely populated downtown in Canada. Toronto stands apart as a benchmark of multiculturalism, and the ROM attracts a variety of ethnic backgrounds. In 2017-18, 21% of visitors self-identified as European, 14% as East Asian, 10% as South Asian, 10% as South American, 8% as American, 5% as African, and 4% as Middle Eastern. According to official statistics, more than half of the city's residents were born outside of Canada. To engage this demographic, the ROM focuses on attracting newcomers to Canada as a growth segment, offering activities such as practice English programs and the Canoo Cultural Pass to provide free General Admission to the museum.

PSYCHOGRAPHICS

Toronto is a dynamic hub for finance, arts, and sports. The downtown core is the city's central business district and cultural core. The primary audience for the ROM values culture, education, and unique experiences. Toronto offers a bustling social scene with a variety of entertainment options that cater to these values, including Ripley's Aquarium, the Rogers Centre, and the CN Tower. Young adults living in high-rises are drawn to the fast-paced urban lifestyle. They are highly social and engage in activities that connect them with their peers, making the ROM's offerings, like ROM After Dark and ROM Conversations, ideal. Residents also prioritize social connection and intellectual engagement, and the ROM's educational events and cultural programs offer this.

GEOGRAPHICS

The ROM is easily accessible to both local residents and visitors from surrounding areas, supported by Toronto's robust transportation network. Toronto's public transportation system includes subway lines, streetcars, and buses, and the ROM is located along Line 1, providing efficient access for urban commuters. The ROM's strategic location in Toronto's downtown core also makes it surrounded by densely populated suburban neighbourhoods, such as Mississauga, Brampton, and Vaughan. Toronto's network of 400-series highways facilitates easy access from these neighbouring cities to the downtown core, allowing families and tourists from the suburbs to reach the ROM within 30–40 minutes on average. Toronto Pearson International Airport receives millions of international visitors each year. The city's proximity to the U.S. also contributes to a significant number of American tourists.

BEHAVIOURGRAPHICS

The behaviour of ROM visitors reflects a variety of motivations, engagement preferences, and visit patterns. Special exhibitions are a significant draw for visitors, with 36% of visitors from outside the Greater Toronto Area attending specifically for these events. Permanent galleries attract 26% of visitors from Ontario, highlighting a strong interest in the ROM's core collections. A broad interest in general visits is also evident with 30% of visitors from outside the Greater Toronto Area attending for an overall museum experience. Digital engagement also plays a large role in the ROM's visitor patterns, with 92.3% of web traffic originating from Ontario and 88% of online ticket sales coming from the province. Many visitors are motivated by the opportunity for learning and cultural enrichment, with a focus on art, history and science, reflecting the ROM's educational mission. The ROM also attracts a considerable amount of families and school groups, welcoming over 100,000 students from thousands of schools each year.

The ROM targets on four key growth segments: suburban families, younger residents of downtown areas, active experience seekers, and new Canadians in the Greater Toronto Area and throughout the province. These segments have been identified through detailed consumer segmentation and developed into target market profiling.

Sarah:

Sarah is a 36 year-old female who immigrated to Canada with her family 15 years ago to the suburbs of Mississauga. She owns a older single-detached home, has a university degree, and works a job in the services. Eager to indulge her children, she enjoys going to theme parks, professional sports games and allinclusive resorts. Seeking to connect with others in their communities, she responds to messages that recognize her Attraction for Crowds.

John:

John is a 25 year-old male who resides in the urban core of Toronto, renting a high-rise apartment condo. He grew up in Brampton, and he holds a university degree from Toronto Metropolitan University. He has an upper-middle wage from his job in business. Young and unencumbered, he travels widely and enjoys urban nightlife, going dancing and barhopping, hitting concerts and attending food and wine shows.

Kate:

Kate is a 39 year-old female who is a second-generation Canadian. She works in a high-paying management position, owns a semi-detached house, and commutes to work by public transit. She has no children, lives with her wife and they enjoy patronizing their local neighbourhood's bars, restaurants, cinemas and theatres.

