CREATION AND DISTRIBUTION OF MONETIZED ONLINE CONTENT FOR OLD STURBRIDGE VILLAGE'S VIRTUAL VILLAGE

ABSTRACT

The Virtual Village is a platform that Old Sturbridge Village (OSV) uses to distribute its content virtually. The goal of the project was to work through the Worcester Community Project Center to develop recommendations to create, distribute, monetize, and evaluate content for OSV's Virtual Village. This project was completed using a three-step methodology that consisted of interviews with village staff, a survey of OSV members, and an evaluation of OSV's current resources. Using the data collected from these methods, our team created recommendations outlining content categories, a distribution method, a monetization structure, and an evaluation plan for the Virtual Village. Additionally, we provided a sample video and survey to demonstrate our recommended delivery and evaluation plans.

TEAM MEMBERS

Patrick Chernjavsky

Matthew Scott

Anthony Striano

Spencer Tess

D Term

May 5th, 2020

ADVISORS

Professor Purvi Shah

Professor Sarah Strauss

SPONSOR

Old Sturbridge Village

INTRODUCTION

Old Sturbridge Village (OSV), the largest open-air museum in the northeast, is set in a period of transformative years in New England (OSV.org). It is a recreation of a typical rural New England town from the 1830s and aims to provide guests with a fully immersive experience from the time period. Unlike traditional museums, Old Sturbridge Village makes use of all five senses to best convey the feeling of living in a long past time period. Visitors are able to engage with costumed historians, touch village artifacts, and experience the everyday life of villagers.

As part of their interactive village experience, Old Sturbridge Village has created a Virtual Village platform to allow members and visitors to enjoy an OSV experience without the need for a physical visit. Currently, OSV's Virtual Village consists of pictures and short videos highlighting different activities and attractions at the physical village. The goal of our project was to work to provide recommendations for the creation of additional in-depth village experiences and engagement with the audience through a monetized, online platform.

Figure 1: Hands-on Interaction Between OSV Staff and Visitor

METHODOLOGY

To achieve this goal, we identified several key research objectives that our team planned to achieve.

1. Identify OSV's past and present online content, location, and distribution.
2. Learn about current shortcomings of the online presence from visitors and staff of OSV.
3. Determine the best method of online content distribution based on OSV's visitors' feedback and background research.
4. Provide a plan for conducting an evaluation of our recommended online content creation and dissemination strategies.

To achieve our objectives, we employed the use of the following methodologies: observation of village resources, interviews with six village staff members, and a survey with more than 400 respondents.

For objective one, our team observed the OSV website and social media sites. Additionally, we conducted interviews with staff and volunteers to understand what online content has been previously implemented and if it was effective.

We achieved our second objective by surveying village members and visitors to learn about their interest in potential online content from OSV. Additionally, we interviewed several staff members to determine what content they felt could be easily and effectively created and delivered virtually.

To achieve our third objective, our team analyzed the data collected from surveys and interviews to determine the best types of content for online distribution and

monetization to satisfy the needs of members while maintaining feasibility for staff.

