

THE SHOW MUST GO ON – EVEN WHEN TIMES ARE LEAN
A COMPLICATED RELATIONSHIP
BETWEEN LABOR PRODUCTIVITY AND
THE PERFORMING ARTS

by

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THESIS ABSTRACT

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Title: The Show Must Go On – Even When Times Are Lean
A Complicated Relationship Between
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This study examines issues and attitudes of performing arts leadership relating to labor productivity within performing arts facilities. Current theory relating to the labor economics of the performing arts prominently refers to a phenomenon called the cost disease that considers increases in labor productivity to be elusive throughout the sector. This same cost disease has been applied to the healthcare sector. However, leaders in the healthcare industry have been applying operations management methodologies, predominantly in the form of Lean production techniques to increase labor productivity. This study questions whether it could be possible to apply Lean methods in performing arts facilities without affecting artistic outcomes. Findings suggest that yes, it could be possible, but organizational diversity and existing organizational cultures within the sector could make such an application difficult to apply sector wide.

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CHAPTER I: INTRODUCTION

Statement of the problem

“In the performing arts, crisis is apparently a way of life” (Baumol & Bowen, 1966, p. 3). So, began the book that outlined much of contemporary thought surrounding labor economics of the performing arts for the next half century. According to Baumol and Bowen, this crisis is born of structural instabilities built into the sector that make it difficult to reduce the costs of production via the application of labor-saving technologies as has been done in other sectors of the economy. This instability is illustrated with an analogy differentiating the performing arts from auto manufacturing.

Human ingenuity has devised ways to reduce the labor necessary to produce an automobile, but no one has yet succeeded in decreasing the human effort expended at a live performance of a 45 minute Schubert quartet much below a total of three man-hours (Baumol & Bowen, 1966, p. 164).

Upon reflection, this analogy rings true in that performers are structurally unable to increase their own labor productivity without negatively affecting artistic outcomes. This inability to increase productivity to justify wage increases conflicts with the continual need to raise wages to recruit and retain high quality performers. This has led to a situation in the performing arts where the cost to maintain consistent performance levels rises at a rate faster than productivity gains can match. This phenomenon has become known as

Baumol's cost disease and features prominently in contemporary discussion of labor economics in the performing arts (Baumol, 1993; Baumol, 2012; Baumol & Bowen, 1966; Byrnes, 2015; Gray, 2017; Heilbrun & Gray, 2001; Lambert & Williams, 2017; Throsby, 2001; Stein & Bathurst, 2008; Webb, 2004). Significantly, in his book *Management and the Arts*, Byrnes summarizes the cost disease with the statement: "cost savings and productivity gains associated with taking less time to produce the product or complete a process does not generally apply to the arts" (Byrnes, 2015, Location No. 2228).

It remains true that the number of labor hours to produce a particular work do not dramatically diminish with subsequent productions of existing works as the labor hours expended on-stage generally represent an irreducible labor cost. However, discussion around the cost disease does not consider the creation of new works (Cowen, 1996; Cowen & Grier, 1996). Nor does the cost disease consider the entire range of operational activities that take place behind the curtain that are required to present that performance. In fact, many performing arts facilities "are achieving significant productivity gains through technologies associated with backstage operations, front of house operations, ticketing, marketing, and general administration" (Lambert & Williams, 2017, p. 54).

Further, analysis of the evolution of new performing art works suggests that artists themselves have been engaging in efforts to improve their own

labor productivity for generations. For example, the late 1800s saw the invention of the kick drum pedal which allowed a single musician to take on the role of an entire percussion section (Avanti, 2013). In between the 1930s and the 1960s, the introduction of microphones and electrically amplified instruments allowed performers to play more loudly, thereby allowing them to increase the scale of their operation by playing larger halls with increased numbers of tickets available at each performance (Lockheart, 2003). However, each of these applications of technology changed the nature of the performance.

The invention of the kick drum pedal subsequently led to the development of the drum kit. This drum kit allowed a single musician to operate an entire percussion section and made it easier for ensembles to find ‘groove’ and improvise. This soon led to the development of jazz, blues, country, and rock music (Wasserman, 2019).

In the 1930s, early microphones were very delicate and tended to distort easily (Lockheart, 2003). To address this limitation of the technology, early microphone vocalists tended to sing in a quiet, almost whispering voice so as to not distort these early microphones. This led to a new and intimate style of singing called crooning. This new style was a great departure from earlier singing styles which emphasized superior diction and projection to enable voices to reach the back of the hall without amplification (Lockheart, 2003).

Users of other amplified instruments faced similar limitations in terms of distortion and clarity. In contrast to the vocalists who sought to minimize distortion and feedback, during the 1960s, many users of electric guitars and basses sought to emphasize anomalies created by the new technology, bringing new sounds into the musical vocabulary (Geels, 2007; Voorelt, 2000). By the late 1960s, distortion and feedback laden guitar sounds were commonplace in popular music and instrument manufacturers undertook efforts to emphasize these once aberrant characteristics.

Although each of these ‘improvements’ served as an application of technology that enhanced the artist’s economic situation by allowing them to employ fewer musicians while also operating at a larger scale by making it practical to sell more tickets at larger venues, this technology also changed the nature of the performance in not insignificant ways.

When left in the hands of the performer, this type of technological intervention can be exciting and can push the art in bold new directions. However, in the hands of management, efforts to increase labor productivity can work to undermine the artistic process. Therefore, any effort on the part of management to increase productivity must be weighed against potential effects that such productivity enhancements might have on the aesthetic experience.

Still, given that the performing arts are, as Baumol and Bowen (1966) implied, in an almost constant state of economic and financial crisis, it seems

wise for leaders and managers of the performing arts to look beyond dismissals that labor saving performance enhancements generally do not apply in the arts. Therefore, this study seeks to examine the viability of, and potential roadblocks to implementing systemic productivity enhancements in the operation of performing arts facilities without negatively impacting artistic presentations on-stage.

Theoretical framework

This study explores the gap between theory and practice as it relates to operations management of performing arts facilities in the United States of America (USA). To start, the influence of Baumol's cost disease is of great concern to this study, especially as it relates to the attitudes and approaches toward operations management in the context of performing arts facilities (Baumol & Bowen, 1966; Byrnes, 2015; Gray, 2017; Lambert & Williams, 2017; Throsby, 2001). The next important theoretical framework is that of the value chain, first introduced in 1985 as an operations management tool for business and industry, the value chain helps managers visualize and communicate the interconnected set of activities that are required for the firm to realize operational success. The value chain was then adapted specifically to the context of performing arts operations in 2005 (Porter, 1985; Preece, 2005).

Additional important theoretical frameworks considered by this study are Baumol's (1993; 2012) cost disease as it applies to the healthcare sector with specific attention given to the analysis of Colombier (2017) which

suggests that by parsing the individual activities that make healthcare viable, only a percentage of these activities are actually affected by Baumol's cost disease. This realization suggests that "policymakers have more room to maneuver to curb ever-increasing public health-care expenditure than has been suggested by Baumol (1993)" (Colombier, 2017, p. 1619).

Another important framework examined by this study is *Lean*, which has emerged in recent years as the operations management tool of choice by which leaders in the healthcare industry seek to systematically improve operational efficiency and lower production costs without sacrificing patient outcomes (D'Andreamatteo, Ianni, Lega, & Sargiacomo, 2015; Radnor, Holweg, & Waring, 2012). Lean is a method of production that is differentiated from traditional craft production and mass production techniques in that it strives to achieve high levels of quality and customization associated with craft production while also realizing the low production costs associated with mass-production.

This study examines the origins and theoretical underpinnings of Lean, investigating how it works within the value chain of an operation to systematically and continuously identify inefficiencies, reduce waste, improve processes, improve quality, and ultimately improve labor productivity in industrial, service, and creative sectors (Lander & Liker, 2007; Liker, 2004; Marodin & Saurin, 2015; Womack, Jones, & Roos, 1990).

In the end, this study seeks to determine whether it might be possible to use Preece’s value chain as a framework by which performing arts leaders can deploy Lean methods and philosophies in the context of a performing arts facility to increase labor productivity in an effort to combat part of the cost disease.

Purpose statement

This study examines the viability of, and potential roadblocks to, implementing systemic labor productivity enhancements in the context of performing arts facilities without negatively impacting artistic outcomes (See Figure 1.1).

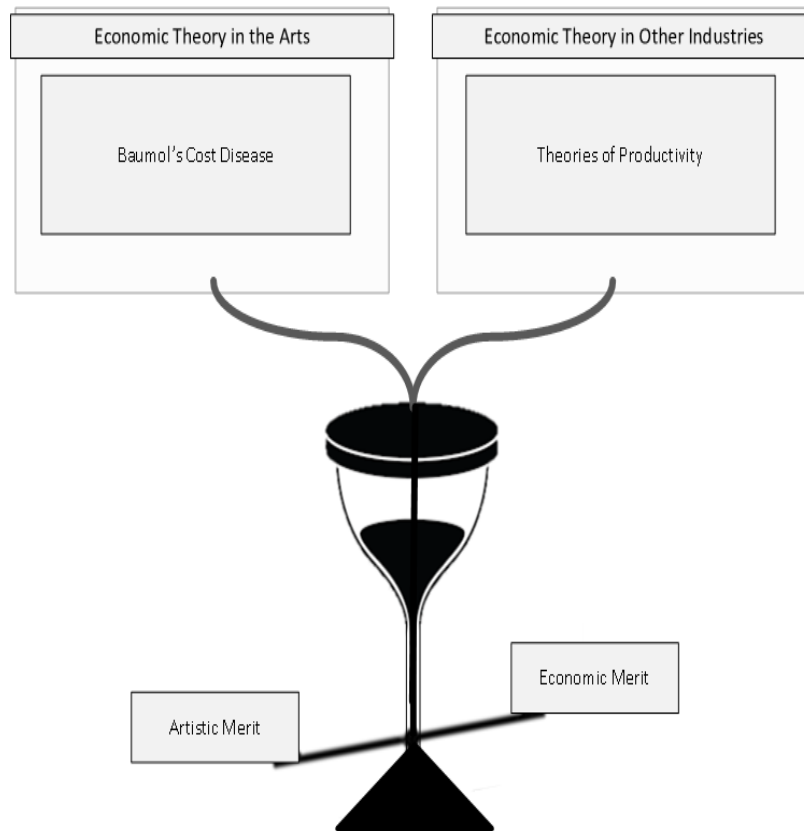


Figure 1.1: Purpose of the study

Methodological paradigm

I came to be interested in this topic from the point of view of much practical experience in venue management, most recently as the Event Services manager at the University of Oregon (UO). From this perspective, combined with an educational background in business with specialization in information systems and operations management, I have faced continual demands from clients and supervisors to increasingly find new ways to meet expanding needs of performance communities with the same (or sometimes fewer) human resources and regularly facing budget limitations.

Shortly after completing a major renovation project at our university's student union, including major upgrades to the proscenium theater and the creation of a new multifunction auditorium, I began a program of advanced study of performing arts management. This study quickly uncovered references to the cost disease which described the difficulty of obtaining productivity increases in the performing arts. However, at my day job, demand for service at our newly renovated facility nearly doubled in the first two years after the renovation completed. In order to keep up with this new demand, our operation simply had to find ways to accommodate more performances within our facility. Budget constraints, however, precluded our hiring more staff. To meet this new demand, we began to actively look for ways to increase operational and labor productivity within the facility. Some ideas we tried were to add contemporary digital audio and lighting

technology to greatly streamline setup and operations. We also applied technological solutions to seating elements including the addition of a mechanical tiered seating structure to automate the deployment of over 200 chairs in our auditorium. We further sought to streamline operations during load-in and load-out to shorten downtime held for these activities to increase the amount of time available for performance use each day. Additionally, we concentrated on improving management of information flow using improved technology to address the greater volume of requests while requiring fewer instances of human handling per request. Overall, engaging in these efforts has not been easy, but by taking this action to continually and actively look for ways to improve how we do things, we have largely been able to meet the new demands on our facility without significantly increasing staffing levels.

I do not anticipate that our efforts to improve operational efficiency at the University of Oregon are complete. Indeed, recent talks of looming budget cuts strongly suggest that our need to improve productivity will continue far into the future, and perhaps indefinitely. Our scramble to find ways to make sure the show can go on, despite widespread resource limitations contrasted significantly with the widely discussed idea that realizing labor productivity increases generally do not apply in the arts.

This apparent gap between theory and practice led me to embark on this project to explore whether there might be more room to increase labor productivity in performing arts facilities than the leading theoretical

constructs allow, and if so, can these be applied without negatively affecting artistic outcomes?

To address the potential for bias in the interpretation of data, this project is constructed so as not to favor any one stance or framework over another and instead looks for evidence among respondents to either align or not align with that framework. This study takes a pragmatic worldview which recognizes that although objective reality can and does exist, it largely exists independently from those who observe it. This underscores the understanding that theoretical frameworks are merely attempts to describe an elusive reality and no theoretical framework is likely to be a perfect description of that reality. Still, this study takes an interpretivist/constructivist approach in the sense that it attempts to seek deeper understanding of current theoretical frameworks and seeks to add to existing knowledge by constructing a new framework developed via exploration of the gap between theory and practice.

This study is based on an interpretivist/constructivist worldview but uses pragmatic methods and tools. As such, this study is comprised of both qualitative and quantitative analysis and seeks to express a clearer understanding of an elusive reality. This mixed methods approach is constructed with an awareness of the potential for and an active avoidance of researcher bias.

This mixed methods approach is founded upon an extensive review of existing literature that describes the current theories used to describe the

underlying economic situation of the performing arts. This literature review is augmented by qualitative and quantitative research instruments which target leaders in the performing arts field. The quantitative instrument consists of an online survey which is widely distributed to performing arts venue managers on a national level via personal contacts and involvement with the International Association of Venue Managers. This survey is intended to generate quantitative information relating to a range of issues concerning operations management approaches at performing arts venues in the USA. Additionally, this study consists of qualitative data in the form of in-person interviews conducted with leaders and managers of performing arts venues of a variety of scales throughout the USA. This qualitative analysis provides context for the quantitative data generated by the survey.

Role of the researcher

In the quantitative survey instrument, the role of the researcher is minimized in that the survey is distributed, administered, and recorded using online methods. Ideally, the research participants should have no conception of me apart from that of a mysterious and difficult to pronounce name written before an email address as a resource for assistance on the introductory page of the survey.

Regarding the qualitative aspect of this research project, I am a full participant in the semi-structured interviews with facility managers from across the country. Like the participants in the study, I am a member of the

International Association of Venue Managers (IAVM) and am currently employed in a position of responsibility overseeing operations as Event Services Manager of multiple performance facilities at UO.

In the qualitative interviews, I use a snowball sampling method to recruit interview subjects and engage in a series of open-ended questions in a semi-structured fashion to allow for deeper probing into insights, opinions, and perspectives from the survey respondents. In this role, I take on the part of a listener who sets up and probes respondents into giving deep and thoughtful responses to questions.

Research questions

The underlying question driving this research project has to do with an exploration of the gap between theory and practice relating to issues surrounding labor productivity in the performing arts as it relates to Baumol's cost disease and the pervasive need for managers of performing arts facilities to find ways to do more with fewer resources. This underlying question led to the following sub-questions.

- Are there unrecognized opportunities to apply systematic efforts to increase labor productivity in performing arts facilities without disrupting artistic quality?
- Are there other industries also suffering from the cost disease, and if so, what can managers in the performing arts learn from them?

A review of available literature on this subject indicates that yes, other industries do suffer from the cost disease, most notably the education and healthcare industries (Baumol, 1993; Baumol, 2012). Closer examination of the healthcare sector reveals that despite suffering from the cost disease, not all aspects of the healthcare delivery system suffer from the cost disease to the same level and therefore may enjoy more opportunity to apply labor and cost saving methods than initially supposed (Colombier, 2017).

The discovery that there may still be opportunity to apply labor and cost saving techniques in the healthcare sector leads to the next important sub-question:

- What methods are currently being deployed within the healthcare system to increase productivity while maintaining or improving patient outcomes?

Further review of available literature indicates that the most commonly deployed system currently being used to increase labor productivity within the healthcare system is called Lean. As a production system, Lean is differentiated from other, more typical production methods such as craft production or mass production in that Lean maximizes the cost savings and efficiency associated with mass production without sacrificing the high quality associated with craft production (D'Andreamatteo, et al., 2015; Radnor, et al., 2012; Womack, et al., 1990).

Throughout the research process, which uncovered the widespread adaptation of Lean in healthcare contexts, the following two-part question emerged as the primary focus of this research project.

- Could it be possible to apply Lean methodologies in the context of performing arts facilities without impacting artistic outcomes and what barriers can be expected when attempting such an implementation?

Delimitations

This study investigates factors relating to labor productivity in the performing arts by examining the business practices of performing arts facilities operating within the USA. This study seeks to understand different attitudes and approaches toward productivity enhancement activity across a diversity of scales of performing arts facilities including small, local, and regional performing arts facilities as well as large metropolitan and world class mega scaled operations. In addition to looking at a variety of operational scales, this study seeks to contextualize attitudes and readiness factors from a wide variety of ownership and management structures ranging from private and family owned facilities to nonprofit, government, and corporate owned facilities. This study primarily examines Lean because of its widespread adoption in non-industrial contexts also suffering from the cost disease.

Given this study's concentration on performing arts facilities in the USA, this project does not examine the facility operations from other

countries. Nor does this study examine aspects of the performing arts supply chain that happen outside of presenting or rental based performing arts facilities. This study does not examine organizations that primarily focus on the creation of artistic works or the development of artists. This project does not examine the activities of agents, promoters, or other personnel that operate as entities independent from the performing arts facilities where productions are presented to audiences.

When considering operations within performing arts facilities, this study does not examine other means or methods to combat the cost disease and the resulting income gap, legitimate as they may be. This means that this study does not consider methods to counteract the cost disease by increasing revenue through fundraising, creative or dynamic ticket pricing schemes, or by seeking supplemental revenues from additional sources such as parking, concessions, merchandise, or membership fees. Nor does this study turn attention to other methods to increase labor productivity or streamline business operations such as Six Sigma, SCRUM, PEAK Performance, etc. This study does not examine ownership or management methods in order to suggest one structure over another but instead looks at these structures exclusively to better understand readiness factors to increase productivity via the implementation of Lean methodologies.

Limitations

This study is framed as an exploration into available literature followed by exploration into the perspectives of a small number of leaders in the performing arts venue management community. As such, this study is not poised to draw conclusions, propose sector-wide solutions, or make inferences about the community of performing arts venue managers as a whole. Still, this study seems to be exploring new territory and may suggest or provide a starting point for areas of future research.

Benefits of the study

Potential benefits of this study include the opportunity to suggest tools, techniques, and/or methodologies that performing arts managers may use to help address the cost disease without negatively impacting artistic outcomes. Further, this study seeks to identify potential obstacles to the successful implementation of productivity enhancing tools in performing arts contexts with the hope that identification could help pave the way to overcome those barriers. Ultimately, the goal of this study is to empower leadership in performing arts facilities by studying tools with the potential to increase labor productivity in performing arts facilities, potentially lowering production costs, which may contribute to a 'cure' of the cost disease without negatively affecting artistic outcomes.

CHAPTER II: LITERATURE REVIEW

Introduction

This chapter reviews existing literature related to this study which explores issue surrounding labor productivity in performing arts centers in the USA and poses the question whether productivity enhancing activities could be employed to improve economic viability to help address systemic issues such as the cost disease as is being done in other sectors.

This chapter begins with a description of performing arts centers in the USA which are the focus of this study, first describing their scale, structure, and mode of operation (Barrell, 1991; Byrnes, 2015; Campbell, 2004; Carter & Chiang, 1994; Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004). This leads to examination of the economic structure of the performing arts, the income gap, and the cost disease as it manifests in the performing arts (Baumol & Bowen, 1966; Byrnes, 2015; Cowen, 1996; Cowen & Grier, 1996; Ferrell & Hirt, 2003; Frey, 1996; Gray, 2017; Heilbrun & Gray, 2001; Lambert & Williams, 2017; Stein & Bathurst, 2008; Throsby, 2001)

This leads to some discussion about how the performing arts sector has been working to address the cost disease. The first examination discusses approaches used by management including marketing techniques, fundraising, and strategic pricing (Bernstein, 2014; Klein, 2016; Rushton, 2015). Following this section is discussion of artists who have made use of technology to effectively increase their own labor productivity, but radically

changed their art in the process (Avanti, 2013; Geels, 2007; Lockheart, 2003; Voorelt, 2000; Wasserman, 2019).

The next section of this reveals observation of the cost disease in other sectors, most notably the healthcare industry (Baumol, 1993; Baumol, 2012; Colombier, 2017). Review of available literature suggests that, although the cost disease appears to be present in the healthcare system, not all aspects of the healthcare delivery system suffer from the cost disease to the same degree, leading to opportunities for leadership to strategically apply tools to increase labor productivity, despite the cost disease (Colombier, 2017).

With the understanding that there may be opportunities to increase productivity, the following section discusses the field of operations management which has become the basis for leaders in the healthcare sector to strategically increase labor productivity while also attempting to improve patient outcomes (Hill & Jones, 2007; Krajewski, Ritzman, & Malhotra, 2007; Meirelles & Klement, 2013). Within the field of operations management, particular attention is paid to value chains and how they are used to visualize the interconnected functions within firms to deliver value to customers, including the performing arts industry (Porter, 1985; Preece, 2005).

Following discussion of the value chain is discussion of Lean, which is an innovative production system first developed in the Japanese automotive industry (Liker, 2004; Womack, et al., 1990). Lean has been successfully applied in the industrial sector, the healthcare sector, and also in creative

sectors as a means of increasing productivity while maintaining high quality and often highly specialized outcomes (Cudney, Furterer, & Dietrich, 2014; Graban, 2016; Lander & Liker, 2007; Schonberger, 2018; Sloan, 2014) This discussion includes the observation that Lean is emerging as the most common method to increase labor productivity in the healthcare industry (D'Andreamatteo, et al., 2015; Graban, 2016; Radnor, et al., 2012).

The final section of this literature review will examine how Lean has been applied in other sectors, discussing common barriers to implementation, and how organizations can anticipate and potentially overcome these barriers (Graban, 2016; Lander & Liker, 2007; Marodin & Saurin, 2015; Womack, et al., 1990; Womack & Jones, 1994).

Performing Art Facilities as Community Centers

Performing arts centers are important parts of many communities and much work has been done to examine the role, structures, and practices that performing arts centers play in the USA (Barrell, 1991; Byrnes, 2015; Campbell, 2004; Carter & Chiang, 1994; Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004). Distributed widely across the country, these spaces are community gathering places that have been specifically designed to meet the distinct needs of both performers and audiences. With regard to artist focused aspects of their design, performing arts centers often feature carefully designed stages with highly specialized lighting, audio, and video systems, and networks of curtains with complex systems of cables and pulleys

to move them. These accommodations generally include carefully designed loading docks, dressing rooms, storage areas, lounge spaces, and possibly even special catering accommodations (Barrell, 1991; Campbell, 2004; Carter & Chiang, 1994; Lambert & Williams, 2017; Webb, 2004).

Balancing this careful attention to artist needs is an equal level of attention to audience care and comfort. More than just providing seats with a good view of the stage, performing arts centers must ensure that the audience can find, and then leave their seat comfortably and quickly for safety reasons as well as to attend to biological needs with (hopefully) clean, well lit, and accessible restrooms. Furthermore, many performing arts centers provide opportunities to eat, drink, and socialize a bit before, after, and sometimes even during performances (Lambert & Williams, 2017; Webb, 2004).

Well executed, the delivery of quality experiences to artists and audiences alike can be transcendent and appear to be magical. This, mysterious and enchanting feeling can contribute to significant shared experiences at a community level. As such, performing arts centers often serve as the symbolic as well as the literal centers of their community (Lambert & Williams, 2017; Webb, 2004).

Operating Scale

Given that performing arts facilities operate in communities of all sizes across the USA, there is a similar diversity in terms of size and scale of operation across performing arts facilities (Lambert & Williams, 2017; Stein &

Bathurst, 2008). Like the communities they serve, the difference in scale between these organizations is vast, not only in terms of budgets and potential audience size, but also in terms of the level of artist that can be accommodated on the stage. For instance, some top tier artists may be in very high demand, expensive to book, and as such, it may require a venue and a community of a scale large enough to even come close to selling enough tickets to cover the cost of mounting the production. Further, technical production requirements to present a top tier artist might be such that only the most well-appointed venues could have the resources appropriate to present such a performance. “Many older theaters lack the size and spaces needed to support large-scale performances because they were built for movies and/or vaudeville, which required much less in the way of support space or technical areas” (Webb, 2004, Location No. 3365).

For the purpose of this study, performing arts facilities are categorized into four broad scales of operation. From the largest to the smallest, they are *mega-PACs*, *major metropolitan PACs*, *small market PACs*, and *collegiate PACs* (Lambert & Williams, 2017). The *mega-PACs* tend to have huge budgets and ample resources that enable them to establish and maintain international reputations as major cultural institutions. Examples of mega-PACs include the Kennedy Center out of Washington D.C. or the Sydney Opera House out of Sydney Australia. To give a sense of the scale of operation, the Kennedy Center reported earnings of over two hundred twenty-five million dollars in

unrestricted revenues in the year 2017 (The Kennedy Center, 2017, p. 45). Performing arts centers at this scale are widely considered ‘world class’ institutions and maintain their focus on presenting the world’s greatest performing art to an international audience. Luckily, they generally have both the capacity and resources to do so.

Major metropolitan PACs operate similarly to the *Mega PACs* in terms of focus on the presentation of the highest-quality art but may tend to focus on a more regional audience. Organizations of this type exhibit a great deal of diversity in terms of ownership structure, organizational focus, and operational methods. Major metropolitan PACS do tend to deal with large budgets, but rarely anywhere near as substantial as the *Mega PACs*. For example, Portland’s 5 Centers for the Arts is a major metropolitan PAC that brought in over forty million dollars in fiscal year 2017 (Portland’s 5 Centers for the Arts, 2017).

Small market PACs are differentiated from the *major* and *mega* sized organizations in that they tend to serve much smaller communities and often feature seating accommodations for fewer than 1,000 audience members. As one might expect, *small market PACs* tend to feature much more modest budgets than the *major* and *mega* sized PACs. For example, one small market theater in Sandpoint, Idaho, a community of about 8,000 features seating for 500, and in 2017, earned just under two hundred and fifty thousand dollars in revenues (Panida Theater, 2017). Given their relatively small capacities and

limited resources, small market PACs tend to take a much greater focus on their local community and rely less on drawing audiences from surrounding regions than do the major and mega sized centers.