Zhang:

Zhang is a 30 year-old male who immigrated to Canada from China a year ago. He rents a small condo and speaks limited English. He has a medium-paying job and is struggling to assimilate into Canadian culture.

C.Overview of the business or organization's current artificial intelligence strategies and practices

The ROM's current AI practices are very limited as many employees fear for the security of their jobs in this new age of artificial intelligence. The ROM heavily relies on manual labour to perform many of their tasks such as maintenance, feedback, etc. Despite not having many AI processes, the ROM is open to adopting AI that may limit repetitive and redundant tasks.

A current AI process that the ROM is using is dynamic pricing, which is a strategy where prices are adjusted in real-time based on demand. This includes an AI system that processes vast amounts of data including demand patterns, competitor pricing and customer behaviour. It sets prices based on future predictions by analyzing customer demand fluctuations, seasonal changes and market trends.



Figure 5: Ticket prices on the ROM website.

AR + Interactive Exhibitions: Over the past few years, the ROM has begun implementing AI and related technologies to create immersive artistic experiences. This includes their 2012 "Ultimate Dinosaurs" exhibition, which featured an augmented reality (AR) app which allowed visitors to visualize life-like representations of dinosaurs. In 2018, the ROM presented a feature of "Phillip Beesley:Transforming Space", an immersive installation which blended architecture and environmental design with AI to create visually stunning and interactive environments.

Plan Ahead Pricing: A system that ROM uses to encourage customers to buy their tickets in advance in order to save money. The earlier that the ticket is purchased, the more they will be able to save. This is done through a very straightforward ticketing calendar on the website, which lists the ticket price of booking a reservation in their present time.





Figure 6: ROM AI Exhibits

There have been countless industry trends that incorporate AI processes including virtual guided tours, virtual assistants and chatbots and automating routine tasks, creating a more efficient future. However, the ROM chooses to perform these tasks manually through in-person guided tours, e-lists, interviews and on-site maintenance.

III. Research Methods

A. Description and rationale of research methodologies selected to conduct the research

Objective: The research methodologies employed in this report were chosen for their effectiveness in gaining insight into the Royal Ontario Museum, with a focus on current visitor and employees perspective. By developing diverse and comprehensive results, preliminary conclusions can be drawn and applied to the formulation of Al driven strategies to rectify weaknesses. Internal and external research processes included secondary research, board director interviews and employee surveys, and rationales for these methodologies are outlined below.

Interview with ROM VP, Kelly Harper General overview of company processes. First-Hand Analysis Visited the museum for an immersive understanding.

Employee
Surveys
Conducted a
questionnaire for
employees.

Online Reviews
Online Reviews
were reviewed
and conclsions
were derived.

Annual Reports +
Statements
Garnered
company statistics
and financial
processes.











Nov 2024

PRIMARY RESEARCH Our primary research provided valuable insights into the ROM, focusing on the current AI processes it has adopted. We assessed employee experiences, evaluated business operations, and identified any areas of concern. To gather this information, we employed a range of primary research methods, including Zoom interviews, employee surveys, and direct in-person observations of the museum.

Interview with ROM Vice President: The first step of our research was finding knowledge through primary sources by interviewing Kelly Harper, the Vice President of Visitor Experience at the museum. As a core executive lead, she was able to give us insight on the inner workings of the employee team, the ROM's different exhibits, customer satisfaction and current use of AI processes as she oversees these aspects daily. Our interview with Kelly played an integral part in our report as we were able to garner direct and relevant information about its strengths and weaknesses.



Figure 7: Interview



Figure 8: ROM Interior

First-Hand Analysis: By going to the ROM, we were able to simulate a real customer experience. We carefully observed the museum's different exhibits in order to see which ones garnered the most attention, the variety of the knowledge each area covers and what could be expanded upon. Beyond observing the artistry, we took a note of the accessibility of the building. Specific areas of notice included how easy it was to find information about exhibits, directory, hygiene, etc.

