

Learning from Leaders: Data Practices in the Opera Industry

Kevin O'Hora



Arts Management & Technology Laboratory

Carnegie
Mellon
University



INTRODUCTION

Marketing departments across the nation acquire significant amounts of external data about their audiences through their websites and social media platforms. The utilization of this data varies across the field, and many industry reports question whether or not cultural nonprofits are using their data to drive their decision making process. This paper will present an analysis of best practices from a set of case studies on the data practices currently used by a sampling of top tier opera companies in the United States. The case studies detail four opera companies and how each utilizes external data acquired through their website and other marketing channels. Understanding the practices of these organizations will lend greater insight to the role of data analysis in the opera industry and the cultural sector at large.

GROWTH OF THE CULTURAL SECTOR ONLINE

The cultural sector is developing more digital content than ever before, and it is clear that organizations understand the need for a strong digital presence. A report from the Pew Research Center called [Arts Organizations and Digital Technologies](#) demonstrated this concept (Thomson). Data from their survey of organizations reported the following statistics:

- 99% of arts organizations in the survey have their own website
- 97% have a social media presence on Facebook, Twitter, YouTube, Flickr or other platform
- 94% of these organizations post photos about the organization or its work
- 86% accept donations online
- 72% sell tickets online
- 50% maintain a blog

Online mediums create new ways for the arts to communicate their work and to extend the reach of their artistic impact. While organizations are sharing content and engaging with audience members

online, they have the opportunity to collect huge amounts of data, but many seem unsure of how to use it

THE RISE OF BIG DATA IN THE CULTURAL SECTOR

The impact of data analysis has revolutionized the process of decision-making in the 21st century. Organizations across all sectors are analyzing “Big Data” to understand information ranging from sales information to human behavior.

A 2013 *New York Times* article discusses Big Data with MIT Professor Erik Brynjolfsson, who described data measurement as “the modern equivalent of the microscope” because of its qualities that enable analysts to measure human behavior in real time (*NY Times*). The article explains that “in business, economics and other fields, decisions will increasingly be based on data and analysis rather than on experience and intuition” (*NY Times*).

A 2014 report called “New Data Directions for the Cultural Landscape” by the Cultural Data Project, soon to be known as Data Arts, addressed the rise of data analysis and explored the various ways that arts organizations have adopted data practices. The report revealed that although cultural organizations have made efforts to collect significant information on their audience over the past fifty years, most organizations have yet to integrate the information into their decision-making processes the way that other industries have. The CDP, among other things, educates the cultural sector on the importance of data driven decisions in order to compete in the 21st century. Their report found that “the field seems to be approaching an inflection point, where the long-term health, sustainability, and effectiveness of cultural organizations depend critically on investment in and collective action around enhancing the field’s capacity for using data strategically and thoughtfully, to inform decision-making” (Cultural Data Project).



NETWORKED NONPROFITS

Measuring The Networked Nonprofit by Beth Kanter and Katie Delahaye Paine gives great insight on this topic, with an abundance of case studies on “networked” nonprofits that have found success by measuring data and using it to inform their decision making from a managerial level. In the author’s words, “a networked nonprofit is an organization that uses social networks and the technology of social media to greatly extend its reach, capabilities, and effectiveness.”

A major focus of the book is the message that nonprofits must be actively networked with their audience online, but also that simply collecting likes and followers on social media is not an effective way to increase audience engagement. The authors place priority on measuring data so that it can be used in decision-making: “an organization with a data-informed culture uses data to help make decisions and uses measurement to continuously improve and refine its systems.”

Kanter and Paine’s advice to achieve this goal involves relating data acquired from social media directly to the organization’s mission statement. For example, instead of reporting the number of likes on Facebook, arts managers should be reporting the ways that social media helped to achieve the greater mission. Below are quotes from Kanter that provide examples for how to report social media data in a way that connects to mission statements:

“Our latest social media outreach program supported our goals to change policy because it generated increased web traffic and greater exposure of our message.” (67)

“We found that podcasts generated 50 percent less engagement among our target donors than we achieved with video, so we are shifting our sales accordingly.” (67)

From an understanding of data, its sources, and potential uses, case studies investigating the real-life use of data will help the cultural sector that the next step toward data driven decision making, and, ultimately sustainability.