Finally, many colleges and universities in the USA have their own campus based performing arts centers. These *collegiate PACs* often maintain a distinct mission-based focus on the on-campus population within the larger community. Even more specifically, collegiate PACs tend to focus their missions specifically on student experiences.

These four scales of operation represent an incredible range of diversity in terms of budget and capability. These differences in terms of scale of operation also hint to a similar variety in terms of organizational structure (Lambert & Williams, 2017).

Organizational Structure

In balancing the needs between artist, audience, and community at large, many performing arts facilities navigate more complex reporting structures than other businesses. For instance, performing arts centers are often responsible for balancing a “triple bottom line’ of financial, artistic, and public benefit” (Lambert & Williams, 2017, p. 137). This divided loyalty, combined with the diversity of operating scales has given rise to a corresponding variety of organizational structures designed to meet this range of need. Accordingly, there is a great deal of variety in terms of ownership

and management structures in the performing arts facility field (Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004).

For instance, in some facilities, it may make sense for an organization to be privately owned. In the case of private ownership, the venue can be owned by private individuals, families, or even private businesses. Some examples of privately-owned performing arts facilities include the McDonald Theatre in Eugene, Oregon and the Neptune Theater in Seattle, Washington (McDonald Theater, 2019; Webb, 2004). In cases like this, a privately owned or commercial organization generally has the goal of earning back investments on performances to earn some amount of profit (Stein & Bathurst, 2008).

In other organizations, especially when public benefit becomes a primary concern, it makes sense for organizations to be publicly owned (Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004). In these cases, when the organization's mission prioritizes public good over profit, many firms organize as nonprofit organizations, while others may organize as collectives of nonprofit organizations or by community cultural districts (Lambert & Williams, 2017). Still other organizations are publicly owned by city, county, state, or federal government agencies, while others are owned by public universities. For example, here in Eugene Oregon, the community's flagship performing arts facility, located so close to the center of town that its address is One Eugene Center, is owned by the City of Eugene while the 520

seat Beall Concert Hall is owned by UO (Hult Center for the Performing Arts, 2019; University of Oregon, 2019).

Alongside the great diversity of ownership structures, there is also a variety of management structures under which performing arts facilities can operate. In some cases, as in the McDonald Theatre, the Kesey family both owns and operates the facility (McDonald Theater, 2019). However, in other cases, it makes sense for the management structure of the facility to be separated from the center's ownership structure. For example, the privately-owned Neptune Theatre mentioned above is managed by a nonprofit organization called the Seattle Theater Group, which oversees the operation of several performance facilities in the Seattle community (Webb, 2004). Still other organizations delegate leadership to professional management organizations to operate their venues. This seems to be particularly true of facilities owned by government agencies who do not want to bear the responsibility of day to day management of the facility. In recent years, this trend has been increasing as part of a general professionalization of the performing arts sector. For example, the Providence Performing Arts Center in Providence, Rhode Island is owned by a nonprofit agency, but managed by the for-profit organization called Professional Facilities Management. At the time of this writing, Professional Facilities Management oversees operations for over a dozen facilities across the USA (Professional Facilities Management, 2019). In cases like this, the professional management

organizations generally approach local governments and offer to take over management of facilities to free the ownership organization from the responsibility.

These ownership and management structures can emerge in a great variety of ways (Byrnes, 2015; Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004). Often, management structures just seem to have evolved organically over time as the organization identified new needs and found new ways to meet those needs. In other cases, the organizational and management structure is the result of careful deliberation and mindful attention to optimizing outcomes with respect to a triple bottom line. Neither system seems to really be better than the other. However, the great diversity of methods by which organizations came about, again contributes to the great diversity of organizational structures to be found.

Despite this diversity, many performing arts facilities are owned and/or operated by nonprofit organizations. Due to structural requirements of nonprofit agencies, each of these organizations ultimately reports to a board of directors (Stein & Bathurst, 2008). Reporting to this board is an executive director or an executive committee which oversees senior level managers which generally oversee specific functional areas such as programming, personnel, promotion, and production. “If the managers are on the same level, they have equal authority in the organization and don’t report to each other” (Stein & Bathurst, 2008, Location No. 570).

Unions

In addition to diversity of operational scales and organizational structures, there is similar diversity in terms of labor organization in performing arts facilities. A great many organizations use union labor to facilitate the production aspects of their operation, while others do not (Barrell, 1991; Baumol & Bowen, 1966; Byrnes, 2015; Campbell, 2004; Stein & Bathurst, 2008; Webb, 2004). These unions engage in collective bargaining between facility management and employees, the result of which is firm rules for work conditions, minimum and maximum daily/weekly hours, overtime and meal considerations, as well as the establishment of the scope of work that may be performed by employees in specific roles.

Examples of union representation can be seen in many areas throughout a performing arts facility. All the way behind the curtain at the loading dock, in front of the curtain on stage, and even out in the house, labor unions can be in play. For instance, at the loading dock backstage, many facilities employ members of the International Brotherhood of Teamsters to load and unload trucks (Stein & Bathurst, 2008). In other facilities, this work falls to the International Alliance of Theatrical Stage Employees (IATSE) which represents many types of backstage personnel, especially those involved with stagehand work such as rigging, props, lighting, and audio reinforcement.

Moving away from backstage operations, but still associated with IATSE, is the Association of Theatrical Press Agents and Managers (ATPAM). As the name implies, this organization represents positions distinct from backstage personnel such as company managers, press agents, and house managers. Moving still further away from backstage operations, the Society of Stage Directors and Choreographers (SSDC) represents choreographers and stage directors and was established to entrench formal paths of communication and set standards and work protocols for stage direction and choreography across the industry.

All the way out in front of the curtain is the Actors' Equity Association (AEA or Equity) which represents actors and stage managers. Equity actors must undergo years of apprenticeship and training, and in many cases, Equity representation can lend an air of legitimacy to a production. Another on-stage union is the American Federation of Musicians (AFM) which organizes to establish fair trade practices between bookers and musicians.

Labor unions are well represented in the performing arts community. While it remains true that many performing arts facilities do not operate using union labor, other facilities employ workers represented by multiple different labor unions. For instance, in Cincinnati, the Aronoff Center has negotiated labor contracts with seven different labor unions that perform work within the facility (Webb, 2004).

While well established in many facilities, the long-term future of unions in the performing arts is uncertain. In recent years, many labor unions across the nation are finding fewer new members come in and fewer new stagehands are being trained by the union shops. Therefore, some of these institutions seem to be losing organizational strength as older members age out and are not reliably replaced (Webb, 2004). Still, many performing arts facilities have a long history of employing union labor and must therefore pay strict attention to the labor agreements negotiated between their organization and the union when making decisions relating to labor productivity.

Economics

Despite the diversity of ownership structure and management structures relating to performing arts facilities, there appear to be strong commonalities with regard to economics in the performing arts. Most notable of this is what has been called the cost disease that affects the performing arts. However, before launching into a more detailed examination of the complications relating to economics of the performing arts sector and how this sector can be differentiated from the rest of the American economy, this segment begins with more generalized discussion of general economic theory. Application of this theory specifically to the performing arts follows.

Economic outcomes in a largely capitalistic society such as the USA are principally determined by interaction between the forces of producer supply and consumer demand which influences how resources are exchanged for

goods and services (Ferrell & Hirt, 2003). The interaction between the forces of supply and demand tend to follow a few fairly simple rules. When all other things remain equal, producers and sellers are motivated to sell more of that good as the price of that good increases. Conversely, consumers tend to be motivated to purchase fewer of that same good as price increases. When graphed with selling price on the vertical axis and quantity sold on the horizontal axis, the seller's 'supply' curve tends to slope upward as both price and quantity sold increase while the consumer's 'demand' curve tend to slope downward as price increases and quantity sold decreases (See Figure 2.1). Ideally, at some point, the supply and demand curves cross on the graph. This crossing point represents the equilibrium point where producer supply matches consumer demand for that particular good. Analysis of this equilibrium is useful for managers when setting prices and making determinations about how many of a particular good to bring to market.

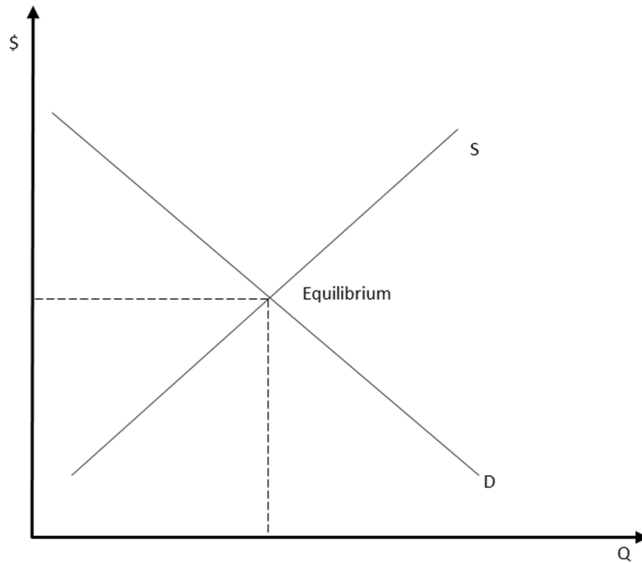


Figure 2.1: Basic economic equilibrium

This translates to the performing arts in the relationship between an audience member's demand to experience a particular performance at a particular facility and the performing arts facility's supply of tickets to see that performance (Heilbrun & Gray, 2001; Throsby, 2001; Baumol & Bowen, 1966). The structure most common in presenting facilities reflects that an audience's demand for tickets relates strongly to the nature of each performance and the tastes of each individual audience member, with some audience members being willing to pay more or less according to their own tastes. On the supply side of the equation, performing arts facilities offer tickets that are limited by the capacity of the venue, but generally speaking, the higher the ticket price, the more a facility is motivated to sell increased numbers of tickets.

Many firms, including performing arts facilities, seek to increase revenue by engaging in methods to influence customer demand through the use of marketing and sales techniques (Bernstein, 2014; Rushton, 2015). These efforts have the effect of increasing awareness and desirability of the performance in question to potential audiences. Successful marketing campaigns can effectively create a positive shift in demand which is represented by a rightward move of the demand curve which, all other things remaining equal, raises the equilibrium point up higher along the supply curve (See Figure 2.2).

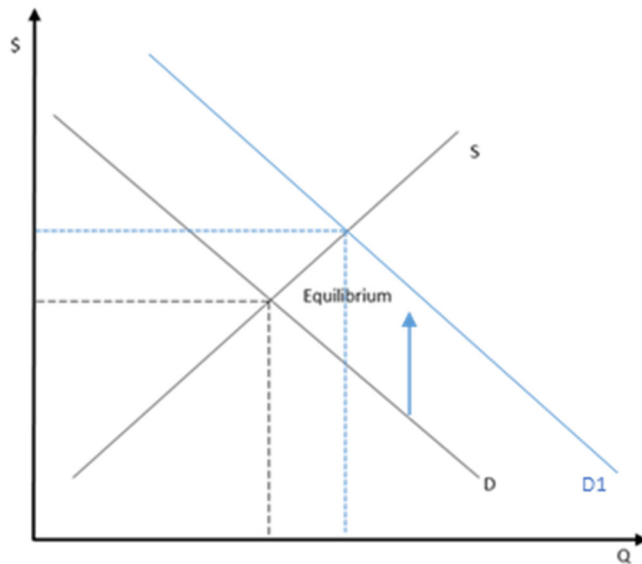


Figure 2.2: Shifting demand curve

Simply selling increased quantities of goods at higher prices does not always optimize outcomes for a firm (Ferrell & Hirt, 2003; Heilbrun & Gray, 2001). Given that a firm's profit equals the difference between revenues earned and the cost to produce that good, it is important to consider the cost

of production relative to demand. Beyond a certain point, the profits realized from selling an additional good tend to diminish as additional goods are sold. Therefore, when making economic decisions, it is important for an organization to look at the marginal revenue, or the amount of revenue earned with each additional ticket sold, or in the case of a rental facility, each additional performance booked, and compare that to the marginal cost, or the cost to the organization to produce each single additional ticket or booking to ensure that the organization is maximizing profit potential. The point at which this profit is maximized is then identified at the point when marginal cost and marginal revenue are equal (See Figure 2.3), (Heilbrun & Gray, 2001). Ideally, at this point, the average total cost falls below the demand curve in order to allow for some amount of profit to the organization. If, for some reason, financial profit cannot be achieved, managers must consider the artistic and public value and decide if operating at a loss is acceptable and respond in some fashion, often by organizing as a nonprofit organization and/or offsetting operating losses with additional earned revenue or by securing additional funding from other sources.

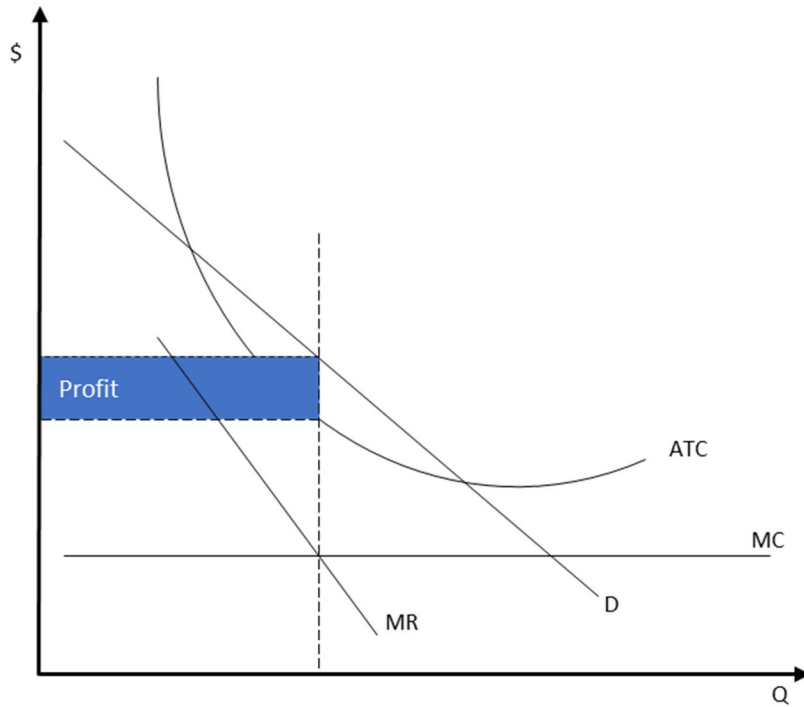


Figure 2.3: Intersection of marginal revenue and marginal cost

Performing arts facilities are often in this position with production costs being higher than ticket revenues because, in addition to weighing production costs against demand, managers must also consider the artistic value of each performance and the public value that their operation brings to the community (Baumol & Bowen, 1966; Heilbrun & Gray, 2001; Lambert & Williams, 2017; Throsby, 2001). Therefore, as is the case with many nonprofit organizations, many performing arts facilities operate at a transactional loss where production costs exceed potential revenues (Bernstein, 2014; Klein, 2016; Rushton, 2015; Webb, 2004).

Productivity in the performing arts

In the performing arts sector, it is particularly difficult to control labor costs relative to ticket revenues. In 1966, William Bowen and William Baumol published their book *Performing Arts: The Economic Dilemma* where they described this difficulty in detail, observing that it is particularly problematic to increase labor productivity in the arts and thereby justify needed increases in performer wages. In contrast, the mass production sector has deployed a staggering array of labor-saving technologies such as interchangeable parts and robotic assembly lines that have greatly increased the number of units produced per worker on any given day, justifying proportionate increases in worker wages. The performing arts sector has not been able to leverage productivity enhancements on a similar scale given that it still takes the same amount of labor hours to perform a Brahms string quartet as it did when the piece was originally composed in the mid-1800s (Baumol & Bowen, 1966; Byrnes, 2015). This apparent lack of ability to increase labor productivity, combined with the necessity to increase wages over time in order to retain the most talented performers, has led to what Baumol called an “income gap” common to the performing arts (Baumol & Bowen, 1966). This income gap results from the reality that costs of production tend to rise at a faster rate than raises in ticket prices can sustain. Discussion of this income gap is prevalent throughout the performing arts industry (Baumol, 1993; Baumol,

2012; Baumol & Bowen, 1966; Byrnes, 2015; Heilbrun & Gray, 2001; Lambert & Williams, 2017; Stein & Bathurst, 2008).

This theory of the cost disease is not uncontroversial. Scholars such as Tyler Cowen (1996; Cowen & Grier, 1996) have outright stated that they do not believe in the cost disease, observing that it is markedly less prevalent in contemporary and popular art forms. Indeed, in the original study, Baumol and Bowen (1966) opted to study a limited selection of traditional performing art forms including orchestras, commercial theater, off-Broadway theater, regional theater, opera, and dance. Cowen (1996) rebuts this as “an unjustified bias toward ‘high culture’”, pointing out that broadly speaking, audience participation and private dollar support has contributed to a booming, rather than declining live performance sector (p. 211). This view of a dynamic sector contrasts significantly with Baumol and Bowen’s view of a stagnant performance art sector while drawing upon statistical evidence to suggest that during a generally growing market economy “from the point of view of the artist... the incentives to create art do not diminish and probably increase” (Cowen & Grier, 1996, p. 20).

Others have suggested that alternative organizational models could be used to at least temporarily disrupt the effects of the cost disease by presenting performances in festival environments (Frey, 1996). The festival environments enable organizers to break outside of the normal boundaries imposed by existing venues, practices, and governmental or community

restrictions, thereby altering the makeup of the supply side of the equation. Festival organizers can also work to redefine the demand side by presenting performances in novel ways as part of larger, more inclusive packages, and perhaps offering performances to audiences outside of the immediate area. In short, by changing venue, organizers can exert more control over the traditional economic factors relevant to live event production and at least temporarily mitigate the effects of the cost disease. However, in the long run, as even the most alternative festival environments become established, they seem to regain the same production woes that contributed to the cost disease in the fixed venues (Frey, 1996, p. 180). This supports the observation that despite efforts to ‘cure’ the cost disease, “the disease keeps reappearing” (Gray, 2017, p. 2).

Combating the cost disease in the arts.

Traditionally, in the performing arts, the income gap created by the cost disease has been addressed by seeking additional funding beyond ticket sales (Bernstein, 2014; Klein, 2016; Rushton, 2015; Webb, 2004). Often, this takes the form of increased efforts to sell concessions and merchandise at performances, or through efforts to secure government funding and grants. However, in recent years, public funding from government sources has been in decline because direct government support of the arts is increasingly seen as controversial (Lambert & Williams, 2017). Further, grants rarely provide unrestricted funds and thereby are difficult to rely on as revenue to effectively

sustain an organization (Klein, 2016; Stein & Bathurst, 2008). In recent years, performing arts facilities have increasingly sought to cover the income gap by seeking direct financial support from private funders and through increased use of crowdfunding techniques (Byrnes, 2015; Klein, 2016; Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004).

Within individual organizations, leaders can also address the cost disease by exerting control over the economic factors that contribute to the disease. On the revenue side, there is opportunity for organizations to undertake efforts to engage in marketing, sales, or strategic pricing efforts to shift the demand curve in positive directions (Bernstein, 2014; Rushton, 2015). Organizations can also raise ticket prices to keep better pace with the costs of production (Heilbrun & Gray, 2001; Throsby, 2001).

An alternate strategy that appears to often be overlooked, perhaps in part due to the ubiquity of Baumol and Bowen's (1966) teaching relating to the cost disease, involves undertaking active efforts to reduce operating costs in the delivery of performance art (See Figure 2.4). As such, there seems to be a gap in formal research in this area. However, in my own experience, the historic and ongoing need to make sure that the show can go on despite myriad hurdles, including resource limitations, budget cuts, and staffing shortfalls, suggest that use of this method may be more routine than is commonly discussed.

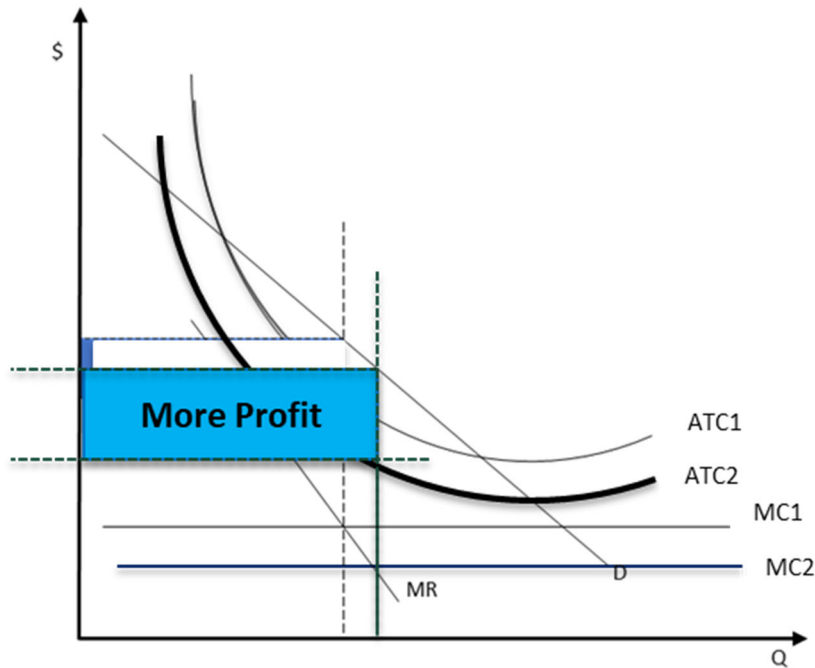


Figure 2.4: Impact of lowering the cost of production

Artists using productivity enhancing technology.

Despite the common understanding of the cost disease that suggests productivity increases don't generally apply in the arts, artists themselves have been applying additional technology to make it possible for fewer people to accomplish a particular task or to increase output in much the same way as the industrialized sector for generations (Avanti, 2013; Geels, 2007; Holt, 2010; Krueger, 2005; Lockheart, 2003; Wasserman, 2019). In some cases, this has allowed artists to either use technology to allow similar outcomes to be realized by fewer people, or to apply technology to increase the scale of the operation and allowing increased ticket sales with little additional investment in talent.

Looking primarily at popular music as an example, the development of the kick drum pedal in the late 1800s allowed a single percussionist to perform multiple parts of a percussion ensemble, greatly increasing the labor productivity of those ensembles (Avanti, 2013; Wasserman, 2019). This ultimately led to the development of the drum kit as a new musical instrument, which in turn, allowed percussion to be performed in radically new ways and served as a significant contributor to the emergence of jazz, then big band, and eventually rock and roll music as popular art forms.

Another application of technology that allowed artists to increase the scale of their operation was the use of electronic audio amplification (Geels, 2007; Lockheart, 2003). Continuing analysis of popular music, big band acts of the 1930s incorporated the recently developed drum kits and saxophones, but also pianos, guitars, basses, and large horn sections. Many of the big band groups also featured vocalists. Given the relative loudness of the rest of the band, these vocalists relied on electric amplification in order to be heard over the driving dance music played by the big bands. However, early microphones were limited in their capability and tended to distort unpleasantly when performers sang in full voice. In order to work within the limitations of this new technology, vocalists adapted their performance style to not overload the microphone by singing in a quiet, natural, and almost casual tone with much less emphasis on vocal clarity, diction, and power than in classical singing styles (Lockheart, 2003). In this context, with this

technology, a vocalist could now project their voice to larger venues, allowing opportunities to sell additional tickets to performances. As in the case of the kick drum pedal, the vocal microphone expanded the reach of the vocal artist, but again led performers to change the nature of their performances in accommodating the new technology.

The application of amplification continued into the second half of the twentieth century with the emergence of other amplified instruments such as electric guitars and basses (Geels, 2007). In amplifying these instruments, many ensembles found that they were able to activate a room full of people without the additional expense of a big horn section. Further, these amplification systems allowed artists to increase their scale of operation by playing even larger venues, and subsequently allowing them to sell vastly more tickets to each performance. Like the early microphones, these amplifiers tended to distort when turned up too loudly. Unlike the vocalists, many musicians leaned into these limitations and sought to emphasize this distortion, feedback, and other aberrant characteristics of the amplification systems. For example, issues surrounding feedback and distortion “were reconceptualised as strengths by the Beatles and Jimi Hendrix, who played the ‘Star Spangled Banner’ with howling feedback and distortion at the Woodstock festival in 1969” (Geels, 2007, p. 1496). Now, contemporary guitar and bass amplification systems are designed explicitly to safely and predictably emphasize these once aberrant characteristics (Voorelt, 2000). The

application of amplification technology absolutely allowed artists to increase their labor productivity by allowing performers to operate at greatly increased economies of scale, but it also had the effect of dramatically altering the output of the art itself.

When in the throes of artistic creativity, it absolutely makes sense that artists take advantage of and incorporate new technologies into their creative process and drive their art in new directions. However, this path of discovery is destined to be traveled by the artist. I do not believe that it is the role of the managers in service of the arts to impose technologies that alter performances onto artists and audiences. Instead, I believe that it is the role of the artist manager to present the performance to audiences in as transparent a manner as possible, with every effort in place to ensure that audiences are comfortable, sated, and as ready to experience the performance as completely as possible. With that in mind, and with the observation that efforts to increase productivity can have a dramatic effect on artistic outcomes, managers in the arts should be very wary of imposing such productivity increasing solutions onto artists for fear of wresting artistic control from the performers themselves.

Luckily, salaries of artistic personnel make up only a portion of the total expenditure of an arts organization. In the original study relating to the cost disease, salaries of artistic personnel are presented as a percentage of total expenditure and broken out by art form (Baumol & Bowen, 1966, p. 144).

When considering major orchestras, artist salaries make up the largest proportion of expenditure at 64%, while activities related to concert production, administrative, tour expense, and advertising make up 15%, 11%, 6%, and 4% respectively. When considering operas, 41% of expenditure is devoted to artistic personnel, with 29%, 10%, 9%, 5%, and 6% being dedicated to production, administrative, tours, advertising, and other expenses respectively. Taking Broadway plays into account reveals that 30% of expenditure is devoted to artistic personnel, with 24%, 16%, 9%, and 20% devoted to production, advertising, authors, and other expenses respectively. More recent data is largely proprietary and difficult to come by, but it still appears that even in producing organizations such as Broadway plays, operas, and orchestras, significant proportions of expenditure is not related to artistic personnel. Further, given that this study focuses on non-producing performing arts venues, it stands to reason that performer salaries make up a much smaller proportion of overall expenditure than the producing organizations described above.

