

VALIDATE ARTS2U BUSINESS MODEL - VABM RESEARCH REPORT

ABSTRACT

Introduction

With this research, the ELAN ARTS2U project has described comprehensive business and revenue modelling for the digital events listings service in the arts sector. This project supports science research of new technology models for the arts sector with potential to enhance and promote increased tourism in Canada. It is building on the scientific premises of metadata, natural language processing, machine learning and AI to the benefit of Canadian creative productions. It improves the potential for investment in Canadian locations and has the potential to develop employment positions in the high skilled technology job market. ARTS2U and its national collaborators are building an efficient and competitive Arts sector marketplace. By driving innovation in the arts and creative sectors, the ARTS2U initiative demonstrates that Canada is a leader in the international creative economy.

The described research findings bolster the ARTS2U business case. We have undertaken a comparative validation and testing versus existing listings models and arts metadata ecosystems. The research demonstrates interoperability with the semantic web, which makes the system compatible for integration with machine learning algorithms, and narrow AI (artificial intelligence) strategies to create better visibility of arts productions. This stage has further formalized collaboration with national partners to co-develop a national arts database and metadata utilities for the benefit of the arts sector.

Objectives

The general research objective was to work with ELAN's previous research to discover and implement improvements that will bolster the ARTS2U sustainable event listings model. A key primary objective was to undertake a comparative validation and testing versus existing listings models and arts metadata ecosystem. Review of the UX (user experience) and UI (user interface), and A - B testing of User Interfaces model was essential to generate feedback from system users. Growing the amounts of data (and as a result metadata) from beyond the Quebec market place is essential to inform the ARTS2U system with types and volumes to expand and test information input capacities, leading to an increasingly robust national model. ARTS2U also has the continued process to validate and test versus existing listings models and in collaboration with the arts metadata ecosystem.

Methodology

The VABM project was conducted by scheduling various research activities. Firstly, we integrated previous research to scope out a national vision for listings platform. Work funded by the Canada Council Digital Strategy Fund to complete the ARTS2U - DCCADI project was essential and several collaborations and findings focused the vision moving forward. Given the earlier finding, we proposed and implemented conceptual, technical, and legal updates to accommodate national onboarding vision. Once the technical updates were complete, we conducted a review for the expansion of the system. Given the costs of the revised modeling and with revenue streams, identified business models and financial projections were created to validate the business case for two scenarios. The first case is a Quebec model from which the system would strive to grow organically with acceptance by the arts sector from the Quebec region. Secondly, A national listings model was constructed to ascertain growth from the starting point of servicing all of Canada.

Summary Findings

The research uncovered findings in many important areas that validated the development and operations of ARTS2U. Legal Considerations, the Data Model, Technical Considerations, and Business Model findings are commented on in detail in the full version of the report. In all areas, further work is required to prepare the ARTS2U system for public release. Generally, third party validation of the business model and the legal framework is optimal to bolster the confidence for the actors within the system (event producers). As User Interface and User Experience (UI & UX), systems have been updated in the course of the current research additional testing is required. Increased content records that represented in the national modelling have pushed the technology requirements to be updated again before mass onboarding of the majority of Canada's arts producers.

Conclusions

ARTS2U has set out to solve problems specific to the Canadian arts sector. ARTS2U has surveyed producers across Canada. The solution proposed to Canadian producers is that we automate the collections of events data, thereby saving producer's time and providing an extensive metadata resource to market to audiences. The metadata generated by the system offer a potential to further employ AI and machine learning tools to the benefit of the arts sector.

Projecting that ARTS2U would manifest as a regional model is not a relevant strategy in the current global market. As ARTS2U has positioned itself within the sector nationally as a community-minded collaborator to the arts sector. The best opportunity for a sustainable model rests with launching with a Canadian model at a minimum, which eventually shows a breakeven. The goal of maintaining the bilingual model and developing the semantic infrastructure to accommodate French and English and potentially other languages remains essential to the identity of any Canadian model.

VALIDATE ARTS2U BUSINESS MODEL - VABM RESEARCH - HIGHLIGHTS

Research Activities

UI and UX review

Admin Interface









The administrative interface presented has been tested through private beta access to select producer/organizers users in the ELAN network. Access has been limited to a range of producer/promoters and organizers of events to assist with iterative development. The admin interface is of the number one priority for usability at this level will drive content growth in the system.