CASE STUDIES

In order to identify trends across the field, surveys were collected from four US opera companies who have garnered attention for their digital strategy and implementation of technology. This cumulative information highlights the similarities and differences in current practice. The responses from participating companies have been anonymized, so the responses are not associated with a particular organization. The participating organizations are as follows: Boston Lyric Opera, Lyric Opera of Chicago, Opera Philadelphia, and Seattle Opera. By concentrating these studies on four essential subjects (Digital Goals, Social Media, Software Use, and Search Engine Optimization), certain trends become clear.

Digital Goals

All of the opera companies contributing to our study have demonstrated a commitment to adopting digital campaigns as a major component of their marketing strategies. However, the motivations for creating digital content vary across these organizations. To understand this, each opera company was asked for their goals regarding digital and the metrics they are using to evaluate their campaigns.

Two organizations identified online conversion to ticket sales as their primary goal. Other goals included increased website traffic and increased audience engagement for social media. The other two companies responded that they do not have any specific goals outlined for digital campaigns. Rather, they use indicators such as Return on Investment (ROI) and conversion rates to evaluate their performance and adapt strategies accordingly.

Regardless of whether or not they had identified institutional goals, all four of the organizations mentioned ROI as a major purpose for their online presence. Digital content affords opera companies the advantage of tracking the path a user takes online. One organization specified that they “usually only try advertising options that have tracking opportunities... [and] if [they] don’t see the ROI, [they] move onto something new.”



To demonstrate the power of tracking audiences online, one organization gave an example of videos produced for their social media channels. They analyzed which videos are being clicked on, which videos are being watched, and the average length that users spent watching a video. Then, they track the pages the user visited after watching the video with a key question in mind: did it lead to website referral or a ticket purchase?

The metrics used to track these paths included counting things such as users, visits, and sales rates. Organizations mentioned analyzing click through rates, the cost per click, and revenue generated through conversion. (for more information on using Google Analytics to capture this data, see Kathleen Grennan or Kristen Sorek-West's recent publications on the subject).

Social Media

According to the Pew Research Report [Social Media Usage 2005-2015](#), 65% of adults currently use social media sites. The report also shows an upward trend for social media usage across ages. Relevant to opera companies and their dominant audience cohort is the fact that social media usage among senior citizens has increased from 2% in 2005 to 35% in 2015. The opera companies contributing to our report are all very aligned with this trend as all four organizations reported valuing data from Social Media "strongly."

When asked about their main goals for social media, all the organizations mentioned one thing: engaging with audiences in real time. Two other popular responses included driving users from social media to their website to ultimately purchase tickets and to deepen brand awareness.

Companies are using social media to provide meaningful content that will encourage audiences to engage with them. Often this involves additional information on the shows they are producing and information on the artists they are working with. Engagement is defined as sharing, liking, or commenting on the posts. Organizations are keeping track of which posts garner the most engagement, and use the information to generate similar content.

Content created for social media generally has a different tone than that of a website. The organizations discussed how social media is their opportunity to "bond with their audience" allowing them to use a more casual tone than with other mediums. One organization described their social media content as a "chance to show [their] sense of humor." As opera companies in the 21st century are increasingly perceived as elitist, this is a valuable opportunity for the industry.

While all the organizations interviewed maintain different forms of social media, not all necessarily track the data from each platform regularly. All four of the organizations specified tracking data on Facebook and Twitter. Some reported tracking the data on all of their platforms and some did not. Social Media platforms utilized by one or more of the opera companies include: Facebook, Twitter, Instagram, Youtube, Pinterest, PeriScope, Trip Advisor.

Staffing social media can be a road to success. One organization accomplishes social media goals through their Social Media Coordinator -- a full time position dedicated entirely to deliver messaging over social channels. This provides the advantage of having someone constantly monitoring the accounts, allowing for real time responses.

Software Recommendations

Data is often best viewed with software tools. The following software programs were recommended by the opera companies when asked how they used their data. Their marketing departments use these programs to increase efficiency in digital campaigns.