The cost disease beyond the arts.

The cost disease is not limited to the performing arts sector. In more recent publications, Baumol describes the larger economy as divided into two sectors, a “stagnant sector” and a “progressive sector” (Baumol, 2012, p. xx). Within the progressive sector, labor productivity increases are common and tend to keep pace with the overall growth of the rest of the economy. The

stagnant sector, common within the service industries, find it more difficult to achieve labor productivity in a manner that keeps pace with the rest of the economy. Another example of an industry operating within the stagnant sector like the performing arts includes the healthcare industry (Baumol, 1993; Baumol, 2012; Colombier, 2017; Gray, 2017). Healthcare, it is argued, consists largely of personal services requiring “face-to-face interaction between those who provide the service and those who consume it” (Baumol, 2012, p. 20). Furthermore, attempts to increase the number of patients served by a doctor, or reduce the amount of time spent with each individual patient tend to lead to decreases in healthcare quality. Ultimately, when comparing the real cost of providing healthcare to the wages of workers in the healthcare system in the latter half of the twentieth century, statistical analysis reveals that “real health expenditures have increased faster than inflation in the United States, the wages of employees in healthcare professions have not” (Baumol, 2012, p. 11).

Despite the prevalence of the cost disease in the healthcare sector, detailed analysis suggests that, while significant portions of the healthcare delivery system do very much suffer from the cost disease, other portions within the system do not (Colombier, 2017). For instance, some areas such as nursing care and long-term care clearly suffer from the cost disease while technologically assisted, minimally invasive surgical procedures have resulted in significant increases in labor productivity on the part of the

surgeons and also dramatically reduced the amount of post-operative care patients require. Upon taking these factors into account and differentiating between stagnant and progressive segments of the health care delivery system, Colombier (2017) finds that “Baumol’s cost disease exerts in between 15 and 40 percent of its potential full impact” on healthcare expenditures (Colombier, 2017, p. 1604). This study concludes that “policymakers have more room to maneuver to curb ever-increasing public health-care expenditure than has been suggested by Baumol (1993)” (Colombier, 2017, p. 1619).

Reducing costs in the healthcare sector.

Recognizing that there may be more room to maneuver and reduce operational costs than initial estimates suggest, the healthcare sector has been under great pressure to address problems surrounding rising costs. However, this must be done with an eye toward not diminishing, and hopefully increasing the quality of patient outcomes. “Public demand for increased quality coupled with the pressure to do more with less has led healthcare organization management teams to reevaluate their operations strategy” (Sloan, 2014, p. 136). Luckily, as Colombier (2017) has suggested, the cost disease only affects part of the healthcare sector’s value chain. Leadership has been looking to the industrial sector for operations management approaches that can be adapted to the healthcare service sector without sacrificing patient outcomes (Radnor, et al., 2012).

Operations Management Approaches

Operations management is “the systematic design, direction, and control of processes that transform inputs into services and products for internal, as well as external, customers” (Krajewski, et al., 2007). The application of operations management tools and analysis are common in industrial and business settings and can be used to achieve competitive advantage and systematically improve processes over time and increasing labor productivity. Despite origins in industry, many operations management techniques can be used in non-industrial settings such as healthcare and performing arts facilities (Lander & Liker, 2007).

One such analytical tool, called the value chain, helps organizations conceptualize the interrelated functions that sustain their operations (Hill & Jones, 2007; Krajewski, et al., 2007; Porter, 1985). More recently, this tool has been adapted specifically for use in the performing arts (Preece, 2005).

A Visual Management System

Porter’s value chain illustrates the relationship between, and sequence of, essential primary activities that directly contribute to inputting, arranging, and processing raw materials, then outputting goods and services to the consumer (See Figure 2.5), (Hill & Jones, 2007; Krajewski, et al., 2007; Porter, 1985). The value chain also shows support activities as those which give direction, guidance, and linkages between primary activities. In such a model, primary activities are arranged systematically to show a process from input to

output and are arranged visually with inputs on the left, outputs on the right. In an industrial setting, the input side can include items like research and development (R&D), then can flow to production which physically transforms raw materials into finished goods. After production, the next primary activity could be a pre-output process such as marketing or sales. Finally, the primary output activity could take the form of a process such as customer service, which is the process that ultimately facilitates a transaction with the customer. Arranged as a chain, we can see that a successful customer service transaction depends on a successful marketing and sales process, which in turn depends on successful production of the product, which in turn depends on a successful R&D process. The interdependence and interlinked structure and of the value chain illustrates that customer value cannot be realized without a successful outcome in each of the primary activities in the value chain. Each of these primary activities are in turn bolstered by a series of support activities which include organizational leadership and governance, materials and human resource management, information systems, and other infrastructural elements that support and foster interlinkages between the primary activities.

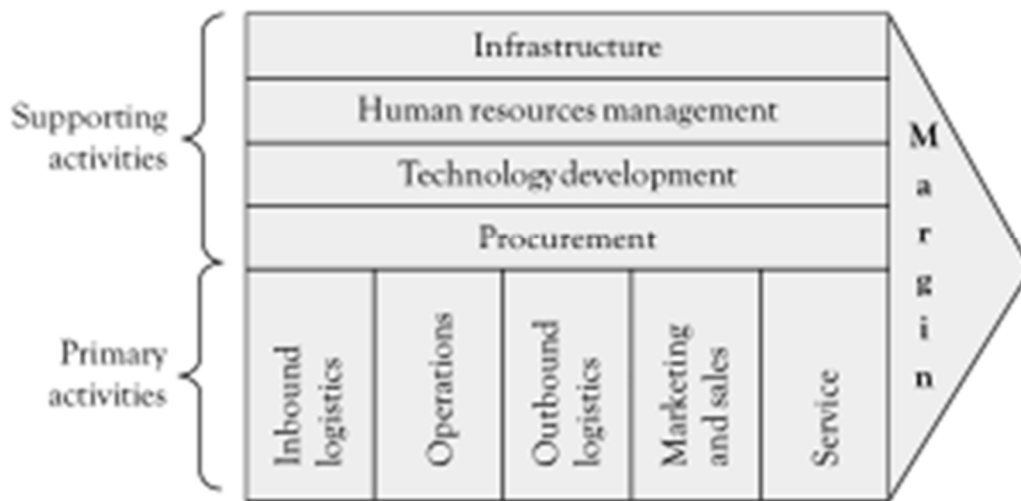


Figure 2.5: Porter's value chain (Presutti & Mawhinney, 2013)

Analysis of this value chain should reveal that at each step in the chain, customer value is added upon the previous link. If for some reason, value is not added at a particular step, this can be an indicator of systemic or procedural waste, the identification of which, can then uncover opportunities for process improvement and waste reduction (Krajewski, et al., 2007; Porter, 1985).

A Value Chain for the Performing Arts

Porter's value chain model has been adapted and applied to the performing arts (See Figure 2.6), (Preece, 2005). In this model, Preece proposed a series of interrelated and essential primary activities that simply must be in place for any performing arts endeavor to be viable. Additionally, Preece suggests a range of support activities that provide an appropriate foundation to provide linkages and direction to the primary activities. These

primary activities include *programming*, *personnel*, *promotion*, and *production*. In support of these activities are *governance*, *administration*, *fundraising*, and *outreach*. Each of these primary and support activities are described in more detail below.

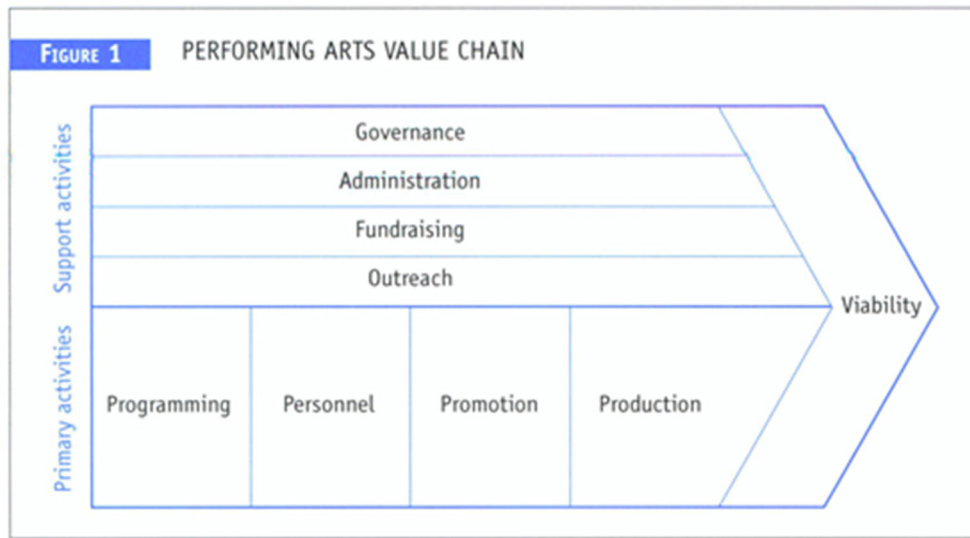


Figure 2.6: Preece's performing arts value chain (Preece, 2005)

Primary Activities

In performing arts contexts, primary activities include *programming*, *personnel*, *promotion*, and *production* (Preece, 2005). Each of these processes, while distinct operations in their own right, are interrelated and interdependent, and as such, cannot stand alone. Without any one of these activities fully in play, no performing arts endeavor can be viable. What follows is an examination of each of the above listed primary activities with discussion of the essential contribution each process provides to the viability of performing arts.

Programming

On the input side of the performing arts value chain, the first primary activity is called programming. Programming describes the selection of performing artists and determination of which pieces will be performed within the facility (Preece, 2005). This role is often handled by a programming or booking manager (Stein & Bathurst, 2008; Webb, 2004). This process involves the coordination between the venue and available artists, managers, and agents seeking to make a deal for the artist to perform at the facility on a particular date. In this model, the artists can be either resident companies, with an already established relationship to the venue, regional artists, or nationally or internationally touring artists. Organizations that tend to coordinate directly with artists and artist agents to book performances in their own facilities are considered to be presenting facilities and exercise a fair amount of creative control by deciding the tone and flavor of artists and performances that fill the venue's calendar (Lambert & Williams, 2017). Presenting organizations generally take all of the proceeds from the box office as well as other revenues earned through concessions and may pay the artists a portion of these receipts on the evening of the show as part of their artist fee.

Other organizations simply rent out the facility to whichever local arts (or other) organization or private individual that chooses to rent the facility. Rental is seen as the model by which the performing arts facility experiences the least amount of risk. In fact, some organizations will “pull back to more

renting, often after experiencing unacceptable financial losses from higher risk presenting (Lambert & Williams, 2017, p. 66). Organizations that decide what goes on stage using a renting model exercise very little input or control over what is performed on-stage. In many cases, independent local arts organizations who rent the facility and receive the proceeds from the box office directly, then pay the facility based on a variety of factors including rental rates, service fees, equipment fees, and potentially a percentage of the box office revenues. In addition to renting to performing arts organizations, facilities often rent the facility for non-artistic purposes such as “corporate meetings to wedding receptions” (Webb, 2004, Location No. 219).

Exercising the greatest amount of creative control are the producing organizations, which also take on extraordinary financial risk. For example, producing includes taking on “creation costs that include hiring casts, directors and designers, and paying for intellectual property rights, rehearsals, scenery, and costume construction” (Lambert & Williams, 2017, p. 63). This direct and early investment can have the potential to reap great rewards in the long run, possibly allowing organizations to earn ongoing royalties on subsequent performances or greater portions of the box office receipts for in-house performances (Webb, 2004). However, the risk is magnified in that neither box office receipts nor long-term royalties are guaranteed. In fact, observations of the failure rate of producing organizations suggests that many

performing arts “buildings may well outlast the producing institutions” (Lambert & Williams, 2017, p. 66).

There are great differences in how the presenting, renting, and producing organizations are structured, especially in how they balance their relationship to risk and creative control. Still, many organizations do not engage in only one type of programming behavior and hybrid approaches are common. An organization might balance its risk and creative control by presenting several performances throughout the year and renting the facility out during downtime between presented performances. If extra capacity remains, an organization might invest heavily into the creative aspects of a limited number of performances in order to contribute directly to the regional arts community. The precise mix of these disparate ingredients vary a lot from one organization to another. Still, it must be said that no matter how an organization decides what to put on stage, programming is an absolutely essential link in the value chain.

Personnel

The next primary link of the performing arts value chain is called personnel and refers to actual talent performing on-stage, whether they be actors, dancers, musicians, or possibly even jugglers (Preece, 2005). While the programming function works to decide which performers wind up on the stage, the personnel function concerns the ability of performers to actually be on-stage. It is noteworthy that this section specifically excludes the human

resources and personnel required to fulfill other functions within the operation. This is because the on-stage personnel represent a critical function in and of themselves. Without specially prepared personnel on-stage, there is not a viable reason for audiences to buy a ticket to a non-performance at the facility.

Performance personnel can come in a variety of forms, ranging from local talent to national and international touring artists. When a facility takes on the responsibility of booking a touring artist, the organization may then also need to take responsibility for the care and feeding of that artist while they are in the area but are not on stage. This responsibility could include transportation and hotel requirements as well as very specific food and beverage accommodations backstage for both before and after the performance. Local artists may not have the same personal care requirements of a touring artist, but often come with complications of their own. For instance, local talent, perhaps in the form of a local ballet or symphony company, may have a residence relationship established with the facility. Such a residency could grant the local talent certain special scheduling priorities or rights as well as the possibility of discounted rental rates.

Despite differences in the type of support an organization must provide to on-stage personnel, these personnel represent a vital link in the performing arts value chain. No matter what, there must be performers on-stage, doing the

right thing at the right time. If the personnel are not in place, the audience will not buy tickets and the whole endeavor is not viable.

Promotion

The next primary link in the performing arts value chain is the functional area of promotion (Preece, 2005). After an organization decides which performances to put on-stage, and after performers are prepared for the performance, the organization must turn its attention outward toward the audience. This functional area refers to all efforts on behalf of the performing arts center, its partners, and/or its agents to make audiences aware of the performance so that they can plan to attend. Given that an event cannot be considered a performance without an audience present, this promotion activity is essential to the viability of any performing arts endeavor.

When a facility is acting in the role of a presenter or producer, the venue takes on a high level of responsibility for the marketing and promotion of each show as its success or failure depends on audiences choosing to spend their leisure time at this particular event in this particular performing arts facility. This responsibility is somewhat less prevalent in the case of rental facilities as the obligation to successfully promote each performance tends to fall on the shoulders of the renting organization. Still, if the performing arts facility rental fees include a percentage of the box office, it may be in the interests of the facility to engage in promotional activities as well.

In the past, promotion and marketing relied a lot on word of mouth and on posters scattered throughout the community. In more recent years, the advent of social media and powerful ticketing software with built in customer relationship management technologies have made it possible to both dramatically increase the reach, effectiveness, and targetability of marketing campaigns (Lambert & Williams, 2017). Additionally, performing arts, and other organizations are increasingly using consumer-oriented marketing approaches as opposed to a product-based or sales-based approach (Bernstein, 2014). This customer-centric approach, combined with the incredible reach and highly specific targetability of contemporary marketing tools, are greatly improving organization's ability to build connections and relationships with audiences.

Production

After promotion, we find production, which represents the output side of the performing arts value chain (Preece, 2005). This final primary link refers to securing, arranging, and operating the physical resources associated with mounting a performance in real time in front of an audience. Given that production activities are responsible for bringing both the audience and the artist together, production activities are often broken up into front and back of house operations (Lambert & Williams, 2017; Webb, 2004). Front of house operations are typically concerned with taking care of the audience through ticket selling, ticket taking, helping guests find their seats, concessions,

janitorial, and security services. Back of house operations tend to focus their concerns on the artist, both in terms of hospitality and stage management, but also by securing, arranging, and operating specialized equipment behind the scenes (Lambert & Williams, 2017; Webb, 2004).

There has been a plethora of technological advances in recent years that have made it easier for production teams to do their work. In particular, advances made in contemporary audio, lighting and video technologies have made backstage operations more streamlined, capable, and reliable than with prior systems (Lambert & Williams, 2017). Technological advancements have not been limited to back of house operations. Advances in online ticket sales, mobile wireless ticket scanning, wireless point of sale, and video monitoring systems have greatly streamlined and increased the effectiveness of front of house operations as well (Lambert & Williams, 2017).

Recent applications of technology aside, the production elements of a performing arts event are absolutely essential physical elements that bring audiences and artists together and often provide the means by which performers convey their work to audiences. If the production elements of a performing arts endeavor are not in place, the performance cannot be viable.

Support Activities

Support activities provide direction to and interconnection between primary activities (Preece, 2005). Like the primary activities, each of the support activities represent a distinct, yet interrelated activity and simply

must be in place before any performing arts organization can be viable. These activities are *governance*, *administration*, *fundraising*, and *outreach* and will be examined individually and in greater detail below.

Governance

Governance refers to high level organizational leadership and oversight (Preece, 2005). Given that many performing arts facilities are nonprofit organizations, this level of support often takes the form of a board of directors or a board of trustees (Stein & Bathurst, 2008; Lambert & Williams, 2017; Webb, 2004). Governance activities are, by definition, oriented toward ensuring the success of the organization as a whole and do not often get involved in the day-to-day operations of the center. Instead, governance activities seek to provide purpose, direction, and focus to each of the primary activities.

Administration

Administration refers to the day-to-day management of the organization and can have a great deal of direct influence over each of the primary activities (Preece, 2005). The administration level includes operations such as finance, accounting, human resources, and other aspects of management required to ensure the day-to-day viability of the organization (Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004). As such, the administration level has a great degree of influence over how different

functional areas, in both the primary and support activities, interact to achieve maximum operational effectiveness.

Fundraising

Fundraising refers to all efforts within the organization to secure funding beyond revenues earned from ticket sales (Preece, 2005). Given the prevalence of the cost disease in the performing arts sector, it is commonly understood that earned revenues alone generally do not cover all costs associated with running a performing arts facility (Baumol & Bowen, 1966). Therefore, fundraising is an essential component required to ensure the viability of such a facility (Byrnes, 2015; Lambert & Williams, 2017; Klein, 2016; Webb, 2004). Fundraising can include activities related to grant writing and/or securing government funding. Additionally, fundraising activities can include efforts to collaborate with corporations and individual community members to secure donations or other private contributions to an organization. Fundraising efforts are often performed in cooperation with primary functional areas in order to secure funding for specific operational needs. In short, fundraising is an essential support activity that directly contributes to the viability of any performing arts endeavor.

Outreach

The final support activity outlined by Preece (2005) is that of outreach. Outreach refers to organizational efforts to develop institutional relationships between the performing arts facility and others outside of the organization.

Given the central role that many performing arts facilities play within their communities, most activities performed by such a facility could be considered outreach. Still, outreach is considered an important support activity in its own right. A common example of outreach activity includes educational programs which can develop audiences and promote audience participation in the long term (Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004). Other outreach activities include the development of relationships between the facility and outside organizations to streamline fundraising efforts and develop relationships with corporate sponsors.

No performing arts facility exists independent from the community in which it resides. Therefore, outreach activities are an important aspect of maintaining the facility's position as a central gathering point of that community.

Linkages

Fulfilling their role as linkages between primary activities, the support activities often draw upon resources existing in the one or more primary activity (Preece, 2005). For instance, governance activities by definition provide guidance and direction for all of the other functional areas. A common governance activity is the creation and development the mission and vision of the entire organization. Such activity explicitly provides direction and guidance that enable each of the four primary activities to operate independently, yet in a coordinated fashion. Similarly, the administrative

activities explicitly impact primary activities by providing day-to-day management and oversight. For instance, within the administrative sector, a human resources department might hire and onboard staff for the entire organization, regardless of the functional area. Further, as mentioned in the above cases, fundraising and outreach activities may coordinate with production, promotion, and programming to build a performance calendar around a specific theme in order to build community relationships and/or develop donors (Lambert & Williams, 2017). In any case, although each of the primary activities are distinct in their own right, they are truly interdependent, and thanks to the support activities, interconnected.

Implications

Preece suggests that the performing arts value chain is intended to be a tool to be used when making managerial decisions at performing arts organization and “is meant to encourage arts managers to consider the entire range of PAO [performing arts organization] activities” (Preece, 2005, p. 31). This suggestion seems particularly apt when considering decisions regarding labor productivity in the performing arts. The cost disease as described by Baumol and Bowen primarily considers labor productivity concerns related to the *personnel* component of the value chain. According to Preece, the primary activities of *programming*, *promotion*, and *production* are also of principal importance when considering the viability of a performing arts endeavor and should be considered when making decisions about organizational

approaches to labor productivity. Similarly, the essential nature of support activities of *governance, administration, fundraising, and outreach* indicate that these areas must be considered as well. Therefore, it stands to reason that, like in the healthcare sector, there may be more maneuvering room to increase productivity than Baumol's theory allows (Colombier, 2017).

Lean

Returning to the examination of the healthcare industry, leaders in the healthcare sector are operating under the assumption that not all functional areas within the healthcare delivery system suffer from the cost disease to the same degree. With this in mind, it is increasingly commonplace for healthcare managers to look to the industrial sector for insights and methods by which to systematically increase labor productivity (D'Andreamatteo, et al., 2015; Radnor, et al., 2012). As of this writing, surveys suggest that a slight majority of academic focus on process improvement studies in this sector has been concentrated on the process improvement methodology called Lean (Sloan, 2014, p. 136)

Lean is a production method that is differentiated from other, more typical production methods such as craft production or mass production in that Lean maximizes the cost savings and efficiency associated with mass production without sacrificing the quality associated with craft production (Womack, et al., 1990). Craft production (common in the arts) is a production method that allows for high quality and highly customized, often unique

creations but must be performed by highly skilled laborers, which contributes to high costs of production. Mass production, on the other hand, uses unskilled laborers who perform very narrow aspects of a production process using interchangeable parts on an assembly line. Using this mass production method, great numbers of a product can be created at very low cost per unit with little or no variation between individual products. In many ways, mass production and its emphasis on cost per unit at the expense of quality is antithetical to artistic endeavors. Lean, on the other hand, strategically deploys broadly skilled workers who are fluent in all aspects of the production process (Liker, 2004; Womack, et al., 1990). These workers then produce right sized batches of product to meet customer needs in as much variety as the customer requires. However, in contrast to the craft method of production, Lean methodology relies on an organizational commitment to ongoing learning and a culture where employees continually seek to identify and eliminate procedural waste while also taking steps to continually increase product quality. Lean methods also seek to even out workload, eliminating periods of high and low activity while continually lowering the cost of production. This allows organizations to deliver the high quality, highly variable, and often creative production outcomes associated with craft-based production processes with the rapid output and low production costs associated with mass production (Lander & Liker, 2007; Womack, et al., 1990).

Lean: Origins in automotive

Lean processes were developed in the Japanese automotive industry, specifically at Toyota, in the years following World War II (Womack, et al., 1990). In the mid-1980s, after recognizing the rapidly emerging competitiveness of the Toyota production system in the worldwide auto market, researchers at Massachusetts Institute of Technology (MIT) began a five year, five-million-dollar study called the *International Motor Vehicle Program* to uncover exactly what Toyota was doing differently (Womack, et al., 1990). This examination revealed a selection of core principles that Toyota applies to running the factory, designing the car, coordinating the supply chain, dealing with customers, and managing the enterprise that are subtly distinct from other types of organization (Lander & Liker, 2007; Liker, 2004; Womack, et al., 1990).

The foundational principle of the Toyota Production System is how every production process relates to a deep organizational commitment to long-term thinking, even at the expense of short-term gain (Liker, 2004; Womack, et al., 1990). Building on that foundation is an emphasis on process and flow with an eye toward continually identifying and resolving disruptions to that flow before they have a chance to grow into larger issues.

This emphasis on long term thinking and commitment to seamless procedural flow is supported by careful cultivation of staff, regularly promoting from within to perpetuate a culture that engages in continual self-

reflection and continual refinement of processes in service of the organization's long-term goals.

Lean systems are noted for their use of visual cues to document and track procedural flow (Lander & Liker, 2007; Liker, 2004; Womack, et al., 1990). Value chains and value stream maps are commonly used in Lean systems to conceptualize, communicate, and review production processes. These visual systems are particularly useful when discussing systemic breakdowns or troubleshooting procedural bottlenecks, especially across separate functional areas.

Another common visual system in a Lean system is called Kanban (Krajewski, et al., 2007; Liker, 2004; Womack, et al., 1990). Translating as the Japanese word for “‘card,’ ‘ticket,’ or ‘sign’”, Kanban refers to a visual tool used to initiate production flow through the production process (Liker, 2004, p. 35). Often literally taking the form of a physical card or sign, a Kanban provides a visual means to both monitor and control the flow of parts and product through a factory (Krajewski, et al., 2007, p. 356). In the Toyota factory, Kanban are revealed when inventory of a specific item dips below a predetermined level. upstream in the production process to indicate when a part or stock item is ready to be replenished. When using Kanban, upstream suppliers do not take action to replenish stock or otherwise move production downstream until they have received a Kanban notification to do so. This innovation is now commonly referred to as a “pull” method of production

(Liker, 2004, p. 104). Pull systems are effective in that they eliminate wasteful overproduction common in mass production environments where processes continue at full speed regardless of customer demand. Simply having suppliers wait until replenishment is actually requested ensures that all efforts are spent in actual service of customer demand rather than wasted on overproduction. This method allows the factory to keep much less inventory on hand and effectively eliminates this type of unproductive waste.

Given that Lean methodologies were developed in the setting of an automobile manufacturing plant, a great many of the tools developed have proven to be very effective in these settings (Krajewski, et al., 2007; Lander & Liker, 2007; Womack, et al., 1990). For instance, a widely known Lean tool called 5-S refers to the practices of sorting, straightening, shining, standardizing, and sustaining work areas in support of Lean operations (Krajewski, et al., 2007). Another tool developed at Toyota is called poka-yoke and refers to error-proofing methodologies designed to contribute to failure proof systems and operations. For example, using poka-yoke techniques, automobile parts are constructed in such a way that it would be impossible to assemble them incorrectly (Krajewski, et al., 2007). Another example could include an alarm that sounds if assembly standards are not met (Liker, 2004). When using poka-yoke techniques, an assembler or technician “should have to think to do it wrong, instead of right” and “reduces the need for rework” (Cudney, et al., 2014, p. 58).