Finally, for objective four, we provided recommended methods for evaluating the online content and its distribution and provided a survey to the staff in order to collect feedback on future beta testing. By following these methods, we were able to develop an effective set of findings.
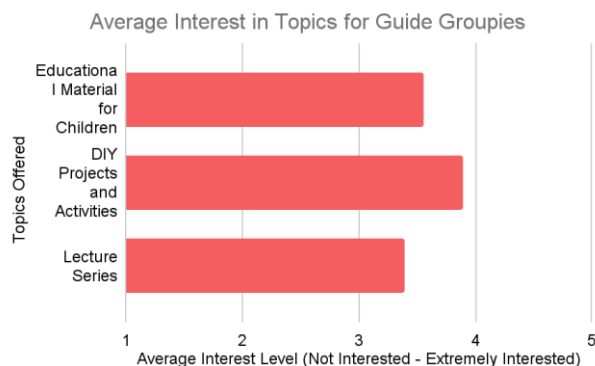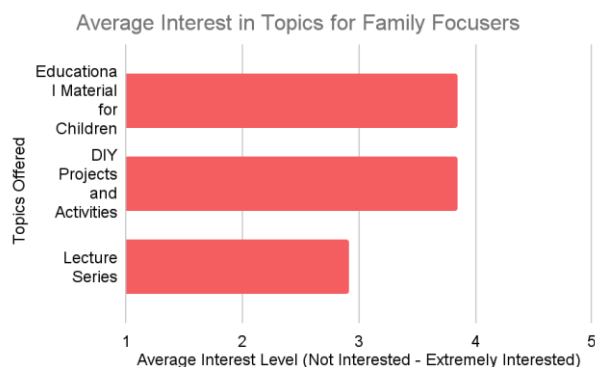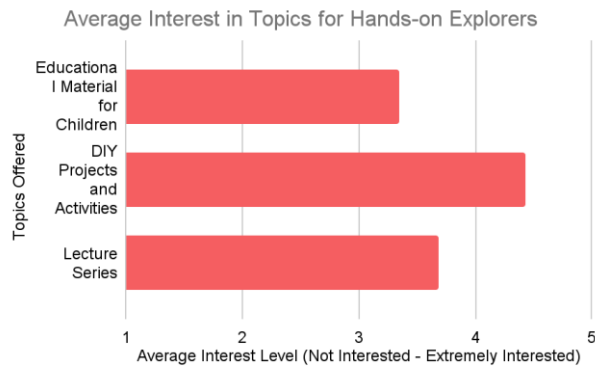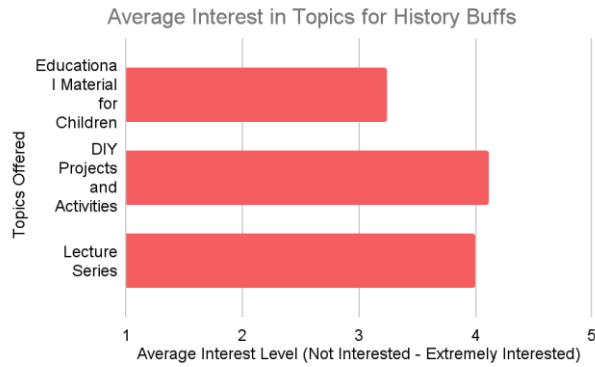
FINDINGS

Overall, most of our findings have supported our project initiative in creating a "Virtual Village" for Old Sturbridge Village. Through our interviews with various OSV staff we were able to determine what type of content Old Sturbridge Village was capable and willing to create for online use. This consisted of a variety of hands-on topics that viewers can either watch or follow along with at home. Additionally, some interview participants were interested in digitizing some of the various collections that Old Sturbridge Village has to offer to visitors.

In order to understand the current physical and online content available at Old Sturbridge Village, we asked our interviewees questions about which activities visitors can participate in, whether in person or online. During the interview process, multiple interviewees also talked about the theory behind how content is delivered and the thought process that goes into generating a good user experience at the village.

In our interview with Emily Dunnack, the Director of Education, we learned that OSV offers the majority of their content in a physical form. The only major online content is produced by the marketing team for marketing communications. Being physically present at the village is very immersive and key to the learning process. Rhys Simmons, the Director of Interpretation, explained that the model that drives this immersion is the promotion of self-exploration, where the experience is left open ended with the intention of letting the visitors' interests drive their learning process. This exploration of the village revolves around the interactions with the interpreters and participating in hands-on activities, the most popular of these, being blacksmithing and woodworking. As Tom Kelleher, Curator and Chief Historian, explained, the activities are hooks to attract people's attention, however, the real connection is with explaining the bigger picture.

To identify which types of online content would be best for implementation on OSV's Virtual Village, our team asked specific questions to each of our interviewees on how they think content could be broken up into tiers. From these interviews we found that the best way to tier their online content would be into the following three categories: DIY projects and activities, educational material for children, and online lectures on more in-depth historical topics. Once we had learned about these preliminary categories, we surveyed 1764 OSV members and visitors (of which 476 responded giving us a response rate of 27%) to determine which of the three tiers interested them the most. From this survey a majority of respondents, 74.6%, wanted to see some form of online content from Old Sturbridge Village, with the most popular content style being DIY projects and at home activities.