Employee Surveys: Another important primary source of data to include is employee experience. This provided us unique insight into the inner workings of the organization in order for us to design a plan that aligned with employee needs. With the permission of ROM executives, we sent out a Google form with questions about employee sentiment, work culture and environment, strengths and weaknesses, efficiency, and leadership and management.

SECONDARY RESEARCH In addition to our primary research, we also conducted additional research to gain an understanding of customer satisfaction and company finances to formulate a strategic plan and budget. This was done through the exploration of online reviews, annual reports, and financial statements.

Online Reviews: Next, we began to extract secondary sources of data from online review platforms such as Yelp, Google Reviews and Trip Advisor. This allowed us to gain a greater scope on some of the issues that customers faced which could potentially be improved by Al. We specifically focused on any recurring issues to target central problems.



Figure 9: ROM Reviews

Annual Reports & Financial Statements: Another important secondary source of data to include is employee experience. The Annual Report describes Museum activities in the past fiscal year and accounts for all monies spent. As required, the accounts and financial transactions are audited by an independent auditor appointed by the Board and the Annual Report is presented to the Lieutenant Governor in Council.

B. Process used to conduct the selected research methods

Interview with Vice President: We conducted a zoom call in the beginning of November with ROM's Vice President of Visitor Experience, Kelly Harper. She was very receptive to questions and provided in-depth responses to our questions about the AI processes of the ROM, potential implementations of AI, any areas of concern with customer experience, and general knowledge of the museum's work processes. We also obtained permission to conduct an employee survey.

Sample Questions

- Are there any repetitive tasks or data management processes that could benefit from AI?
- Are there any common issues that arise from visitor feedback?
- How does the ROM keep track of their target audience and visitor retention?

Employee Survey: Near the end of November, we created a Google form with questions that aimed to cover various areas of employee satisfaction and and work environment. The survey was distributed through email and accumulated 40 responses. The survey consisted of 12 questions which consisted of multiple choice, short answer, and linear scales.

Online Reviews: In order to gain a deeper understanding of customer satisfaction, we referred to a variety of sources of online reviews such as Yelp, Google Reviews, and TripAdvisor. In order to notice any reoccurring themes, we organized the reviews from one star to five stars, and noted down any prominent issues and positive features.

Annual Reports and Financial Statements: As an agency of the government, the ROM releases all annual reports, strategic plans, and financial statements on their website. These reports were thoroughly analyzed and information was drawn to formulate conclusions.

First-Hand Analysis: Near the beginning of December, we went to visit the ROM in-person in order to gain a first-hand experience of the museum. Before visiting, we defined our objectives and listed down the various aspects that we wanted to cover, such as the different exhibits, accessibility, and customer service. When arriving at the ROM, we noted down the accessibility of getting to the venue through various means of transportation. In our case, we observed the parking and signage leading up to the ROM. Throughout our visit, we paid specific attention to the availability of information, the interactivity and educational value of the exhibits and how easy the content was to understand, It was also important to note down the overall aesthetics and functionality of the museum and the amenities that they offered.



Figure 10: In-Person Visit

IV. Findings and Conclusions of the Study

A. Findings of the Research Study

From our research, we were able to conclude key positives and negatives of the ROM, organized in the SWOT and PESTLE analysis below:

STRENGTHS

- Iconic Facility
 - Beautiful architecture and central location in Toronto, Canada
 - Clean, well-maintained spaces
- Extensive Collection
 - One of North America's top 10 cultural institutions, housing 13 million artworks.
- Global Reach
 - Over 1 million people engaged globally through travelling exhibitions in 2022-23
 - International leader in field research.
- Strong Partnerships
 - Strong academic relationships with University of Toronto and other institutions
 - Receive grants from from provincial and federal government.
- Recognized Brand
 - Leading brand awareness, positive image,