In large part specific tools such as Kanban, 5-S, and poke-yoke contribute significantly to Toyota's efforts to increase productivity and continually lower operational costs. As such, these tools may be readily transferrable to other traditional manufacturing contexts. However, they may not be as readily transferrable to other contexts such as the service or creative industries. In fact, studies suggest that attempting to force fit industrial tools into non-industrial situations can seem to confirm preconceived notions among stakeholders that Lean is a poor fit for these contexts (Lander & Liker, 2007; Marodin & Saurin, 2015). Instead, specialists recommend leaving the tools behind and looking back to the core philosophies of Lean, then leading the organization to develop new tools that specifically apply Lean philosophies to this new context (Lander & Liker, 2007; Marodin & Saurin, 2015; Womack, et al., 1990). Examples of these deeper core principles include a deep organizational commitment to long-term thinking, a clear organizational focus on generating value for customers, employees, and the larger society, and an organization wide commitment to continual reflection and ongoing improvement (Cudney, et al., 2014; Lander & Liker, 2007).

Lean: Applications in healthcare

A notable application of Lean production techniques in non-industrial settings is in the healthcare industry (Cudney, et al., 2014; D'Andreamatteo, et al., 2015; Graban, 2016; Radnor, et al., 2012). This application is particularly interesting due to the fact that, like the performing arts industry, the

healthcare industry also suffers from Baumol's cost disease (Baumol, 1993; Baumol, 2012; Colombier, 2017).

Since the early 2000s, Lean in healthcare has been the focus of a great many researchers from around the world and its application seems to be increasing over time (D'Andreamatteo, et al., 2015). In a survey of 243 scholarly articles relating to the application of Lean in healthcare, it is revealed that Lean methodologies tend to be primarily implemented in clinics and nurses' stations and has mostly been studied in surgery and emergency room contexts (D'Andreamatteo, et al., 2015). This analysis also suggests that, although it has not solved, and cannot be expected to solve all of the problems associated with healthcare delivery in the USA, Lean has had positive performance impacts in both tangible and intangible areas related to labor productivity, cost efficiency, clinical quality, safety, patient satisfaction, and employee morale (D'Andreamatteo, et al., 2015; Graban, 2016).

Adapting Lean to healthcare contexts has not been without issue. Some of the most significant hurdles to implementation include organizational resistance to change, complex onboarding processes, unclear implementation plans, too narrowly focused implementation, lack of unit standardization, and lack of momentum post implementation (D'Andreamatteo, et al., 2015; Graban, 2016; Radnor, et al., 2012). With regard to the narrowly focused implementations, it has been difficult to establish the deep organization-wide commitment to Lean methodologies throughout the entire institution. In fact,

despite widespread successes in narrowly defined operations such as surgery, emergency rooms, and nursing, very few American health care facilities have fully embraced Lean on a system-wide level (D'Andreamatteo, et al., 2015).

It should be noted that, even with a systemwide implementation, Lean is not poised to cure all that ails the American health care delivery system (D'Andreamatteo, et al., 2015; Radnor, et al., 2012). Still, Lean methods do seem to be yielding positive results by improving safety and quality, reducing patient wait times, and generally improving the flow of services throughout organizations (D'Andreamatteo, et al., 2015; Graban, 2016).

Indicators of Lean thinking

There are a number of factors that differentiate Lean from other means of production. Although these factors are not exclusively found in Lean production methodologies, when combined, they can contribute to significant increases in organizational effectiveness, including the ability to maintain flexible and creative output as found in craft production methods while also realizing continually improving productivity found in mass production methods.

Commitment to long-term thinking.

The first primary indicator of a Lean organization is a deep commitment to long-term thinking. This is referred to as a “constancy of purpose” common in Lean organizations (Liker, 2004, p. 81). Such an organization will typically “not see huge growth spurts from one year to the

next or major shifts in strategy” (Liker, 2004, p. 81). In terms of purpose, the core mission will relate to adding value to a triple bottom line “customers, employees, and society” (Liker, 2004, p. 82).

In a Lean organization, this emphasis on long-term remains in place even in the face of short-term opportunities or losses. With this in mind, the Lean organization’s commitment to constancy of purpose suggests that a Lean organization will tend to resist making periodic alterations to their ongoing mission, opting instead to make routine and periodic alterations to operations in support of the unchanging mission.

Presence of ‘pull’ systems.

The next indicator of Lean thinking is the presence of ‘pull’ systems. Such systems reduce operating expenses by minimizing the amount of energy expended in the production, storage, and maintenance of unused supplies. In a Lean organization, equipment and supplies are procured at the last possible minute and in minimum quantity. A great example of an intuitive Lean approach is offered in *The Toyota Way*, “your car signals a need for more fuel when the gauge tells you that fuel is low. Then you go to the gas station” (Liker, 2004, p. 23). In this example, great emphasis is placed on the foolishness of trying to further fill the gas tank before it is ready because you must then turn attention and resources away from the primary mission of driving and try to solve the problem of how to deal with all of the excess stockpiled fuel. Instead, in a Lean enterprise, all processes seek to have “the

equivalent of a “gas gauge” built in, (called *kanban*), to signal to the previous step when parts need to be replenished” (Liker, 2004, p. 23). This ensures that all effort expended in preparing and procuring resources is initiated specifically by customer demand, which in turn eliminates wasteful expenditures dedicated to storage and resource stockpiling.

Broadly trained employees.

Another indicator of Lean thinking relates to organizational approach to employees. Typical mass-production outfits will seek to optimize efficiency by dividing labor to employees with very specific specialties (Womack, et al., 1990, p. 338). This leads to difficulty where an employee with a focused and limited area of responsibility may not really understand how their part fits into the big picture of the production process. The disconnected nature of this approach can lead to major quality issues going unnoticed until the entire production process is complete. This in turn leads to the situation where quality issues must be identified and resolved at the end of the production line in a separate quality control and final repair function. In cases where an error occurs early in the production process, issues related to the initial error tend to multiply and “an enormous amount of rectification work might be needed to fix it” (Womack, et al., 1990, p. 55). Lean organizations, on the other hand, greatly emphasize teamwork, cross-training, and cross-functional teams. This contributes to line workers spotting, reporting, and resolving issues as they occur, greatly reducing the need for post-production quality

controls and last-minute repairs before products are ready for the customer (Liker, 2004; Womack, et al., 1990).

Lean organizations tend not to take advantage of cheap, readily available unskilled labor (Liker, 2004; Womack, et al., 1990). Instead, Lean organizations concentrate on developing cohesive teams of well-trained individuals with a deep commitment to the company. It is not practical to develop the high-level of training and commitment expected of employees in Lean organizations through the use of temporary workers to meet production needs during periods of high activity. Instead, Lean organizations take active steps to level out workload to eliminate dramatically different periods of high and low activity (Liker, 2004; Womack, et al., 1990). This is often done by organizing work into small batches, and quickly switching between different production processes according to customer demand, with attention paid to leveling workflow, eliminating the need for periods of frantic activity alternating with periods of low activity. By restructuring workflow in this way, Lean organizations are able to keep operating at a consistently high level without the need for regular use of temporary labor or the errors and safety concerns that arise when pushing workers beyond their capacity.

Continuous learning and ongoing improvement.

Another key indicator of a Lean organization is a well-developed commitment to continued learning and ongoing improvement. In many ways, the basis of Lean production is a deep organizational focus on “relentless

reflection (*Hansei*) and continuous improvement (*Kaizen*)” (Liker, 2004, p. 250). Continuous improvement is achieved in a Lean organization by developing the organizational capacity to continually and thoughtfully engage in and embrace change. “To become a true learning organization, the very learning capacity of the organization should be developing and growing over time, as it helps its members adapt to a continually changing competitive environment” (Liker, 2004, p. 251). In contrast, many organizations habitually resist change and such resistance to change is a common barrier to implementing Lean methodologies in an organization (Cudney, et al., 2014).

Despite the prerequisite of a systemwide embrace of ongoing change being common to Lean organizations, such institutions are often slow adopters of new technological solutions. Instead, Lean organizations seek to ensure that any technology adopted is reliable, tested, and will work to effectively support “people, process, and values” of the organization, often preferring to use simple manual solutions instead of complex technological solutions (Liker, 2004, p. 159). When new technology is implemented in a Lean organization, it is done only after careful consideration, and the process of implementation is done very quickly.

This commitment to ongoing learning and continuous improvement leads Lean managers to approach problems differently from other organizations. Unlike many mass-production and craft production organizations which are incentivized to keep issues hidden or to keep the

assembly line running at all costs, Lean organizations instead strive to bring problems to the surface and make them more visible (Cudney, et al., 2014; D'Andreamatteo, et al., 2015; Graban, 2016; Lander & Liker, 2007; Liker, 2004; Womack & Jones, 1994; Womack, et al., 1990). This is done at all stages throughout the value chain and much effort is spent developing visual systems that make it even easier to spot problems to ensure that they are solved at the root.

When responding to issues, Lean organizations often employ a tool called a 5-why analysis which ensures that the problem is resolved at the deepest level (Liker, 2004; Womack, et al., 1990). The 5-why technique asks that 'why' be asked not less than five times when a problem is identified. Doing so can resolve the problem at a much deeper level than more superficial analysis might suggest. Once an issue is resolved following a 5-why analysis, the same or similar issues are much less likely to recur. To better describe a 5-why analysis in action, Liker provides the following hypothetical situation:

The problem is oil on the shop floor. In this example, each why brings us further upstream in the process and deeper into the organization. Note that the countermeasures are completely different depending on how deeply we dig. For example, cleaning the oil would simply be a temporary measure until more oil leaked. Fixing the machine would be a little longer term, but the gasket would wear out again, leading to

more oil on the floor. Changing the specification for gaskets could solve the problem for those particular gaskets, but there is a deeper root cause that would still go unresolved. You could purchase other parts at lower cost, based on inferior materials, because purchasing agents are evaluated based on short-term cost savings. Only by fixing the underlying organizational problem of the reward system for purchasing agents can we prevent a whole range of similar problems from occurring again in the future (Liker, 2004, p. 253)

In probing five layers deeper into the issue, the organization is considerably less likely to experience leaking oil, or any other issue related to the sourcing of substandard quality parts at any point in the future.

Applying Lean to other sectors.

Lean was developed as an alternative to both craft production and mass production in the auto manufacturing plants of Toyota in the years following World War II. In that time, Lean methodologies have enabled Toyota to become one of the most flexible, most reliable, and profitable producers of high-quality automobiles in the world market. During the 1980s, other auto producers began to take notice of what Toyota was doing differently and began incorporating Lean methodologies into their own factories (Liker, 2004; Womack, et al., 1990). Adopting Lean methods was not easy and met with some cross-cultural resistance, especially in western societies that emphasize individualism over collective collaboration. Still, as Lean methodologies

began to take hold, the practice dramatically lowered production costs while also improving overall quality.

After seeing the successes of Lean in the automotive sector, leaders in other industries have taken note, particularly service industries like the healthcare sector. Given that, like the performing arts sector, the healthcare sector suffers from Baumol's cost disease which seems to be, at least in part, alleviated by adopting Lean methodologies, this study seeks to explore the viability of such an application of Lean in performing arts contexts as well.

Early applications of Lean within healthcare contexts have demonstrated some positive results (D'Andreamatteo, et al., 2015; Graban, 2016; Radnor, et al., 2012; Sloan, 2014). Some examples include measurable improvements in terms of patient safety and quality as well as demonstrable reductions in patient waiting times and duration of hospital stays (Graban, 2016; Radnor, et al., 2012).

However, these successes have not been achieved without issue in healthcare contexts. Most significantly is that "few Hospital Trusts follow an integrated and system-wide approach to service improvement" (Radnor, et al., 2012, p. 370). This has led to a more limited "tool-based approach" rather than the adoption of an organization-wide philosophy committed to long-term thinking and systems improvement (Radnor, et al., 2012, p. 369). In adopting Lean in this limited fashion, many hospitals report that after initial productivity gains, these process improvement efforts eventually stall.

Radnor et al. go on to explain that there are two reasons that broader implementations have not yet been applied in these contexts. The first reason relates to the complex structures required to interact effectively with external insurance and government agencies for appropriate funding of medical services. The second reason relates to a perception among staff that Lean efforts relate only to management efforts to eliminate operational waste rather than also seeking to address overburden and uneven workloads.

Still, the trend of implementing Lean in healthcare continues as organizations demonstrate success with localized implementations in specific areas such as nursing and emergency services (D'Andreamatteo, et al., 2015). When considering the likelihood of implementing in another context such as a performing arts facility, one will see the greatest ongoing gains by concentrating efforts on an organization wide implementation rather than a small, localized, tools-based implementation as has been done in healthcare (Lander & Liker, 2007; Radnor, et al., 2012). By concentrating on the big picture and long-term elements, organizations are afforded the opportunity to develop new tools specific to the unique social and cultural as well as structural peculiarities of their organization. Lander and Liker demonstrate that this approach of getting the philosophy right first and developing the tools later yields the most positive, most flexible, and most individualized results.

This suggests that there could be room for Lean to be adapted within the context of performing arts facilities, particularly by building an organizational culture dedicated to ongoing efforts to increase flow, and eliminate procedural waste associated with the off-stage activities related to programming, promotion, and production while keeping an ongoing strategic focus on maintaining the integrity of the artistic performance taking place on stage.

CHAPTER III: RESEARCH DESIGN

Primary research question

This study seeks to understand current attitudes and approaches to labor productivity and operations management held by managers of performing arts facilities in the USA to determine whether it could be possible to apply Lean methodologies in performing arts facilities as is being explored by healthcare institutions and the auto manufacturing industry (See Figure 3.1). Through analysis of these attitudes and approaches, this study seeks to identify both hurdles and opportunities to apply Lean productivity enhancements in non-producing performing arts facilities without negatively impacting artistic outcomes.

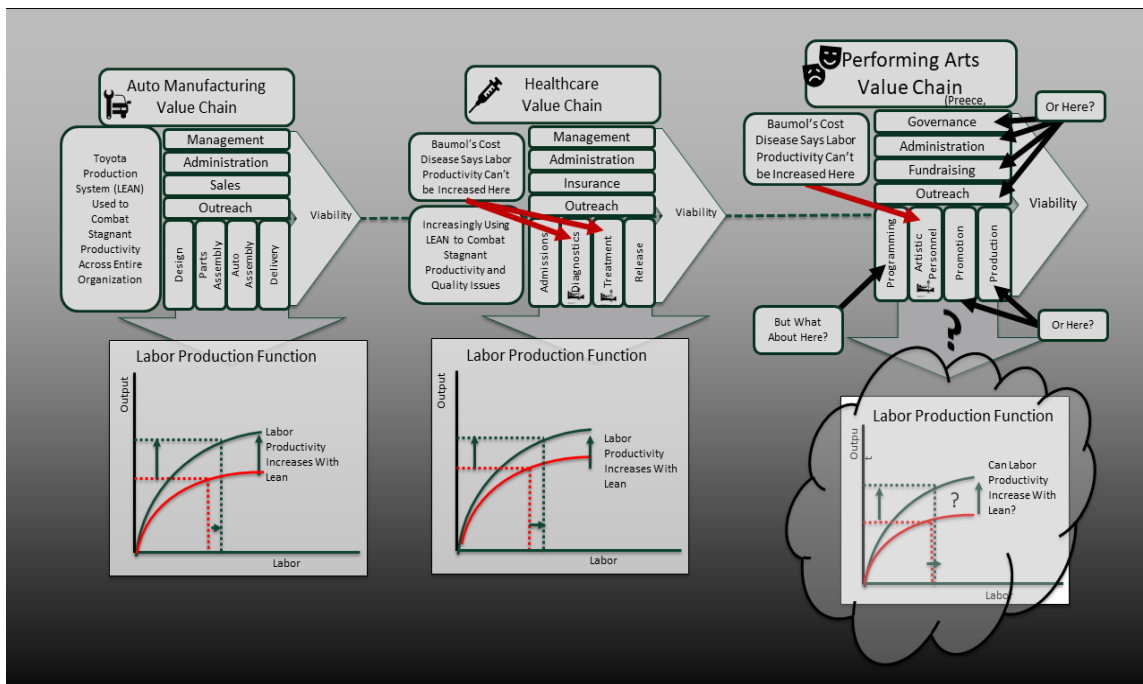


Figure 3.1: Could it be possible to apply Lean methodologies in performing arts facilities as is being done in the automotive and healthcare industries?

The primary question asked in this inquiry is:

- Could it be possible to apply Lean methodologies in the context of performing arts facilities without impacting artistic outcomes and what barriers can be expected when attempting such an implementation?

Research approach/dimensions of research.

This study employed a convergent mixed methods approach and used independent research instruments to gather quantitative and qualitative data which were then analyzed as a whole to answer the primary research question. The quantitative data consisted of an online survey instrument that was analyzed to identify trends and commonalities in attitudes and approaches used by performing arts facility managers across the USA while the qualitative data was analyzed to provide interpretive context and depth to the quantitative data. Once combined, these data were interpreted as a larger whole to answer the main research question as to whether a Lean methodology could be applied in performing arts facilities and what potential hurdles there may be in such a process.

Strategy of inquiry

This pragmatic, convergent mixed methods approach consists of an online survey instrument to generate quantitative data and a series of in-person interviews to generate qualitative data. The data from both instruments

was analyzed as a whole to identify issues and attitudes surrounding labor productivity among leadership at non-producing performing arts venues.

The online survey was conducted using the survey software Qualtrics and was distributed widely among professional members of the International Association of Venue Managers. This survey recorded responses in an anonymous fashion and generated quantitative reports to make observations about attitudes relating to labor productivity held by venue managers in the USA across a range of operational scales.

This survey first collected demographic information to determine the scale at which each respondent is operating, both in terms of budget size as well as venue capacity. The survey went on to inquire into which functional area was the respondent's area of responsibility as defined by Preece (2005). The demographic segment of the survey continued by inquiring into the type of programming featured by each respondent's venue. The survey skipped to the end if the respondent's organization expended over 50% of its time producing artistic content as the activity of primarily producing organizations was outside of the scope of this study. This questionnaire then inquired into which labor unions were active within the performing arts facility.

The survey then engaged in a series of questions about the operational processes and procedures employed by the organization. This segment concentrated on strategic approaches of the institution by inquiring into the stability of the organization's long-term strategic plans as well as the strategic

focus of the organization. The survey then launched into a series of questions relating to various attributes of Lean methodologies such as just in time inventory approaches, efforts to even out workloads, and problem-solving approaches.

The next section focused on the primary functional areas of a performing arts facility including programming, personnel, promotion, and production, using a Likert scale to assess attitudes relating to Lean approaches such as broadly trained employees, an organizational tendency to expose procedural issues, and overall receptivity to procedural change across each of these primary functional areas. The survey concluded by inquiring into whether the facility has ever undergone any sort of formal labor productivity assessment or process improvement plan, then allowing respondents the opportunity to provide any insight, observation, or other thoughts that they might have wished to share.

Analysis of this survey took the form of quantitative analysis to determine whether attitudes or approaches to various Lean methodologies hold any patterns within performing arts facilities.

The qualitative segment of this study consisted of semi-structured key informant interviews conducted with performing arts facility managers across the country representing facilities from a range of operational scales. These in-person interviews were conducted using a snowball sampling method whereby existing contacts were asked to suggest additional interview subjects,

specifically seeking out executive, technical, and operations leadership in performing arts venue management contexts. These interviews were designed to provide interpretive context and clarification for the quantitative data generated in the on-line survey.

Lean methodologies are based on visual management systems such as value chains which serve as a basis for the systematic and ongoing evaluation of processes to increase productive flow through an organization. Both the online survey and the semi-structured interviews associated with this study used Preece's value chain as this basis for evaluating how performing arts facilities currently function at an operational level and better understand operational flow through organizations. Using Preece's value chain, this study sought to identify whether there may be systemic occurrences of procedural waste, lack of flow, or overburden across functional areas within performing arts facilities. This examination sought to determine whether there could be room to apply Lean methodologies in performing arts facilities to address these concerns and potentially lower operating costs without sacrificing artistic outcomes.

CHAPTER IV: FINDINGS

Online Survey

Demographics

The online survey associated with this study was distributed to the community of performing arts/theatre managers within the International Association of Venue Managers (IAVM) on June 3, 2019. This community of venue managers consisted of 173 members from around the world who engage with one another through a member's only online message board system. Additionally, this survey was distributed to personal contacts via email and also in person via a printed card with a QR code linking to the survey which was distributed as I attended the Venue Connect 2019 conference in Chicago between July 21-24, 2019. I closed the survey on August 11, 2019 after receiving 30 responses.

Despite aggressive attempts to promote this survey, the response rate was low. Of the 30 responses, only 12 made it to the end of the survey and also qualified as managing a venue located within the USA. Given this low rate of response, this study is not able to generalize about the sector as a whole or make conclusions or firm recommendations. Nonetheless, in conducting this study, valuable lessons were learned that merit further study. Specific findings will be discussed throughout this chapter, and the valuable lessons will be detailed in the final chapter along with several recommendations for further study.

Of the 12 final responses, four respondents identified as part of administration, responsible for day to day management of their performing arts center. An additional four respondents represent production/operations. Two respondents represent governance, participating in high level oversight of their organization. A single respondent represents the marketing and promotion link in the value chain while another respondent splits their activity between administrative functions and production activities related to front of house operations (See Figure 4.1).

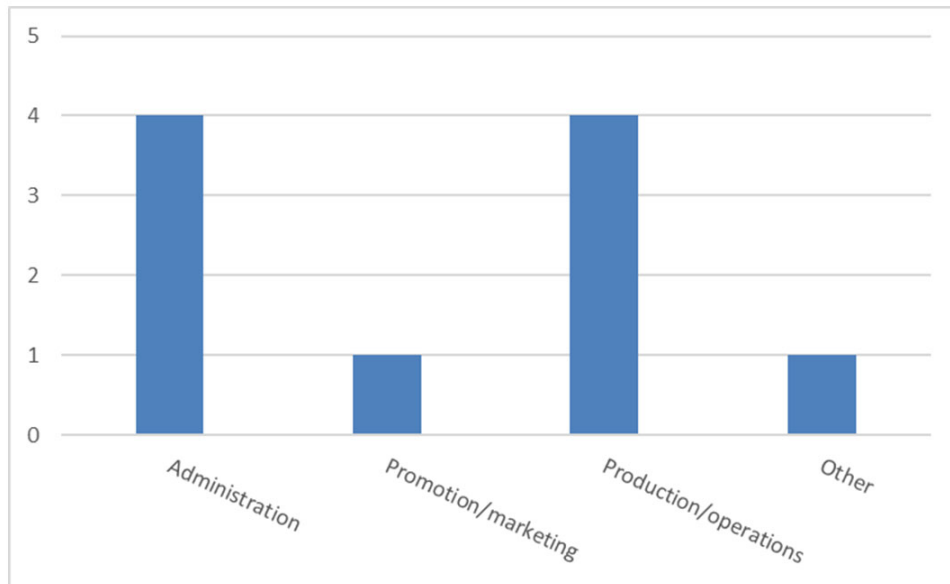


Figure 4.1: What is your primary area of responsibility within your organization?

As expected, given the decision to avoid focus on organizations that produce their own artistic content, none of the respondents represent the function of personnel or on-stage talent.

When considering the proportion of time each organization devotes to specific types of programming, there was great variation in this area.

Collectively, on average, the surveyed organizations spend 35% of their time focused on international or national touring and presenting and 29% of time serving resident company performances. These same organizations spent 11% on regional touring and presenting and 10% of their time on commercial concerts. It is appropriate considering this study's focus on performing art centers as opposed to community halls, convention centers, or universities, that only 8% of time is devoted to community events, 5% of time hosting conferences and meetings, and only 2% of time is devoted to lectures and other activities (See Figure 4.2).

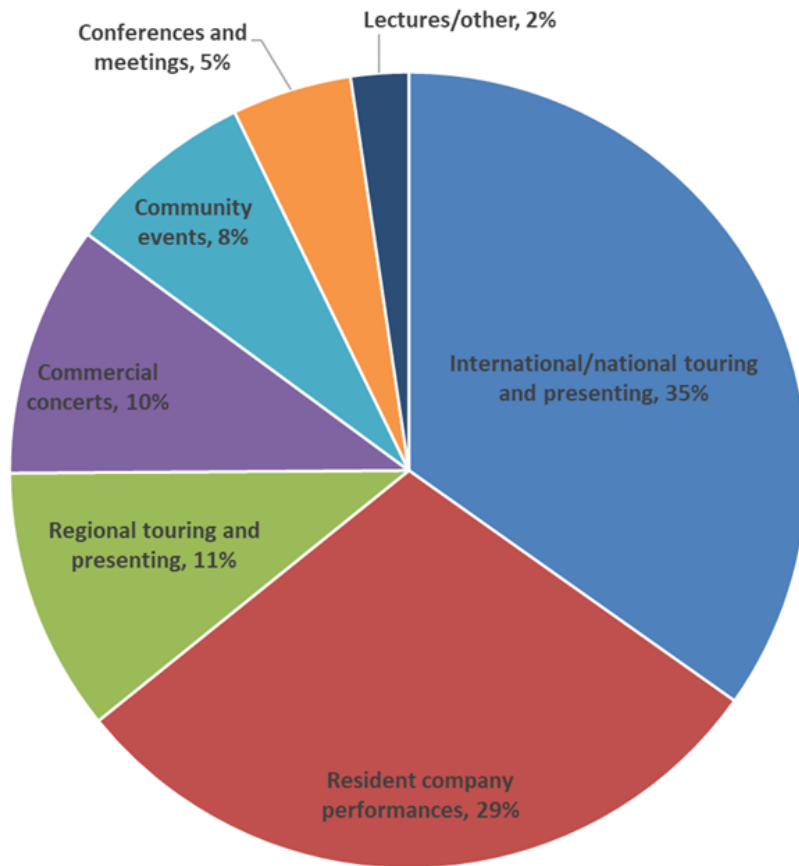


Figure 4.2: Roughly, what proportion of time does your organization devote to the following types of programming?

Within the above breakdown of programming type, there was a great deal of variance across the surveyed organizations. Some managers reported spending as much as 84% of time presenting international and national touring while others devoted as little as 3% of time in the same category. There is similar variance in the resident company performances category leading with some respondents reporting 76% of time in this category and others reporting that their organization spends no time at all with resident companies.