Average Interest in Topics for History Buffs

Average Interest in Topics for Hands-on Explorers

Average Interest in Topics for Family Focusers

Average Interest in Topics for Guide Groupies

Figure 2: Interest in OSV Activities Segmented by Target Audience

Once we had determined the way in which to structure OSV's Virtual Village content, we began to investigate which specific topics and content categories could be most effectively produced by the village. We were able to collect this data through our interviews with three of OSV's expert interpreters.
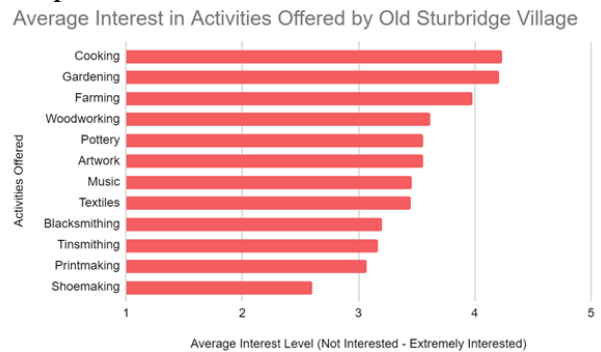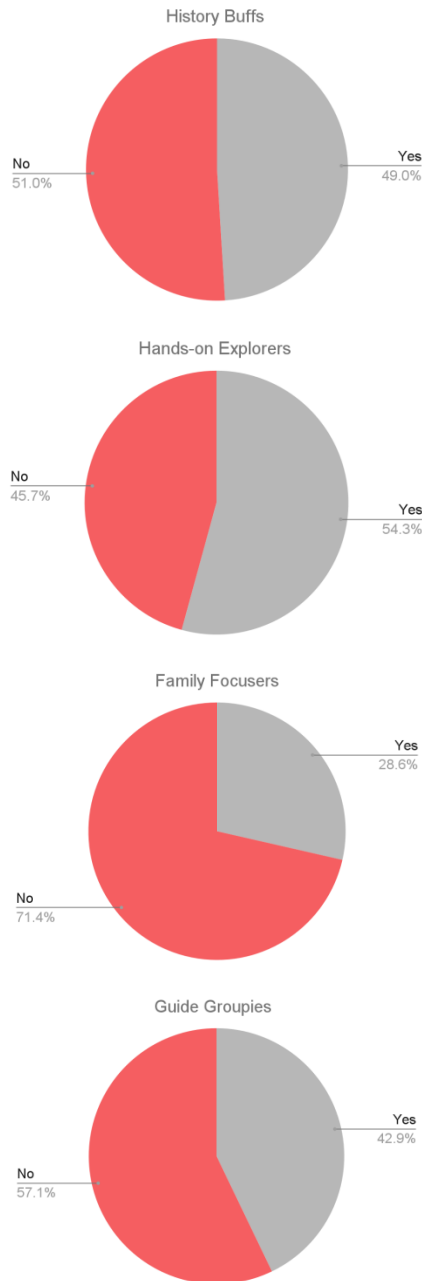