WEAKNESSES

- Parking + Venue Navigation Issues
 - Problems with parking availability and clutter near the building.
 - Issues with navigation, broken elevators and lack of clear signage
- · Lack of Directional Resources
 - Absence of guidebook and clear directory.
- Staff Capacity
 - Need for increased staff capacity to meet future goals and demand.
- Financial Challenges
 - Long-term debt and balance sheet issues
 - Ongoing financial operating challenges, particularly due to the pandemic.
 - the number of museum visitors remain below pre-pandemic levels

OPPORTUNITIES

- Digital engagement + Virtual Access
 - ROM at Home and their website provides global access to collections and research
 - Opportunities to expand digital content and reach more audiences via social media platforms.
- Membership Benefits
 - Membership programs offering VIP access, discounts, and exclusive deals, fostering customer loyalty
- Financial Support
 - Royal Ontario Museum is a Major 100 charity. In 2023, the Royal Ontario Museum received \$51.3m in donations and \$27.3m in government funding
- OpenROM project: Redesign its first floor, expand its galleries, and make ground level exhibits free to visitors

THREATS

- Heavy Inflation in Toronto
 - Inflation decreases consumer discretionary pricing.
- Aging Infrastructure
 - Aging base building infrastructure
 - Outdated museum equipment.
- Increased Competition
 - Rising competition from other attractions in the Greater Toronto Area.
- Disruptions to Operations
 - Disruptions from public transportation issues affecting visitor access
- Target Audience Changes
 - Reduction in immigration levels may impact the ROM's target demographic of new Canadians.

Political Political

The ROM receives significant funding from the Ministry of Heritage, Sport, Tourism and Culture Industries.

E conomic

There is persistent financial stress from pandemic recovery, aging infrastructure, and capital needs. Economics downturns can limit tourism and thus limit visitor numbers.

Social

Serves Canada's multicultural population, including programs like ROMCAN and free admission for Indigenous Peoples.

Strong emphasis on educational and accessibility programs.

echnological

Existing digital systems need upgrades to remain competitive and enhance efficiency.

Legal

Compliance with laws ensuring access for persons with disabilities, supported by programs like free tickets for support programs.

Protection and use of content and research materials.

nvironmental

Aging infrastructure requires sustainable renovations and improvements. ROM's focus on climate change education aligns with global environmental awareness.

KEY FINDINGS

From the information above, we deducted a few key areas of issue:

#1: Visitor Experience and Accessibility

From our interview with Kelly and online reviews, we were able to find that visitors experience navigation issues within the museum, including unclear signage, lack of guidebooks, and broken elevators, negatively impacting visitor satisfaction.

#2: Visitor Decrease

Since the pandemic, the ROM has seen decreases in visitor numbers as consumers are more reluctant to engage in entertainment. Although visitor numbers have risen to approximately 930,000 in 2022, it has still not reached pre-pandemic levels. Coupled with rising Toronto inflation, which reached 1.9% in November 2024, consumers may not be inclined to visit the ROM.

#3: Technological Gaps

Outdated IT and digital systems limit the ROM's ability to provide a seamless visitor experience and stay competitive.

#4: Competitive Market and Audience Challenges

Rising competition from other attractions like Canada's Wonderland and entertainment services like Netflix puts pressure on the ROM to differentiate itself. Reduced immigration levels may also impact ROM's target audience, particularly new Canadians.

B. Conclusions Based on the Findings

ROM's PATH to Success: To determine conclusions from the business study, the PATH acronym was used to address key performance factors, overcome challenges and maximize opportunities.