Despite the vast diversity in terms of which specific area of performing arts is presented, there is a clear line between types of programming that is performative in nature as opposed to lectures, conferences, and meetings. This suggests that although this survey has not collected a large number of responses, it has successfully targeted these responses from subjects that represent the intended audience of this study.

Of the twelve completed responses, seven report operating expenses in the range between \$10M and \$50M and appear to be operating on the scale of major metropolitan centers. Two respondents report expenditures between \$5M and \$10M per year. With regard to the categories of expenditure between \$2.5M and \$5M, \$500,000 and \$2.5M and less than \$500,000, the survey resulted in a single respondent for each category (See Figure 4.3).

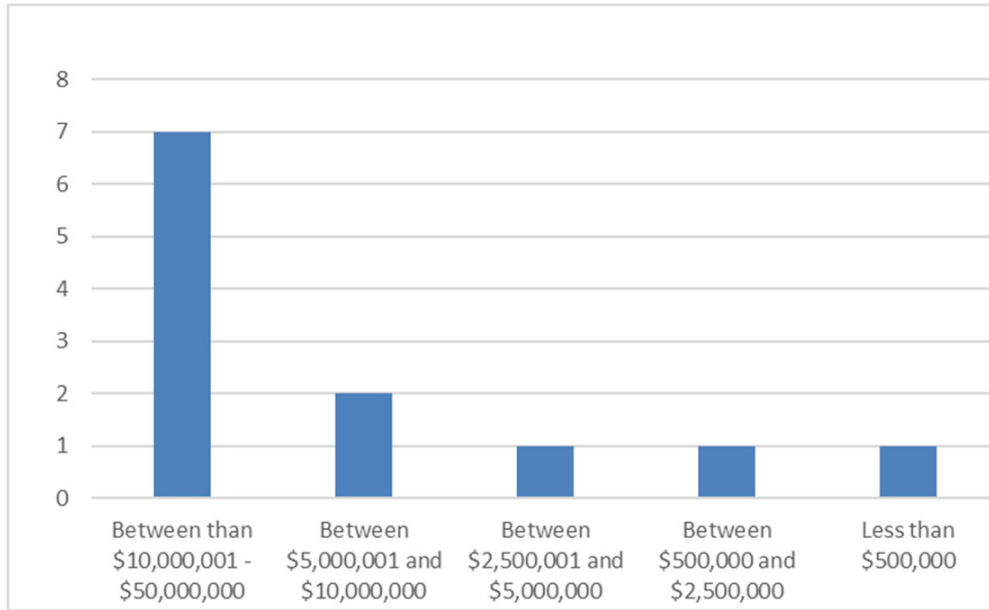


Figure 4.3: What are your organization's annual operating expenses?

When considering revenue for these organizations, on average, 61.25% of income comes from earned revenue. However, there is too much variation within this extremely small sample size to make any judgements about the sector or predictions about other, similar organizations. To describe this variation, at least one of the 12 respondents indicated that earned revenue makes up about 95% of all of their operation's revenue, while another respondent reports earned revenue representing as little as 25% of all revenues.

When considering other sources of revenue, on average, about 21% of revenue comes from government sources, private donations make up 14% on average, and other sources average 4% of all revenues. Again, even within this small sample, there is a great deal of variation across all of these areas. For instance, the maximum reported proportion of revenue coming from

government sources is 75% while the minimum reported proportion is no government support at all. Within the category of private donations, the maximum reported proportion is 33% while other organizations report receiving no private sourced funding at all. The maximum reported proportion of other revenue sources is 30% while most of the responding managers' report receiving no additional support from other sources at all.

This wide range in responses supports the observation in the literature that, while earned revenue appears to make up a large portion of many venue's revenue streams, this earned revenue is not the organization's only source of income (Baumol & Bowen, 1966; Byrnes, 2015; Heilbrun & Gray, 2001; Lambert & Williams, 2017; Stein & Bathurst, 2008; Webb, 2004). As such, performing arts facilities often operate using additional funding from other sources such as governments, private individuals or businesses, or other sources. This small sample also supports the observation that there is a great deal of variation in funding strategies across organizations.

When considering the source of performances across each organization, the bulk of programming comes from presenting and rental sources, accounting for 45% and 36% of productions on average respectively. One of the organizations surveyed devotes 100% of their production calendar to resident company performances, which the respondent reports treating for all intents and purposes like a venue rental. In fitting with the goals of this study to focus on venue operations rather than the creation of artistic content, the

responding managers' report that only 11% of activity on their stages comes from their organization's efforts related to the production of artistic content.

With regard to ownership structure, five of the respondents indicate that their venue is owned publicly as a government entity, four respondents indicate that their venue is owned by a nonprofit organization, and a single respondent indicates that their venue is privately owned for profit. In terms of management structure, there is not a one to one relationship between ownership and management structure. Five respondents report that their venues are nonprofit managed, while three indicate public or governmental management. One respondent indicates that their organization is privately managed while another respondent indicates that their publicly owned venue is managed by a hybrid organization as a government institution with an appointed commission board that operates like a nonprofit organization (See Figure 4.4).

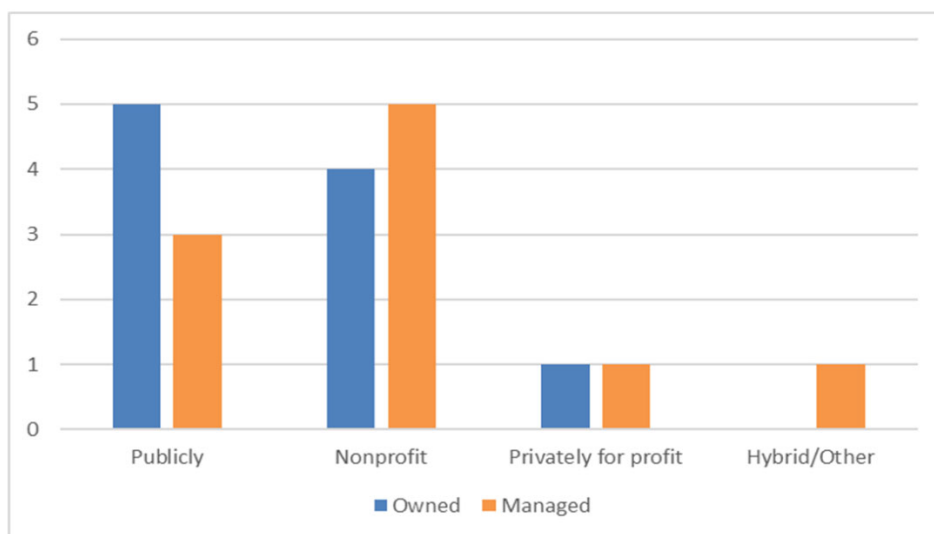


Figure 4.4: How is your organization owned? How is your organization managed?

When considering the size of each venue by venue capacity, only two respondents indicate operating a single venue with one respondent reporting a venue size between 2,000 and 2,499 seats and the other response between 2,500 and 3,499 seats. The remaining ten respondents report managing between three and four venues with the largest ranging in size from 3,500 to about 800 seats and the smallest venues ranging between about 600 and 125.

With regard to union representation among employees, the most commonly represented labor union is the International Alliance of Theatrical Stage Employees (IATSE), with seven out of the 12 respondents indicating this labor union regularly operates within their venues. There are several other unions represented as well including the American Guild of Musical Artists (AGMA), the United Scenic Artists (USA), International Brotherhood of Teamsters (IBT), and Service Employees International Union (SEIU), with a single respondent each indicating that they operate within their venue. This supports the observation that, although not ubiquitous, union representation is commonplace among employees of performing arts venues, especially from IATSE. Any final analysis will need to give consideration toward the influence of union representation when considering labor productivity in the performing arts sector.

In looking at the demographic characteristics of the survey respondents, it is clear that, although the survey did not gather enough

responses to make statistically significant predictions or extrapolations about attitudes and behaviors of managers at performing arts venues, it does appear to have targeted the appropriate audience within the intended type of predominantly presenting and rental based performing arts venues across a range of venue scales of operation within the USA. Therefore, this survey can still be used to gain some perspective about the breadth of opinions held within those venues and uncover areas in which to focus future study. Some of these avenues of future study are suggested in chapter five.

Looking for indicators of Lean thinking

Considering that this survey instrument was targeted towards managers within presenting and rental performing arts venues across the USA ranging in operating scale from small local venues to major metropolitan operations, we can now look at the data returned and observe whether there are any attitudes and observations held within the surveyed population that might provide indications of attitudes and approaches that may support or impede Lean operations. Given the small sample size, this section cannot be construed to be representative of all leaders within the performing arts community. Instead, this section can only explore the range of ideas held by those individuals who responded to the survey.

Organizational focus

Long-term strategic planning

The foundation of Lean operations is a deep commitment to a long-term strategic plan that balances between commitment to a triple bottom line of customers, employees, and the larger society. When considering whether this foundation is conducive to the operations of performing arts facilities, 90% of respondents affirm the presence of a long-term strategic plan for their organization, with only 10% indicating that their organization does not have a long-term strategic plan in place. Of those respondents with long term strategic plans, 67% have updated their strategic plan within the past five years. Of those with strategic plans, 89% indicate that they do plan to rewrite their plan in the near future.

An important consideration for a Lean organization is a long-term strategic vision that seeks to balance the need to add value to customers, employees, and the larger society in which the firm is located. Analysis of the question about who each organization is strategically driven to serve indicates that performing arts organizations are greatly motivated to devote strategic attention to audience members. On average, respondents report that 49% of attention is devoted toward audience members. There is a great deal of variation among other managers in terms of precisely where they split the rest of their strategic focus, but on average, 19% focus energy on neighboring arts organizations, while 14% of energy is focused on performing artists. This

clear, yet divided strategic focus suggests a dedication to a triple bottom line which could be conducive to Lean operations.

To provide more clarity, several respondents opted to include their organizations mission statement in their survey response. Privacy agreements made with the survey respondents make it inappropriate to quote those mission statements in this section. Still, I can state that eight out of nine responses explicitly include efforts to satisfy the needs of their larger community into their mission statements. The remaining respondent, while excluding the larger society, did balance their mission to explicitly serve both artists and attendees.

This suggests that of the survey respondents, most organizations do display a commitment to long-term thinking which could be conducive to adopting Lean techniques within their organizations. Additionally, many of the organizations surveyed readily display an orientation toward recognizing their organizational relationship to their larger community while one organization displayed a focused orientation on the experience of both the audience (customer) or the artists (employees). Additionally, a great majority of respondents indicated active plans to rewrite their mission statements within the next five years. In combination, this could allow the opportunity for the organization's leaders to fine tune the mission statement into greater alignment with Lean operations. On the other hand, this willingness to rewrite the mission statement could indicate a lack of long-term commitment

or fluidity to the mission which could make onboarding, and more importantly, sustaining Lean methodologies more difficult.

Just in time purchasing

Another key indicator of Lean operations comes in the form of “pull” systems which work to reduce the amount of wasted effort in overproduction and stockpiling behaviors. A key indicator of “pull” based systems can be found in the organizational approach to purchase of inventory and supplies. In a Lean organization, efforts to procure inventory and supplies is undertaken only in response to a specific customer demand. Once a customer has initiated a demand, activity related to procurement then moves up the value chain in order to fulfill the customer’s need. To that end, in a Lean organization, purchases, supplies, and inventory decisions made in direct response to customer demand the form of minimum sized orders at the last possible minute or just in time (JIT). A Lean organization will not stockpile resources by ordering ahead just to keep stock on hand. Nor will a Lean organization engage in efforts to make routine purchases at specific time intervals regardless of need deeming this type of activity wasteful.

When surveyed, respondent managers in performing arts facilities indicate a preference toward a common practice of ordering ahead to keep stock on hand rather than make minimum sized orders at the last minute. This is particularly true of expendables such as tape, lamps, and batteries with 90% indicating a preference for ordering ahead to keep stock on hand. In

this section, the remaining 10% of respondents opt to make minimum sized orders at the last minute.

The greatest instance of pull based purchasing behavior can be found in the area of major equipment over \$5,000 with 30% of respondents opting to make minimum orders at the last minute (See Figure 4.5)

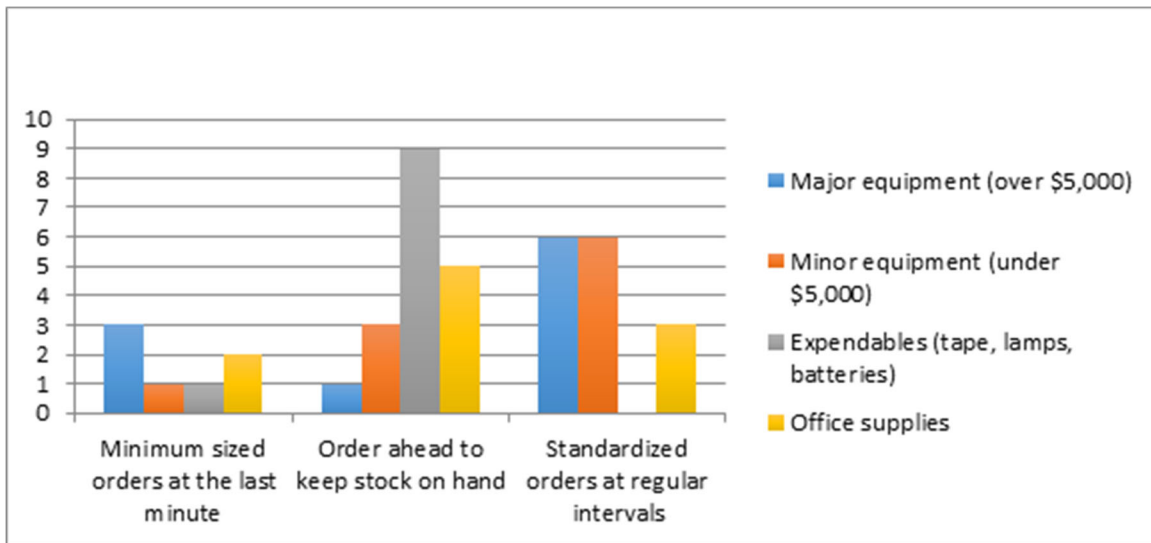


Figure 4.5: After initial startup, how does your organization typically approach inventory/supply purchases?

When considering organizational approach to resupply among responding managers, there appears to be a distinct trend away from Lean behaviors that dictate that purchasing and inventory management be based directly on customer demand. This could be indicative of an area for potential improvement if an organization were to undertake a Lean reorganization within their facility.

Personnel Concerns.

Lean organizations have a distinct approach to management of the people within the organization. Rather than employ a large number of low-skilled employees as might be found in a mass-production organization, or low numbers of highly skilled employees as found in craft operation, Lean organizations take steps to employ the right number of broadly skilled and highly dedicated employees. In developing this close-knit team of broadly skilled employees, cross training and cross-functional teams appear to be common in Lean organizations.

By employing cross-training efforts, managers in Lean organizations are afforded opportunities to move employees around from task to task based on customer demand. This helps to more evenly distribute workloads across functional areas and mitigates the need to bring in temporary staffing during peak periods. These and other active efforts to level the workload help ensure that staffing levels remain appropriate across all links of the value chain without an uneven burden across functional areas which can help employees avoid burnout.

Finally, in a Lean organization, operational decisions tend to be made by seeking consensus between employees and management because employees at each workstation are often in a better position to identify the most efficient way to accomplish a particular task than the managers who may not have as much experience performing that task as do the employees.

Cross training.

In developing a team of broadly trained and knowledgeable staff in a Lean organization, there must be some effort to cross-train employees in place to allow employees to move from one functional area to another. To explore this issue, respondents to this survey were asked whether cross-training efforts happen within their organization. Across the functional areas of programming/presenting, personnel, promotion/marketing, the majority of responses indicate that cross training activities never or rarely happen within their organization. Still, 20% of respondents in programming/presenting frequently or always engage in cross-training. Furthermore, 40% of promotion/marketing frequently engages in cross-training while 40% of production/operations does so sometimes, with 10% of respondents always engaging in cross-training. This suggests that, while apparently not common within the surveyed organizations, efforts to cross train employees is not unheard of either (See Figure 4.6)

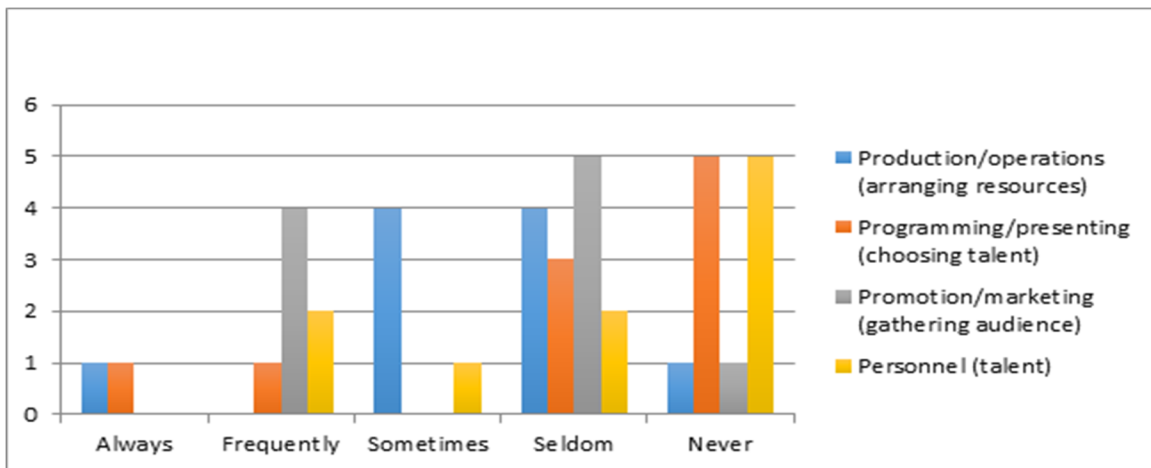


Figure 4.6: In your organization, do any of the following functional areas take advantage of cross training opportunities with other functional areas?

Staffing levels.

When considering whether staffing levels are appropriate across each of the primary functions of the organization, there is some disparity among the respondents across different functional areas. For instance, 80% of respondents agree or strongly agree that staffing levels within programming/presenting are appropriate to the demand placed on that functional area. Conversely, when considering production/operations, 40% agreed or strongly agreed that staffing levels are appropriate, while 50% disagreed or strongly disagreed that staffing levels are appropriate to meet demand. When considering promotion and marketing, responses were evenly split with 40% agreeing or strongly agreeing in their observations of appropriate staffing levels and 40% in disagreement with 10% remaining neutral (See Figure 4.7).

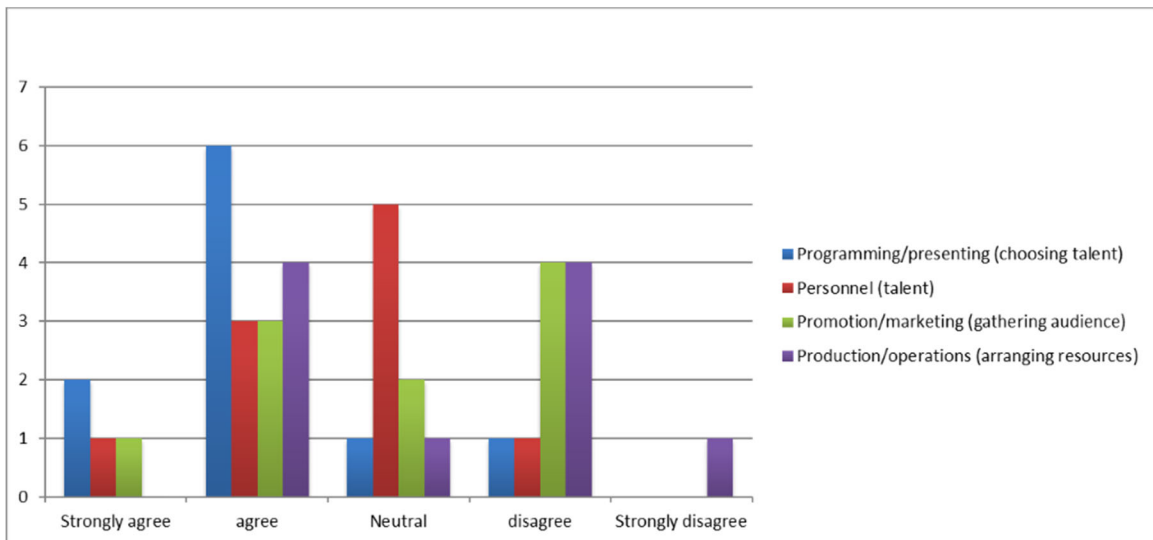


Figure 4.7: From your perspective, would you say your organization's staffing levels are appropriate to meet the required workload?

Given this study's focus on presenting and rental institutions which routinely outsource their on-stage talent, it does not make much sense to give too much attention to this link of the value chain. Still, it is heartening to notice that surveyed managers generally consider staffing levels in this area to be 90% adequate or neutral.

When asked about the occurrence of bringing temporary staffing in to cover staffing shortfalls across functional areas, we can see that 80% of respondents in the functional area of programming/presenting indicate that their organization seldom or never does this. Conversely, none of the respondents in promotion/marketing or production/operations indicate that they never bring in temporary staff to help out during busy times.

What is noteworthy about this is that the use of temporary staffing appears to be commonplace within the surveyed performing arts centers, especially as we move down the value chain toward the moment of production where artists and audiences come together. This use of temporary workers can make deploying Lean operations more difficult because of Lean's dependence on a team of highly dedicated employees with both deep and broad familiarity with the operation to actively contribute to ongoing efforts of continual improvement. Temporary employees will necessarily have much less intimate familiarity with the facility and its operation and will therefore be in a less optimal position to contribute to long-term process improvement plans (See Figure 4.8).

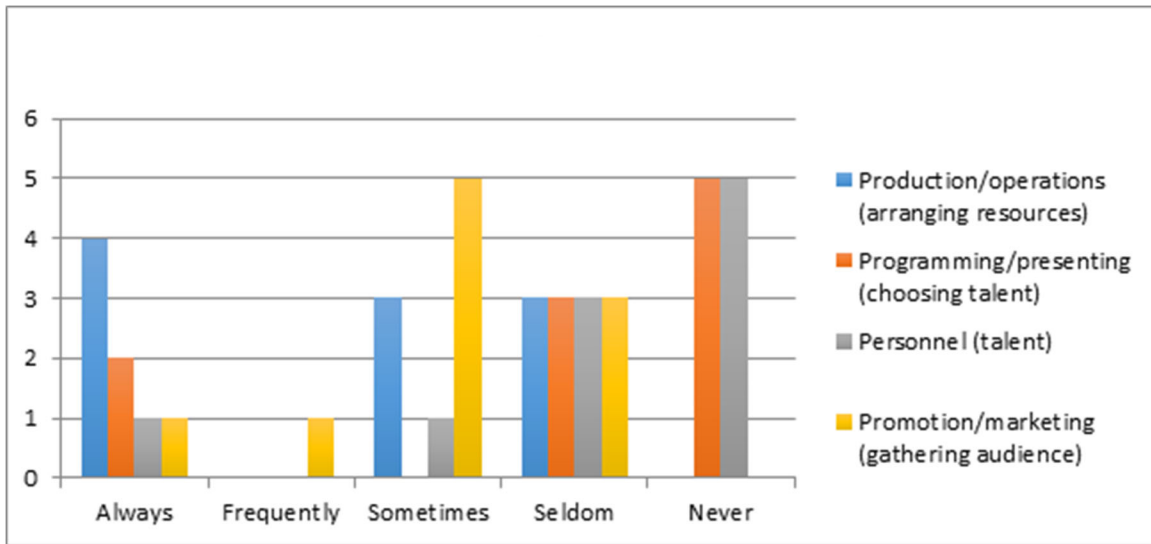


Figure 4.8: Does your organization bring in temporary staffing to meet obligations during peak periods?

Workload leveling.

A common indicator of a Lean organization is the presence of ongoing efforts to restructure workloads to reduce periods of high and low activity and level workflow. By restructuring operations to this end, Lean organizations are able to keep operating at a consistently high level without the need for regular use of temporary labor or the errors and safety concerns that arise when pushing workers beyond their capacity

Among the responding managers, there is a fair amount of diversity in observation with regard to activity levels within the organization. The greatest proportion of respondent's report operating under sustained periods of moderate, yet challenging activity. On average, this section reports that 44% of respondents spend the bulk of time in this state. However, this proportion is skewed by three respondents which indicate that 85%, 85%, and 90% of their operation time is spent in this moderate yet challenging sweet spot. The

remaining respondents report more wildly fluctuating work schedules, only spending between 15% and 39% of time in this moderate yet challenging state.

When asked whether each manager's organization has ever taken steps to level out workload, 60% of respondents report that their organizations have not taken such steps. Among the 40% that have, it is interesting to note that two thirds of the organizations indicating a sustained but challenging workload are included in this group. Another organization reports having taken steps to level workload, but text responses suggest that theirs is a growing organization which is still experiencing rapid and unpredictable growth spurts which have disrupted efforts to achieve a more level workload.

Of those that have taken steps to level out workload, all indicate that these efforts have been only somewhat effective. One respondent indicates that their attempt at workload leveling centers on organizational efforts to focus on specific types of programming, steering away from productions that don't promise to net much revenue. Additionally, this manager reports their organization tends to prefer presenting high demand performances that allow for multi-day runs as opposed to one-night shows as they are less impactful on staff.

Who makes operational decisions?

Another foundational element of Lean thinking in an organization is empowerment of employees within the organization to actively contribute to

the betterment of their work processes through companywide efforts related to continual improvement. A Lean organization's operational decisions will tend not to be made in a top down approach. Instead, Lean organizations seek to empower employees at all levels of the organization to make active contributions to continuous improvement efforts. Therefore, in a Lean ready institution, operational decisions will tend to be made through consensus between management and staff.

Survey results indicate that of the responding managers, 20% feature operational decisions made from the top down by an executive director while 60% of respondents indicate that operational decisions are made by an internal management team. On the other hand, 20% indicate that operational decisions are made by seeking consensus between management and staff. This suggests that some venues, especially those using a top down management approach may have a more difficult time incorporating Lean methodologies than those institutions already making operational decisions through consensus between management and staff.

Approach to problems.

