Chapter 3.40 Digital Cinema as Disruptive Technology:

Exploring New Business Models in the Age of Digital Distribution

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ABSTRACT

The distribution and exhibition of motion pictures are at a crossroads. Ever since the medium was invented in the 1890s the "picture" has been brought to the spectator in the form of photochemical images stored on strips of celluloid film passed in intermittent motion through a projector. Now, at the beginning of the 21st century, an entirely new method has emerged, using digitally stored data in place of film and barely needing any physical support other than a computerised file. This opens an intriguing portfolio of revenue-generating opportunities for the movie exhibitor. This chapter

will give an overview of current developments in digital cinema (d-cinema). It will examine potential new business models in an industry wedded to the analogue process. The authors will consider the strategies of companies at the forefront of the technology; implications associated with the change; and how different territories might adapt in order to accommodate this transition.

INTRODUCTION

In this chapter we will consider how the transition from film to digital product is likely to affect an industry that has been wedded to an analogue process for more than 100 years. Rather than contributing further to the debate about the qualities of competing technologies or the creative merits or demerits of digital product, this chapter will focus on the development of potentially new business models in the global film industry. The authors will examine the strategies of the companies at the forefront of the technology; the financial implications associated with change; and how different territories are adapting in order to accommodate this transition.

D-Cinema: An Idle Revolution?

Ever since 1999, when George Lucas launched *Star Wars: Phantom Menance* on four digital screens in America, prophets of d-cinema (that is using digitally stored data in place of film) have proclaimed that it will change the film industry forever. Six years later d-cinema is still far away from wide implementation.

Belton (2002) has even declared d-cinema to be a "false revolution" because it does not transform the nature of the motion picture experience for the audience, stating that "One obvious problem with digital cinema is that it has no novelty value, at least not for film audiences." He argues that in a marketplace in which the word "digital" sells consumer products, "it is digital sound (and not digital projection) that marks for consumers the entry of motion pictures into the digital era."

His arguments cannot be easily dismissed especially when considering the explicit goal of digital projector manufacturers to produce an image quality that *equals* that of traditional film prints. Slater (2002) has compared the cinema exhibition chain of traditional film and electronic/d-cinema. When looking for an answer to the question what problem electronic/d-cinema is trying to solve, he could not find "one single good technical or operational reason why the whole system should

be replaced" (p. 43), with film being high quality, flexible, and most important future proof.

Still key players in the industry seem to be determined to make d-cinema happen, such as John Filthian, president of the National Association of Theater Owners (NATO) in America, who has said that "digital cinema will be the biggest transition technology in the history of the movie industry" (Baird, 2004).

The Dilemma

However, with just over 120,000 screens worldwide, the cinema market has been deemed too small to support any major technological innovation by itself (*Screen Digest*, 2003). This means that no manufacturer is currently in the position to produce a digital projector at such a competitive price, that exhibitors could afford to pay for the switching costs themselves. Consequently, the matter of financing the conversion to d-cinema has been passed on to distributors, who are claimed to benefit the most from d-cinema by saving on print costs.

The problem is further intensified, when more than one company for d-cinema equipment tries to serve the market, and more than one standard exists. For distributors however, it does only make sense to fund d-cinema conversion, if a single standard exists (similar to the 35mm standard), otherwise the cost savings of digital are offset by producing several masters for different standards.

Thus the need arises for a clearly specified standard—an issue that took the participating players more than 6 years to resolve.

These players can be categorized into three basic groups: equipment manufacturers, institutional players, and distributors. In the following section the major players and their stakes in d-cinema will be introduced briefly while reflecting on their role in the search for a single standard.

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