Figure 11: ROM Interior

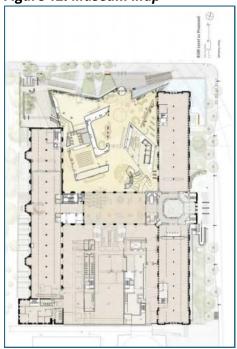
In-Depth Explanation of Conclusions

Conclusion #1 (P): Preserve and Innovate: The ROM has a longstanding legacy of being a leader in the arts, an element that is important to preserve while also advancing new technologies. Many of the positives that were researched center around their comprehensive collection and beautiful exhibitions. Although the ROM is known for its beautiful architecture, it is important to fix aging facilities to ensure safety and potentially make it easier to navigate. Simultaneously, innovation in its programming and operations can elevate visitor experiences and efficiency as ROM seems to fall behind its competition in the implementation of AI.

Conclusion #2 (A): Accessibility and Audience:

While the ROM boasts an extensive collection, the museum layout is very strange and hard to follow. Many negative consumer experiences is due to this, and this is even identified by ROM officials themselves. It would be very expensive to fully redo the museum layout, thus another strategy is needed for visitors to understand the layout and to make the museum more accessible and enjoyable. The current offerings at the information desk from volunteer visitor guides include map guides, brochures, directions, and suggestions, but these are very tedious to access and use, and streamlining this process would make visits much easier and increase overall consumer experience.

Figure 12: Museum Map



Conclusion #3 (T): Technology and Transformation

Technology and transformation are vital to ROM's future, allowing it to enhance both operational efficiency and visitor engagement. Upgrading outdated IT and digital systems is critical to maintaining a seamless visitor experience, from online ticketing to interactive exhibits. Implementing tools like AI can open doors to virtual tours and wayfinding, eliminating redundant employee processes and increasing outreach, making the museum more accessible and appealing to a diverse audience.

Conclusion #4 (H): Heritage and Future

The ROM must focus on future-proofing its operations through strategic renovations and upgrades that align with sustainability goals. Expanding global partnerships, like the recent collaboration in India, further strengthens its position as an international leader in cultural and educational exchange. In recent years, ROM has seen a steady decline in American and global visitors. By making their offerings more accessible to increasing demographics in Canada, such as new immigrants, a rapidly increasing Toronto population, the ROM can spread its mission to a diverse audience and increase their visitor counts.

V. PROPOSED STRATEGIC PLAN

A. Objectives and Rationale of the Proposed Strategic Plan

At the core of the hospitality industry lies consumer experience, and the ROM is no exception. The comprehensive research study conducted indicated a pressing need for the enhancement of the ROM's current processes to align with its 21st-century ambitions and improve the overall museum experience for all ROM guests. The ROM is a cornerstone of Toronto's cultural and entertainment industry, but it has faced challenges in recovering its visitor numbers post-pandemic. With the current economic climate making discretionary spending less appealing, the museum must adapt to remain competitive and relevant. By utilizing the research and conclusions from the primary and secondary research processes, we can create a strong strategic plan to reshape existing resources and activities that require revitalization, and implement revolutionary strategies to bring the 21st century museum to life. The proposed ROM PATH to success strategic plan will allow the ROM to address key pain points such as poor navigation, limited accessibility, and barriers, while also creating a more engaging and personalized experience for visitors to modernize the museum, improve visitor satisfaction, and ultimately increase attendance and visitor retention.

Figure 13: ROM Exterior

Visitor Growth is essential to the ROM's strategic plan because the primary goal is to increase the number of visitors to the museum, especially as attendance has not fully recovered and competitors are ncreasing. By implementing the plan, the ROM will become more accessible, engaging, and appealing to a broader audience. This objective will be measured by tracking year-over-year visitor numbers. Revenue Growth: The ROM's strategic plan should serve the dual purpose of enhancing the visitor experience and increasing revenue. By modernizing the museum, the ROM can attract more visitors, encourage repeat visits, and boost spending on tickets, memberships, and purchases. Revenue growth will be measured by tracking sales data, membership renewals, and average visitor spending. Accessibility and Inclusivity: A key part of the plan is to ensure the museum is accessible and inclusive for all visitors. By implementing the plan, the ROM will remove barriers to entry and create a welcoming environment for diverse audiences. This objective will be measured by tracking visitor feedback, accessibility ratings, and the number of visitors from underrepresented groups. Brand Recognition and Outreach: Increased brand recognition and outreach will help position the ROM as a leading 21st-century museum, attracting both local and international visitors. This objective will be measured by tracking visitor perceptions of the museum's modernity, media coverage of its innovations, and the adoption rate of the new proposed technologies.