Ad Yapper

Ad Yapper is a sensor for all ads that watches for online fraud. The software ensures that the viewer of an ad is actually an individual who could potentially generate revenue through a ticket purchase. According to their website, "Ad Yapper partners with brands to identify wasted ad spend, eliminate it, and reallocate it toward working media." A major benefit of Ad Yapper is that it completes analysis using an accountability and transparency framework that is able to determine which media content is not generating value for the company. This affords

organizations the ability to reevaluate their digital strategy by determining the true value returned on their efforts.

BrightEdge

BrightEdge enables organizations to compare the performance of their digital content against that of their competitors. One company recently implemented BrightEdge to aid them in maximizing their market share. Bright Edge uses search engines and keywords to evaluate which strategies are giving clients advantages, and which are not. BrightEdge is a valuable tool for marketing departments looking to optimize their position in search results. The company describes themselves as the “only enterprise-scale search engine optimization (SEO) platform designed to increase revenue from organic search in a measurable, predictable way.” BrightEdge creates quantifiable reports on digital campaigns, allowing organizations to determine their strategy based on performance results of their campaigns.

Changes in Data as a Result of Specific Campaigns

To evaluate the positive impact that analyzing data can have on an organization, organizations were asked if they had ever “seen a change occur in your data as a result of a specific campaign.” Two of the organizations responded in the affirmative.

For one organization, a paid ads campaign accomplished their goal to increase website traffic. In addition to accomplishing this goal, it also led to an increase in revenue generated by online ticket sales:

“We conducted our first paid ads campaign on Facebook for our first opera of the season, and our average monthly total reach increased by 650%, which correlated to an 108% increase in visitation to our website. We sold more tickets than we did to our season opener the previous year, even though we didn’t meet our revenue goal.”

The other organization discussed a new initiative by the marketing department, discussed next: search engine optimization.

Search Engine Optimization

Search engine optimization (SEO) is a strategy that was recently adopted by one organization contributing to this study. They undertook SEO as a priority when their board members pushed them to quantify their return on investment.

According to research from Marketing Sherpa, 60% of all “organic” clicks go to the top three organic search results. Search Engine Optimization (SEO) is the process of improving a websites position in search engine results. While nearly every organization is using a website, far less are focusing efforts on their position in organic search results. By focusing on improving the web platforms they have already established, arts organizations can make the most of the resources they have already invested in.

Marketing Sherpa completed a benchmarking survey in 2014, and asked various companies how they manage and execute SEO campaigns:

- 64% of organizations run them in-house
- 8% Go to an outside agency or consultancy
- 27% Do both

Out of the four opera organizations in our study, only one respondent indicated completing SEO in-house. This could suggest that many organizations would improve their position in search results by assigning their staff members to projects focusing on SEO. Utilizing new software, such as BrightEdge, would also assist in this endeavor.