The next selection of survey questions has been gathered using a Likert scale and seek to understand how the responding managers approach issues as they arise during production. The first question in this section asks respondents to rate how their organization responds to procedural issues. Lean organizations go to great lengths to make sure that problems are easily

seen and, once discovered, are solved in such a way as to be impossible to recur.

When considering whether their organization seeks to identify and resolve the underlying issue, respondents indicated that 60% engage in this behavior frequently while another 20% always identify and resolve the root of the issue. Conversely, when considering the question whether their organization internally acknowledges that such issues exist without taking attempts to resolve them, 50% of respondents indicated that this approach is sometimes taken within their organization.

By and large, it looks like respondents take on the preferred Lean method of resolving underlying issues when possible. However, it is somewhat worrisome that so many respondents admit to sometimes simply acknowledging issues without attempting to resolve them. It seems plausible that organizations using this approach to issues may have greater difficulty onboarding Lean methods while also exhibiting the greatest potential for benefit from such activity (See Figure 4.9).

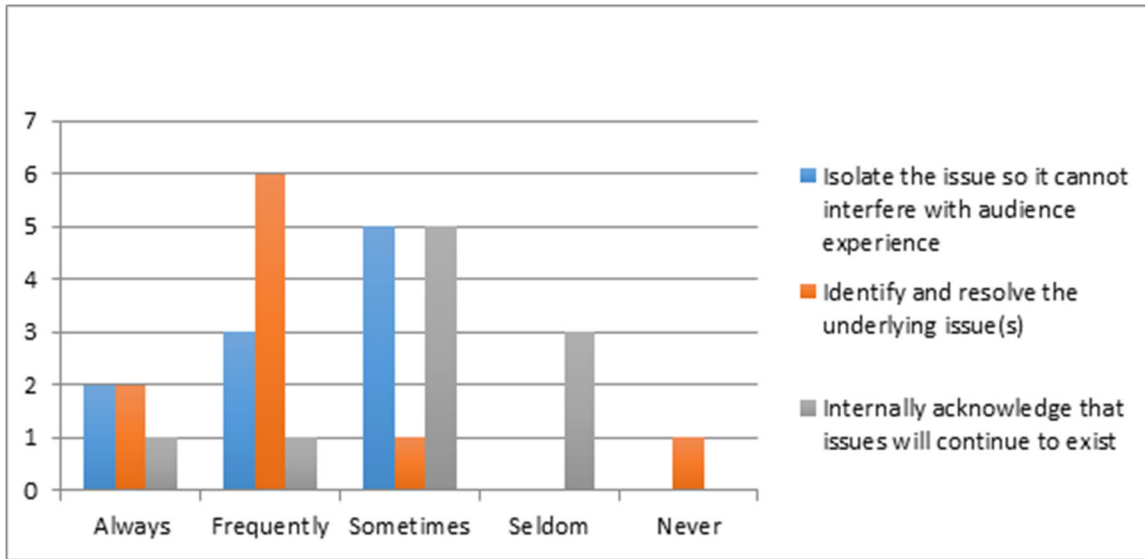


Figure 4.9: How would you say your organization tends to respond to procedural issues?

Hidden problems.

Lean organizations go to great lengths to ensure that issues that arise during production are made as visible as possible in order to ensure that problems can be resolved before there is an opportunity for the issue to grow or recur.

When asked whether small issues ever go unnoticed until they become big issues across functional areas, there was a wide range of responses. It is heartening to realize that no respondent indicated that issues always remain unnoticed until they became big issues. That said, 10% of responses indicated that such issues arise frequently in the area of programming/presenting and 30% of responses indicate that issues frequently arise in promotion/marketing. Further, at least 40% of respondents indicated that

issues sometimes remained hidden across all links of the value chain (See Figure 4.10).

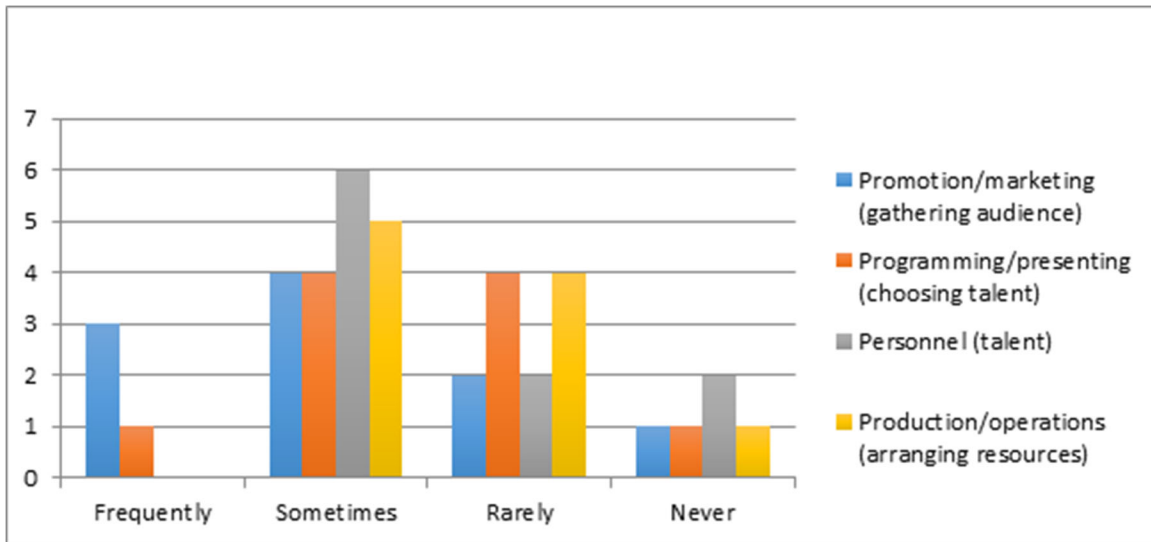


Figure 4.10: In your organization, do small issues ever go unnoticed until they become big issues?

When asked whether steps have ever been taken to make problems easier to see before they have a chance to grow, respondents indicate that this is not uncommon across their organizations. Indeed, 50% of responses across all functional areas indicate that efforts are taken to make issues easier to see at least sometimes with such efforts being most prevalent in production/operations.

Seeing that at least half of responding managers have at least sometimes experienced small, hidden issues grow into larger issues, then considering that at least half of responses have generally been open to the notion of making issues easier to detect may indicate both a justification and an

openness toward adopting the Lean method of making problems easier to see during the production process (See Figure 4.11).

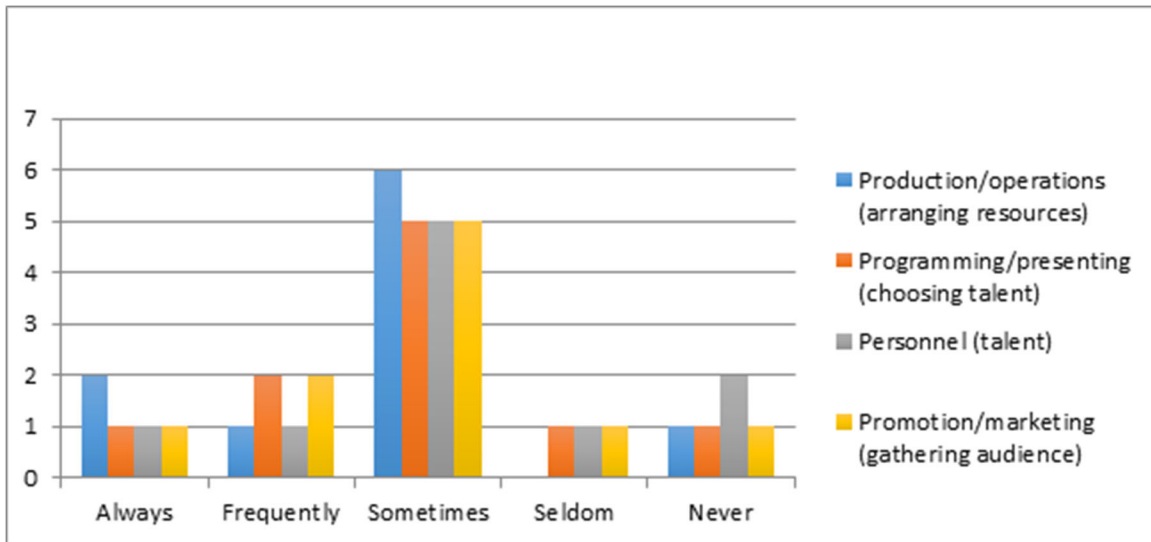


Figure 4.11: In your organization, have steps ever been taken to make problems easier to see before they have a chance to grow?

Response to procedural change.

Given the prerequisite of a Lean organization to deeply and completely embrace a philosophy of unending continual improvement, it would be most helpful for any organization preparing to embrace Lean methodologies to also embrace ongoing procedural change.

However, none of the managers surveyed strongly agree with the question that their organization responds positively to procedural change in any functional area. That said, again discounting the on-stage talent, 40% of respondents agree that both promotion/marketing and production/operations do respond positively. Further, 50% of respondents agree that programming/presenting do as well. On the other side of the coin, 20% of

respondents disagree or strongly disagree that their organization responds positively to procedural change across all of the primary links of the value chain.

While the greater portion of respondents are either neutral or generally agree that their organization responds positively to procedural change across all functional areas, this less than enthusiastic embrace of change, paired with the undercurrent of disagreement that their organization responds positively to procedural change could be indicative of a hurdle in the implementation of Lean among the surveyed organizations (See Figure 4.12).

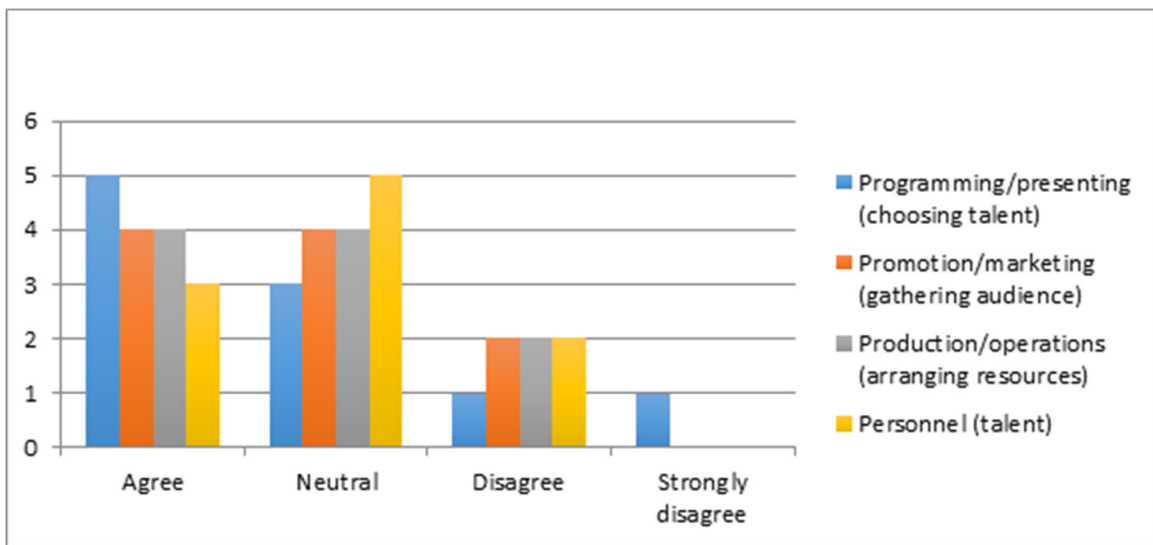


Figure 4.12: Would you say your organization responds positively to procedural change?

Adopting new technology

Lean organizations tend to have an interesting approach to new technology. Lean organizations tend not to be early adopters and are often slow to incorporate new technology, instead preferring to undertake simple,

direct, and often low-tech solutions to resolve problems. However, once a Lean organization engages in thorough deliberation and makes the decision to incorporate new technology to resolve a specific problem, it implements that solution very quickly. In order to do this, employees within a Lean organization must be at least somewhat ready to incorporate new technology into their operations.

When considering attitudes toward organizational readiness to incorporate new technology across functional areas, surveyed managers generally agree that those in programming and presenting readily incorporate new technology, with 70% of respondents agreeing or strongly agreeing with this statement. When considering promotion/marketing, 80% of respondents agree or strongly agree that promotion/marketing readily incorporates new technologies. When considering production/operations, 20% report neutral attitudes, while 70% agree or strongly agree that production personnel readily incorporates new technology (See Figure 4.13).

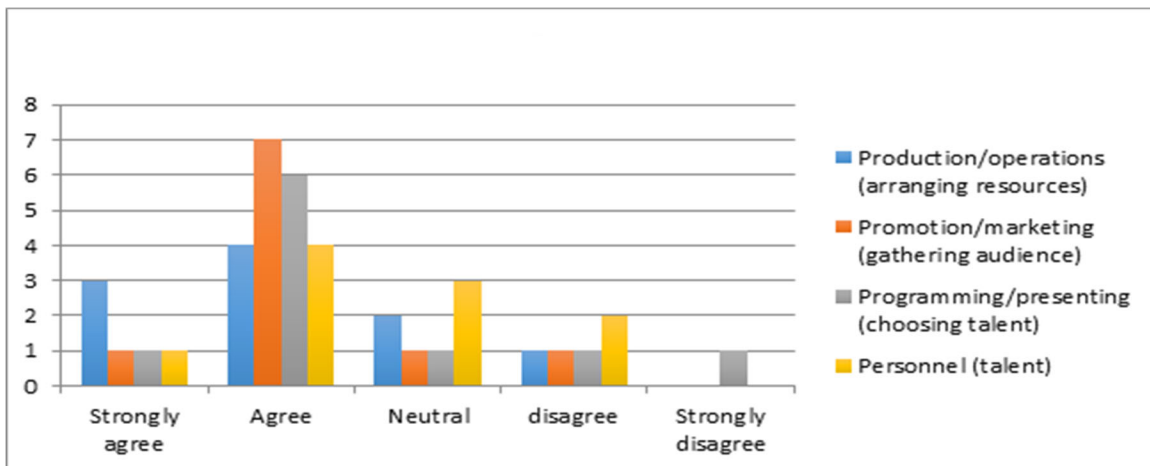


Figure 4.13: From your perspective, would you say your organization readily incorporates new technologies?

It seems that although respondents within performing arts centers generally indicate an organizational resistance to procedural change, there is an opposing embrace of new technology and the procedural change it brings. This may be a hurdle for those incorporating Lean within performing arts contexts because Lean organizations demonstrate the opposite tendency. Lean organizations feature a deep and ongoing commitment to the embrace of procedural improvement and the change it brings with a comparatively slow and deliberate embrace of technology.

Organized efficiency program?

The next phase of this survey makes inquiry into whether any of the respondents has ever considered any organized attempt or demonstrated interest in employing operations management techniques to improve labor productivity and/or reduce inefficiency within their organization. To this end, the survey inquired as to whether their organization had ever undertaken a productivity analysis. Twenty percent of respondents had while 70% of respondents had not. A remaining 10% was unsure whether their organization has ever undertaken such efforts.

When asking whether anyone in the organization has considered undertaking such a project to identify/eliminate inefficiency in operations, 44% respondents had at least considered it. When asked why or why not, the negative responses indicated that such a project did not rise as a priority in

their organization. Other negative responses indicate a lack of available resources to dedicate to such efforts. Positive responses indicated that many such efforts have taken place informally or have been embraced in small pockets of the organization without being embraced throughout the entire company. Other positive responses indicated efforts to take advantage of opportunities at IAVM to benchmark their organization against others in terms of cost and revenue.

When asked whether they believed their organization could benefit from an organized project to identify/eliminate operational inefficiency, 80% of respondents indicated yes while the remaining 20% responded with a maybe. None of the respondents replied with a no in this portion of the survey. However, when asked “why or why not?” a single response directly stated in a narrative response that “I don’t believe we are in a position to benefit from this right now.” Other responses to the why or why not question appeared to cluster into groupings that conceded that any organization could benefit from activities related to process improvement. Many of these responses went on to express the difficulty of changing the status quo or trying to change the way things have always been done. One respondent stated, “I think every venue could use this.” In the next breath, this respondent offered the sage advice that “one must tread lightly when walking into a stranger's house and telling them how to run it.”

Summarizing the survey

Despite aggressive attempts to promote the survey, the response rate to the online survey was low and the completion rate was even lower. Still, the survey was successful in its effort to target leaders and managers within the community of performing arts venue managers. This successful targeting makes the survey useful as an exploration even if it cannot be used to make determinations or generalizations about the field of performing arts facility management as a whole.

In examining the results of the online survey, it is clear that among those surveyed there appear to be some areas of alignment with and nonalignment with Lean thinking. Some areas of alignment between the views of performing arts managers and typical Lean operations include a general tendency among surveyed managers to engage in long-term strategic planning efforts. Indeed, 90 percent of surveyed managers indicate having a long-term strategic plan in place for their organization. Further, examination of several mission statements submitted in the survey suggest that there could be some compatibility between the triple bottom line served by those surveyed and the type of triple bottom line favored within Lean operations.

With regard to areas of general nonalignment, most responses were decidedly mixed, and given the small sample size, results are unclear. Among the surveyed managers, at least some of the responses indicate that some organizations engage in resource stockpiling by making resource purchases

ahead of time or at routine intervals rather than employing a ‘pull’ based approach to inventory management as would be found within a Lean organization.

Also, when asked about how their organization responds to procedural problems, only two respondents indicated that they always identify and resolve the underlying issue. Instead, the majority indicated that the typical approach was to isolate the issue so that it cannot interfere with audience experience, while a few respondents indicated that they sometimes simply internally acknowledge that issues will continue to exist. This suggests that the organizational culture at the facilities of at least some of the surveyed managers is somewhat ambivalent to procedural issues and non-responsive when they arise. This approach is antithetical to Lean operations and its requisite commitment to ongoing and systemic elimination of procedural waste and the problems that unresolved issues can cause.

Another area where some organizations are not aligned with Lean operations involves a tendency among some of those surveyed to engage temporary laborers during periods of peak activity. Lean operations are based on the fostering of a deep, organization-wide culture that is committed to the ongoing improvement of the organization. As a general rule, given the short-term commitment of temporary workers, it is more difficult to encourage their demonstrating a deep interest in the long-term betterment of the organization.

Another significant area of nonalignment with Lean methodologies can be seen in the fact that some of the responding managers indicate that operational decisions are made from the top down by an executive director or other strict hierarchical leader rather than a flatter organizational structure as might be found in a Lean organization. Lean methodologies really require direct and coordinated involvement from both front-line workers and management in order to be successful.

Still, given the limited sample size of this survey, and the reality that the results in all of the areas mentioned above were in fact mixed, the above described areas of alignment and nonalignment yield results that are unclear. The fact remains that despite a tendency among some of the surveyed managers to not engage with Lean style 'pull' systems, other managers do seek to put off making purchases until the last possible minute. While some of the responding managers engage the services of temporary laborers to help out during periods of peak activity, other managers take advantage of cross-training efforts instead. Some organizations respond readily, if not enthusiastically to procedural change and new technologies while others tend to find a process that works and stick with it. Some of the surveyed managers come from organizations that are run using a top down manner while other organizations are run using a flatter organizational structure where operational decisions are made through consensus between management and front-line staff. This mix of responses supports observations in the literature

about a large amount of variety in organizational and management structure across the range of performing arts facilities located in the USA (Lambert & Williams, 2017; Stein & Bathurst, 2008). This suggests that within this variety, at least some organizations may find it difficult to adopt Lean methodologies, while other organizations may find it easier to learn about and incorporate Lean thinking into their ongoing operations.

In-Person Interviews

In preparation for this exploratory study, I approached several managers of performing arts facilities to conduct in-person interviews which consisted largely of the same questions posed by the online survey but provided more opportunity for in-depth narrative responses in order to add a qualitative and interpretive context to the study. The individuals approached to participate in the study included some of my existing contacts within the performing arts management community as well as individuals associated with or in attendance at the summer's IAVM conference in Chicago where I attended as a participant observer. In addition to these individuals, I also asked these contacts to make recommendations for other people that they thought appropriate to participate in the in-person phase of this study. Despite active recruitment efforts, several potential participants expressed discomfort at the prospect of providing quotes and declined to participate.

Still, this recruitment process did yield results from in-depth interviews with three managers who represent different points of view within

the performing arts management community. The first interview was conducted with Jason Way, the Venue Manager and Production Manager at Pipeline Productions which presents musical performances at its outdoor music venue called Crossroads KC in Kansas City, Missouri. The second interview was conducted with Kathy O’Leary, the Facilities Director for performing arts facilities at Rowan University in Glassboro, New Jersey. The final interview was conducted with Rich Hobby, the Director of Marketing at the Hult Center for the Performing Arts in Eugene, Oregon.

While each of the three interviewees manage performing arts venues, they each have very different physical and organizational structures and also tend to feature different artist types, engage different audience demographics and are subject to different organizational constraints that govern their activity. Additionally, each of the interviewees is subject to different pressures with regard to labor productivity and therefore approach issues related to management of their operation in different ways.

Jason Way at Crossroads KC (Pipeline Productions)

Jason Way is the Production Manager and Venue Manager at Crossroads KC in Kansas City, Missouri. Crossroads KC is an outdoor music venue located in the heart of the city’s Crossroads Arts District and overlooks the city’s skyline. The venue can accommodate an audience of about 3,000 people. As an outdoor venue, Crossroads KC operates seasonally from May

through October each year and facilitates between fifty and sixty nationally touring, primarily popular music performances each season.

The facility is owned privately as a for-profit partnership between three principal individuals. The first principal operates the performance art aspects of the venue under a side company called Pipeline Productions, where he splits his attention between programming and promotion. The second principal owner owns the actual property and operates a restaurant and bar connected to the venue called Grinders. The third principal owner of the venue bought into the endeavor as a capital investor. All three owners share profits from ticket, food, and beverage sales according to a pre-arranged deal. Mr. Way is an employee of Pipeline Productions and serves as venue manager and production manager. As such, Mr. Way is responsible for ensuring that the venue is functional from a technical perspective and that all physical and human resources are in place for each performance.

The primary source of supplementary revenue beyond ticket sales at Crossroads KC comes from food and especially beverage sales. This leads to there being some consideration given to how audience demographics at each performance will impact food and beverage sales when choosing artistic content.

Governance of Crossroads KC is provided by the three owners of the organization. Day to day management of the facility is conducted by a management team, which includes the individual owner of Pipeline

Productions who takes on the role of the primary programmer by booking the on-stage talent for each performance. Additionally, this owner takes primary responsibility for promotion and marketing as well. Handling the production aspects of the value chain is Mr. Way, who coordinates closely with the owner to handle all of primary activities of the performing arts endeavor. In terms of support activities, this organization employs a promoter representative at a peer level to Mr. Way who represents the owner in coordinating hospitality and settlement between the venue and artists and their agents. There is a box office manager who oversees ticket sales and website announcements and partners with the owner in support of marketing and promotion activities as well. Additionally, there is an IT manager, an accounting manager, a security manager, a bar manager, a stage manager, and a staffing director who oversees front of house operations.

Crossroads KC does not operate using union labor. As a result, Mr. Way has a lot of flexibility when structuring the work of his employees. For instance, Mr. Way can ask employees from one production area to move to another area during periods of downtime. Crossroads KC engages with a lot of cross-training activity. Using himself as an example, Mr. Way, a skilled photographer, videographer, and graphic designer, admits that he is often called upon to coordinate with the promotion and marketing department to create marketing videos and posters in support of efforts outside of his primary area of focus in production. Additionally, when discussing his

employees, “some of my door staff will jump on and be stagehands and vice-versa... same with bartenders, those people cross-pollinate.” This ability to move personnel from one area to another seems to be especially useful in helping address periods of high and low activity because frontline staff can simply move from one department to another during periods of downtime in their primary area of employment. This in turn reduces the overall number of people that need to be hired in the facilitation of each performance. Still, whenever practical, Mr. Way expresses a preference to keep employees working within their own disciplines. The reason for this is that doing so increases confidence that employees will be able to accomplish their required tasks, which in turn reduces his tendency to micromanage personnel which in turn tends to slow down the work and decrease the effectiveness of the organization.

When considering the presence of a long-term strategic approach, Crossroads KC’s mission statement reads: “we are devoted to make the artist and fan experience not only superior but memorable.” While not addressing the larger community as in a Lean organization, this motto does seem to balance strategic attention between a segment of employees (the subcontracted artists) and the ticket buying customer.

When applying this long-term strategic orientation, Mr. Way describes a commitment to continually “improving our effectiveness and ability to sell the product that we sell which is, basically, a ticket. We’re trying to better our

operational setups every day, every show... We are always looking forward, what shows can we get, how can we improve our venue and our operations, how can we improve the patron experience, and how can we maximize our efficiency and productivity so that we can improve our profitability and sustainability.” This commitment to continuous and ongoing improvement aligns quite well with the commitment to organizational learning and ongoing improvement found in a Lean organization.

When considering how issues that arise during production are addressed during the course of daily activity, Mr. Way strives to foster an environment on his team where feedback is given freely and openly from artists, audiences, and employees. To this end, Mr. Way states, “I accept all feedback, I don’t want anyone to ever feel like they shouldn’t tell me something. The worst thing I experience personally as a boss is when someone lets something go to become a big problem... we’re all in this business to solve problems and the show’s gotta go on.”

Still, despite his best efforts at resolving problems before they can grow, issues still do arise in the workplace. The important part seems to be about how an organization deals with problems when they do arise. In describing one, particularly memorable issue, Mr. Way relayed a story about identifying that a fire extinguisher was not where it should have been within a theater in which he worked. In recounting the analytical process he went through after identifying this anomaly, Mr. Way described an intuitive

application of a 5-why analysis which quickly revealed that earlier in the evening, an employee had tried to improperly adapt a piece of rented equipment into an incompatible power supply, leading to an electrical fire which they had then tried to hide. While the fact that the employee tried to hide such a significant and potentially destructive issue speaks to a separate personnel matter, Mr. Way's intuitive application of a 5-why method of issue resolution demonstrates that such a process can fit and be applied in performing arts facilities and contexts.

When asked about whether there have been any formal efforts to streamline operations or steps taken to increase labor productivity within the organization, Mr. Way couldn't describe any specific or formal efforts to do so, nor does he admit to receiving any formal training in Lean methods. Still, he seems to be embracing a Lean like approach to the management of his venue's operations, underlining that his organization is always open, and always looking for ways to improve.