Public User Interface

The current Public User interface presented has been tested through private beta access. Access has been limited to a group of registered users and ELAN members. Development and testing of the public user interface is essential as it generates statistics for the administration interface, and public user statistics will be part of data packages which eventually will be product offered and included in the ARTS2U revenue model.

All Events (63)

Filter events Sort by date ^ v

 <p>#music</p>	 <p>#music</p>	 <p>#music</p>	 <p>#music</p>
<p>2020-03-13 Petit Campus TALL HEIGHTS</p>	<p>2020-03-14 MTelus SUBTRONICS</p>	<p>2020-03-15 L'Astral THEO KATZMAN</p>	<p>2020-03-15 Théâtre Corona BEST COAST</p>
 <p>#music</p>	 <p>#music</p>	 <p>#music</p>	 <p>#music</p>
<p>2020-03-18 Théâtre Corona DWEEZIL ZAPPA</p>	<p>2020-03-19 L'Astral ELI ROSE</p>	<p>2020-03-20 Maison Symphonique Orchestre symphonique de Montréal (OSM)- Gerald Finley and Jean-Yves Thibaudet: A Distinguished Encounter</p>	<p>2020-03-20 Le Ministère DRAMA</p>

Media Interface

The media interface presented has been tested through private beta access to select media outlets. Access has been limited to events to assist with iterative development. Development of the media interface is secondary to development, as it is not required to develop dashboard statistics in the current version

The screenshot shows a website interface with a navigation bar at the top containing a music note icon, dropdown menus for 'Venue', 'Promo', 'Type', and 'May -:', and search input fields. Below the navigation bar, the 'Lastest Shows' section is displayed. The featured show is 'Orchestre symphonique de Montréal (OSM)- Bach and Glass at the Organ'. The event details include 'Maison Symphonique', 'Saturday, May 2nd', and 'Doors: 12:00 AM // Show: 8:00 PM'. There are two buttons: 'Buy Tickets' (blue) and 'More Info' (grey). Below the event details, there is an 'Artist Information' section with the text 'Orchestre symphonique de Montréal (OSM)- Bach and Glass at the Organ'. At the bottom of the card, it says 'Promoters: Place Des Arts'.

The Feed

Is currently being distributed as an Application Program Interface (API) to limited media outlets and rendered within the ARTS2U admin interface for visual aid producers who have added events to the system.

Legal Framework

ARTS2U has developed Version 1 of Terms and Conditions for both public users (the audience) and for Producers (artists and event organizers who will offer data to the system). We have also had these documents vetted by our legal representatives and have also had legal translations completed. The terms and conditions are currently posted on the ARTS2U website and for signing, is contingent to beta testings and participating in uploading information through the Admin interface. These Terms and Conditions represent the basis of agreement for producers who list content in the system and form a foundation on which to build a working governance model by the Producer users.

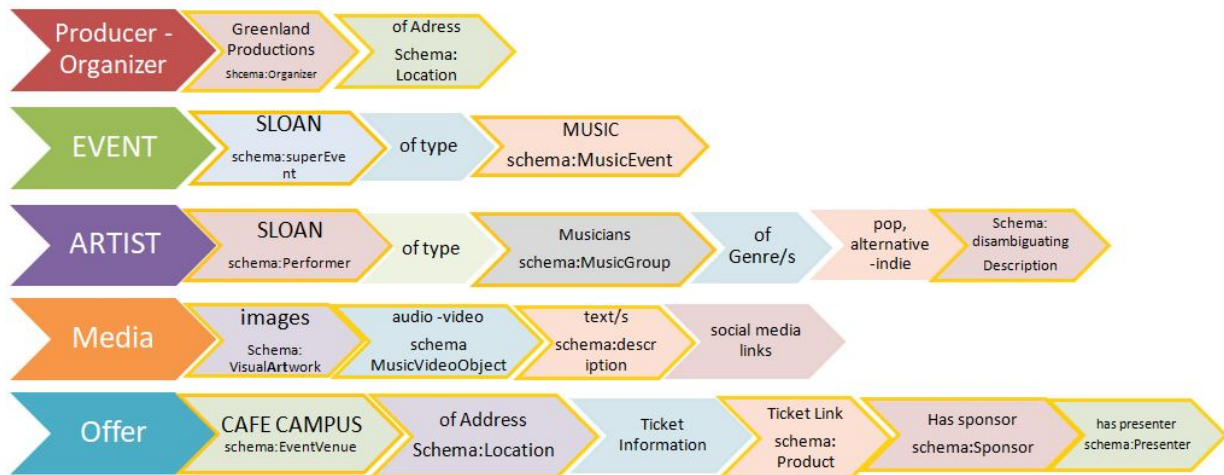
National Comparative Modeling

ARTS2U database is modelling data from the below list of websites. The list is expanding as the revised admin platform is updating. The ARTS2U website shows events as producers approve them. Private test view is available prior to producers before publishing online.