RECOMMENDATIONS FROM OPERA COMPANIES

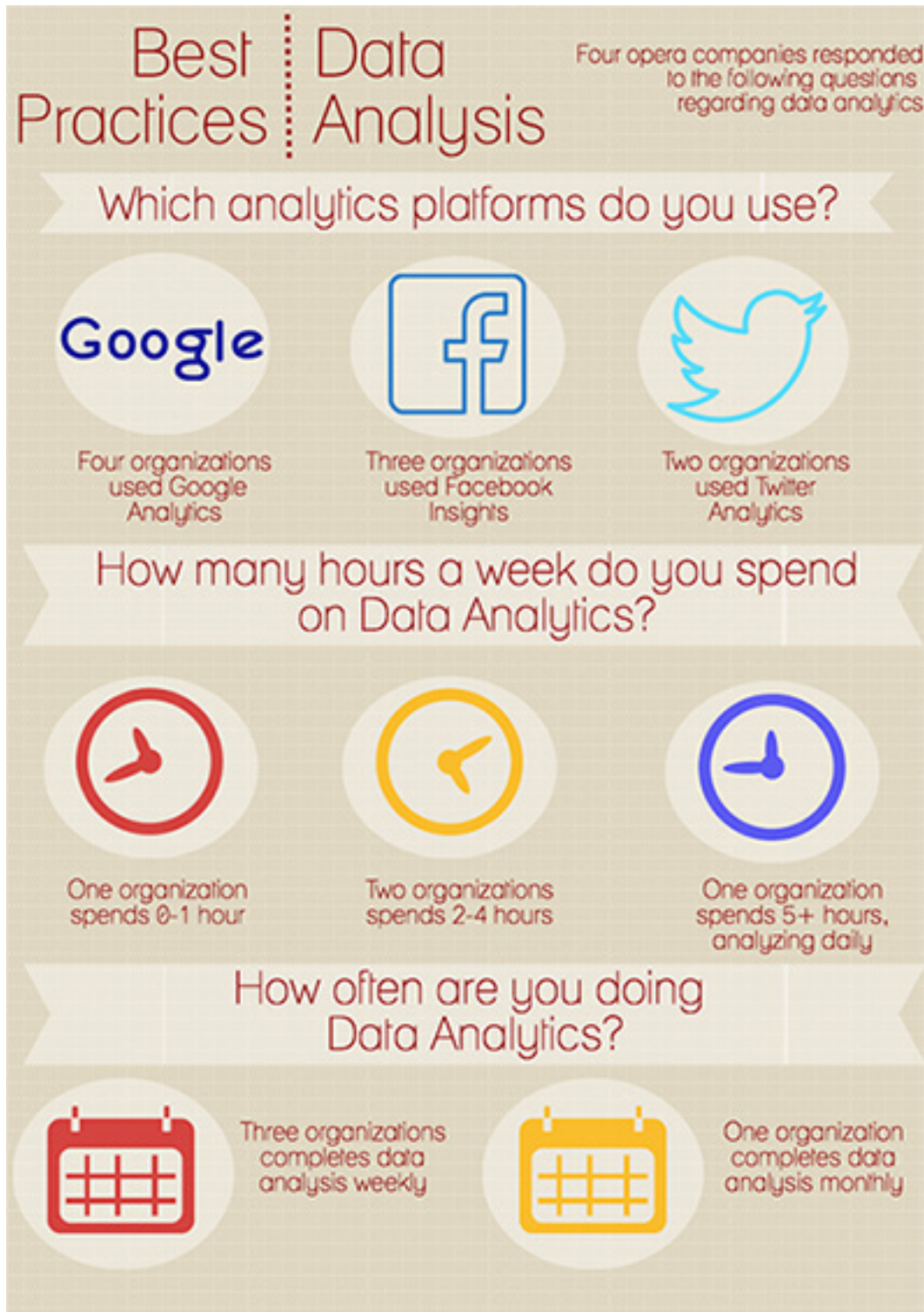
At the close of the survey, participating opera companies were asked for their recommendations for those organizations beginning to use data analytics. Their responses are summarized below:

- **“Find experts to help you navigate the landscape.”** This is a great first start for smaller organizations that may be completely new to data analytics. There are several companies that provide services to specifically aid arts organizations such as Capacity Interactive or TRG Arts.
- **“Find a handful of KPIs [key performance indicators] that mean something for your day to day work and track those.”**
- **“What do you want the consumer to do and how will you measure that? Decide what the end goal for each customer is.”** This piece of advice directly aligns with the ideas of Measuring the Non Profit. Organizations give themselves a significant advantage when they have a specific goal in mind for their digital content and predetermined metrics for these goals.
- **“Ask very specific questions.”** One organization recommended working backwards from granular questions to determine the information that you need. What information does your organization need to be sure they are reaching their target?
- **“Diligently monitor changes that lead to ticket sales.”**- Use data to identify the reasons that tickets are selling. Ticket sale came in- But Why? Is there a new price point? Is the customer new or returning?
- **“Things change really fast, so make sure you’re at least trying to keep up!”**

CONCLUSION

As determined by the Pew Research Center, 99% of arts organizations have their own website and 97% have their own social media pages. With such a large presence online, the next step for the cultural nonprofit sector is to prioritize data analytics so that every organization will integrate data analytics into their marketing strategy and decision-making process. As most cultural nonprofits operate on a strict budget, there is no space for wasted resources. When organizations invest their time and money in digital platforms but ignore the opportunities that online platforms provide for data analytics, they are wasting valuable information already at their disposal.