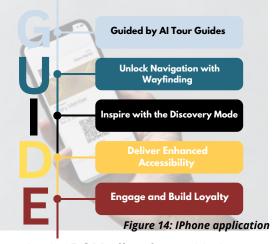
B. Proposed Activities and Timelines

The ROM's PATH to Success strategy aims to modernize the museum by focusing on digital innovation rather than solely physical upgrades. By capitalizing on the ROM's strengths, its vast collections and status as a cultural landmark, the plan will allow the museum will deliver a distinctly 21st-century experience that welcomes all visitors.

convenient customer experience, lower operational costs, and protect the integrity of ROM workers.

Operation GUIDE encompasses five main categories under which the proposed activities fall, along with the steps needed to get the plan up and running over two years. At the heart of this plan is the ROM Explorer App, a comprehensive digital platform that integrates all the proposed AI features into one seamless experience.

Our goal for implementing AI is to create a more



G- Guided by Al-Powered Tour Guides: Currently, the ROM offers free guided tours with admission. These tours last 45 minutes, and are conducted in English, with a limit of 20 people per group. These tours prove to be engaging, however they come with several challenges, such as the small group sizes limiting participants and tours only being available at set times. Additionally, the English-only format can be a barrier for newcomers to Canada who may not be fluent, who are one of the ROM's main target markets. The ROM Explorer App will feature an Al Tour Guide that makes the experience more flexible, accessible, and personal. Visitors will be able to choose when and how they want to explore, with tours available in multiple languages and tailored to individual interests. A visitor interested in ancient civilizations could receive a customized tour focusing on the ROM's ancient artifacts, while a family with young children would enjoy a kid-friendly experience. Moreover, the app will generate audio tours for every exhibit, including descriptions for visually impaired visitors. This feature will make the museum more welcoming to a diverse audience while reducing operational expenses by minimizing the need for human guides.

U - Unlock Navigation with the Wayfinding Feature: A prevalent visitor comment is the difficulty of navigating the ROM, an issue acknowledged by the ROM's board of directors. The museum's large and complex layout can be overwhelming, especially for first-time visitors or those with accessibility needs. The ROM Explorer App will include a Wayfinding Application, featuring a detailed map of the museum, clearly marking key areas such as exhibitions, food zones, washrooms, elevators, and more. Its key functionality will be real-time location tracking, allowing the app to pinpoint the user's position and offer step-by-step directions to their desired destination. For example, a visitor could type "Dinosaur" into the app, and it would provide the exact route from their current location, with estimated walking time and accessibility options.

- I Inspire with Discovery Mode: To encourage repeat visits, the ROM Explorer App will allow each user to create an account, where they can unlock exclusive benefits to create a dynamic, interactive experience using Discovery Mode. Using AI, the app will analyze visitor preferences and suggest exhibits, events, or activities tailored to their interests. If a visitor spends a lot of time in the dinosaur exhibit, the app would notify them about a new fossil display or an upcoming workshop.
- D- Deliver Enhanced Accessibility: The Explorer App will help the ROM with their commitment to making the museum more inclusive for all visitors, including newcomers, non-English speakers, and individuals with disabilities. These initiatives will ensure the ROM is a welcoming space for everyone, regardless of language or ability. Looking at the ROM workforce, the initial hesitancy for employing AI was to protect worker integrity. Therefore, employee surveys will be conducted to understand the app's impact on their workflow and visitor interactions.

Try out the AI technology used for the ROM Explorer App Wayfinding!