Semantic Modelling Interoperability and Linked open data

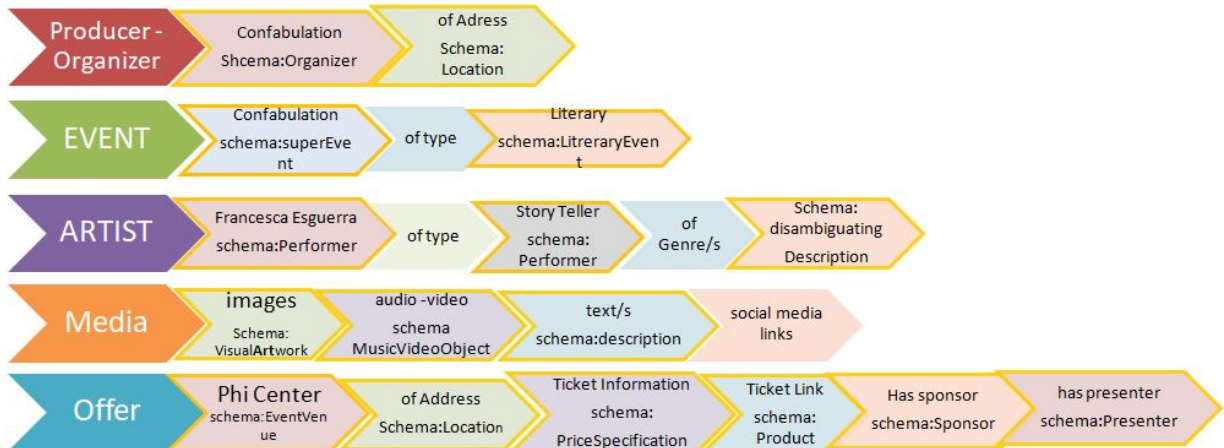
ARTS2U EVENTS SEMANTIC MAPPING – OUTLINE OF STRUCTURED (Machine Readable) DATA

Event : SLOAN @ CAFE CAMPUS , MONTREAL



ARTS2U EVENTS SEMANTIC MAPPING – OUTLINE OF STRUCTURED (Machine Readable) DATA

Event : CONFABULATION @ Phi Center , MONTREAL



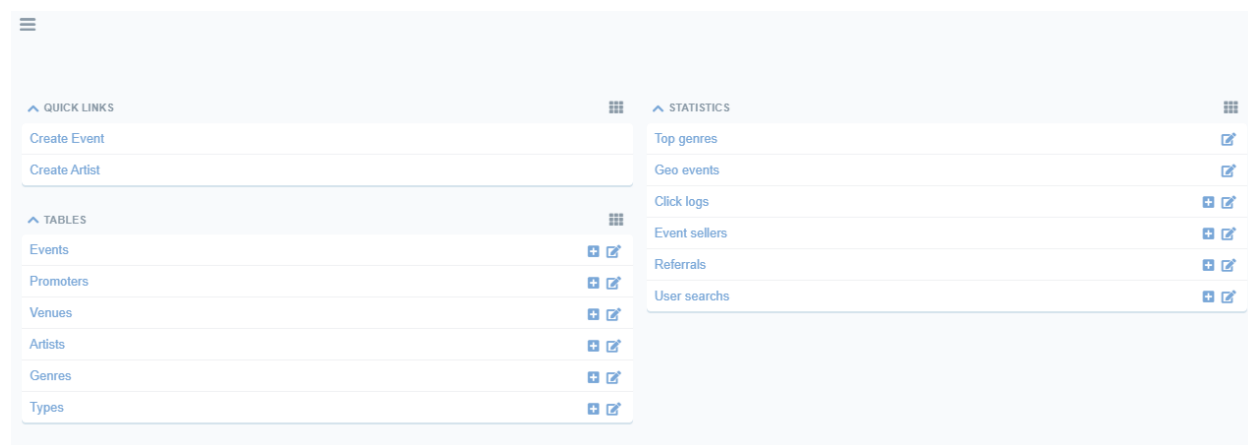
FINDINGS

Data Model

The ARTS2U data model is working with existing structure and mapping database fields into projected models in development and participating with collaborative initiatives to arrive at a state of the art solution. Currently, the arts sector remains beholden to transnational ticketing and listings systems such as Facebook, YouTube and Spotify for distribution and discovery of arts events. The ARTS2U advantage is that it uses a thin data set of event information that has been discovered as essential for an audience member to make a decision about whether to engage with an artistic event. The agnostic approach which means ARTS2U works across ticketing and social media platforms is a key advantage. The limited data set also allows ARTS2U to rapidly acquire data across geolocations and to save time and costly human resources for arts producers. The system also offers media a direct and authenticated, easily searchable, arts event information service which they can use as a time saving resource.