Figure 3: Average Interest in Types of OSV Content Based on Survey Responses

In addition, we collected data from survey responses to understand which topics and content categories would be most popular among the OSV members and visitors. From these methods, we found that the most popular and most feasible categories of online content for the Virtual Village were videos on the subjects of cooking and gardening. These topics had an average of 4.24 and 4.21 respectively on a scale of 1-5 representing no interest to a high interest.
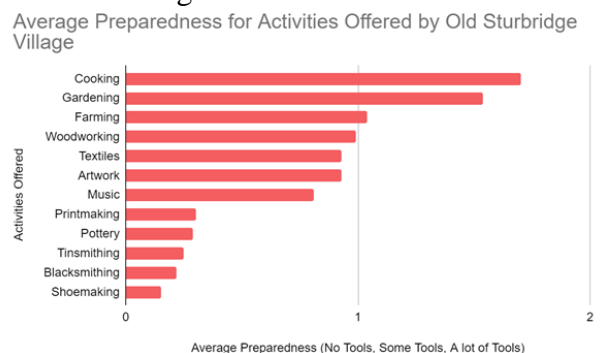
Figure 4: Average Preparedness of Survey Respondents to Participate in Each Activity
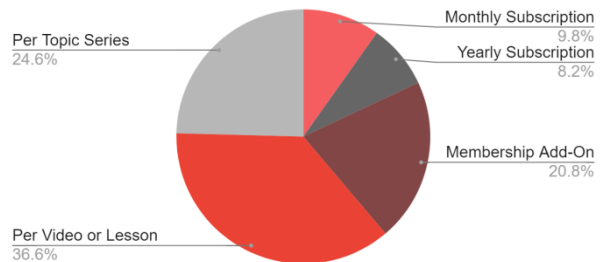
Cooking and gardening were also the two topics that survey respondents were most prepared for to follow along with at home. This overlap shows that these two topics are the most likely to be viewed and followed along with at home by viewers.

History Buffs

No 51.0%

Yes 49.0%

Hands-on Explorers

No 45.7%

Yes 54.3%

Family Focusers

Yes 28.6%

No 71.4%

Guide Groupies

Yes 42.9%

No 57.1%

Figure 5: Willingness to Pay for Content from OSV Based on Audience Segmentation

A key objective for this project was to determine how we would make an online content program profitable for OSV. Our team collected secondary data from literature and primary data through the survey to determine the optimal monetization method that would be profitable for the village and convenient for OSV members and visitors. Upon analyzing the data, we determined that using a hybrid of a subscription and one-time payment system would be an optimal way to market the Virtual Village's online content. Majority of respondents said they would not be willing to pay for the content, but only by a small margin, 54.4% said they would not pay while 45.6% said they would pay. Of that percentage that said they would pay we asked how they would like to pay for it. The most popular response was an individual purchase per video or lesson at 36.6% of responses. The second most popular response was an individual purchase per topic series at 24.6% of responses.

If this online content from Old Sturbridge Village was a paid service, how would you like to pay for it?
(Gathered from 183 respondents who would pay for the service)

Per Topic Series 24.6%

Monthly Subscription 9.8%

Yearly Subscription 8.2%

Membership Add-On 20.8%

Per Video or Lesson 36.6%

Figure 6: Preferred Method of Payment of Survey Respondents

To further investigate this data, our team broke down this question to isolate each of the four OSV audience segmentations mentioned previously. Once broken down, the question revealed that Hands-on explorers were more likely to pay for the Virtual Village

than any of the other categories. Surprisingly, the results also showed that Family Focusers were by far the least likely to pay for this content.

All these findings combined allow for us to make distinct recommendations to our sponsor on how to distribute online content, what topics the content should cover, and how to price the content.

RECOMMENDATIONS

Recommendation for Creation of Digital Content

The format of the content should follow a pre-recorded video format. We considered live streaming as an alternative format, but after conversations with our sponsor concerns about reliable internet connectivity became apparent. Additionally, OSV has experience with producing pre-recorded videos. A pre-recorded video format allows for a more polished final product with none of the limitations of a livestream. We recommend an approximate length of 10 minutes for DIY and tutorial videos and 30 minutes for lecture style videos for maximum viewership.

We recommend that OSV create content in the two general categories of DIY tutorial videos and lecture videos. We determined that these types of videos are the most popular among museum visitors. Additionally, we found that this type of content would be in line with what people might expect from OSV. These DIY videos and lectures can cover a wide range of topics that encompass all the activities OSV offers in person for both children and adults.

The initial content topics should be cooking and gardening. Cooking and gardening were the highest rated topics from our survey. Additionally, they are the topics that most viewers are prepared to follow along with at home. These topics require a low entry barrier for tools and materials required to both produce and to follow along with.

Recommendation for Distribution of Content

The platform for the virtual village should become a branch of the OSV website. The OSV website is where visitors can get more information about the museum, plan their visits, shop, and purchase tickets for events. By using this website as the platform for virtual village content, users will have an easier time accessing the content they are paying for.