This is an earlystage prototype of our Al-powered navigation system, helping you explore the museum like never before!

and performance.



Figure 15: QR Code

E - Engage and Build Loyalty: To foster longterm relationships with visitors, the Discovery Mode will include a loyalty program where visitors can earn points for exploring different exhibits, completing challenges, or attending special events. The point system will reward repeat visits with discounts at the gift shop and free tickets to special exhibits. Following the app implementation, the app will be marketed through the ROM's social media channels, explained more thoroughly in the budget.

Q1 Q2 Q3 Q4 Jan-Mar Months 4-6 Months 7-9 **Months 10-12** Ongoing Test the app with a Develop Al Officially launch the Launch a full-scale Conduct customer small group of algorithms for ROM Explorer App, marketing campaign surveys to gather visitors and gather Begin creating on Instagram, feedback on the personalizing, feedback. multilingual promotional YouTube, and the app's usability, Launch a teaser materials ROM website to features, and overall support, and audio campaign on drive downloads. experience. tours. Instagram and Media Captures YouTube Q1 Q2 Q3 Q4 Months 1-3 Months 4-6 Months 7-9 **Months 10-12** Ongoing Analyze visitor Conduct employee Conduct customer Continue refining Launch the ROM feedback and usage surveys to gather surveys to assess and expanding the feedback on the data to refine the **Explorer Loyalty** satisfaction with the app's features app's features. Program app's new features new features and based on visitor Make adjustments and their impact on feedback. experiences. to improve visitor engagement. accuracy, usability,

C. Proposed metrics or key performance indicators to measure plan effectiveness

The GUIDE plan is aimed to expand company growth, recognition, and customer experience. To make sure that it does, we have developed a method to assess the effectiveness of our plan

through different scales.

Qualitative Customer Survey: After implementing our proposed plan, surveys will be sent to customers after their visit via email to measure customer satisfaction. If the responses indicate that the customers are satisfied with the changes, the plan will be considered successful.

Sample Questions

- In what ways did ROM Explore App improve your experience?
- What was your experience navigating the ROM venue?
- Rate your experience out of 5.

Qualitative Employee Survey: Monthly surveys will be sent to employees to measure the effectiveness of the strategic plan, as well as maintain employee integrity as this was the driving force behind the ROM's initial AI hesitancy. They will be asked questions about their perception on how customer experience has altered, their reception of the app, and their lessened workload as a result of the app.

Quantitative Measures

Table 2: Proposed Metrics

Table 2: Proposed Me			
Metrics	Method	Target	Calculation
Total Visitor Numbers	Track year-over- year attendance data.	Increase visitor numbers by 25% over 2 years.	Current Year Visitors – Pr evious Year Visitors Pr evous Year Visitors
Visitor Satisfaction Score	Customer post-visit surveys will incude a score to measure overall accessibility satisfaction (scale of 1-10).	Achieve a satisfaction score of 9/10 or higher.	Average score from visitor surveys.
App Adoption Rate	Measure the number of downloads and active users of the ROM Explorer App.	App Users Total Visitors · 100	
Revenue Growth	Track year-over- year revenue from ticket sales, memberships, and in-house purchases.	Increase revenue by 15% over 2 years.	Current Year Revenue – Pr evious Year Revenue Pr evious Year Revenue
Loyalty Program Participation	Track the number of visitors enrolled in the ROM Explorer Loyalty Program.	25% Loyalty Program Participation	Loyalty Pr ogram Members Total Visitors

VI. PROPOSED BUDGET

To clearly outline the budget, the costs will be presented across the first two years of implementation. The projected total for the first year is \$2,383,675, covering development, marketing, and multimedia expenses. The second year, dedicated towards maintenance and upkeep, is projected to cost \$458,600.

