

Chapter 40

Commerce Models in Virtual Worlds and Environments

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ABSTRACT

Operators of popular virtual worlds, online games, and other environments employ a number of models to engage in commerce with users and to facilitate user-to-user commerce. Subscriptions, direct user-to-user transactions, advertising, and sales of premium content are just a few examples. These virtual economies exist alongside and within traditional local and global economies, introducing dynamics related to regulations and currency valuations. Within an active virtual worlds market, content and service providers continually look for more effective ways to derive revenue from their virtual properties, while researchers explore the potential of virtual worlds as experimental environments. For both proprietors and researchers, the implications of commerce models are important considerations when defining business or research strategies.

INTRODUCTION

In this article, we discuss various commerce models being employed and/or experimented with in attempts to capitalize on the popularity of online virtual worlds and environments. There are a variety of models currently in use, and a steady stream of entries into the marketplace, providing a rich resource to observe current trends. Many

factors influence the potential usefulness of virtual worlds and environments as entertainment venues, economic engines and research tools. Among these factors are globalization of economies and portability of information across borders, notions of virtual goods, and cultural considerations.

In what follows, we provide a summary of currently adopted commerce models, identify upcoming trends, and consider potential impacts of commerce models and the intertwining of virtual and real economies.

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BACKGROUND

Virtual worlds and environments are an increasingly popular and prevalent part of life, and as such, there are significant efforts by service providers to monetize the virtual world experience and by providers and users alike to carry out commerce activities. When we discuss virtual worlds and environments, we note that there are different types of these environments in operation, including online games with tightly scripted content, “sandbox” virtual worlds that allow and encourage users to develop their own content, and web-based environments in which the state of an evolving virtual environment persists between visits. A commonly used system of acronyms efficiently describes and categorizes virtual environments in a hierarchical fashion. The top-level term of the hierarchy is that of the Massively Multiplayer Online (MMO) environment. Within the realm of the MMO, additional descriptive terms are added to the name to further describe the purpose of an environment. Massively Multiplayer Online Games (MMOG) are MMOs specifically geared toward playing games (as opposed to unstructured socializing), and are often further categorized as in the common example of the Massively Multiplayer Online Role Playing Game (MMORPG), which has in recent years emerged as a ‘mainstream’ form of entertainment on a grand scale. These distinctions are important, because the type of environment being considered directly influences the types of commerce models that may or may not be appropriate or acceptable (for example, users are more accustomed to making direct payment for access to an online game than a web-based community environment).

Current Commerce Models

The methods and models used for commerce in virtual worlds are varied, and not necessarily exclusive in their application (i.e., producers of virtual worlds can and do choose to employ com-

binations of commerce methods). We summarize the most popular currently employed commerce models here:

- **Subscription-based services:** Subscription-based revenue models derive income from continued payments by players in exchange for access to the online environment. Typical examples of this revenue model include MMORPGs, such as *World of Warcraft (WoW)*, widely acknowledged as the current leader in subscription-based MMORPGs with a reported subscriber base of 11.5 million (Activision-Blizzard, 2008). Implementation details of subscription models vary, with payments taking various forms such as automatic monthly charges to credit cards, pre-paid cards redeemable for access time, and often include discounts for users if they choose to pre-pay for longer periods of time (up to lifetime subscriptions in some cases). Some of these variations are driven by regional factors. For example, in China (which, according to some reports, is home to over one half of *WoW* subscriptions (Graham, 2008)), there is no option for automatic-payment subscriptions; players instead purchase pre-paid blocks of time.
- **Real Money Transaction (RMT) or “microtransaction” models:** As a replacement for or supplement to subscription revenue, many virtual world and game companies also look for ways to facilitate multiple small sales. While credit cards used to be unsuitable for small transactions because of fee structures and technical constraints, in recent years “microtransactions” have become commonplace (popularized in large part by web-based services such as single-track music sales). RMT models include the ability of users to make small purchases that enhance their online experience. This can include cosmetic upgrades or personalization of avatars (in both web-

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