The organizations surveyed for this study present a wide range of strategies for utilizing data and each should be commended for their progress in the field. Their variety of data practices includes diverse motivations and collection strategies. This suggests that the specifics of data collection are different for each organization. While tactics may be specific, clearly identified goals and metrics with which to measure success will result in more efficient environments for utilizing external data, across the industry. Only when digital goals are established and clearly connected to the organization’s mission can the metrics of measurement provide true value. As the cultural sector enters the age of “big data,” organizations must learn from each other and determine which strategies should be adopted as a “common practice for data analysis” at their organization.



BIBLIOGRAPHY

- Adhikari, Abhay. "The Arts and Culture Sector Must Think about Data ... but Differently." www.theguardian.com. *The Guardian*, 28 Mar. 2014. Web. 3 Nov. 2015.
- Burstein, Daniel. "Marketing Research Chart: 64% of Marketers Run All SEO Campaigns In-house." *Marketing Sherpa*, 30 July 2013. Web. 28 Nov. 2015.
- Heffernan, Virginia. "A Sucker Is Optimized Every Minute." *The New York Times*. The New York Times, 21 Mar. 2015. Web. 28 Nov. 2015.
- "Is the Cultural Sector Ready to Move Beyond Data for Data's Sake? | Createquity." Createquity.com. *Createquity*, 17 Nov. 2014. Web. 20 Nov. 2015.
- Kanter, Beth, Katie Delahaye Paine, and William T. Paarlberg. *Measuring the Networked Nonprofit: Using Data to Change the World*. San Francisco, CA: Jossey-Bass, a Wiley Imprint, 2012. Print.
- Kaple, Deborah A., Lori Morris, Ziggy Rivkin-Fish, and Paul DiMaggio. *Data On Arts Organizations: A Review and Needs Assessment, With Design Implications*. Rep. Princeton, New Jersey: Center for Arts and Culture Policy Studies Princeton U, October 1996. Web. 10 Nov. 2015
- Lohr, Steve. "The Age of Big Data." *The New York Times*. The New York Times, 11 Feb. 2012. Web. 20 Nov. 2015.
- Mitchell, Amy, and Emily Guskin. "Twitter News Consumers: Young, Mobile, and Educated." www.journalism.org. *Pew Research Center*, 4 Nov. 2013. Web. 30 Nov. 2015.
- Performing Arts Digital Marketing Benchmark Survey. Rep. New York City: Capacity Interactive, September 2013. www.ideas.capacityinteractive.com. Sept. 2013. Web. Oct. 2015.
- Perrin, Andrew. "Social Media Usage: 2005-2015." *Pew Research Center Internet Science Tech RSS*. Pew Research Center, 08 Oct. 2015. Web. 20 Oct. 2015.
- Rau, Lisa. "Increasing Your Organization's Internet Presence: SEO Fact & Fiction - NTEN." *NTEN. NonProfit Technology Network*, 11 July 2012. Web. 28 Nov. 2015.
- Sajewski, Christine. *Making Data Driven Decisions for Marketing-Focused Outcomes*. Rep. *Arts Management and Technology Research Laboratory*, Jan. 2014. Web. 1 Oct. 2015.
- "SEO: A Comprehensive Guide for Beginners." *SEO: A Comprehensive Guide for Beginners*. Kissmetrics, n.d. Web. 28 Nov. 2015.
- Schwartz, Barry. "SEMPO State Of The Industry Report 2015 Results." *Search Engine Land*. Search Engine Land, 28 Oct. 2015. Web. 28 Nov. 2015.
- Sorek-West, Kristen. *From Strategy to Analysis: A Guide to Navigating Google Analytics*. Rep. *Arts Management and Technology Laboratory*, 11 Aug. 2015. Web. 20 Sept. 2015.
- Thomson, Kristin, Kristen Purcell, and Lee Rainie. 2013. *Arts Organizations and Digital Technologies*. *Pew Research Center*. 4 January 2013. Web. Accessed 18 October 2015
- Tuttle, Chris. 2011. "5 Web Reports Every Nonprofit Should Know." *npEngage NpENGAGE*, 26 May 2011. Web. 18 Nov. 2015.