Table 3 Year 1 (\$2,383,675)

Development Expenses Description	Estimated Cost (USD)
Project Manager (1 at \$50.14/h, 40 hours/week)	\$78,000.00
Machine Learning Engineer (3 at \$79.72/h, 40 hours/week)	\$497,500.00
Software Developer (5 at \$62.58, 40 hours/week)	\$650,800.00
UI/UX Designer (3 at \$52.52/h, 40 hours/week)	\$327,700.00
Data Scientist (3 at \$64.98/h, 40 hours/week)	\$405,475.00

The app is expected to take 9 months to develop, scheduling the official launch for **Q3**. Working full time, a skilled development team of fifteen will have a combined cost projected at **\$1,959,475**. The team, including experts in project management, software development, artificial intelligence, user interface and user experience design, data analysis, quality assurance, and cybersecurity, will each play a crucial role in building a secure, functional and user-friendly ROM explorer app.

Table 4

Multimedia Description	Estimated Cost (USD)
Graphic designers (4 at \$22.73/h, 40 hours/week)	\$87,200.00
Cinematographers (3 at \$27.23/h, 40 hours/week)	\$78,400.00
Multimedia Specialist (2 at \$32/h, 40 hours/week)	\$61,400.00

High-quality visuals are essential to enhance the apps features and for the release of promotional media. A small team will handle all visual production over 24 weeks in **Q1** and **Q2**, working full time. The portion of the budget allocated towards multimedia is projected to be \$227,000.

Table 5

Marketing Description	Estimated Cost (USD)
Feature on ROM's website	\$0
Instagram Advertisements (\$13,000/month)	\$78,000
Youtube Advertisements (\$20,000/month)	\$120,000

After the creation of the app, it must be adequately promoted. This would be done by featuring it on its website, which is free of charge, and also on Instagram and YouTube advertisements, which prove to get the most reception from the ROM's previous campaigns. The total budget for marketing would equate to \$198,000 for 6 months, split between Q2 and Q4, covering a teaser campaign and full-scale marketing.

Table 6 Year 2 (\$458,600)

App Maintenance: Description	Estimated Cost (USD)
Backend Developers (2 at \$57.73/h, 40 hours/week)	\$240,200
UI/UX designer (2 at \$52.50/h, 40 hours/week)	\$218,400

In the second year, the budget will be allocated towards app maintenance costs and the launch of the ROM loyalty program. The app may require bug fixes, performance optimizations, and UI updates, which will be handled by a team of two backend developers and two UI/UX designers, equating to \$458,600 over the fiscal year.

INVESTED: \$2,842,275

RETURNED: \$7,816,256

ROI: 175.7%

Return On Investment

Following detailed reviews and additional conversations with ROM Vice President Kelly Harper, we believe the PATH to Success plan will significantly enhance visitor experience and drive long-term engagement. As a result, we project a return on investment of approximately 175.7%. This projection is supported by global trends in digital engagement across major museums, demonstrating the strong potential for digital strategies to boost visitor satisfaction and financial performance. The British Museum experienced a 29% increase in visitors after launching an Al-driven app, the Louvre's My Visit App reached an 80% adoption rate by offering personalized experiences, and the Museum of Modern Art (MoMA) reported a 17% revenue increase after implementing a similar Al-enhanced visitor experience.

Funding

The ROM will fund the ROM Explorer App through a combination of private philanthropy, government grants, and revenue-generating initiatives.



Revenue from special events, memberships, and partnerships will contribute to funding the app, ensuring its development and long-term sustainability.



Additionally, the ROM can apply for government grants aimed at supporting digital innovation and accessibility in cultural institutions, such as the Canada Cultural Investment Fund and Ontario Trillium Foundation.



Building on its strong donor base, the museum will seek contributions from private foundations and individual philanthropists. Recognized as a Major 100 charity, ranking among Canada's largest in terms of donations, the ROM has widespread community support and has received several donations, including a landmark \$50-million donation from the Hennick Family Foundation.

VII. Bibliography

Primary Research

Kelly Harper Interview (2024)

Employee Survey (2024)

Secondary Research

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