Extensive comparisons to other listings system models in existence in Canada have shown ELAN that no state of the art solution that works to add value to metadata is close to being launched on the market for the Canadian arts sector. Partial solutions exist to clean and structure data but they do not address sector wide visibility for arts events. Leading players fall into two categories of either being silo-ed event ticket sellers, or resellers who do not have the authority of the arts sector. Initiatives for digital literacy are active across Canada. Artists are learning the value of metadata. Sector wide awareness is pushing toward interoperable systems to list events is a common discussion among arts organizations and in arts conferences. Requests for Proposals to discover data governance frameworks and to document arts sector ontologies, taxonomies and vocabularies to work toward interoperability and increased visibility are in process.

DWG: Revised Admin Interface



Key Brand Development Considerations

Naming:

Though name search exercises have been undertaken, there is no pressure in the immediate timeline to make a decision to re-brand. The possibility of commercial usage of the database and the likelihood of commercial entities using the database information created by ARTS2U to launch other commercial brands which would benefit creators, artists and producers remains. With the ARTS2U brand currently being dependent on arts sector funders. Communicating the essence of the project has not been a problem by using the current ARTS2U branding. For the purposes of onboarding an array of national Producers the current brand will suffice.

Brand Strategy

With the build out of the data, structuring technical solution ARTS2U is providing a technology service to the arts sector Agility is essential to success in the technology service-providing sector. Turns are expected as new technologies are released. Monitoring the key performance pillars of strategy, costs and talent are tantamount for service providers.

Key Technical Considerations

Investigation of the technical model exposed key weaknesses that need to be addressed before launching a service of any kind. User preferences systems, recommendation engine, dashboard functionality for producers are key elements that must be further tested to guarantee quality assurance for all levels of users. Looking forward, Arts metadata connected at light speed (5G) in a frictionless and open framework will allow for massive intelligence opportunities for the arts sector.

UI/ UX testing is ongoing and iterative as rapid user growth capability is directly contingent to success. Development to determine seamless and frictionless paths to access desired content progress status though integrated are rudimentary and continually being upgraded.

Arts2u Admin Project

Description of work

Based on the in-depth technical review and update resulting from preliminary UI and UX testing, ARTS2U has embarked on a comprehensive reconstruction of the admin database table structure to achieve the desired objectives of art sector producers. Reconstruction of the admin interface will allow promoters and content reviewers to create new events while giving the system ability to gather advanced statistical information to render in dashboards for producers.

URI's

Unique Resource Identifiers must be developed to be interoperable with linked open data must be done in tandem with other services. Work to make identifiers interoperable with other Open data platforms such as Wikidata, Musicbrainz.org and Quebec based data consultants Espace Temps, and Artsdata.ca are ongoing as all are nascent in relation to newly created arts data and subject to revision and development over a period of one to three years.

Media Interface Development

Testing of the ARTS2U feed, placement in Iframe feeds with media outlets is ongoing and will continue with external websites. Advertising placement served from ARTS2U and taken from third party suppliers continues to be tested and will roll out incrementally as events content is increased in the system.

Rewards System Findings

The rewards system as conceptualized must be subject to more rigorous modeling. Breakeven and profitability can be disproportionately impacted by a poorly theorized system that may also affect the primary goal of customer loyalty. Depending on the company, direction and its commitments to stakeholders a decision to invest in Rewards programs are highly contentious. There are multiple questions to be considered including; is your loyalty program worth it? Are there other values that your loyalty program brings to you? Does your organization value customer incentives above profits?

