CREATIVE STORAGE SOLUTIONS FOR THEATRE PROGRAMS:
THE TIME AND COST OF ALL THOSE PROPS

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A network of independent school, university, community, and small professional theatres, maintaining their own inventory while networking with others to rent, buy, or sell set props.

One of the primary problems faced by small theatre groups is the acquisition and storage of props. Props are acquired in various ways including purchasing, renting, building, or pulling from an internal collection. With limited resources, these process can be time consuming and expensive. Because of this, many theatres maintain an internal collection of pieces acquired over time. These collections of properties can help in addressing some of the financial and time related issues posed by the other methods, but create additional logistical problems, primarily related to storage space requirements and costs. In addition to these challenges, there is a heightened sense of environmental consciousness, calling for increased conservation efforts within the theatre community.
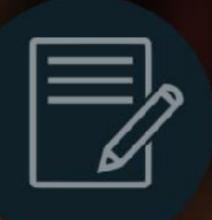
This study sought to use design-thinking methods to understand how small theatre programs acquire and store props for productions and to propose innovative solutions to help alleviate these challenges. The research project was broken down into five stages, each implementing a different design thinking methods.

Stage one began as three theatre professionals completed a stakeholder map in order to determine those positions most involved in the storage and acquisition of theatre set props. This would help ensure that those most closely connected to the challenges could provide greater insight into the issues. The theatre professionals identified six key stakeholders: director, designer, technical director, producer, properties master, and theatre program director.

In stage two, six Individuals representing each of the key stakeholders were interviewed and their typical experiences were diagrammed. The individuals echoed the challenges from the initial research. There was a desire to develop a more efficient system to find and store their properties. However, none of those interviewed had a fully working system. It was found that these organizations were on their own to develop their own solutions. The interviews consistently echoed the issues of time, cost, storage, and conservation that where raised in the previous research.

Using 14 participants from a variety of industries outside of theatre, stage three worked to see how others areas have dealt with similar challenges. These professionals helped to present innovative concepts dealing with acquisition and storage solutions by participating in a design thinking workshop. This two hour workshop included three strategies: alternative worlds, round robin, and visualize the vote. The alternative worlds strategy led the group to explore libraries, warehouse automation systems, and multi-site churches further to understand how these industries approach the issues being investigated. The participants then completed a round robin session, where they developed potential solutions. Using this strategy, improved inventory and networking options emerged. Finally, visualize the vote led the group to focus in supporting the individuals programs and developing a system to provide inventory creation solutions and opportunities to rent or sell props. Discussion following the voting focused the group on the concept of standardizing inventory systems. If networking is going to be any part of the solution, the group determined a standardized inventory system is vital.

Stage four used a system of schematic diagrams with stakeholder critiques to refine the ideas which developed out of the stage three workshop. After two rounds of critiques and revisions, the concept was refined into the proposed solution. This solution involves a web/mobile application to help theatres standardize their inventories as well as open up channels between theatres for rentals and sales. The proposed plan was showcased in stage five through a video scenario.

In the end, the developed solution is a network of independent high school, collegiate, and small professional theatres maintaining their own inventory while networking with other theatres for rental and sales opportunities. The proposal is to create a simple to use, mobile based, inventory tool to capture key information about the items and create a fully searchable database of properties. The database can be maintained on any computer with internet access using cloud based technologies. As the theatre creates its inventory, they will have the opportunity to place items in an online market for rental or sale to other theatres.

The marketplace will allow users to view items available in their search radius that may meet their needs for an upcoming production. With many other features, including tracking labels, show related searching, condition tracking, and scheduling, the solution will allow theatres to work together and support each other's productions by providing access to a nationwide network of set props. This solution will help organizations save time in acquisition by providing a fully searchable inventory of their private collection and other available pieces that can be locally sourced. This will address the challenge of cost by opening up new access to rentals and potentially create new sources of revenue. Additionally, this project can address the challenge of storage by allowing organizations to sell off unneeded or unwanted items, while providing access to other large items within the network of theatres. Finally, this network can help theatres operate greener by helping eliminate the number of pieces that are discarded when storage becomes limited. Now the items can find a new home at another theatre through the online marketplace. Through the use of these design thinking methods, a potential solution emerged to address the longtime challenges, which were also echoed by the stakeholders, of time, cost, storage and conservation.