

ABSTRACT

DESIGNING AN INFORMATION SYSTEM TO EFFICIENTLY  
COORDINATE FILM SCREENINGS

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This paper explains the engineering concepts design efforts used to build an information system to efficiently coordinate film screenings. The market served is an emerging group of film makers and production companies that have limited resources. The application aims to save both time and money in coordination efforts for screening films in the local community.

The project case examined is a small production start-up from Cal Poly San Luis Obispo named Yellow Glass Media. The design described in the paper specifically targets their needs which are assumed to be representative of the needs of the larger emerging market. The design serves as a proof of concept and is limited in scope to the San Luis Obispo community and to suppliers whose cost structures can be tabulated for meaningful manipulation.

The resultant design is a Microsoft-Excel based application that takes advantage of its Solver, function, and formatting capabilities. A linear goal program is built to make recommendations and a user interface is created to help users visualize the associated solution space.

The design aims to minimize the amount of time spent in the sub-processes associated with booking a supplier set that contains all necessary components of a successful film-screening. Before implementation of design, the time spent in the booking suppliers for an event was 105 days. The estimated time after implementation is 7 days.

The resultant design is limited in its application and has room to be improved and expanded upon. Key areas for potential expansion include suppliers outside of the current network, users outside of the project case, and eventually cities outside of San Luis Obispo. Systemic application of such a design could accelerate the “democratization of film” and further empower low-budget film makers through distribution.