Legal and Governance Findings

After completion of Version 1 of the Terms and Conditions for Public User and for Producer/Organizers, we are expressing our interest to satisfy the RFP with the Linked open data project, which has the deliverable: "*Sample terms and conditions that could be used to seek consent to release data as open or shared data.*" The texts we have offer to this nation project have evolved out of real word use cases for our ticketing and marketing services used by Greenland Productions(Concert Promoter)and TIXZA (Ticket Sales Platform) and Thepointofsale.com (Ticket Sales platform) and previous texts regarding a proposed digital distribution system for arts media. As a contributor to the RFP process, ELAN and ARTS2U are keen to discuss performing arts datasets currently in use and benefits and barriers to sharing and discussion of governance processes.

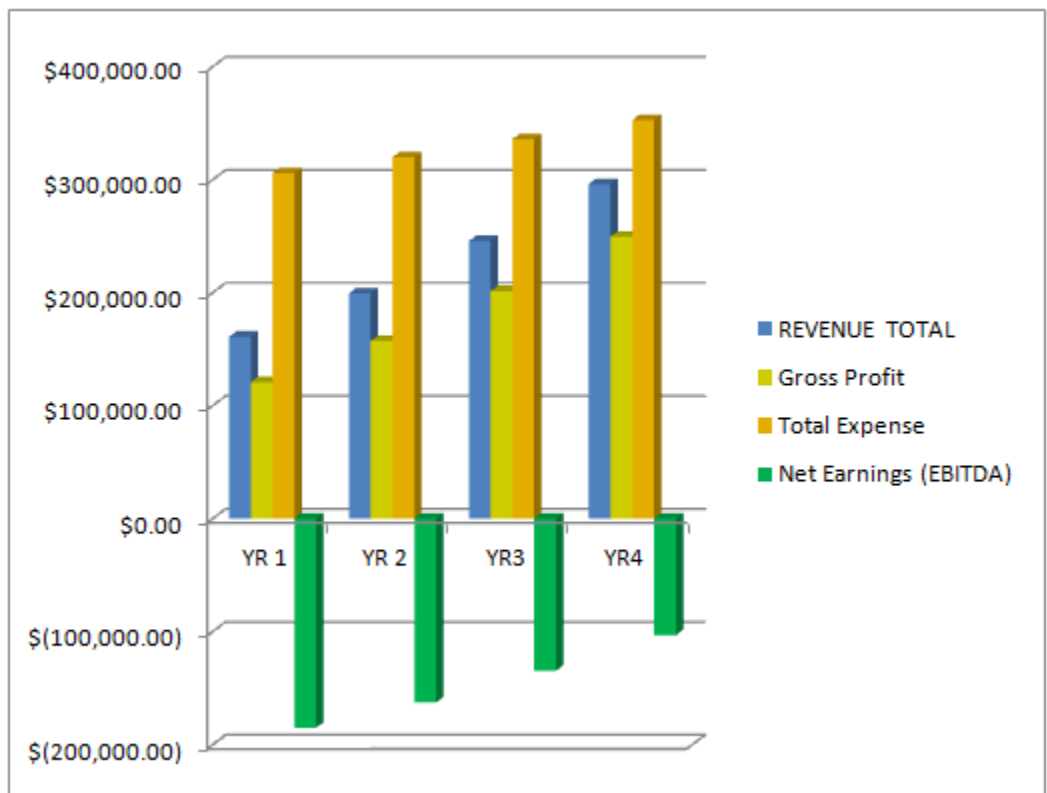
Business Model Findings

Quebec Model

The Quebec model shows a challenging path to sustainability other than continuous investment by arts funders, or reconsideration as service paid for by producers.

Four Year Financial Snapshot*

ARTS2U - Quebec	YR 1	YR 2	YR3	YR4
REVENUE TOTAL	\$161,000.00	\$199,500.00	\$245,750.00	\$296,087.50
Gross Profit	\$120,750.00	\$157,237.50	\$201,374.38	\$249,493.09
Total Expense	\$305,800.00	\$319,914.00	\$335,909.70	\$352,705.19
Net Earnings (EBITDA)	\$(185,050.00)	\$(162,676.50)	\$(134,535.33)	\$(103,212.09)



National model

Though more upfront investment is required, the Canada model shows a promising path toward sustainability.

Four Year Financial Snapshot*

ARTS2U National	YR 1	YR 2	YR3	YR4
REVENUE TOTAL	\$741,000.00	\$951,000.00	\$1,209,600.00	\$1,490,265.00
Gross Profit	\$555,750.00	\$756,487.50	\$1,005,361.88	\$1,275,814.97
Total Expense	\$1,087,260.00	\$1,136,919.00	\$1,193,764.95	\$1,253,453.20
Net Earnings (EBITDA)	\$(531,510.00)	\$(380,431.50)	\$(188,403.08)	\$22,361.77

*Disclaimer - Third Party validation

Certain information in the financial model constitutes forward-looking statements and projected future results based on our assumptions and estimates and are subject to risks and uncertainties. A variety of factors, including those described herein will cause actual financial results to be different that the projections discovered in this excel file ART2U initiative and ELAN maintain that a third party evaluation of financial projections is required in the next iteration of project documentation.