The site should be split by content topic, similar to a library, to allow for ease of navigation through the content available. By formatting the site based on topic, users will be able to quickly find the content that suits their needs. This will significantly reduce frustration when trying to find specific videos and will allow users to see exactly what OSV has to offer through the virtual village. Separating the content by topic will also keep the virtual village true to the village mindset of self-exploration based around a visitor's interest.

The site should have interactivity built in through the use of comment sections and polls to allow users to interact with the interpreters behind the content. The visitor and interpreter relationship is key to the physical village experience. By allowing users to interact and ask questions, the content can

become more valuable than just the video. Relationships can still be built through interaction and the user will be able to understand the bigger picture beyond the face value of the content.

This content distribution model will allow users to access the virtual village through a familiar platform and search it easily for the content that fits their interests, while still maintaining a certain level of interactivity that is important to OSV visitors. In order to help OSV visual this model, our team has created a sample webpage showcasing our recommendations. The webpage can be viewed using the following link: https://wp.wpi.edu/wcpc/projects/projects-by-sponsor/old-sturbridge-village-enhancing-the-virtual-visitor-experience/virtual-village-sample-content/cooking/

Recommendation for Monetization Structure for Online Content

For the Virtual Village to be sustainable for OSV, it must have some sort of monetization structure to generate revenue. In our initial research we narrowed down the possible structures that could work for OSV into two broad categories: individual purchase per video or series (night school model) and subscription (academy model).

Our survey results indicated that most members and visitors would prefer the content of the Virtual Village to be either a membership add-on or be available for individual purchase. These results support our researched models. We recommend that OSV adopt a hybrid monetization model with both an option to add the Virtual Village to a membership as well as allowing for the individual purchase of a single video or series of videos from the Virtual Village. By adopting this monetization model, OSV will

be able to maximize their potential for profit while adhering to the feedback received from its village members and visitors.

Recommendations for Follow-up Evaluation of Implementation

We recommend the use of a real time feedback system on videos as well as a follow up survey to gain specific feedback on how to improve the Virtual Village. Possible instant feedback options are to have a rating and comment section on every post similar to social media. The rating system could be five stars, thumbs up or down, or a spinoff of these ideas to evaluate whether the viewers enjoyed the content. Comment sections allow users to expand their thoughts on each piece of content released. Additionally, the use of a survey to gain more specific feedback will allow OSV to further improve their Virtual Village.

CONCLUSION

Following our evaluation of the data collected through interviews and survey responses a solid recommendation can be formulated regarding the approach to implementing online content. The objectives of the paper focus on determining the best topics of interest, distribution of content, monetization strategies, and payment models. Visitor interests indicate cooking and gardening as the primary topics, and DIY projects as the best form of execution. The form of topic delivery could vary on the topic, for example history would be easier in a lecture format, but if the option presents itself for a DIY project this approach should be taken. To monetize the Virtual Village, an optimal method would be to allow for the

purchase of an individual video or an individual series of videos as well as having an option for members to add the Virtual Village to their memberships. This will give visitors flexibility and allow them to try out the village before committing to a large purchase. Keeping the content easy to access and of high quality will result in the best visitor participation.

FUTURE RESEARCH

This report lays the groundwork for the creation, distribution, monetization and evaluation of the Virtual Village at OSV. However, to make the Virtual Village a success, additional objectives need to be considered. Our team has compiled a list of areas for future investigation. First, OSV can research methods for securing the Virtual Village and its content so that only audiences that have paid for content can access it. To start, investigate successful monetized content platforms like Patreon and Netflix to begin to learn about currently employed techniques.

Secondly, determine the audio and video equipment needed to create high quality videos. WPI's ATC has an extensive collection of audio and visual recording equipment and has recommended equipment that would work best for video creation. A complete list of recommended equipment can be seen in Appendix F. Finally, OSV can review possible editing software applications (e.g., Adobe Premiere Pro, Reaper, OpenShot) for the Virtual Village.

These objectives give the Virtual Village the potential for success. To achieve them, OSV could potentially partner with another WPI Interactive Qualifying Project (IQP) or a Major Qualifying Project (MQP).