Kathy O'Leary at Rowan University

Kathy O'Leary is the Facilities Director for the performing arts facilities at Rowan University in Glassboro, New Jersey. Ms. O'Leary has been employed by the university for 30 years, working her way up to Facilities Director after starting out as the Assistant Theater Arts Manager and earning a degree from the institution as a theater technician. The venues managed by Ms. O'Leary consist of an 800-seat proscenium theater called Pfleeger Concert

Hall, a 530-seat proscenium theater called Tohill Auditorium, a 200-seat proscenium theater called Boyd Recital Hall, and a 50-seat black box theater.

The venues themselves are owned and operated by Rowan University with funding for maintenance and upkeep coming from the university's general facilities operating budget. Day to day management of the facility comes from the College of Performing Arts which is responsible for many aspects of the facilities' operation. When considering the primary functional areas of programming, personnel (on-stage), promotion, and production, Rowan University handles much of these operations in-house directly through the College of Performing Arts. In many cases, the artistic content is generated by students and teachers as part of academic programs. Still, the facilities operate largely as a rental institution with these, still internal units, renting out the venues and engaging the services of hourly and student employees to facilitate each production.

While serving as a rental institution, the facilities at Rowan University maintain their focus on academia by engaging in strategic scheduling practices that prioritize student and academic use. The student and campus departments enjoy priority booking rights and may book a venue (or venues) up to two years in advance while external clients may only book venues nine months to one year in advance. This leads to about 70% of productions being dedicated to academic pursuits and include a professional artist concert series presented by the College of Performing Arts. The remaining use of the venue

comes from non-university sources such as regional dance companies, government debates, conventions and a variety of other uses.

The facility operates year-round but tends to experience some seasonality that parallels the typical fluctuations of the academic calendar of the university. This leads to higher levels of activity from the start of fall through spring semesters and experiences lower levels of activity, especially in the concert hall, during the summer when many students are away from campus.

The performing arts facilities at Rowan University, while operating as a rental organization within the larger community of the College of Performing Arts, do not closely align strategically with the mission of the College of Performing Arts, nor does it have a long-term strategic plan of its own. Instead, Ms. O’Leary considers the production team to be more closely aligned with the larger university mission, but generally does not engage with these long-term strategic concerns on a day-to-day basis apart from “trying to keep with the basic ideals of customer service and maintaining a facility for the community.”

When asked about how operational decisions are made within her organization, Ms. O’Leary indicates that such decisions are largely made according to the university’s hierarchical system from the dean down. Upon receiving direction from the dean, the department chair will then instruct the faculty member in charge of each production who will then detail the

production and venue requirements to Ms. O’Leary and her team. For external events, a contracted event services team coordinates details with the artist, then generates contracts and determines production requirements. This event services personnel then passes this information on to the production team. Once these details are confirmed, Ms. O’Leary and her team arrange all of the relevant production elements and ensure that the facility is in order and ready for production.

The university does not employ union labor on a regular basis to facilitate performances unless a specific production requires it. For these “yellow card” shows, Ms. O’Leary will contract union labor from the regional IATSE labor pool to work the show. In the great majority of cases, the university employs a team of about thirty student workers to perform the work of the event production team. While establishing that she is still the boss, Ms. O’Leary does take steps to encourage her team to provide feedback about how to do things better and when appropriate acts on employee suggestions to improve systems and processes.

When considering fluctuating workloads, Ms. O’Leary recognizes that there are definite swings between high and low activity. Still, Ms. O’Leary schedules house managers and technical staff regardless of the activity level in the facility. During times when there are not shows, she will send teams out to engage in non-production related projects, maintenance, and general clean-up of the facility. She credits the fact that they are a non-union

operation with this ability to move employees around from one job to another in her effort to maintain consistent employment for these individuals while maximizing productivity. During peak times, as a non-union organization, Ms. O’Leary is able to draw on help from other departments adjacent to her organization such as marketing to help out. Still, Ms. O’Leary and her team defer to traditional IATSE guidelines that establish breaks and mealtimes in an effort to ensure that her team is not overworked or driven to burnout.

When considering how her organization deals with issues as they arise, Ms. O’Leary extolls her organization’s informal motto as “Semper Gumbi – always flexible” emphasizing that “the show must go on, tempered with reality.” This need to stay flexible stems from her observation that, despite robust efforts to gather detailed and complete information in advance of each production, it is often difficult to draw all relevant information out of her clients. This difficulty seems to be rooted in the fact that the university clientele tends to be somewhat less experienced than clients might be in a non-university setting. Still, in times when dealing with professional productions, Ms. O’Leary relates that technical advance documentation from artists is often out of date and/or may be incomplete. In either case, Ms. O’Leary draws upon her experience and personal expertise to recognize when information might be incomplete or out of date and then take steps to draw out better information.

When considering issues as they arise within her organization and within her control, Ms. O’Leary credits good communication and positive relationships with helping her coordinate activities and keep issues from growing unnoticed into larger issues. The most significant issue facing Ms. O’Leary and her team relate to the fact that the institution has grown from a population of 13,000 students to 19,000 students in the past few years. This has led to great increases in demand on her team and her facilities without a proportionate increase in staffing. Ms. O’Leary’s response to this issue has been to be clear with the event services department, the dean, and upper administration when expressing limitations regarding her venue’s carrying capacity as it is currently staffed.

When considering her institution’s organizational attitude to change, Ms. O’Leary expresses a largely positive attitude toward change while also recognizing, like many other teams in large institutions such as universities, there are a few people within her organization that are hesitant and sometimes resistant to change. Further, she expresses that “it’s very easy for an academic institution to fall into ‘well, that’s the way we’ve always done it’.” In this environment, Ms. O’Leary suggests that any changes be broached carefully so as to be presented in a non-threatening manner, and not simply be forced upon anyone.

When asked if any part of her organization has taken part in any effort to increase operational efficiency, Ms. O’Leary indicates that although her

organization has not recently engaged with any formal or systematic effort to increase operational efficiency or labor productivity, she and others in her organization are “always looking to create more efficiency with regard to changing how we do things.” Ms. O’Leary brings up that in her experience, the biggest productive leaps seen in her organization tend to take place when new people with new ideas are brought into the organization.

Rich Hobby at Hult Center for the Performing Arts

Rich Hobby is the Director of Marketing for the Hult Center for the Performing Arts in Eugene, Oregon. The Hult Center is a large community venue with two primary indoor performance spaces. The Silva Concert Hall is the larger of the two with 2,448 seats while the smaller Soreng Theater seats 496 guests. The venues operate year-round and accommodate a combination of resident company performances and touring productions. Mr. Hobby’s marketing work largely supports a robust effort on the Hult Center’s part to present a vigorous season of thirty to forty productions presented by the Hult Center itself. Facility rentals from outside promoters make up the remaining portion of the venue’s performance calendar.

The Hult Center for the Performing Arts is owned outright by the City of Eugene and operates as a part of the city’s Cultural Services division. Within this division, all non-management employees are represented by the AFSCME public services employee union apart from the on-stage personnel which is represented by IATSE local 675.

The primary source of supplementary revenue beyond ticket sales at the Hult Center for the Performing Arts comes from a transient room tax (TRT) which levies a 4.5% tax on all stays at hotels, motels, and other overnight accommodations within the city. This TRT is then used to fund the City of Eugene's Cultural Services office which in turn funds the Hult Center for the Performing Arts. By basing the funding of cultural services on this TRT tax, city leadership is able to communicate to its constituents that these cultural services are not a burden on the community, but instead part of a larger plan and project to bring outside dollars into the community to help stimulate the local economy. An important secondary source of earned revenue comes in the form of food and beverage concessions and in fact, a commercial kitchen was recently installed to facilitate the venue's ability to sell more substantial types of food, which in turn creates opportunities to sell additional types of beverages.

When asked about a long-term strategic plan, Mr. Hobby indicates that there are definitely plans, purpose, and mission statements associated with the Hult Center as a building. Mr. Hobby distills this mission by stating "our goal is to bring world class performances to our stages for the enjoyment of our community... our community values incredible art, and it is our job to make sure that it is coming here." In terms of application of strategic attention, Mr. Hobby's focus is not surprising considering his role in marketing. His personal attention is very much focused on the larger

community, specifically on finding and reaching different audiences within and encouraging them to attend performances presented at the Hult Center.

When asked to consider the flow of activity across the functional areas of programming, personnel, promotion, and production, it is apparent that Mr. Hobby's primary area of responsibility, and therefore his attention focuses clearly upon the singular area of promotion. That said, he recognizes the importance of clear communication and collaboration across the other functional areas. Most significantly top of mind for Mr. Hobby is the collaboration between his role and that of programming. The strength of this relationship is reinforced by the fact that within the Hult Center, Mr. Hobby's promotion/marketing operation shares an office with the programming/booking department. From this proximity, both programming and promotion are readily positioned to share information and collaborate as deals are sought and made between the venue and the touring artists who represent the personnel side of the operation. Mr. Hobby describes the organizational relationship between production, or "tech" as strong as well despite the production office being located on the other side of the building. This apparent distance is mitigated in that so much of the work of production happens on-stage, so production personnel are rarely in their office anyway. Even if the office were located nearby, they would not enjoy the same opportunities to collaborate in close proximity as occurs between programming and promotion.

This imbalance of proximity across functional areas is addressed at a weekly operations meeting where the heads of each department get together and discuss the details for upcoming performances. It is in this meeting where potential issues are identified and resolved.

When discussing cross-training and cross functional collaboration, it becomes clear that despite there being union rules with IATSE which prohibit some forms of cross-training or job sharing among the production team, there is a lot of such activity happening informally between the programming and promotion aspects of the organization. While this has led to a great deal of familiarity with the neighboring aspects of the organization, it does not necessarily qualify a person from one area to jump in and perform the work within another. Instead, this familiarity is described with the statement “we know enough to be dangerous.” Still, this close familiarity between different aspects of the organization appears to contribute a great deal to the strength and effectiveness of the team by building trust and helping identify and resolve issues before they have a chance to grow.

Despite this close collaborative relationship demonstrated between programming and promotion, Mr. Hobby underscores that the Hult Center does exist as part of the larger bureaucratic institution of city government. As such, there are organizational silos where cross departmental communication, collaboration, and operational efficiencies may not be as cohesive and streamlined as is ideal.

Mr. Hobby has seen some attempts to deploy project management software platforms to help democratize awareness of project statuses and hopefully make issues more visible before they have a chance to grow into big issues. However, these efforts have been met with inconsistent rates of adoption, especially among personnel who display a resistance to change or reluctance to engage with the new technology or a belief that it takes more time and effort to engage with the project management software than to just do the project. Recognition of this tendency has contributed to management within the organization tending to meet people where they are in terms of their comfort level with change. This, in turn, has led to inconsistent operational practices within the organization. In one example, at one point in the recent past, two different calendar reports were generated for participants at the weekly operations meeting depending on each representative's level of engagement with information technology.

This situation seems to have improved in recent years and the Hult Center has established a pattern of sending staff off to engage in a variety of training and development opportunities at organizations such as IAVM to keep the team updated on the most current best practices and develop the team to lead the Hult Center into the future.

Summarizing the interviews

As predicted, the online surveys alone lack context and make interpretation of the data difficult. The in-person interviews are helpful in

providing this context. When examining each of these case studies, it is clear that each respondent represents a venue that is very different from the others. For instance, each interviewee is located just about as far from one another as is possible while remaining within the contiguous United States. The Hult Center for the Performing Arts is situated near the Pacific coast of the USA in the literal center of Eugene, Oregon while the venues at Rowan University are located nearer the Atlantic shore in the university town of Glassboro, New Jersey. Crossroads KC is positioned not quite equidistant between the other two in the great plains of Missouri.

In addition to their geographic separation, each of the interviewed venues relate to their respective communities in different ways. For instance, the venues at Rowan University are focused on serving the community of students and faculty and support efforts to provide educational experiences to this audience. The venue at Crossroads KC focuses more on presenting popular music performances in order to engage and attract an audience that can both sell adequate numbers of tickets and also bolster food and beverage sales at the venue's partner restaurant. Meanwhile, the Hult Center for the Performing Arts is primarily engaged with efforts to present a diverse range of high-quality and engaging performing arts experiences to Eugene and the surrounding community.

In addition to serving different communities and audiences, another noteworthy difference can be found in the organizational and management

structure of each organization. Crossroads KC is a for-profit organization while the venues at Rowan University and the Hult Center are organized to serve their larger communities with profit being a secondary motive. Specifically, the venues at Rowan University are organized as part of the larger university, and as such are subject to the rules, regulations, and bureaucratic peculiarities of the university structure. Similarly, the Hult Center for the Performing Arts is owned and operated as part of the City of Eugene, and as such, has its own political and bureaucratic peculiarities related to its position as an entity of local government.

In terms of organizational structure, Crossroads KC is the smallest organization with just a few professional staff members reporting to a trio of owners. Further, Crossroads KC appears to be a comparatively flat organization with personnel at all levels of the organization having the ability to provide input into operational decisions. The facilities at Rowan University are organized quite differently from Crossroads KC in that they are part of the larger university institution and appear to be largely subservient to the College of Performing Arts. Rather than the flat organizational structure enjoyed by Crossroads KC, the facilities at Rowan University appear to be rather strictly hierarchical with firm direction coming from the dean, through department heads, to faculty, then ultimately to the facilities director in charge of production. The Hult Center for the performing arts seems to be more of a blend of the two approaches with an executive director of the

organization reporting to a representative of the city government, but operational decisions largely being handled by a cross-functional team of with representatives from administration, outreach, programming, promotion, production, and others.

Despite these differences, each of the interviewed managers report facing similar pressures to deliver high quality artistic performances within their facilities despite limited human and material resources. However, each of these organizations respond to these limitations in different ways. Some of these responses seem to align well with a Lean approach, while others to not.

In terms of organizational conditions that align well with Lean, both Rowan University and Crossroads KC engage in efforts to level workload by making regular use of cross-training which allows staff to move readily from position to position based on the changing demands of each day. At the Hult Center for the Performing Arts, negotiated agreements with labor unions make meaningful cross-training efforts more difficult to deploy. Still, leadership at the Hult Center does appear to encourage the development of cross-functional teams. While this may not necessarily help level out workloads as demands change from day-to-day, it does seem to help democratize information flow and improve collaboration efforts.

Another instance at where there seems to be general alignment with Lean methodologies relates to how problems are identified and resolved within the context of performing arts. In his interview at Crossroads KC, Mr.

Way related an intuitive application of a 5-why analysis in the act of telling a story about getting a production gone wrong back on track. This illustrates that, when combined with an organizational culture that is “always looking forward,” actively seeking feedback, and always looking to improve its operations, Lean tools can effectively be used within performing arts contexts.

Despite some evidence that some aspects of Lean methods may be employed in performing arts contexts, there is also evidence of areas that Lean approaches do not align well with the surveyed performing arts organizations. For example, both Rowan University and the Hult Center for the Performing Arts indicate an organizational tendency for those within the organization to fall back onto ‘the way things have always been done’ rather than continually push for ongoing systemic improvement. Mr. Hobby at the Hult Center for the Performing Arts, this is described as a “human tendency” which has been generally tolerated by management. At Rowan University, this has led to a culture where processes and procedures generally remain the same with the largest productive leaps happening when new people with new ideas are onboarded into the organization. Neither of these cases describe an organization that emphasizes a deep commitment across the entire organizational culture to relentless reflection and ongoing improvement as one would find within a Lean organization. For example, at Rowan University where Ms. O’Leary has been faced with increased demand on her facilities. Rather than engage in a systematic review of operations or to engage in a

process to identify and eliminate procedural waste, Ms. O’Leary has instead taken steps to increase communication efforts to place limitations on utilization of her facility, in effect working to quell demand on her venues in order to limit the need for evolution and growth until such time as additional resources are secured.

Still, there does seem to be some effort on behalf of these venues to participate with peer professionals at organizations such as IAVM to compare and contrast experiences, share tools and techniques, and bring new information back to their home venue in order to encourage reflection and help bring systemic improvement across the entire sector.

Bringing it all together

A view that was supported by survey findings is that any organization can benefit from a program to increase labor productivity. However, it remains to be seen how a program such as Lean might fit within a performing arts facility. This study is intended to explore whether it could be possible to deploy Lean methodologies within the context of performing arts facilities and what barriers might be encountered in the process. Despite featuring a low number of respondents, the survey did return results from the intended audience of leaders and managers within the performing arts facility management community. When considering the results of the online survey and incorporating the context provided in the in-person interviews, it becomes clear that the organizational structure and culture of each individual

organization appears to have a great deal of influence over how well an organization's operations can align, or not align with Lean methodologies. As mentioned in the analysis of the survey results, most of the surveyed managers have some sort of long-term strategic plan in place for their organization. This tendency is supported in conversations with those at Hult Center for the Performing Arts, and Crossroads KC where Mr. Hobby and Mr. Way were readily able to recite a working interpretation of their organization's motto or mission statement. Even in the case of Rowan University, where the long-term mission of the performing arts venues is somewhat muted when compared to the overall academic mission of the university as a whole, Ms. O'Leary readily recited an informal motto that guides her work and the work of her team. This emphasis on a long-term strategic orientation, even if informal, combined with the ongoing importance of maintaining high-quality artistic outcomes is generally compatible with Lean operations.

When considering the management style found within each organization, a significant area that can greatly influence the ability of an organization to align or not align with Lean methodologies can be seen in the fact that some of the responding managers indicate that operational decisions are made from the top down by an executive director or other strict hierarchical leader rather than using a flatter organizational structure as might be found in a Lean organization. In the case of Ms. O'Leary at Rowan University, operational decisions are made at the dean level and then passed

down through a strict hierarchy with those at the production level having little input into the implementation phase. Conversely, Mr. Way at Crossroads KC appears to engage his staff and their perspectives and expertise inform a lot of the operational decisions at his venue. Balancing these divergent approaches is Mr. Hobby at the Hult Center for the Performing Arts, who participates as part of a cross-functional team of managers who regularly engage in open dialogue to identify and resolve issues by making operational decisions as a team. This seems to suggest that the ability of an organization to adopt Lean methodologies could be related to the organizational structure and how receptive that structure is to the organizational mindset of Lean operations.

While it remains to be seen whether the implementation of Lean can help ‘cure’ the cost disease in the performing arts, it does appear that there is room in some organizations within the performing arts community to increase labor productivity using Lean methods. However, the findings of this study support the literature in that there appear to be a tremendous variety of institutional forms, ownership structures, management structures, and artistic priorities among the multitude of performing arts facilities within the USA (Lambert & Williams, 2017; Stein & Bathurst, 2008). It does not seem plausible that Lean will work equally well in all of these institutions. Indeed, even within the small samples explored in this study, some of the organizations surveyed are led by strong, visionary leaders who confidently make

operational decisions for their entire organization. It seems plausible that this leadership structure may work very well within these organizations. However, it does not seem likely that Lean can thrive within a strict top-down hierarchy given Lean's reliance on input, collaboration, and buy-in from staff at all levels of the organization.

Additionally, some of the surveyed organizations indicate that some in their facility at times resist procedural change. Indeed, Ms. O'Leary underlines how easy it is for an organization "to fall into 'well, that's the way we've always done it'." This reluctance to accept change is antithetical to, and actively undermines the incorporation of a Lean methodology. Lean can be more accurately described as an organizational mindset than a set of new, more efficient operational tools. As such, Lean relies on and fosters an environment of continuous evaluation and ongoing systemic improvement. With this culture comes a steady and incremental flow of change. Lean cannot thrive in an environment resistant to change.

CHAPTER V: CONCLUSION

The purpose of this master's thesis was to examine the viability of, and potential roadblocks to, implementing systemic labor productivity enhancements in the context of performing arts facilities without negatively impacting artistic outcomes. This study began with an examination of Baumol's cost disease which describes limitations as to how much performing arts organizations can benefit from labor productivity enhancements. According to this construct, in the performing arts, the labor required to mount a performance is irreducible given that the productive labor on stage is the productive output in and of itself. Therefore, labor productivity increases cannot be realized in the performing arts as they can be in other sectors without disrupting artistic quality. Indeed, examination of instances where artists employed productivity enhancing technology found that doing so tends to greatly alter artistic outcomes. This led to a deep dive into available literature about the cost disease and its presence in other sectors such as the healthcare sector.

Further review into this literature reveals that the healthcare sector is not limited by the cost disease in all of the functional areas of healthcare delivery. To this end, leadership in the healthcare sector is employing operations management techniques to increase labor productivity at various points in the healthcare system while maintaining attention on consistently improving patient outcomes. The most commonly deployed technique

currently used to increase labor productivity in the healthcare sector is called Lean. Lean is an operations management approach that is differentiated from more traditional craft production and mass production methods in that it strives to achieve high levels of quality and customization associated with craft production while also realizing the low production costs associated with mass production.

In applying operations management tools such as the value chain back onto the performing arts sector, it becomes clear that there is a great deal more productive labor required to make any performing arts endeavor viable than merely the labor expended on-stage. Further review of the available literature uncovered the primary activities of programming, personnel, promotion, and production, all of which are deemed absolutely essential for any performing arts endeavor to be viable. Furthermore, all of the primary activities are supported and linked by additional essential activities related to governance, administration, outreach and fundraising. Only by having each of these separate functional areas in place and in alignment can a performing arts endeavor be viable.

This study pays particular attention to the primary activities of programming, promotion and production and considers whether Lean methodologies could be deployed within performing arts contexts to find efficiencies across these functional areas similar to what is currently being

explored in the healthcare sector. This study seeks to answer the following question:

- Could it be possible to apply Lean methodologies in the context of performing arts facilities without impacting artistic outcomes and what barriers can be expected when attempting such an implementation?

To investigate this topic, this study consisted of both a quantitative and a qualitative segment. The quantitative exploration was presented in the form of an online survey distributed to leaders within the community of performing arts managers and inquired into their attitudes and approaches to issues related to labor productivity, specifically looking for instances of alignment or nonalignment with Lean methodologies. This online survey was followed up by a series of in-person interviews with management from a selection of performing arts facilities across the USA to provide qualitative and interpretive context to the study.

An answer to the primary question

The primary research question driving this thesis is a two-part question and as such, calls for a two-part answer. In response to the first part of the question, “could it be possible to apply Lean methodologies in the context of performing arts facilities without impacting artistic outcomes?”, the answer appears to be yes, it could be possible to apply Lean methodologies within the context of performing arts facilities without impacting artistic outcomes.

However, given the great diversity of organizational forms existing within the community of performing arts facilities, such an implementation may not be appropriate for all organizations. This leads to the second part of the question, “what barriers can be expected when attempting such an implementation?” The most appropriate response here is that the barriers are vast and appear to relate primarily to each organization’s individual structure and culture. This is not to say that these barriers are insurmountable, but additional research is advised to determine conclusively whether it is appropriate or even a good idea to impose Lean methodologies into the context of a performing arts facility.

Avenues for future research

When considering the findings from this study, valuable lessons have been learned. There appears to be some consensus among respondents to this survey that their organizations could benefit from undertaking a systematic process to improve their operation’s productivity. Further, many of the managers surveyed indicated that their organizations regularly experience issues and/or problems that Lean is particularly well positioned to resolve.

However, given that this study is merely an initial exploration into the idea of applying Lean in the context of performing arts facilities, many questions that have arisen throughout this study fall outside of the scope of this thesis. With that in mind, the following segment poses some remaining questions that could be explored in future research.

1. If Lean methods were applied in performing arts venues, would they would have a significant or measurable impact on costs related to labor productivity?
2. How could Lean methods be adapted to best fit within performing arts contexts?
3. What organizational, managerial, and/or cultural changes would be needed within performing arts facilities in order to successfully transition to Lean operations?
4. Of all of the operations management techniques out there, is Lean the best operations management approach to ‘cure’ the cost disease in the performing arts?

It is my hope that this study can serve as a launching point for future research to answer these and other remaining questions relating to labor productivity in the performing arts. That said, any future study will need to greatly increase participation among its target audience in order to achieve statistical significance. To accomplish this, I suggest that any future studies be conducted in a closer partnership with IAVM, engaging leadership in that organization directly and taking advantage of the organization’s robust marketing and promotion infrastructure to raise awareness and compel increased participation with the study.

The ultimate question

This study explores a topic that is not often discussed at length in the performing arts sector while challenging the prevailing mindset common throughout the sector that “crisis is apparently a way of life” (Baumol & Bowen, 1966, p. 3). This organizational mindset of crisis is largely born out of the common understanding that labor costs in the performing arts are irreducible because the labor of performance is in itself the artistic product. This inability to increase labor productivity leads to a phenomenon that is commonly known as the cost disease. However, in taking a broader operations management view, it quickly becomes evident that there is a great deal more labor that goes into bringing a performance to fruition than the performance that appears on-stage in front of the audience.

In turning attention toward the myriad off-stage activities required to mount a production and looking outward to other sectors for tools and techniques, this study has uncovered that, like the performing arts sector, the healthcare industry also suffers from the cost disease. However, rather than simply resigning themselves to a way of life defined by crisis, the healthcare sector has been actively pursuing operations management techniques, most notably in the form of a methodology called Lean, to help address symptoms related to the cost disease.

This study poses the question as to whether it could be possible to apply Lean methodologies in the context of performing arts facilities and what

hurdles might present themselves when doing so. Findings from an online survey and a series of in-person interviews suggest that yes, it can be possible to apply Lean methodologies in the context of performing arts facilities. However, not all of those surveyed or interviewed appear to be in alignment with or receptive to Lean methodologies from structural, managerial, operational, or cultural points of view. Further research is required to determine whether the hurdles related to this organizational diversity can, or should be effectively overcome throughout the sector.

That said, in my role as event services manager of the performing arts facilities within the student union at UO, when faced with the choice between fostering an organizational mindset defined by the resigned acceptance of ongoing crisis as a way of life, and fostering an organizational mindset defined by a commitment to continual reflection and ongoing improvement, I feel compelled to make the positive choice toward ongoing improvement. I hope others are able to do the same.

APPENDICES

APPENDIX A: ONLINE SURVEY

The Show Must Go On - Even When Times are Lean

Start of Block: Informed Consent

Thank you for taking time to respond to this short survey in support of a master's thesis exploring issues and attitudes surrounding operational productivity at performing arts centers of varying scales throughout the United States. Your participation in this survey is voluntary. You may refuse to participate or discontinue participation at any time without penalty.