Conclusions

ARTS2U has set out to solve problems specific to the Canadian arts sector. ARTS2U has surveyed producers across Canada. The producer and event managers do not have time to upload information to hundreds of relevant media websites. They are spending the bulk of advertising dollars with Facebook which is a system not built for them. They need more visibility for their events and they need to engage directly with audiences to maximize sales. The solution proposed to Canadian producers is that we automate the collections of events data, thereby saving producer's time and providing an extensive metadata resource to market to audiences. The metadata generated by the system offer a potential to further employ AI and machine learning tools to the benefit of the arts sector.

The in depth cost analysis related to technical development and the cost of building automation to save the sector time has been verified by further scraper development across languages, geolocations, and in relationship from low to high volume events producers. As well as system and operations costs, human resources required to operate ARTS2U systems have been projected in two scenarios, one for Quebec and one for Canada. Working with the existing Quebec prototype has been fruitful in understanding maintenance of data security, content integrity, and consistent content flows, have given the project a realistic model on which to base operating assumptions.

An in-depth brand study has been conducted as well as name searches and marketing justifications created for the key branding elements to launch a listings service. The identification of specific digital arts products of value has created projectable streams of revenue through a digital event listing service. The revenue streams of 1. Ticket Service Revenue 2. Ad Revenue, 3. Artistic Content and 4. Data packages have been itemized to project sales revenues.

Comparison of Quebec vs Canada

The two scenarios modeled in the financial projections appear to follow divergent paths when we compare volumes achievable. Scalability is key and if the project does not present significant volumes of events in a given period, many of the higher volume benefits are not realized from the model. The larger the data pool (sample) the more value the data has. Projecting that ARTS2U would manifest as a regional model is not a relevant strategy in the current global market. As ARTS2U has positioned itself within the sector nationally as a community minded collaborator to the arts sector, the best opportunity for a sustainable model rests with launching with a Canadian model at a minimum, which eventually shows a breakeven. The goal of maintaining the bilingual model and developing the semantic infrastructure to accommodate French and English and potentially other languages remains essential to the identity of any Canadian model.

Recommendations

1. Continued iterative development and review of UI and UX processes are essential in work toward a public launch. Streamlining of UX with all levels of users to ensure rapid and frictionless onboarding of content suppliers and users must face more rigorous third party testing before public release.
2. Revised integration with transactional websites (Lepointdevente, com, and one other test case) so that users can be maintained within the system logs. User behavior need to be traceable from marketing outreach processes and initial engagement to completion of sales processes
3. Further review of products to be sold through the system including media containers and subscription options. Metadata packages have not been thoroughly reviewed, as the viewable data available at the time of this review is limited to Quebec source inputs. Metadata subscription packages need to be reviewed internally after national onboarding of producers and their content.
4. International research to prepare for export development in the global marketplace. Market is sixty B globally and the system is the first silo breaking technology in the event space
5. The financial plan documents herein should be subject to third party validation of the financial and revenue models. CPA review of the proforma documents including verification of product costs and sales projections is a requirement prior to achieving funding beyond Q1, 2021 and commercial launch of a brand.
6. ELAN must continue its Digital Literacy activities for its constituency. ELAN must continue in collaboration with other Canadian arts organizations is important evangelism for Canadian arts producers. Several initiatives wish that ELAN would take part in a national forum regarding Digital Literacy including Mass Culture, Arts pond DASA/ initiative, CAPACO Linked Digital Future RFP.
7. ELAN must continue funding research efforts to find investment to complete the ARTS2U minimum viable product. With the confirmation of additional national onboarding funded by the Canada Council and other regional pending funding ARTS2U is pushing very close to a launch able product. Connections made through ISED at the provincial level should be expanded to include research into Canada wide ISED programs, as the project is now a national concern.

VALIDATE ARTS2U BUSINESS MODEL - VABM
SUMMARY RESEARCH REPORT - WEB VERSION - completed - April 20, 2020

Project Manager, Daniel Webster

Program Manager Swati Khanna

ELAN Executive Director - Guy Rodgers