This survey should take 10 - 15 minutes to complete.

Your thoughtful responses are greatly appreciated.

- Privacy policy
- Begin the survey

Display This Question:

If Thank you for taking time to respond to this short survey in support of a master's thesis explor... = Privacy policy

To safeguard the confidentiality of research participants, no personal or geographically identifiable information will be gathered in this survey. Further, survey responses will be securely maintained by the principal investigator in a password-protected computer system. Only the principal investigator and faculty research adviser will have access to these data. Survey responses will be destroyed one year after the conclusion of the research project.

Given the benign nature of this study, very minimal risks may exist in the category of social/economic risks due to loss of confidentiality. Topics related to the role of arts and culture in community development and well-being can be controversial and sensitive. That said, such a risk is unlikely to occur and all responses will be treated as confidential and the resulting analysis will be presented in such a way that individual

respondents or institution cannot be identified.

Research participants may not benefit directly from this study. However, many of the issues addressed in this study may bring up ideas and/or concerns that may help participants in their jobs. Ultimately, the goal of this study is to investigate attitudes and approaches of management in performing arts facilities with regard to issues relating to operational efficiency, which may lead to sector-wide benefits to subjects. If you have any questions, please contact Mr. Wade Young-Jelinek or Professor Patricia Dewey Lambert at jelinek@uoregon.edu or pdewey@uoregon.edu respectively. Any questions regarding your rights as a research participant should be directed to the Office for Research Compliance Services, University of Oregon, Eugene, OR 97403, 541-346-2510.

End of Block: Informed Consent

Start of Block: Demographic Info

This section is designed to gather basic demographic information about you and your institution. For your information security, this survey will not collect personally identifiable information.

Is (are) your venue(s) located within the United States of America?

Yes

No

Skip To: End of Survey If Is (are) your venue(s) located within the United States of America? = No

What is your primary area of responsibility within your organization?

- Governance (responsible for high-level oversight of organization)
- Administration (responsible for day to day management of organization)
- Fundraising (responsible for resource gathering beyond the box-office)
- Outreach (responsible for building bridges with other community organizations)
- Programming/presenting (responsible for the selection or booking of performed works)
- Personnel/talent (dancer, musician, actor, singer, etc.)
- Promotion/marketing (responsible for communicating event to potential audience)
- Production/operations (responsible for the physical requirements for the event)
- Other _____



Roughly, what proportion of time does your organization devote to the following types of programming?

Choices must total 100

- _____ International/national touring and presenting
 - _____ Regional touring and presenting
 - _____ Commercial concerts
 - _____ Resident company performances
 - _____ Community events
 - _____ Lectures
 - _____ Conferences and meetings
 - _____ Other (please describe)
-

What are your organization's annual operating expenses?
If you don't know for sure, please give your best guess.

- Less than \$500,000
- Between \$500,000 and \$2,500,000
- Between \$2,500,001 and \$5,000,000
- Between \$5,000,001 and \$10,000,000
- Between than \$10,000,001 - \$50,000,000
- More than \$50,000,000



Roughly what proportion do each of the following funding sources contribute to your revenue?

Choices must total 100

- _____ Earned income
- _____ Government sources
- _____ Private donations
- _____ Other (please describe)



Roughly what percentage of time does your organization devote to the following types of programming?

Choices must total 100

- _____ Producing
- _____ Presenting
- _____ Rental
- _____ Other (please describe)

Skip To: End of Survey If Roughly what percentage of time does your organization devote to the following types of programmi... > Producing

How is your organization owned?

- Publicly owned (as a government entity)
- Nonprofit owned
- University owned
- Privately owned for profit (individual or family)
- Publicly traded for profit (corporation)
- Hybrid ownership structure (briefly describe)

How is your organization managed?

- Publicly managed (as a government entity)
 - Nonprofit managed
 - University managed
 - Privately owned for profit (individual or family)
 - Publicly traded for profit (corporation)
 - Hybrid management structure (briefly describe)
-

Does your organization run more than one venue?

- Yes
 - No
-

Display This Question:

If Does your organization run more than one venue? = No

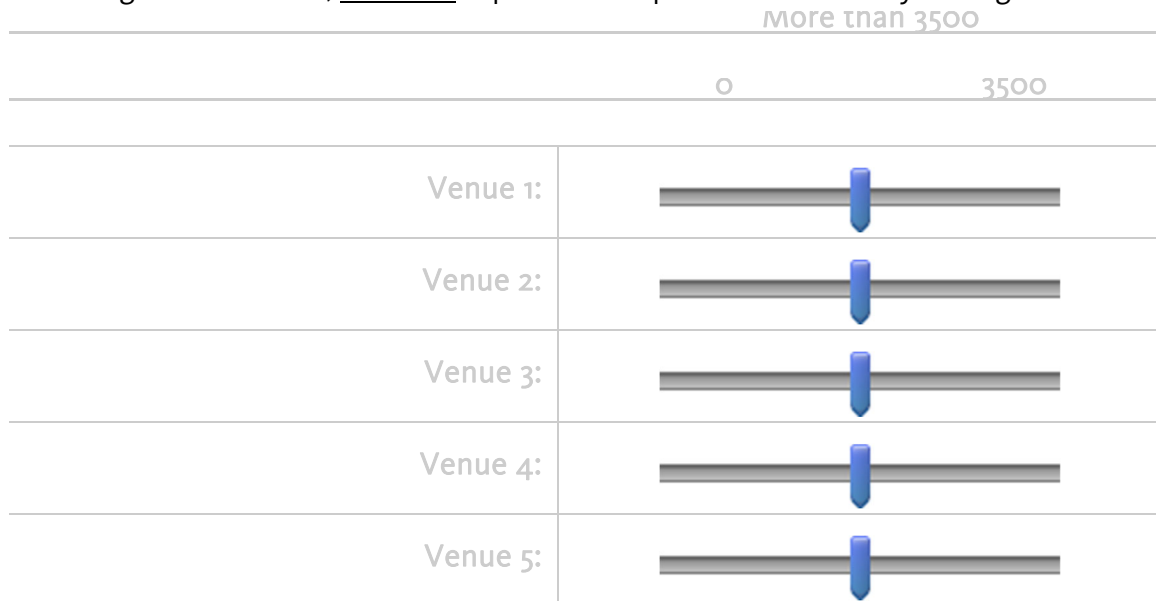
What is the capacity of your venue?

- Less than 250 seats
- 250-499 seats
- 500-999 seats
- 1000-1499 seats
- 1500-1999 seats
- 2000-2499 seats
- 2500-3499 seats
- 3500 + seats

Display This Question:

If Does your organization run more than one venue? = Yes

From largest to smallest, estimate capacities of up to five venues in your organization?



Does your facility operate with union labor?

Select all that apply.

- American Guild of Musical Artists (AGMA)
- American Guild of Variety Artists (AGVA)
- American Federation of Musicians (AFM)
- United Scenic Artists (USA)
- International Alliance of Theatrical Stage Employees (IATSE)
- International Brotherhood of Electrical Workers (IBEW)
- International Brotherhood of Teamsters, Chauffers, Warehousemen, and Helpers of America (IBT)
- Service Employees International Union (SEIU)
- Others? _____

End of Block: Demographic Info

Start of Block: Processes and Procedures

Does your performing arts center have a long-term strategic plan?

- Yes
- No

Display This Question:

If Does your performing arts center have a long-term strategic plan? = Yes

If yes, have you recently (in the past five years) changed your organization's long-term strategic plan?

Yes

No

Display This Question:

If Does your performing arts center have a long-term strategic plan? = Yes

Do you plan to rewrite your organization's long-term strategic plan in the near future?

Yes

No

What is your organization's mission statement?

Who is generally responsible for making operational decisions within your performing arts center?

- Operational decisions are made by the board of directors
- Operational decisions are made by the executive director
- Operational decisions are made by an external management organization
- Operational decisions are made by an internal management team
- Operational decisions are made by staff
- Operational decisions are made through consensus between management and staff



Proportionally, who would you say your organization is most strategically driven to serve?

Choices must total 100

- _____ The board of directors
 - _____ Neighboring businesses
 - _____ Neighboring arts organizations
 - _____ Performing artists
 - _____ Audience members
 - _____ Other (please describe)
-

After initial startup, how does your organization typically approach inventory/supply purchases?

	Minimum sized orders at the last minute	Standardized orders at regular intervals	Order ahead to keep stock on hand
Major equipment (over \$5,000)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minor equipment (under \$5,000)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expendables (tape, lamps, batteries)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Office supplies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



How often does your organization experience:

Choices must total 100

- _____ Periods of frantic activity lasting hours or days
- _____ Periods of frantic activity lasting weeks or months
- _____ Sustained periods of moderate, yet challenging activity
- _____ Periods of slow activity lasting hours or days
- _____ Periods of slow activity lasting weeks or months

Has your organization ever taken steps to level out the workload, decreasing fluctuations between periods of busy/slow activity?

- Yes
- No

Display This Question:

If Has your organization ever taken steps to level out the workload, decreasing fluctuations between... = Yes

Were these attempts to level out the workload successful?

- Yes
- Somewhat
- No

Display This Question:

If Has your organization ever taken steps to level out the workload, decreasing fluctuations between... = Yes

Why or why not?

How would you say your organization tends to respond to procedural issues?

	Never	Seldom	Sometimes	Frequently	Always
Internally acknowledge that issues will continue to exist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Isolate the issue so it cannot interfere with audience experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify and resolve the underlying issue(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Processes and Procedures

Start of Block: Across Functional Areas

From your perspective, would you say your organization's staffing levels are appropriate to meet the required workload?

	Strongly disagree	disagree	Neutral	agree	Strongly agree
Programming/presenting (choosing talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel (talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion/marketing (gathering audience)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/operations (arranging resources)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Does your organization bring in temporary staffing to meet obligations during peak periods?

	Never	Seldom	Sometimes	Frequently	Always
Programming/presenting (choosing talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel (talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion/marketing (gathering audience)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/operations (arranging resources)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your organization, do any of the following functional areas take advantage of cross-training opportunities with other functional areas?

	Never	Seldom	Sometimes	Frequently	Always
Programming/presenting (choosing talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel (talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion/marketing (gathering audience)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/operations (arranging resources)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

From your perspective, would you say your organization readily incorporates new technologies?

	Strongly disagree	disagree	Neutral	Agree	Strongly agree
Programming/presenting (choosing talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel (talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion/marketing (gathering audience)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/operations (arranging resources)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your organization, do small issues ever go unnoticed until they become big issues?

	Never	Rarely	Sometimes	Frequently	Always
Programming/presenting (choosing talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel (talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion/marketing (gathering audience)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/operations (arranging resources)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your organization, have steps ever been taken to make problems easier to see before they have a chance to grow?

	Never	Seldom	Sometimes	Frequently	Always
Programming/presenting (choosing talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel (talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion/marketing (gathering audience)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/operations (arranging resources)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you say your organization responds positively to procedural change?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Programming/presenting (choosing talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel (talent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion/marketing (gathering audience)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/operations (arranging resources)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Across Functional Areas

Start of Block: Formal efficiency programs?

Has your organization ever undertaken any sort of operations productivity analysis?

- Yes
- No
- I don't know

Why or why not?

Have you, or anyone in your organization, ever considered undertaking an organized project to identify/eliminate inefficiency in your operations?

- Yes
- No
- I don't know

Why or why not?

From your perspective, do you believe your organization could benefit from undertaking an organized project to identify/eliminate operational inefficiency?

- Yes
 - No
 - Maybe
-

Why or why not?

End of Block: Formal efficiency programs?

Start of Block: Anything else?

Is there anything else you'd like to share about your observations/experiences concerning operational productivity in performing arts contexts?

End of Block: Anything else?

APPENDIX B: CONSENT FORM

Research Protocol Number: 03052019.003

**THE SHOW MUST GO ON – EVEN WHEN TIMES ARE LEAN
A COMPLICATED RELATIONSHIP
BETWEEN LABOR PRODUCTIVITY
AND THE PERFORMING ARTS**

Wade Young-Jelinek, Principal Investigator
Arts and Administration Program
School of Planning, Public Policy and Management
University of Oregon

You are invited to participate in a research project titled *The Show Must Go On – Even When Times Are Lean, A Complicated Relationship Between Labor Productivity and The Performing Arts* conducted by Wade Young-Jelinek from the University of Oregon’s Arts and Administration Program. The purpose of this study is to explore issues surrounding labor productivity at performing arts centers. This phase of this study aims to assess the scope, nature, and extent of issues surrounding labor productivity and business practices as they currently manifest in performing arts centers of varying scales throughout the United States.

You were selected to participate in this study because of your leadership or management position with the McDonald Theatre and your experiences with and expertise pertinent to management of a working performing arts center. If you decide to take part in this research project, you will be asked to participate in an in-person, telephone, or Skype (Microsoft Teams) interview, lasting approximately one hour, in August 2019. In addition to taking handwritten notes, with your permission, I will use an audio recorder for transcription and validation purposes. You may be asked to provide follow-up information through phone calls or email.

Any information that is obtained connection with this study will be carefully and securely maintained. All research records will be stored on a password protected computer, and hard copies of documents will be stored in a locked file cabinet. Audio recordings will be immediately downloaded to password-protected storage and erased from the recording device. Research records will be retained through completion of this research project for validation purposes and shortly past publication of the master’s research project. Research records will be destroyed one year after completion of the study. Only the principal investigator and the faculty research adviser will have access to these records.

There are minimal risks (loss of privacy and/or breach of confidentiality) associated with participating in this study. To maintain credibility of the research, I intend to identify the participants and use quotes from participants in the final publication. Your consent to participate in this interview, as indicated below, demonstrates your willingness to have your name used in any resulting documents and publications and to relinquish confidentiality. You will have the opportunity, if you wish, to review any quotes and paraphrasing of your statements prior to publication. It may be advisable to obtain permission to participate in this interview to avoid potential social or economic risks related to speaking as a representative of your institution. Your participation is voluntary. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty.

I anticipate that the results of this research project will be of value to the cultural sector as a whole. However, I cannot guarantee that you personally will receive any benefits from this research.

If you have any questions, please feel free to contact me at jelinek@uoregon.edu, or Dr. Patricia Dewey Lambert at pdewey@uoregon.edu. Any questions regarding your rights as a research participant should be directed to the Office for Research Compliance Services, University of Oregon, Eugene, OR 97403, 541-346-2510.

Please read and initial the following statements to indicate your consent. Because interviewees differ in their wishes for information to be collected during the interview and in reviewing the information before publication, please specify your understandings and preferences in the list below:

_____ I understand that I will be identified as a participant in this research project.

_____ I consent to the use of note taking during my interview

_____ I consent to the use of audio recording during my interview

_____ I consent to the potential use of quotations from the phone interview

_____ I consent to the use of information I provide regarding the organization with which I am associated.

_____ I wish to have the opportunity to review and possibly revise my comments and the information that I provide prior to these data appearing in the final version of any publications that may result from this study. I understand that the principal investigator will send me by email a copy of all of the quotes and paraphrases that are directly attributable to me, and that I will have the opportunity to approve and/or revise these statements by a clearly defined deadline.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you have received a copy of this form, and that you are not waiving any legal claims, rights or remedies. You have been given a copy of this letter to keep.

Print Name:

Signature: _____

Date: _____

Thank you for your interest and participation in this study.

Sincerely,

Wade Young-Jelinek
jelinek@uoregon.edu
541-729-2419

APPENDIX C: IN-PERSON INTERVIEW QUESTIONS

Background

Individual

Name: _____

Position: _____

Venue: _____

**

1. Can you tell me a bit about yourself and your job?
 - a. How long have you been in this position?
 - b. How long have you been working in this sector?
2. Tell me a bit about the organization you represent?
 - a. Type of venue?
 - b. Capacity?
 - c. Governance?
 - d. Funding model?
 - e. Union affiliations?
3. Does your organization have a long-term strategic plan?
 - a. Do you have plans to update your strategic plan in the future?
4. How are operational decisions made within your organization?
 - a. By the board?

- b. By the ED?
 - c. By a management team?
 - d. By consensus between management and staff?
- 5. Once made, how are decisions implemented?
- 6. Demographically, who would you say is your organization's most important customer?
- 7. Does your organization experience alternating periods of frantic and slow activity?
 - a. If yes, how does your organization deal with it?
 - b. If no: how does your organization accomplish this?
- 8. From your perspective, how does your organization deal with issues as they arise?
 - a. Technical
 - b. Procedural
- 9. It has been said that performing arts organizations primary functions include programming, personnel (talent), promotion, and production. Can you tell me how these processes interrelate in your organization?
- 10. How would you describe staffing levels across these functional areas?
 - a. Programming, Personnel, Promotion, Production
 - i. Does your organization ever engage in efforts to cross-train staff?
 - ii. Do issues ever go unnoticed until they are big in any area?

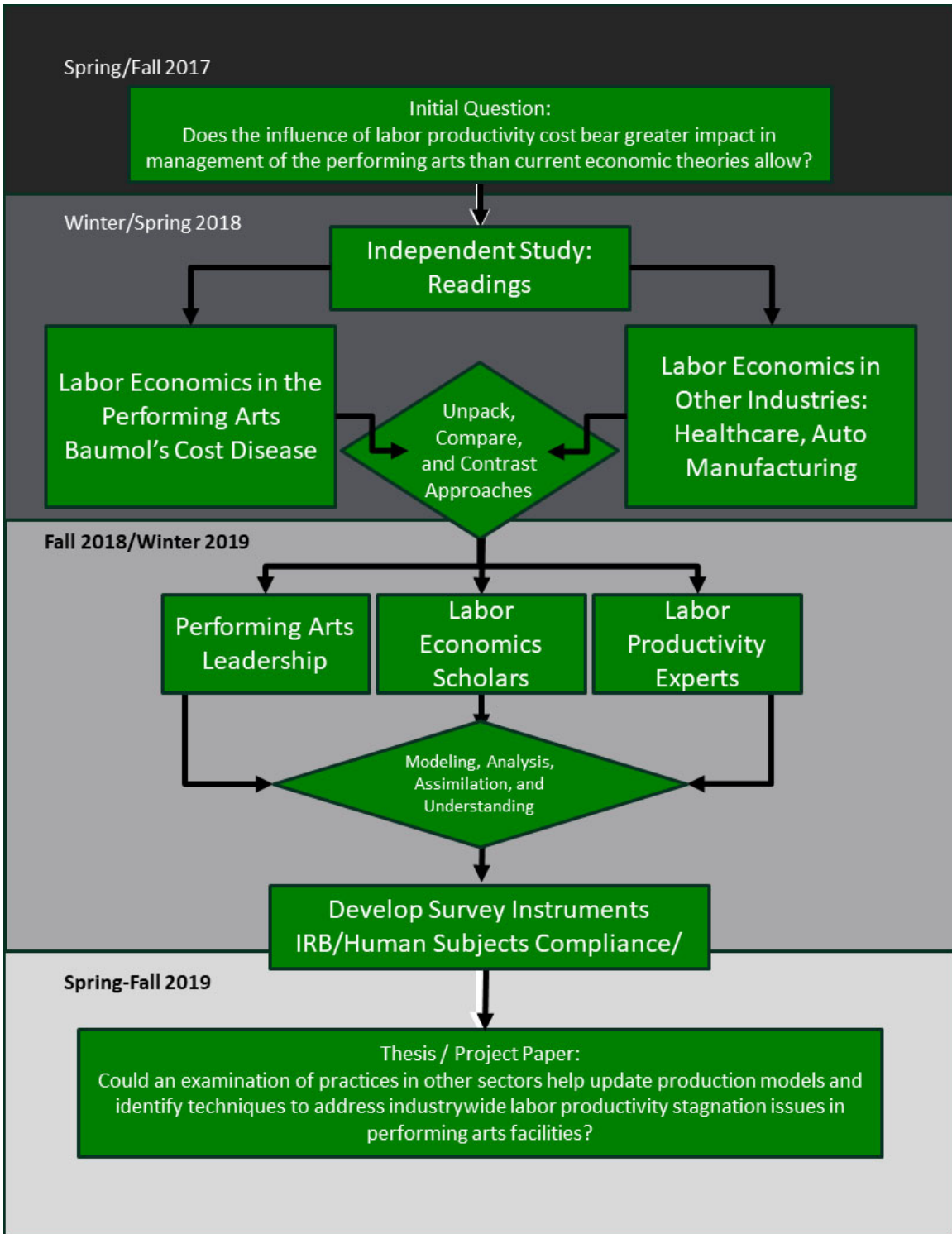
iii. How does each area react to change?

11. Has your organization ever considered undertaking an organized project to increase operational efficiency?

12. Do you believe your organization could benefit from such a project?

13. Is there anything else you'd like to add?

APPENDIX D: TIMELINE AND STRUCTURE OF THE STUDY



Structure and timeline of this study

APPENDIX E: GLOSSARY

- **5-S:** A common Lean based tool that leads to a clean, uncluttered workspace, referring to the actions of “Sort”, “Set in order”, “Shine”, “Standardize”, and “Sustain.” This practice contributes to and supports visual control systems (Liker, 2004).
- **5-why:** Refers to an analytical process that is designed to dig deeper into the root causes of production issues. In asking why an issue occurred not less than five times, the chances are greatly increased that the true root of the issue will be identified. The thought behind this is that identifying and resolving problems at the true root, make them much less likely to recur.
- **Artists:** Refers to the individual personnel appearing on-stage. See also performers, personnel, or talent.
- **Audience:** As a collective, the people who come to see artists perform.
- **Back of House Operations:** a range of activities that provide direct support to artists but often occur “behind the curtain” and largely away from public view. Examples include setup, takedown, audio support, lighting, rigging, and/or stagehand related activities.
- **Back Office Operations:** Administrative activities that support performances indirectly by providing the infrastructural support necessary to continue business operations. Examples of back office

activities include payroll, insurance, scheduling, event coordination, and related operations.

- **Continuous Improvement:** Refers to a deep organizational commitment to unrelenting self-reflection and unending refinement of processes. One of the primary pillars of Lean operations.
- **Cost Disease:** Describes the situation created where the irreducible nature of the labor costs associated with on-stage activities do not allow management in the performing arts to increase labor productivity in the same way that productivity can be increased in other sectors. This leads to an economic imbalance where there is no opportunity to increase performer wages with a concurrent increase in labor productivity over time.
- **Craft Production:** A means of production that employs highly skilled workers to accomplish highly detailed or custom products.
- **Demand:** The willingness of a consumer to purchase a product or service. In performing arts contexts, this refers to an audience's willingness to purchase a ticket to a particular performance.
- **Equilibrium:** The point at which a seller's supply matches the consumer's demand. Identifying this point is an essential component of setting price
- **Front of House Operations:** activities that support performances by providing support to audiences directly. Examples include ushers, security, concessions, and ticket office personnel.

- **House:** See Performing Arts Facility
- **Kaizen:** See continual improvement
- **Kanban:** A Japanese word translating to “signs” or “cards” that are used within Lean systems and serve as a visual cue to replenish stock or take a specified action within a production process based on customer demand.
- **Labor Productivity Costs:** The cost of paying people to do work. Generally, cost savings can be had by restructuring work to be accomplished by fewer people and/or in less time.
- **Lean:** A method of production that is differentiated from both craft production and mass production in that it strives to achieve high levels of quality and customization associated with craft production while also realizing the low production costs associated with mass-production.
- **Marginal Cost:** The cost an organization takes on to produce one additional unit for sale.
- **Marginal Revenue:** The amount of additional money earned through the sale of one individual unit.
- **Mass Production:** A method of production that employs many low skilled workers to assemble products using interchangeable parts, often along an assembly line, to produce large numbers of a particular good at very low cost per unit.

- **Muda:** A Japanese word meaning waste, which refers to wasted effort, materials, and time. Lean operations actively target and work to eliminate such waste at every opportunity in an ongoing fashion.
- **Mura:** A Japanese word that translates to unevenness and refers to alternating periods of high and low activity within a production process. Lean operations seek to level out workloads and reduce alternating periods of high and low activity as much as possible.
- **Muri:** A Japanese word that translates to overburden of people or equipment. A Lean operation actively seeks to minimize such overburden as it tends to lead to quality or safety issues down the line.
- **Operations Management:** An area of organizational management where production processes are closely examined in order to identify and exploit efficiencies to apply controls and ensure that products are delivered in the most productive and efficient way possible.
- **Performing Arts Facility:** Refers to a venue where audiences can gather to experience creations generated in real time by artists.
- **Person Hours:** The amount of work done by a person in one hour. If a task takes three people one hour to accomplish, that task takes three person hours to be accomplished. Similarly, if a task takes a single person three hours to accomplish, that task also takes three person hours.
- **Poka-yoke:** A commonly used tool within many Lean organizations that concentrates efforts on making errors harder to accomplish. This can take

the form of designing parts so that they can only fit together in the correct manner or placing shields and guards on control surfaces to prevent accidental button presses.

- **Presenting House:** A performing arts facility that arranges to host established artists to perform at that facility.
- **Process Improvement:** A disciplined effort within an organization to review internal and external systems and processes to identify and eliminate procedural waste.
- **Producing House:** A performing arts facility that takes full responsibility for all aspects of a performance including the development and creation of artistic content.
- **Productivity:** Refers to the output produced by workers within a system.
- **Profit:** Any revenues generated beyond the costs associated with producing a product for sale.
- **Pull method:** A method of production that waits for a customer to demand a product before beginning efforts to produce that product. Such a method seeks to avoid the creation of surplus products.
- **Push method:** A method of production that produces products at full speed, regardless of customer demand. Such a method tends to lead to the stockpiling of surplus resources.
- **Rental House:** A performing arts facility that makes itself available for artists to present their own work.

- **Supply:** The willingness of a producer to sell a product or service. In performing arts contexts, this refers to a performing arts facility's willingness to sell a ticket to a particular performance.
- **Total Cost:** The costs of producing a particular good and refers to the sum of both fixed and variable costs.
- **Revenue:** Income generated by an organization as part of doing business.
- **Value Chain:** A management tool used to help managers visualize and communicate the full range of activities required to bring their product or service to market.
- **Venue:** See Performing Arts Facility
- **Visual Control System:** An operational system that uses visual cues to spur action, indicate status, and/or make it easier to identify issues or errors within a process.
- **Yellow Card:** Refers to a touring performance that requires union labor from the International Alliance of Theatrical Stage Employees (IATSE) to facilitate, even in a non-union facility.

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